



Playing by the Rules | Colorado

A Practitioner's Guide to Rules, Regulations, and Rating Systems for Outdoor Learning Environments in Colorado Child Care Facilities

ECHO
EARLY CHILDHOOD HEALTH OUTDOORS

NC STATE Design
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NATURAL LEARNING INITIATIVE

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Prepared for Early Childhood Health Outdoors (ECHO) Colorado:
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Disclaimer

The intent of *Playing by the Rules/Colorado*, from here on the guide, is to encourage greater understanding of the regulatory framework for outdoor learning environments in four types of child care facilities regulated by the state of Colorado—child care centers, family child care homes, neighborhood youth organizations, and school-age child care centers. The guide is intended to help designers and child care professionals navigate six documents issued by the State of Colorado and certain other standards or rating systems that are incorporated into them. It is not intended as legal advice. The guide should be considered in conjunction with other existing health, safety, and accessibility measures, guidelines, and standards. The guide does not duplicate or fully incorporate all the language in the laws, regulations, and policies discussed herein. It is not intended to encourage practitioners to overlook or neglect health, safety, or accessibility issues that are not discussed or that are not subject to clear regulation. Neither is the guide intended to be a comprehensive guide to best practices for optimizing safety, accessibility or developmental benefits. A wealth of resources is available to address specific concerns for designing environments to allow all children (and their caregivers) to take advantage

of the benefits of outdoor learning environments. The information contained in this document was the most current available at the time it was created.

Project Team

This guide was prepared by the Natural Learning Initiative, a research, design assistance and professional development unit at North Carolina State University's College of Design, for Early Childhood Health Outdoors Colorado, an initiative of the National Wildlife Federation in partnership with the Natural Learning Initiative, and Qualistar.

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Introduction

1. Introduction

Two 4-year-olds race their tricycles around the looping path, while another pair “frost cupcakes” in the mud kitchen. A boy turns over stones to look for worms, and a girl chases a butterfly. Two months ago, these preschoolers planted a garden. Today, it is filled with tomatoes, kale, yellow squash, and other vegetables. Kale and squash are often a hard sell for preschoolers. But the young gardeners here like to taste the vegetables they grow.

Pretending, racing, exploring, and vegetable tasting are common activities in outdoor learning environments inspired by Early Childhood Health Outdoors™ Colorado (ECHO™ Colorado). ECHO™ Colorado aims to facilitate the creation of healthy, natural, and affordable areas for play and learning in the state that support young children’s physical and mental health and their cognitive, physical, social, and emotional development.

ECHO™ Colorado began as a partnership driven by the National Wildlife Federation and the Natural Learning Initiative at North Carolina State University. Qualistar, an organization that sunset in late 2018, was a founding partner of ECHO™ and contributed to the creation of this document. Early Childhood Council Leadership Alliance has replaced Qualistar as an active partner in ECHO. It is supported to date by the

Colorado Health Foundation and the Gates Family Foundation.

ECHO™ is based on a program developed by the Natural Learning Initiative (NLI) in North Carolina, known as Preventing Obesity by Design or POD. And like POD, ECHO™ aims to promote children’s health through systematic changes to the way that outdoor areas at childcare facilities are designed and managed.

Both programs help people reconceive outdoor areas as learning environments. The term outdoor learning environment (OLE), was adopted by the North Carolina Division of Child Development and Early Learning in 2007. OLEs contain diverse opportunities for playing and learning and can have a significant impact on young children’s healthy development. OLE naturalization, to integrate a diversity of natural features and settings, is one of the main strategies POD and ECHO™ use for promoting children’s health and development.

Promoting Health through Design. A growing body of research suggests that connecting children to nature benefits both their physical and mental health (Chawla, 2015; American Public Health Association, 2013). Natural views buffer children’s stress and improve their ability to concentrate (Wells and Evans, 2003; Faber Taylor, Kuo, & Sullivan, 2001; Wells, 2000). A short walk in a green urban park can reduce the symptoms of attention deficit disorder (Faber Taylor and Kuo, 2009). Time spent in diverse

green spaces exposes children to beneficial microbiomes that support young immune systems (Rook, 2013; Levy, 2012; Hanski et al., 2012). Time outdoors is generally associated with lower rates of nearsightedness and higher levels of physical activity and cardio-respiratory fitness (Dolgin, 2015; Gray et al., 2015).

An environment’s ability to encourage physical activity may depend on its design. Some studies show early childhood play areas with a diversity of natural features—such as trees and shrubs—are associated with higher levels of physical activity compared to traditional playgrounds lacking these components (Boldemann et al., 2006). Particular types of manufactured equipment promote physical activity by providing opportunities for climbing, sliding, or swinging where no naturally existing opportunities for these activities occur.

Manufactured, portable equipment such as balls, parachutes, and cloth tunnels can also add value to play and learning areas by extending the range of activities possible. A diversity of natural and manufactured settings and components, fixed features, and loose parts can promote different types of physically active play (Cosco, 2006).

Pathway design also affects physical activity in OLEs. Research shows that OLEs with broad, looping primary pathways where children can use wheeled toys such as tricycles and wagons have higher levels of physical activity (Cosco, Moore, 2014).



The design of outdoor learning environments may also encourage healthy eating. Studies show that children who grow their own food are willing to try more fruits and vegetables (Bell & Dymont, 2008).

Supporting Learning and Development. Playing in natural environments is not just good for children’s health, it is also associated with improved learning and development. A Norwegian study showed that kindergarteners who played daily on a mostly forested, sloped site significantly improved their gross motor skills—balance, coordination, and agility—

A growing body of research suggests that spending time in natural settings benefits children’s physical and mental health.

compared to kindergarteners who lacked experience in such settings (Fjortoft, 2001).

Additional studies show that natural features also encourage creative and cooperative play (Bell and Dymont, 2006). Components such as sticks, stones, and seed pods collected by children can be repurposed as

building materials, used as currency in an imaginary world, and any number of other creative play and learning scenarios. Rivkin (2000) argues that the “richness and novelty” of experiences perceived outdoors stimulate brain development. A study of seven to nine year olds in Barcelona found an association between the level of vegetation within 100 meters of residences lived in since birth and the gray matter volume in areas of their brains associated with cognitive test scores, working memory, and attentiveness (Dadvand, 2018). A study of Norwegian children found a positive relationship between time



More than 1000 pages of state-level regulations, standards, and rating systems were reviewed to produce this document. The aim is to help designers, child care professionals, providers, and local policy makers navigate rules and rating systems that may influence outdoor learning environments in Colorado child care facilities.

spent outdoors in preschool and attention functioning, after correcting for various confounding variables (Ulset, Viatro, Brendgen, Bekkhus, & Borge, 2017). Those children who spent more time outdoors in preschool also showed fewer inattention-hyperactivity symptoms.

Purpose of this Guide. ECHO™ Colorado is working to improve the quality of child care outdoor learning environments. The initiative supports planning services, training, and technical support for OLE design and management. This guide is part of that work. It aims to help designers, child care professionals, providers, and local policy makers navigate state-level regulations, standards, and rating systems that may influence funding for outdoor learning environments at Colorado child care facilities. For most outdoor play and learning settings, only a handful of regulations or rating scale items apply. Yet, finding the relevant language may require sifting through hundreds of pages of unrelated material. Following in the path of *The Regulatory Framework for Outdoor Learning Environments in Texas Childcare Facilities* released in 2016, this guide aims to make regulatory environment reviews less foreboding (Jost, Cosco, Moore & Cooper, 2016a, 2016b). The aim of this guide is to reduce the cost and effort associated with designing nature play and learning settings and components by making it easier to navigate key

regulatory documents. The goal is to help people break through the inertia that can prevent child care facilities from adopting innovative best practices because they think their license or their rating may be negatively impacted.

To identify laws, regulations, standards, and funding language to include in this guide, NLI and NWF conducted background research and structured interviews with a variety of individuals, including child care center directors, outdoor learning environment designers, college instructors, non-profit leaders, assessors, and regulators. A draft of the guide was reviewed by a similarly diverse group of stakeholders, including regulators from the Colorado Office of Early Childhood and the Colorado Department of Public Health and Environment. Qualistar experts (before the agency closed) and Clayton Early Learning professionals responsible for rating and assessing child care environments also reviewed an earlier draft of the document.

Using the Guide. This guide is not meant to be read fully from cover to cover. However, the first five sections (30 pages approximately), should be read in their entirety—particularly by those creating a new outdoor learning environment or making changes to an existing space.

Section Two, following this introduction, identifies a series of documents that relate to the planning and design of outdoor learning

environments in Colorado child care facilities. It discusses the documents that this guide aims to help readers navigate.

Section Three introduces site-level requirements that may affect the overall layout of the outdoor learning environment and the play and learning settings included.

Section Four provides a general review of accessibility regulations relevant to OLEs.

Section Five discusses when features may qualify as playground equipment.

The majority of the guide presents a series of charts dedicated to specific play and learning settings and components used to create rich play and learning environments. Most readers only need to refer to section introductions and specific items being considered for inclusion.

Section Six contains short descriptions of each setting and component and related design and planning considerations, with references to additional resources. Relevant sections from documents identified in Section 2 are noted.

Most of these documents are government publications in the public domain, so there is no limitation on quoting from them generously. However, a number of proprietary, more restricted documents are included. We do not repeat ASTM playground standards in this guide, we focus on when they do and do not apply to a certain type of feature. This guide will also not help people determine a facility's score on the proprietary rating scales that are part of Colorado's regulatory environment. It does,

however, provide an understanding of how design and planning can affect these ratings and how to navigate to relevant parts of the proprietary scales.

Some regulations related to OLE management, common across many different play and learning settings, are unlikely to have a major effect on OLE planning or design. For example, sanitation rules require that staff members and children over 12 months who walk independently must wash their hands after “coming in from outdoors” and infants must have their hands washed for them (see section 7.10.3.).

Section Seven summarizes such regulations so repetition for each OLE setting and component is avoided.

Section Eight discusses rules and regulations that may provide opportunities for contact with nature beyond licensed spaces.

An Appendix lists helpful resources about managing risks and hazards in naturalized outdoor learning environments. Like all environments, outdoor areas present risks. It is important to balance children’s need to grow and develop through manageable risk-taking with appropriate protection from hazards that children can’t perceive (Cooper, 2014). Children are especially vulnerable to environmental toxins, given their rapidly developing bodies and brains (American Academy of Pediatrics, 2012; Grandjean, 2013; Roberts, Karr & Council on Environmental Health, 2012). Resources for

creating landscapes that minimize exposure to toxins are provided.

Information contained in this guide was the most current available at the time it was released (June 2019). Prior to using this guide, refer to appropriate state or federal agencies to determine if document updates have been issued.



Overview of Regulatory Environment

2

2. Overview of Regulatory Environment

The State of Colorado recognizes different types of child care facilities, each of which is regulated differently. This guide focuses on four major types of child care facilities serving children 0-7 years old during part of the day when their parents or guardians are at work or otherwise occupied.

1. Child care centers. These facilities provide care for 5 or more children between six weeks and 18 years of age, some or all of whom are under 5 years old, for fewer than 24 hours at a time. Child care centers are also divided into types that may have slight variations based on the age and number of children served and the amount of time children spend in the facility (e.g. preschools). (See 12 CCR 2509-8, Section 7.702.)

2. Family child care homes. These facilities are located in the primary provider's residence and serve 5 to 12 children under 18 years of age, two of whom are unrelated to each other or the primary provider. There are a few variations of the license for this type of facility based on the age and number of children served and the experience level of the child care provider. (See 12 CCR 2509-8, Section 7.707.)

3. School-age child care centers. These facilities serve five or more children of school-age, typically between the ages of 5 and 18

years, for more than one week per year. Four year olds born before October 15th of the current calendar year may also be served if centers are building-based. These children start kindergarten before they turn 5. Licenses for this type of facility apply to before and after school programs, day camps, and summer playground programs. (See 12 CCR 2509-8, Section 7.712.)

4. Neighborhood Youth Organizations. These facilities are non-profits serving youth six to 18 years old who are members of an organization that "provides research-based, age-appropriate, and character-building activities designed exclusively for the development of youth." Children and youth attending such facilities have written consent from parents or guardians "to arrive at and depart from the primary location of the activity on their own accord, without supervision by a parent, legal guardian, or organization." Faith-based organizations and programs of state or city park programs or special districts that fit into this category do not qualify as neighborhood youth organizations and are not required to be licensed as such. (See 12 CCR 2509-8, Section 7.720.)

Some specialized child care facilities regulated by the State of Colorado are not specifically addressed in this guide including day treatment centers for developmentally disabled children, children's sleep-away camps, residential child care facilities, foster care

homes, secure residential treatment centers, and homeless youth shelters. (Refer to 12 CCR 2509-8 to understand how these facilities are defined, and to learn more). Requirements specific to child care centers that hold their programs fully or predominantly outdoors and do not have indoor classrooms are also not addressed in this guide. Contact state regulators to learn more about the potential for such programs.

State Licensing Requirements. The Colorado Office of Early Childhood, located in the Colorado Department of Human Services, oversees the creation and enforcement of Social Services Rules for Child Care Facility Licensing (12 CCR 2509-8). These regulations must be followed for a facility to obtain and retain its license to operate. Facilities are monitored primarily through annual inspections. Additional investigations may be carried out to ensure children's health and safety.

All child care facilities are subject to section 7.701 of these rules. Each facility type covered here with the exception of neighborhood youth organizations, are also required to adhere to section 7.719 of these rules. (Neighborhood Youth Organizations, though not required to follow this section, may use it as a model for their policies).

Finally, each category of child care facility is required to meet licensing rules specific to that type of facility. Child care centers must

meet the requirements in Section 7.702. Family child care homes must meet requirements in 7.707, School-age child care centers must meet requirements in section 7.712. Neighborhood Youth Organizations must meet requirements in 7.720. Most of the licensing rules related to outdoor learning environments are located in these sections. They vary in ways large and small from facility type to facility type. When reading through the charts in later sections, refer to the licensing requirements for the facility type of interest.

Regulations for child care centers and family child care homes are further clarified within two additional documents: *Administrative Guide: Rules Regulating Child Care Centers 7.702* (2016) and *Administrative Guide: Rules Regulating Child Care Homes 7.707* (2016). These documents were created by the Colorado Office of Early Childhood, Division of Early Care and Learning, and only contain rules chosen to be clarified. They do not serve as standalone resources. They have informed the discussion of licensing requirements for child care centers and family child care homes in this guide.

Under Colorado Revised Statutes Section §26-6-105.7, a child care facility subject to licensing requirements may seek a waiver to use certain materials in its programs and curriculum that would not otherwise meet the licensing regulations. Such facilities must have policies in place to ensure instructors “are trained in the



It may be possible to receive a waiver to use equipment or materials that do not meet licensing regulations but provide reasonable safety provisions, such as an embankment slide that only has protective surfacing at its foot. The pathway at the foot of the slide above is made of poured-in place protective surfacing.

use of the materials in a way that provides reasonable safety provisions for use by children.” Also, parents must be notified of the potential safety risks and sign consent forms “acknowledging their awareness of the risks in using the materials in the facility.” (See 12 CCR 2509-8 Section 7.701.13.)

State Sanitation Requirements. The design and management of outdoor learning environments at many Colorado child care facilities is also regulated by the Colorado Department of Public Health and Environment (CDPHE), which, together with the State Board of Health creates *Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of Colorado* (6 CCR 1010-7).

These regulations apply to child care centers and school-age child care centers, but not to family child care homes and neighborhood youth organizations. Neighborhood youth organizations food service areas and some water play settings may be subject to health inspections under different regulations but their outdoor learning environments are generally not regulated by CDPHE.

The childcare sanitation regulations are enforced through inspections conducted, at minimum, once every two years and sometimes more frequently as determined by CDPHE using a risk-based inspection methodology. Inspections are conducted by local health

agencies in counties that have them and by CDPHE in counties that don't. A list of the local health agencies responsible for enforcing these regulations is online at: <https://www.colorado.gov/pacific/cdphe/find-your-local-public-health-agency>.

Current sanitation rules and regulations became effective on January 14, 2016. Child care centers and school-age child care centers in operation prior to that date, "which would require capital expenditures to fully meet all design, construction and equipment requirements of the regulations, shall be deemed acceptable if in good repair and capable of being maintained in a sanitary condition and pose no hazard to the health of the facility occupants" (Section 7.3A1, p. 1).

When constructing a new child care facility or "extensively" remodeling an existing facility, the CDPHE may require detailed plans and specifications to be submitted prior to construction. "Approval of requested plans and specifications is necessary before construction begins," according to the regulations, and "any revision of plans shall be submitted to the Department for review and modification or approval. Plans shall include: a plan-view scale drawing of the facility; the location of all equipment, plumbing fixtures and connections, ventilation systems, and other pertinent information" (Section 7.3B).

As with the licensing regulations, facilities are able to seek a variance to sanitation rules or

regulations—particularly those perceived to present "an undue hardship to the person, facility, or community so long as minimum health and sanitation requirements are met." Changes requiring a variance should be submitted for approval prior to construction. A written request for a variance may be made using the form here: https://www.colorado.gov/pacific/sites/default/files/DEHS_ChildCare_VarianceForm_011816.pdf.

Accessibility Requirements. Colorado's general rules for child care facility licensing state that all facilities that are subject to the Child Care Licensing Act are also subject to the Americans with Disabilities Act (ADA). All child care facility outdoor learning environments need to meet the *2010 ADA Standards for Accessible Design* adopted by the U.S. Department of Justice under the authority given to it by ADA.

As with the other regulations, there are some variations in what is required for different types of child care facilities. Accessibility requirements are discussed in greater depth in section four of this guide.

Colorado Shines Rating System. Licensed child care centers and family child care homes enrolling children five years of age or younger are assigned a rating using the Colorado Shines rating system (See 12 CCR 2509-8, sections 7.702.1C and 7.707.22A1). This program is used to assess the quality of child care facilities, to

communicate information about quality to parents seeking child care, and to determine the level of funding providers receive for each child whose tuition is subsidized through the Colorado Child Care Assistance Program (CCCAP).

CCCAP helps families with low or no income afford child care. The program is managed jointly by the Colorado Office of Early Childhood, Division of Early Care and Learning, and local county departments of social or human services. Each county is required to provide a tiered system of reimbursement that rewards programs for having higher Colorado Shines ratings. The tiers vary from county to county, as do the eligibility requirements for families participating in the program.

However, the rating system used is consistent across the state. Colorado Shines rates facilities at levels between one and five, with five being the highest possible rating. All licensed facilities begin with a Level 1 rating. The procedures for obtaining higher ratings are outlined in the *Colorado Shines Program Guide*, which is available free online. Working toward a higher rating is optional, however the public availability of ratings and their link to funding encourage this.

Facilities may earn a Level 2 rating by registering staff in the state's Professional Development Information System, having 75% of staff participate in online training modules offered by the state, completing a quality

indicator assessment, and completing a quality improvement plan (See pages 9 and 31-38 of the CO Shines program guide).

Rating Levels 3-5 are determined using a two-tiered rating system. To achieve these ratings, facilities must meet certain thresholds for the points laid out in the *Colorado Shines Program Guide*. Their average score on one or more environment rating scales must also meet certain thresholds (See tables on page 11).

The environment rating scale(s) used depend on children's age and facility type. Child care centers serving infants and toddlers (children under 3 years old) are rated using the *Infant Toddler Environment Rating Scale, Revised Edition* (ITERS-R). Child care centers serving preschool children (3 to 5 years old) are rated using the *Early Childhood Environment Rating Scale, Revised Edition* (ECERS-R). And family child care homes are rated using the *Family Child Care Environment Rating Scale, Revised Edition* (FCCERS-R). These are proprietary publications and are not available freely online as the Colorado Shines Program Guide is. They need to be purchased or borrowed from a local library.

Only 5 points within the Program Guide's point system are tied to outdoor learning environments—scale items 5.4, 5.5, and 5.7. That is out of a total of 134 possible points for child care centers and 90 possible points for family child care homes. Two points are awarded to facilities that undergo a one-time

Table 1: Scoring for Levels 3-5 of CO Shines Rating System for Child Care Centers

	Categories	Total Possible Points	Level 3	Level 4	Level 5
1.	Workforce Qualifications and Professional Development	31	8	12	18
2.	Family Partnerships	22	10	13	20
3.	Leadership, Management & Administration	26	12	18	24
4.	Learning Environment	29	8	13	22
5.	Child Health	14	5	7	9
6	Optional available points:	12			
	Minimum requirement for Rating		43	63	93
	Average Environment Ratings Score (ITERS-R/ECERS-R)		At least 3.75 with no classroom below a 3.0	At least 4.75 with no classroom below a 4.0	At least 5.75 with no classroom below a 5.0

Table 2: Scoring for Levels 3-5 of CO Shines Rating System for Family Child Care

	Categories	Total Possible Points	Level 3	Level 4	Level 5
1	Workforce Qualifications and Professional Development	11	3	5	7
2	Family Partnerships	20	8	10	14
3	Leadership, Management & Administration	6	3	4	5
4	Learning Environment	27	6	9	16
5	Child Health	14	5	7	8
6	Optional available points:	12			
	Minimum requirement for Rating		25	35	50
	FCCERS Score*		At least 3.75	At least 4.75	At least 5.75

Source: Colorado Office of Early Childhood, 2015

certified playground safety inspection, create a quality improvement plan based on the results, and monitor progress annually. Two points are awarded for having a garden that grows fruits or vegetables and for providing children opportunities to taste them. A point is provided when classroom teachers lead children in structured physical activities daily (once if program is under 5 hours per day, twice if it is 5 hours or more).

The primary influence design and planning of outdoor environments can have on Colorado Shines ratings is through the environment rating scales. Each rating scale has a number of items that can be rated higher or lower based on the design and management of the outdoor learning environment.

The guidelines laid out in the program guide and the scale items laid out in the rating scales are not requirements. Facilities do not have to meet them in order to operate or even to obtain a certain rating. Flexibility is offered to ignore scale items and sacrifice the points associated with them if this aligns with the goals of the child care facility. In many cases, sacrificing a few points will not make a significant difference in the overall score.

Local Laws, Fire Inspections, and Zoning.

Navigating local laws or regulations is beyond the scope of this guide. However, fire inspections and compliance with local planning and zoning requirements are both required by

the Colorado Department of Human Services as part of child care facility licensure (See 12 CCR 2509-8, Sections 7.701.34A and 7.701.34C). Fire inspections must be conducted a minimum of once every two years in child care centers, school-age child care centers, and neighborhood youth organizations, and inspection reports approving the operation must be maintained on hand at the facility. Family child care homes are not subject to this requirement. Written approval from a local zoning department must also be provided when opening or relocating a facility. Refer to local jurisdictions to ensure awareness of specific laws or standards at the local level that must be followed.



Site-Level Requirements

3

3. Site-Level Requirements

Before digging into the details of the design and planning process, and, whenever possible, before committing to a location for a new child care center, family child care home, or school-age child care center, it is important to consider site-level requirements that will affect the design for the outdoor learning environment. Regulations will, for example, define the maximum number of children that can be served within an outdoor area of a certain size, which may affect the viability of some sites. In this section, the focus is sanitation and licensing requirements. Accessibility requirements, which must be considered at both the site-level and at a more detailed level, are discussed in the next section.

Although this section lays out minimum requirements, going beyond them in ways that improve the quality of the outdoor learning environment is encouraged.

Note that while this guide discusses Colorado Shines quality rating indicators in Section 6, it does not discuss them at the site-level. This editorial decision was made because most of the indicators are within the proprietary environment rating scales (ITERS-R, ECERS-R, and FCCERS-R), and thus difficult to introduce

them in a way that would be useful and comprehensive without infringing on copyrights.

Those working with a neighborhood youth organization may skip this section and go to Section Four. None of the site-level requirements discussed in Section 3 apply to neighborhood youth organizations.

Bounding/Enclosure. Child Care Centers and Family Child Care Homes must have play areas enclosed by fences, walls, or natural barriers (such as hedges) (See 12 CCR 2509-8, sections 7.702.73B3 and 7.707.931B). There is no such requirement for school-age child care centers or neighborhood youth organizations. For more detailed information on the rules for enclosing outdoor learning environments, see p. 60.

Square Footage Requirements. Outdoor play areas for child care centers, family child care homes, and school-age child care center must meet specific square footage requirements. For play areas that are enclosed by fencing or other barriers, the area would be measured within these limits. Remember, square footage requirements in the licensing standards are lower limits. Especially when there are site constraints, such as steep topography or areas deeply shaded by mature trees, provision of diverse play and learning settings for children of different ages may require areas larger than the minimum required.

Child Care Centers: Under section 7.702.73C of the child care center licensing requirements, all child care centers (aside from drop-in centers) are required to provide “an outdoor play area that is adjacent to or safely accessible to the indoor facilities.” This play area “must provide a minimum of seventy-five (75) square feet of space per child for a group of children using the total play area at any one time. The total play area must accommodate at least thirty-three percent (33%) of the licensed capacity of the center or [be] a minimum of 1500 square feet, whichever is greater” (CCR 2509-8, section 7.702.61B).

If the child care center has an infant program, the outdoor play area for infants “must be a minimum of four hundred (400) square feet” (CCR 2509-8, section 7.702.61B7). This area can be used by other age groups, but not while the infants are using it (CCR 2509-8, section 7.702.61B8).

If the child care center serves toddlers, the area serving that age group “must be a minimum of seven hundred fifty (750) square feet if licensed for ten (10) toddlers and one thousand fifty (1,050) square feet if licensed for fourteen (14) or more toddlers, or seventy-five (75) square feet per child for the largest group size for which the program is licensed” (CCR 2509-8, section, 7.702.61B9). The licensing regulations state that this area may be used for infants as well as toddlers but both groups



Play areas at child care centers and family child care homes must be enclosed by fences, walls, or natural barriers. If fencing is used, it may be greened to make it less cage-like.

cannot be in the space at the same time (CCR 2509-8, section, 7.702.61B10). Otherwise, the rules note “toddler facilities, both indoor and outdoor, must be completely separate from facilities for other age groups” (CCR 2509-8, section 7.702.71C2). Any plans to provide areas for contact between toddlers and older siblings must be approved by a licensing representative.

Family Child Care Homes: “At least seventy-five (75) square feet of useable outdoor play space

must be available for each child” in family child care homes (CCR 2509-8, section 7.707.931A). There are no minimum size requirements for the overall space or for specific age groups.

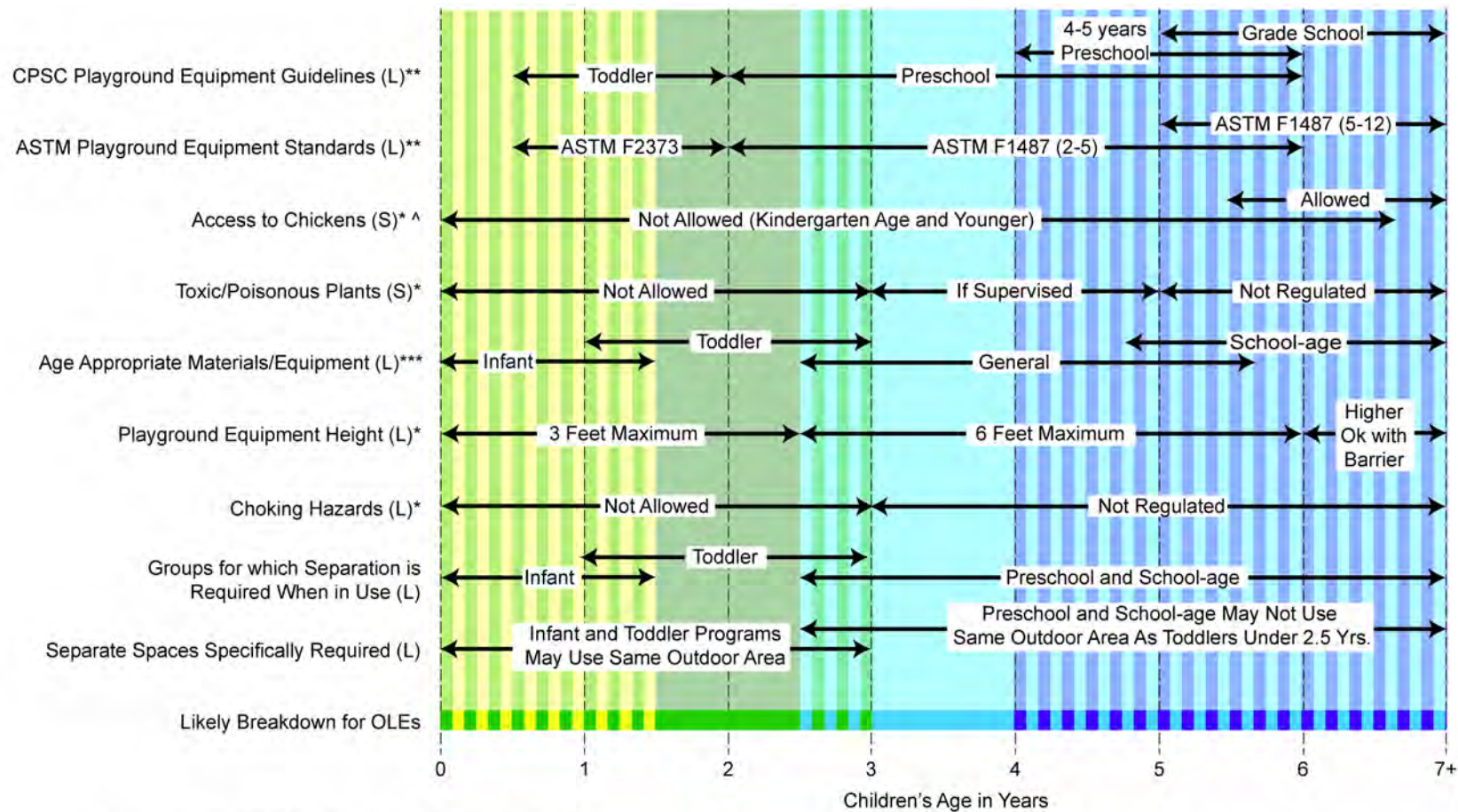
School-age Child Care Centers: School-age child care centers have similar requirements to child care centers. They must have an outdoor play area accessible to children attending the program—though it may be a city park or public school ground. “The center must provide a total outside play area of at least seventy-five (75)

square feet per child for a minimum of one-third of the licensed capacity of the center or a minimum of 1500 square feet, whichever is greater” (CCR 2509-8, section 7.712.71D1).

Age Appropriateness. The licensing regulations for child care centers, family child care homes and school-age child care centers all have similar language discussing the age appropriateness of equipment and materials that children have access to (CCR 2509-8, sections 7.702.61A, 7.707.83, and 7.712.64B). For example, licensing regulations for child care centers state that “Indoor and outdoor play equipment and materials must be appropriate for children’s ages, size, and activities” (CCR 2509-8, section 7.702.61A).

Two contrasting aspects of age appropriateness affect all types of child care facilities, particularly child care centers because they are likely to have the greatest diversity of ages present. On the one hand, children must not have access to equipment that presents hazards to someone at their stage of development. On the other hand, children at each stage of development need choices of stimulating play opportunities that stimulate extensions of existing skill levels and testing of new ones. As the licensing regulations for child care centers note: “Indoor and outdoor materials and equipment must be sufficiently varied and appropriate for the developmental needs of the children and the number

How Various Regulations and Standards Require or Encourage Separating Children into Age Groups in Colorado Child Care Centers



(L) Licensing Rules; (S) Sanitation Rules (CDPHE);

* For these categories, spaces for older children could be designed/managed to meet requirements for younger children.

** Licensing advises it uses both CPSC guidelines and ASTM standards to evaluate hazards, except where lesser standards are explicitly stated in their licensing rules. Playground equipment may be designed to meet CPSC guidelines/ASTM standards for ages 2-12 year olds.

*** Many age appropriate materials for older children would not necessitate separation.

^ Note access to chickens is limited by grade level rather than numerical age.

attending” (CCR 2509-8, section 7.702.61B). In order to meet both of these requirements, and to meet the specific age separation requirements outlined in the section on square footage, facilities that serve children across an age spectrum often create multiple side by side outdoor areas designed for discrete age groups—particularly at child care centers. The diagram on page 16 highlights how various regulations and standards require or encourage the creation of discrete outdoor areas in Colorado childcare centers. Two types of regulations in Colorado that encourage such separation are those addressing choking hazards and playground equipment height.

Choking hazards (child care centers and family child care homes only): Child care centers and family child care homes should pay particular attention to the rules related to choking hazards and how regulations restricting such hazards may lead to the designation of spaces for infants and toddlers who are under 3 years old that are separate from older children. Children under 3 are most susceptible to choking hazards. While regulations allow use of an outdoor infant area by older children, any use of an infant space by children 3 and up would need to ensure that these children do not bring toys or materials that provide choking hazards into the space from an adjacent space. (As noted previously, regulations specifically forbid use of toddler spaces by older children.)

Playground equipment height (child care centers only): Both child care centers and school-age child care centers must follow licensing rules governing playground equipment height; however, these rules will only affect site-level planning for child care centers. The state licensing regulations for child care centers have different maximum height requirements for playground equipment serving children under 2.5 years old, 2.5 to 6 years old, and 6 and up that may also affect how children in different age groups can be mixed on the playground. Children under 2.5 are not allowed to have access to equipment with platforms or designated play surfaces that are more than 3 feet off the ground (CCR 2509-8, section 7.702.62B4). Children 2.5 to 6 years old may not have access to equipment with platforms or designated play surfaces more than 6 feet off the ground (CCR 2509-8, section 7.702.62B4).

In child care center OLEs, it may be difficult to meet the needs of both preschoolers and school-age children using play structures set in a flat area of protective surfacing due to these height limits. Swings, slides, and climbing equipment that meet height limits for preschoolers may not provide sufficient challenge for older school age children. However, it may be possible to meet minimum height requirements for preschoolers and developmental needs of school-age children by incorporating sliding and scrambling equipment into topography by using embankment slides

and embankment scrambles. Such features may be designed so they are never more than a foot off the adjacent surfaces (See p. 56 and p. 58).

Playground equipment type (child-care centers only): Licensing advises use of the CPSC *Public Playground Safety Handbook* to evaluate hazards related to playground equipment in child care centers. Referring to horizontal ladders and overhead rings, CPSC states that they “should not be used on playgrounds intended for toddlers and 3-year-olds,” (CPSC, 2010, Sections 5.3.2.4 and 5.3.2.5). CPSC does “not recommend” sliding poles, track rides, log rolls, fulcrum see-saws, spiral slides with more than one 360° turn, freestanding arch climbers, or freestanding flexible climbers on playgrounds serving toddlers and preschoolers. Rung ladders, rotating tire swings, balance beams, and merry-go-rounds are “not recommended” on playgrounds serving children under 2.

Combined effect of age-based regulations: When considered together, the age-based regulations for child care centers discussed above and in the previous section are likely to lead to the creation of discrete spaces for children under 3, children 3-5 years old, and possibly also children 6 or more years old if chickens or playground equipment serving exclusively school-age children are used. Infant outdoor spaces may be separated from

toddler spaces in large facilities but there is no requirement for this as long as the two groups are not using the same space at the same time.

It may be possible to completely combine the 3-5 year-old space and the school-age space, which would be particularly advantageous in a small facility, by focusing on ground-level recreational opportunities for school-age children and/or integrating slides and climbers into topography.

In facilities with space limitations, it may be possible to locate play and learning settings that serve both preschool and school-age children (such as sand play settings) in a shared area that can also be closed to serve only school-age children. To increase richness of settings on a medium-sized site, a shared setting may be able to be opened or closed to serve as a preschool-only space or as a school-age only space. There is no requirement to keep school-age children out of OLEs designed for preschoolers. However, settings and features that are only appropriate for older children need to be located in a separate area inaccessible to age groups for which they are restricted.

Programs licensed as family child care homes do not have requirements to separate children of different ages but must ensure they are designed to serve the youngest child present (Choking hazards should be avoided if any of the children are under three.) Programs licensed as school-age child care centers can serve all the

Table 3: Child Care Center Minimum Staff-Child Ratios (from 12 CCR 2509-8, 7.702)

AGES OF CHILDREN	NUMBER OF STAFF
6 weeks to 18 months (infants)	1 staff member to 5 infants
12 months to 36 months	1 staff member to 5 toddlers
24 months to 36 months	1 staff member to 7 toddlers
2-1/2 years to 3 years	1 staff member to 8 children
3 years to 4 years	1 staff member to 10 children
4 years to 5 years	1 staff member to 12 children
5 years and older	1 staff member to 15 children
Mixed age group 2-1/2 years to 6 years	1 staff member to 10 children

- *"In other preschool age combinations, the staff ratio for the youngest child must be utilized if more than twenty percent (20%) of the group is composed of younger children. This does not apply to infants and toddlers. The ratio for toddler groups is based on the youngest child in the group.*
- *Drop-in child care centers may follow a ratio of one (1) adult for every eight (8) children for children in a mixed age group of 2 years of age to 12 years. 1-2 children 1 year of age to 2 years of age may join the preschool age group of children for short periods of time for structured activities as long as the 1 year old children are safely confined in a toddler seat or high chair." (7.702.45 (12))*

ages they are licensed for in the same outdoor space without concern about differing height limits for playground equipment or choking hazards.

Staff-Child Ratio/Maximum Group Size/Separating Toddler Groups.

Another consideration that could drive the

design and planning of outdoor learning environments at child care centers and school-age child care centers in Colorado is the state licensing regulations regarding staff-child ratios and maximum group size. This section summarizes what those planning outdoor areas will need to know without getting into every detail that staffing providers must be aware of.

Child Care Centers: Tables 3 and 4 and the accompanying text explain staff ratio and group size requirements for child care centers. Smaller child-staff ratios are required for younger children. Younger children must also be in smaller groups, which, in some cases, must be physically separated from other groups.

There is a rule requiring that groups containing toddlers (children between 12 and 36 months who are able to walk on their own) must be separated from other groups including toddlers using “permanent or portable dividers or other methods as approved” by the Colorado Department of Human Services. The exception to this rule is “circle time, meal and snack time, special occasions and activities” (CCR 2509-8, section 7.702.45A13).

Designing outdoor settings to be physically separated from the others within the space designated for toddlers may be necessary in large centers serving multiple groups including toddlers who are expected to use an OLE at the same time. This will be of particular concern where the outdoor environment is intended to play a larger role in daily activities when the weather allows.

Preschool age and school-age groups must be separated into developmentally appropriate activities. They are not *required* to be physically separated from each other by permanent or portable dividers or walls. However, if they are not physically separated, the OLE would need to

Table 4: Child Care Center Maximum Group Size (from 12 CCR 2509-8, 7.702)

AGES OF CHILDREN	MAXIMUM GROUP SIZE
6 weeks to 18 months	10 infants
12 months to 36 months	10 toddlers
24 months to 36 months	14 toddlers
2-1/2 years to 3 years	16 children
3 years to 4 years	20 children
4 years to 5 years	24 children
5 years and older	30 children
Mixed age group 2-1/2 to 6 years of age	20 children

- *“In other preschool age combinations, the maximum group size for the youngest child must be utilized if more than twenty percent (20%) of the group is composed of younger children. This does not apply to infants and toddlers. The group size for toddler groups is based on the youngest child in the group.*
- *Preschool age and school-age groups of children must be separated into developmentally appropriate activities. Groups are not required to be separated from each other by permanent or portable dividers or walls.*
- *Group size for children in preschool and school age classrooms may be exceeded for circle time, meal and snack time, special occasions and activities. The room capacity must not be exceeded.*
- *Toddler-age groups of children must be separated from each other by permanent or portable dividers or other methods as approved by the Department.*
- *When combining age groups, not including individual child transitions, children must be cared for in the room licensed for the youngest child in care, including the outdoor play area.” (7.702.45A13)*

be licensed (and thus meet the regulations) for the youngest child in the group.

Family Child Care Homes: Staff-child ratio and group size are not relevant to the design of family child care home OLEs because there is no need for multiple groups.

School-age Child Care Centers: Under the licensing rules, “at all times, school-age child care personnel must be directly supervising the children.” (CCR 2509-8, section 7.712.43H). Staff-child ratios are the same for all school-age children age 5 and up, namely: “There must be at least one (1) program leader providing supervision with each group of thirty (30) or fewer children cared for by the center,” and “there must be one (1) staff member for each fifteen (15) children in attendance” (CCR 2509-8, section 7.712.43 C, F). Mobile and outdoor day camps have slightly different requirements: “In a mobile day camp program or an outdoor-based day camp program, the staff ratio given at Section 7.712.43, C and D, must be maintained, but there must be at least two (2) program leaders at all times with the children” (CCR 2509-8, section 7.712.43G).

The maximum group size for programs serving ages 5 and up is 30 children. When a center has more than the maximum group size, these children “must be separated into developmentally and age appropriate activities.” Children may be in larger groups during

attendance, meal and snack time, special occasions, and activities. “Groups are not required to be separated from each other by permanent or portable dividers or walls.” (CCR 2509-8, section 7.712.43D, E).

If the program serves 4 year olds, a few things would differ. The maximum group size would be 24. “There must be at least one staff member for each twelve (12) or fewer children cared for by the center,” and “there must be at least one program leader providing supervision with each group of twenty-four (24) or fewer children cared for by the center” (CCR 2509-8, section 7.712.43C, D, F).

Design to Facilitate Visual Supervision.

Licensing regulations for child care centers state, “The play area must be designed so that all parts are visible and easily supervised” (CCR 2509-8, section 7.702.73B4). Similar language applies to family child care homes (CCR 2509-8, section 7.707.931C) but not school-age child care centers. These regulations do not require that all areas are visible from any particular point in the place, but the adults supervising an area must be able to see into all settings as they move through the OLE. In child care centers that maximize the group size, there must be at least two adults supervising the same group of children at any given time.

Different Types of Surfaces. For child care centers only, “The playground area must have at

least two (2) different types of surfaces. Each type of surface must cover at least ten percent (10%) of the playground area” (CCR 2509-8, section 7.702.73B5). There is no similar requirement for family child care homes or school-age child care centers.

Shade. Provision of shade is a licensing requirement in child care centers, family child care homes, and school age child care centers. Only child care centers are required to have a specific amount of shade, for which regulations state: “A shaded area in the fenced play area of at least one hundred fifty (150) square feet must be provided by means of trees or other cover to guard children against the hazards of excessive sun and heat (CCR 2509-8, section 7.702.73B6). Remember, when measuring shade cover provided by trees, the licensing staff consider the amount of cover provided currently and not the amount projected once trees grow in, as is often shown on design drawings.

Variety of Play Materials and Equipment.

Requirements for child care centers, family child care homes, and school-age child care centers require the provision of different categories of play materials and equipment. Those categories are noted here. Section six of this guide notes which categories each type of setting and component covered in this guide fit into.



Play houses and performance settings with costumes or other props may help satisfy requirements for providing “dramatic play areas” in child care centers and “dramatic play materials” in family child care homes.

Child Care Centers: “The center must have enough play materials and equipment so that at any one time each child for which the center is licensed can be individually involved. Separate play rooms or separate interest centers must be provided for each category of equipment required for the program. A variety of material and equipment from the following categories must be available.

1. Art Supplies
2. Blocks and Accessories
3. Books and Posters
4. Dramatic Play Area
5. Large Muscle Equipment
6. Manipulative Toys
7. Musical Equipment
8. Science Materials” (CCR 2509-8, section 7.702.62C)

“If the center serves school-age children, it must have some age-appropriate materials and

equipment from each of the following categories:

1. Arts and Crafts
2. Games
3. Sports
4. Science
5. Library” (CCR 2509-8, section 7.702.62D)

“An appropriate supply of play materials must be readily accessible to children and must be arranged in an orderly manner so that children can select, remove, and replace the play materials either independently or with minimum assistance” (CCR 2509-8, section 7.702.62E).

“In the infant program, some play equipment from the following list must be provided: rubber washable toys, rattles, blocks, balls, record player, radio, tape player” (CCR 2509-8, section 7.702.62H).

“In the toddler program, some play materials easily accessible to children must be provided from each of the following categories:

1. Gross Motor Development
2. Fine Motor Development
3. Language Development
4. Social Interaction” (CCR 2509-8, section 7.702.62I)

Family Child Care Homes: “At least one (1) provider-initiated language activity shall be offered daily, such as reading, storytelling, flannel boards, or puppetry” (CCR 2509-8, section 7.707.82I).

“The provider(s) shall initiate at least one (1) interactive musical activity weekly, such as singing, dancing, playing instruments, marching, listening to tapes or recordings, radios, and musical videos” (CCR 2509-8, section 7.707.82J).

“A selection of at least four (4) **books** must be available for the group of infants/toddlers in care” (CCR 2509-8, section 7.707.83A).

“A selection of at least ten (10) books must be available for all children over two (2) years of age in care and must be organized and accessible to children most of the day. If children over five (5) years of age are in care, books relevant to that age of child must be included within the ten (10) books” (CCR 2509-8, section 7.707.83B).

“At least four (4) **language development materials** appropriate to age of the children shall be available, such as telephones, puppets, story boards, dolls, and chalk boards” (CCR 2509-8, section 7.707.83C).

“At least four (4) types of age-appropriate **eye-hand materials** shall be available for use daily which should include at least some of the following: crayons, paper, scissors, non-chokeable small building toys, developmentally appropriate multi-size stringing beads, pegs, sewing cards and puzzles” (CCR 2509-8, section 7.707.83E).

“Age-appropriate **blocks and accessories** shall be accessible for free play daily allowing at least two (2) children to play independently, yet simultaneously” (CCR 2509-8, section 7.707.83F).

“A selection of at least four (4) types of developmentally appropriate **nature or science related games, materials, or activities** shall be available: natural object collections, plants,

gardens, pets, magnets, magnifying glasses, or science props” (CCR 2509-8, section 7.707.83G).

“At least four (4) types of developmentally appropriate **math or number materials** shall be available: counting objects, balance scales, rulers, number puzzles, magnetic numbers, and dominoes” (CCR 2509-8, section 7.707.83H).

“At least four (4) types of **art materials** shall be available: crayons, pencils, markers, paints, play dough, scissors, and glue. Some art materials must be readily available each day” (CCR 2509-8, section 7.707.83I).

“At least four (4) types of **dramatic play materials** shall be accessible for free play daily such as: backpacks, purses, hats, dress up clothing, housekeeping toys, dolls and accessories, toy telephones, play houses, toy animals, cars and trucks, costumes, and safe jewelry” (CCR 2509-8, section 7.707.83J).

“**Outdoor physical free play materials** shall consist of at least four (4) age appropriate toys and equipment including, but not limited to, the following in good repair: push toys, riding toys, tossing toys, climbing equipment, balance boards, stationary swings, slides, balls, toss games, and sports equipment. These must be provided daily except in extreme weather, such as rain, snow, or extreme temperatures when indoor physical play may be substituted” (CCR 2509-8, section 7.707.83K).

“Materials provided in large homes must be double the requirements for the regular

home as listed above” (CCR 2509-8, section 7.707.83L).

“Some **sand or equivalent dry material or water play** should be offered indoors or outdoors at least monthly and year round. If used, food and/or organic material must be discarded each week” (CCR 2509-8, section 7.707.83M).

School-age Child Care Centers: “Children at the center must have access to age-appropriate materials and equipment from at least the following categories:

1. Activity supplies
2. Manipulatives and games
3. Recreation equipment
4. Library items
5. Science equipment and materials” (CCR 2509-8, section 7.712.64B)

Play Material Diversity Related to Ethnicity, Race, Gender, and Age. The final site-level regulation relates only to Family Child Care Homes. Licensing regulations for those facilities state: “Materials must be available to the children that are developmentally appropriate, culturally sensitive and represent diversity in ethnicity, race, gender, and age. Variety shall exist in toys, books, and pictures” (CCR 2509-8, section 7.707.83C).



Accessibility of Outdoor Learning Environments

4

4. Accessibility of Outdoor Learning Environments

Two sets of U.S. standards apply to the creation of accessible play areas for children. First, the 2010 ADA Standards for Accessible Design issued by the U.S. Department of Justice (DOJ) interpret the federal Americans with Disabilities Act of 1990. Second, ASTM F1951 is a “voluntary standard” issued by ASTM International for determining the accessibility of safety surfacing under and around playground equipment.

In Colorado, all licensed child care facilities are required to meet ADA Standards by section 7.701.14 of the Social Service Rules for Child Care Facility Licensing. So, compliance with ADA could potentially be enforced by both state licensing inspectors and the DOJ.

There may also be local laws for accessibility that need to be considered. To determine if such laws exist, talk to local regulators charged with approving building plans.

Scope of ADA Standards. The ADA Standards for Accessible Design set minimum accessibility “requirements—both scoping and technical—for newly designed and constructed or altered state and local government facilities, public accommodations, and commercial facilities” (U.S. DOJ, 2010).

Some of this language is easy to understand. State and local governmental facilities clearly must comply. But what is a public accommodation? As defined in ADA, public accommodations are “[facilities] operated by private [entities] whose operations affect commerce” (Code of Federal Regulations §36.104). Section 36.104 of the Code of Federal Regulations note public accommodations include restaurants, schools, day care facilities, shopping centers, and recreation facilities.

Playgrounds at private residences that are not used for commercial purposes are not required to meet the ADA standards. There are also some exceptions for designated historic properties and religious institutions, including child care facilities operated by religious entities (See [ADA Title III Technical Assistance Manual](#), III-1.5000 and III-4.4200). But most non-residential play areas are required to meet ADA requirements. Many religious institutions choose to do so even when not required.

Commercial facilities located in private residences, such as family child care homes, are also subject to ADA Standards when new construction or alterations to these facilities takes place.

28 CFR part 36, subpart D §36.401 (b)(1-2) states: “(1) When a commercial facility is located in a private residence, the portion of the residence used exclusively as a residence is not covered by this subpart, but that portion used exclusively in the operation of the commercial

facility or that portion used both for the commercial facility and for residential purposes is covered by the new construction and alterations requirements of this subpart.

(2) The portion of the residence covered under paragraph (b)(1) of this section extends to those elements used to enter the commercial facility, including the homeowner’s front sidewalk, if any, the door or entryway, and hallways; and those portions of the residence, interior or exterior, available to or used by employees or visitors of the commercial facility, including restrooms.”

ADA Standards for Play Areas. Under the ADA Standards, manufactured playground equipment, constructed play features, and nature play and learning settings are all regulated in the same category, as “play areas.”

The ADA Standards define play area as: “a portion of a site containing play components designed and constructed for children” (U.S. DOJ, 2010). The ADA Standards define “play component,” as “an element intended to generate specific opportunities for play, socialization, or learning.” It explains: “Play components are manufactured or natural; and are stand-alone or part of a composite play structure” (U.S. DOJ, 2010).

Unless the entire property is exempted from complying with ADA, the outdoor learning environment and all its play, learning, and socialization areas will likely be subject to ADA

requirements for play areas. This includes play and learning features designed and constructed with natural materials.

The extent of the ADA standards can seem intimidating at first. The document is 279 pages long. But only a few pages are focused on children's play areas—Sections 206.2.17, 240 and 1008. [Section 206.2.17](#) simply declares that play areas must include an accessible route.

[Section 240](#) is primarily concerned with what needs to be accessible—including how many of the individual play components within the larger play area need to be at ground level and on an accessible path. [Section 1008](#) is primarily concerned with the technical question of how to make things accessible.

Home-based child care facilities where the proprietor resides are exempt from meeting the requirements for play areas in Section 240 under specific language in that section. However, other child care facilities must meet these requirements.

Section 240: What needs to be accessible? One of the main ways that ADA standards seek to ensure accessibility is by regulating the number of play components at ground level and on an accessible path. The table on the following page is adapted from Section 240 of the 2010 ADA Standards.

Using Table 5 (on the following page), one can see that if a typical elevated playground structure has three play components attached—



three components that can be approached from an elevated platform or deck on at least one end—at least one play component is needed at ground level on an accessible route. If 7 elevated play components were present, at least two, different play components at ground level would be required. Providers are urged to consider these rules when planning the OLE layout and selecting play components to avoid having to change the design later. This is especially important when considering play structures that elevate play components and/or

when working with a site with steep slopes. When play areas for different age groups are segregated, each area needs to independently meet the requirements in Table 5, as would each phase of a project with multiple phases.

Ground Level Play Components: Do not have to be manufactured equipment. Play areas designed by manufactured playground equipment suppliers typically specify items from their catalog as ground level play components

**Table 5: Number and Types of Ground Level Play Components
Required to be on Accessible Routes*
(From Section 240.2.1.2 ADA Standards)**

Number of Elevated Play Components Provided	Minimum Number of Ground Level Play Components Required to be on an Accessible Route	Minimum Number of Different Types of Ground Level Play Components Required to be on an Accessible Route
1	Not applicable	Not applicable
2 to 4	1	1
5 to 7	2	2
8 to 10	3	3
11 to 13	4	3
14 to 16	5	3
17 to 19	6	3
20 to 22	7	4
23 to 25	8	4
26 and over	8, plus 1 for each additional 3, or fraction thereof, over 25	5

*EXCEPTION: If at least 50 percent of the elevated play components are connected by a ramp and at least 3 of the elevated play components connected by the ramp are different types of play components, the play area shall not be required to comply with 240.2.1.2 (U.S. DOJ, 2010).

However, a variety of natural or custom settings may play this role. Ground level play components may include a grass maze, a place where children can make natural constructions, or a mud kitchen. They may include sand or earth play with features raised off the ground so that wheelchair users can pull up to them.

Section 1008: How to make it accessible. While Section 240 of the ADA focuses on *what* in play areas needs to be accessible, Section 1008 focuses on *how* to make play areas accessible with answers to questions such as: How wide does the accessible route need to be? How much vertical clearance is required? What is the maximum slope allowed and are handrails required? It also specifies and explains topics such as required dimensions for wheelchair transfer systems, and clearance required under play tables so that children using wheelchairs can use them.

The 2010 ADA standards can be accessed online at <https://www.ada.gov/regs2010/2010ADAStandards/2010ADAStandards.pdf>. Those responsible for the layout, grading, or detailing of an OLE will want to carefully review sections 240 and 1008. Many questions do not have a single answer but a variety of different answers for different situations. Those familiar with the ADA Standards more generally will notice the ADA standards for play areas differ from the standards for other environments in ways that may be more or less restrictive.

“Advisory 1008.4.2 Clear Floor or Ground Space. Clear floor or ground spaces, turning spaces, and accessible routes are permitted to overlap within play areas. A specific location has not been designated for the clear floor or ground spaces or turning spaces, except swings, because each play component may require that the spaces be placed in a unique location. Where play components include a seat or entry point, designs that provide for an unobstructed transfer from a wheelchair or other mobility device are recommended. This will enhance the ability of children with disabilities to independently use the play component.

When designing play components with manipulative or interactive features, consider appropriate reach ranges for children seated in wheelchairs. The following table provides guidance on reach ranges for children seated in wheelchairs. These dimensions apply to either forward or side reaches. The reach ranges are appropriate for use with those play components that children seated in wheelchairs may access and reach. Where transfer systems provide access to elevated play components, the reach ranges are not appropriate” (U.S. DOJ, 2010).

Table 6: Children’s Reach Ranges

Forward or Side Reach	Ages 3 and 4	Ages 5 through 8	Ages 9 through 12
High (maximum)	36 in (915 mm)	40 in (1015 mm)	44 in (1120 mm)
Low (minimum)	20 in (510 mm)	18 in (455 mm)	16 in (405 mm)

ASTM F1951. The other standard for creating accessible play environments is *ASTM F1951: Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment*. This standard focuses on the accessibility of protective

surface systems in use zones and whether wheelchairs can move forward and turn on them.

What is a use zone? The U.S. Consumer Product Safety Commission *Public Playground Safety Handbook* defines a use zone as “the

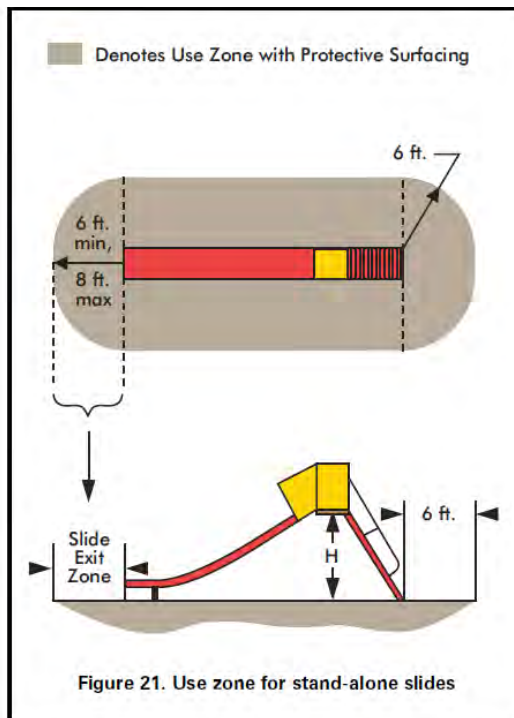
surface under and around a piece of equipment onto which a child falling from or exiting from the equipment would be expected to land,” and says, “These areas are also designated for unrestricted circulation around the equipment” (CPSC, 2010).

Use zone sizes vary by equipment type. This section will not cover the specifics on how to determine use zone dimensions or types of appropriate surfacing. Information may be found in the sections on manufactured playground equipment (p. 88) and protective surfacing (p. 100). Also, see ASTM F1487 or the CPSC *Public Playground Safety Handbook*.

Protective surfacing is “Shock absorbing (i.e., impact attenuating) surfacing material in the use zone” (CPSC, 2010). This surfacing is provided to minimize serious head injuries that may result from falls from play equipment.

ADA requires protective surfacing that serves as an accessible route to meet the specifications found in ASTM F1951. Some materials that provide an acceptable level of impact attenuation, like sand or pea gravel, cannot be used as protective surfacing if the use zone also serves as an accessible route.

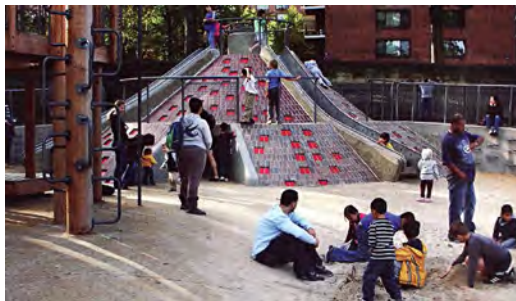
This does not mean such surfacing materials must be entirely eliminated from the use zone. The Tarr Family Playground in New York’s Central Park shows how sand can be integrated with another similarly colored protective surface that meets ASTM 1951 to provide a landscape with visual unity,



accessibility, and more play value than if the whole zone was covered with a unitary surface (See image on this page).

A copy of ASTM 1951 can be purchased online or accessed through a university or public library. However, for common protective surfaces already on the market, verification with the supplier that the material meets ASTM 1951 will typically suffice.

Those responsible for maintaining protective surfacing—particularly engineered wood fiber that may be mistaken for mulch—should verify that any material used to supplement or replace it has been designed and tested to meet attenuation standards and, if required, accessibility standards. Improper maintenance can sometimes decrease the accessibility of a play and learning area.



Top: The Central Park Conservancy integrated play sand (which typically does not meet ASTM 1951) with similarly colored accessible protective surfacing (Photo: Daniel Jost).
Bottom: A playground equipment use zone (U.S. CPSC, 2010).



What Qualifies
as Playground
Equipment?

5

5. What Qualifies as Playground Equipment?

When do stationary natural features and decks qualify as playground equipment that is subject to more extensive standards?

The purpose of this section is to clarify what qualifies as playground equipment under Colorado’s licensing rules. When is it necessary to refer to playground equipment standards or guidelines outside the licensing rules and beyond the scope of this guide to understand licensing requirements for child care facilities in Colorado?

Section 7.702.61C of the licensing rules, which applies to child care centers, states: “Indoor and outdoor equipment, materials, and furnishings must be sturdy, safe, and free of hazards.” An administrative guide issued by the Colorado Office of Early Childhood clarifies that this means “all playground equipment must be commercial grade and meet current Consumer Product Safety Standards or be inspected and approved by a Certified Playground Safety Inspector (CPSI).” Similar language can be found in the rules and administrative guide for family child care homes. The term playground equipment is also used in licensing rules for various types of facilities to clarify what features must be surrounded by protective surfacing.

In the United States, ASTM International is the main entity that issues playground safety

standards. The most current playground safety standards are ASTM F1487-17 *Standard Consumer Safety Performance Specification for Playground Equipment for Public Use*, which covers children 2-12 years old and ASTM F2373-17 *Consumer Safety Performance Specification for Public Use Play Equipment for Children 6 Months through 23 Months*. The U.S. Consumer Product Safety Commission also issues guidance on playground equipment design and layout in its *Public Playground Safety Handbook*. Colorado licensing has advised the authors it uses all of these documents to evaluate hazards. However, where lesser standards are explicitly stated in their licensing rules (as with depth of protective surfacing) those rules set the minimum requirement.

All three documents limit their reach to playground equipment or play equipment. Similarly, a number of Colorado licensing rules use the term “playground equipment”—including a rule requiring that “all pieces of permanently installed playground equipment must be surrounded by a resilient surface” (Section 7.707.62 B7). But what qualifies as playground equipment? Is every log, boulder, and stump relocated to a child care facility outdoor learning environment considered playground equipment? Is every deck?

The short answer to the second and third questions is no. Logs, boulders, stumps, and decks will not *always* qualify as playground equipment. However, they are *sometimes*

considered playground equipment under national standards. And *sometimes*, even when logs, boulders, stumps, and decks are not considered playground equipment under national standards and where their standing as playground equipment under CPSC guidelines is questionable. Colorado licensing has advised the authors that such items are required to meet the licensing rules for playground equipment, using practices found in playground equipment standards to remove hazards. In-depth information is provided in the remainder of this chapter.

This chapter is presented in three parts. First, the written definitions of playground equipment found in ASTM standards are reviewed. Second, how playground equipment is defined (or not clearly defined) in CPSC guidelines. Third, it will explain how Licensing has advised the authors it is interpreting the term playground equipment—an interpretation that builds on ASTM and CPSC definitions but goes beyond what is written in any rule or guide.

Managers of facilities subject to child care licensing should begin by determining whether the setting or feature they are creating would fall under ASTM or CPSC’s definitions of playground equipment. If a log, boulder, stump, or deck appears exempt, they should determine whether it may fall under the slightly more encompassing interpretation of what needs to be treated as playground equipment that Licensing has advised it is

using. If there is a potential for different interpretations about whether something qualifies as playground equipment, designers and providers are encouraged to seek input from licensing specialists in the Colorado Office of Early Childhood.

ASTM Standards. ASTM F1487 defines “Public Use Playground Equipment” as a “play structure for use in play areas of schools, parks, child care facilities, institutions, multiple-family dwellings, private resorts and recreation developments, restaurants, and other areas of public use.” It goes on: “Requirements for amusement park equipment, sports use, home playground equipment, toys, soft contained play equipment, and play equipment for children 6 through 23 months are covered in Specifications F698, F1148, F963, F1918, F2373, Guides F846 and F893, and Practices F853 and F1159. Independent loose items intended to be manipulated by the intended users are not covered in this standard” (ASTM F1487, 2017, 3.1.32 and 3.1.32.1).

Loose parts, whether natural or manmade, are clearly outside the scope of these standards. Also, public playground equipment is clearly defined as a play structure. But what is a play structure?

ASTM F1487 defines “play structure,” as a “free standing structure with one or more components and their supporting members” (3.1.25). ASTM F1487 defines a play

component as “any portion” of a play structure “that generates specific activity and cannot stand alone” (3.1.7).

ASTM F2373, the standard for toddlers 6 months to 23 months old, defines public use play equipment almost identically to the way ASTM F1487 defines playground equipment for older children. “Public use play equipment” is a “play structure,” used in “early care and education facilities” and “other areas of public use” (ASTM F2373, 2017, 3.1.39). Under ASTM F2373, a “play structure” is a “free standing structure” with “supporting members” that hold up a play component that “generates specific activity and cannot stand alone.” And like the standard for older children, age appropriate loose parts for toddler play would be outside the scope of ASTM F2373, which specifically excludes toys.

Based on the above definitions, natural features that are not play structures may not be considered playground equipment and therefore are not within the scope of ASTM F1487 or ASTM 2373. For example, plantings used for play are not play structures, so ASTM’s playground standards don’t apply. Planted play settings like ornamental grass mazes and wildflower meadows need to be outside the use zone of playground equipment. Otherwise, there are no design considerations within the playground equipment safety standards restricting them.

What types of nature play features would potentially fall under the reach of ASTM F1487

and ASTM F2373? Once natural materials such as logs, boulders, stumps and similar natural objects are connected together to create a freestanding structure to generate a specific type of play activity, that play structure would clearly be defined as playground equipment within the scope of the ASTM standards. It does not matter if it is a custom structure or a manufactured structure. If you put together natural materials to create a freestanding play structure within a play area, meant to serve children ages 2 to 12 that structure would fit within the scope of ASTM F1487. If it serves children between 6 months and 23 months old, it would fit within the scope of ASTM 2373. The structure on the left of p. 32 would clearly qualify as playground equipment.

There are some other important exceptions to what is considered playground equipment. Products, materials, and site furnishings outside the equipment use zone are clearly excluded from ASTM F1487—the standard for children 2-12. A bench outside the use zone will not need to be surrounded by protective surfacing. The ASTM standards for younger children under 2 also clearly limit their reach to the play area, which they define as the space designated for play. So ASTM F2373 would not apply to benches or tables adjacent to a play area.

CPSC Guidelines. CPSC defines “public playground equipment” as “equipment for use by children ages 6 months through 12 years in



A log, boulder, or stump that has been physically attached to others to create a free-standing play structure (left) is playground equipment under all definitions. Licensing advises it would also consider individual logs, boulders, and stumps to be playground equipment if supervisors allow their use for a gross motor play activity (climbing, swinging, sliding down, balancing, or jumping off) where children's feet are 18 inches or more above the adjacent ground surface. However, if such features were used only for non-gross motor activities like storytelling (right), they would not be playground equipment.

the playground areas of: commercial (non-residential) child care facilities, institutions, multiple family dwellings, such as apartment buildings, parks, restaurants, resorts, schools, [and] other areas of public use.”

If playground equipment is limited to “equipment,” that would exclude most planted settings—play meadows, gardens, and grass

mazes. Unfortunately, the handbook does not provide definitions for equipment or playground area—which leads reasonable people to come to different conclusions as to what these terms may mean. Like ASTM, CPSC clearly excludes certain types of equipment. The handbook says, “These guidelines are not intended for: amusement park equipment,

sports or fitness equipment normally intended for users over the age of 12 years, soft contained play equipment, constant air inflatable play devices for home use, art and museum sculptures (not otherwise designed, intended and installed as playground equipment), equipment found in water play facilities, or home playground equipment.” It

also states: “Equipment components intended solely for children with disabilities and modified to accommodate such users” “are not covered by these guidelines” (CPSC, 2010, p. 1).

The types of equipment CPSC explicitly excluded from the scope of its guidelines provide a clue to the way CPSC defines the term “equipment”. CPSC does not list tricycles or toys as types of equipment exempt from the guidelines. At the same time, the CPSC handbook says all playground equipment in a playground area needs a use zone. This suggests CPSC is not defining equipment as a physical resource that equips a person for play in a playground area. If it was, then it would be saying every toy and tricycle on a playground needed a use zone.

The definition of “stationary play equipment” in the CPSC handbook suggests that like ASTM, CPSC is using the term to refer to a play structure. CPSC’s (2010) *Public Playground Safety Handbook* defines stationary play equipment as “any play structure that has a fixed base and does not move” (p. 4).

CPSC (2010) also refers designers and “any others requiring more technical information” to ASTM standards, which limit the definition of playground equipment to play structures (See p. 1 of CPSC handbook).

Finally, like ASTM, CPSC limits the definition of playground equipment to something which is within the play area or playground area. These terms, as used in

playground standards and guidelines, are not synonymous with outdoor learning environment or outdoor area.

Decks and stages are not playground equipment if they are outside the playground area. They are not playground equipment unless they are attached to play components such as climbers, swings, or slides. While a bridge connecting a climber to a slide would be playground equipment, a bridge over a dry creek bed in a garden would not be.

How Licensing Advises Its Definition Differs.

Based on conversations with child care licensing officials in Colorado, there is a small but important difference in the way Licensing uses the term playground equipment.

Individual logs, boulders, and stumps are not “free standing structures” with “supporting members,” so they would not be considered to be playground equipment by ASTM F1487 or ASTM F2373. However, Licensing advises that it may consider them to be playground equipment. It depends on their height, how they are intended to be used and how their use is supervised. Similarly, Licensing may consider decks and bridges outside the use zone of other playground equipment to be playground equipment if certain activities are allowed.

If a climber was created out of a single section of a dead tree or a boulder, under the licensing rules regulating child care centers in Colorado, it would be considered climbing

equipment, and would require a use zone with protective surfacing if it was 18 inches or higher off the adjacent ground surface under the language in Section 7.702.62B6.

Additionally, Licensing has advised the authors that logs, boulders, and stumps that are not connected to create structures would still be considered to be playground equipment if supervisors regularly allow their use for a gross motor play activity (climbing, swinging, sliding down, balancing, or jumping off) where children’s feet are 18 inches or more above the adjacent ground surface. Licensing advises such play features would require protective surfacing and use zones equivalent to similar stationary playground equipment.

On the other hand, a log, boulder, or stump that is used for sitting or forms of play where the child’s feet would be in contact with ground (as with a table in a dramatic play area) would not be considered playground equipment by Licensing. If children are jumping off logs or boulders not designed for gross motor play, supervisors would be expected to intervene. However, Licensing has advised a single observation of a children using such an area for a gross motor activity would not lead to its designation as playground equipment by Licensing. If they observed such activity, licensing specialists would ask supervisors present about the intended use of these features and how they are typically used.

So, if a stump circle like the one shown on page 32 was used for storytelling, and not gross motor play, Licensing would not consider it to be playground equipment. Such features would, of course, need to be outside the use zone of other playground equipment. They may be subject to other licensing rules. If children were regularly allowed to use the stump circle for gross motor play, even if their primary purpose was for storytelling, it would be treated as playground equipment by Licensing if it was possible to fall 18 inches or more from any stump.

Similarly, if decks or bridges that are not attached to playground equipment provide a risk of falling from an unprotected platform 18 inches or more from the adjacent ground surface, Licensing would consider them playground equipment. However, such decks and bridges would not be considered playground equipment, even if the platforms were higher than 18 inches, as long as protective barriers were present to deter jumping and falling.

A photograph of four young children playing in a garden bed. The garden bed is bordered by dark plastic edging and filled with dark soil. One child in a blue and yellow striped shirt is on the left, holding a red shovel. Another child in a purple shirt is in the center, using an orange shovel. A third child in a grey shirt is on the right, also using an orange shovel. A fourth child in a blue shirt is in the foreground, holding a blue shovel. There are several colorful buckets (red, pink, blue) and shovels scattered around the garden bed. A green plant is visible on the left side of the garden bed. The background shows a grassy lawn and a wooden fence.

OLE Settings & Components: Relevant Language in Rules, Regulations and Rating Systems

6

6. OLE Settings and Components:

Relevant Language in Rules, Regulations, and Rating Systems

The aim of this section is to help readers navigate rules, regulations, and rating systems instituted by the state of Colorado that pertain to specific OLE settings and components. Only those being considered need to be reviewed,

together with the documents and sections of documents relevant to the related type of facility. The table below summarizes which of the documents covered in Section 2 of this guide are relevant to each type of childcare

facility. The table explains which documents (or sections of documents) are required, which are not required but are tied to ratings and reimbursements for low-income students, and which are not applicable.

Table 6: Relevance of Rules Regulations, and Rating Systems to Different Types of Child Care Facilities

Type of Facility	Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)				Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
	Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)			
Child Care Centers	Required	N/A	N/A	N/A	Tied to Rating/Reimbursements (Program Guide, ITERS-R—spaces used by children under 3 years old—and/or ECERS-R—spaces used by children 3-5 years old)*	Required	Required
Family Child Care Homes	N/A	Required	N/A	N/A	Tied to Rating/Reimbursements (Program Guide and FCCERS-R)	N/A	Required
Neighborhood Youth Organization	N/A	N/A	Required	N/A	N/A	N/A	Required
School-Age Child-Care Center	N/A	N/A	N/A	Required	N/A	Required	Required

*ITERS-R is only used to rate areas serving infants and toddlers (children under 3 years). ECERS-R is only used to rate areas serving children 3-5 years.

Acoustic or Music Play Settings

Acoustic play settings offer children a chance to express themselves and develop gross motor skills. They may be made by mounting repurposed items—such as pots, pans, or pipes—or manufactured instruments—such as drums, xylophones, bells, chimes, or rattles—onto a fence or low wall. They typically include drumsticks, spoons, or other implements to play the instruments. The implements used to play the instruments may be attached to the feature using a short rope, cable, or chain or they may be loose with storage integrated into the feature (e.g. a cup).

Acoustic play settings typically have few risks or hazards associated with them. Avoid protrusions, sharp edges, and toxic paints and materials. Heavy objects like cast iron skillet should not be allowed to swing and create an impact hazard. Any rope, cable, or chain used should not be long enough to create a strangulation hazard for children on nearby climbing, swinging, or sliding equipment. The CPSC guidelines for playground equipment call for ropes to be tied down at both ends. ASTM F1487-17 allows use of rope, chain, or cable “to attach manipulative components (for example, Mallet for chime panel)” on playground equipment at ground level as long as the rope is less than 24 inches long and attachment point is no higher than 27 inches above grade (See Section 6.6.2.3).

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be appropriate for children’s ages,” “size,” and “developmental needs.” “[M]ust be sturdy, safe, and free of hazards.” Must not include choking hazards (e.g. toy parts <1.25 inches in diameter and <2.25 inches long) if accessible to children under 3. If attached to playground equipment, “must be designed to guard against entrapment” (no gaps between 3.5 and 9 inches), “strangulation,” and meet ASTM F1487 and CPSC guidelines (or, if custom designed, be approved by a certified playground safety inspector—a free service offered by licensing.) <i>Mandates Addressed:</i> Helps meet mandates for developmentally appropriate equipment including “large muscle equipment,” “manipulative toys,” and “musical equipment,” and support toddlers’ “gross motor development.” §7.702.61A-C; §7.702.62B5; §7.702.62C; §7.702.62I, Administrative Guide	May be designed to meet requirements <i>Design Considerations:</i> “The premises... must be safe and free from hazards to health,” or “posing danger of injury including but not limited to ‘keep out of reach items, protrusions, broken items, areas of entrapment,’ (gaps 3.5 to 9 inches), “strangulation or choking hazards...” (e.g. toy parts <1.25 inches in diameter and <2.25 inches long accessible to children under 3). “[O]utdoor play equipment must be correctly assembled, well maintained, and securely stabilized or anchored.” <i>Mandates Addressed:</i> Helps meet requirement for “outdoor physical free play materials.” §7.707.934B, §7.707.21, §7.707.91M, §7.707.83K Administrative Guide	May be designed to meet requirements <i>Design Considerations:</i> “[S]hall be sturdy, safe and free of hazards.” §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... manipulatives and games.” §7.712.73A7, §7.712.64B2	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to music and movement, affording gross motor play or physical activity, providing materials for use during free play, and environmental modifications aimed at including children with disabilities. <i>Design Considerations:</i> Environment Ratings Score may be adversely affected if setting includes entrapment hazards (openings between 3.5 and 9 inches that may allow children to get head stuck or openings between 3/8 inch and 1 inch), pinch-points, projections, sharp or “dangerous” objects, or other “hazards that could lead to serious injury.” <i>Infants and Toddlers (ITERS-R):</i> Items 11, 16, 18, 30, 32 <i>Early Childhood (ECERS-R):</i> Items 7, 8, 14, 21, 35, 37 <i>Family Child Care (FCCERS-R):</i> Items 12, 18, 26, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts” Toxic materials are materials “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §2.6.1.A2; §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Animals: Cats & Dogs

Interacting with cats and dogs not only provides entertainment and learning opportunities for children but may facilitate social interaction and buffer stress. A literature review of 69 studies found interacting with animals (typically dogs) led to improved social behavior, interpersonal interactions, and mood. Children had reduced cortisol levels after petting dogs and lower blood pressure when they were in the presence of dogs. Studies have also shown improved attention and concentration among young children when they are in the presence of dogs (Beetz, Uvnäs-Moberg, Julius & Kotrschal, 2012).

It is important that any pets introduced into child care facilities are known to be friendly towards children. How pets are managed within the OLE will vary based on their training. They must be carefully managed in areas with sand play and moving playground equipment.

Caring for Our Children; National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs (2011) provides extensive recommendations for managing animals in child care facilities (See pages 119-122 at http://nrckids.org/files/CFOC3_updated_final.pdf).

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be managed to meet requirements <i>Considerations:</i> See 6 CCR 1010-7 (opposite page). <i>Mandates Addressed:</i> Helps meet mandates for “science materials” §7.702.62C8, §7.702.62D4	May be managed to meet requirements. <i>Considerations:</i> “[A]nimal(s)... that are dangerous, and/or pose a potential threat to a child's safety or health must be confined in a place away from the child care area and inaccessible to children.” “The provider’s animals must be vaccinated as required by state law and local ordinance, and proof of vaccination must be available for review by the licensing specialist.” “All providers must wash their hands thoroughly with soap under warm running water, when available, and dry with an individual use and/or single use disposable towel... after handling animals, their toys, or food and water bowls.” (See p. 137 for more information on handwashing). “Children must be directly and actively supervised near standing water including, but not limited to... animal troughs.” “Children must not be permitted to mistreat animals.” “All outdoor areas where children may pass or play shall be kept free of animal contamination. All animal wastes must be promptly removed and placed in a lidded container or otherwise inaccessible to children.” <i>Mandates Addressed:</i> Helps meet mandates for “nature or science related... materials” such as “pets.” §7.707.72A; §7.707.934A; §7.707.91J, L; §7.707.931G; §7.707.83G	May be managed to meet requirements. <i>Considerations:</i> None.

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)		2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)				
May be managed to meet requirements <i>Considerations:</i> See 6 CCR 1010-7 (two columns to the right). <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... science equipment and materials.” §7.712.64B5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to nature/science that reward centers for providing access to pets. <i>Considerations:</i> Rating will be higher if cages used for pets are clean, litter boxes are “out of children’s reach,” outdoor play areas (including sand play areas) are free of “animal contamination,” animals are immunized, and handwashing occurs after handling pets. (See p. 137 for more information on handwashing). <i>Infants and Toddlers (ITERS-R):</i> Items 10, 22; <i>Early Childhood (ECERS-R):</i> Items 13, 25; <i>Family Child Care (FCCERS-R):</i> Items 11, 22	May be managed to meet requirements <i>Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Considerations for child care centers and school-age child care centers:</i> Cats and dogs may be present in child care centers, aside from infant programs where they are prohibited. However, the presence of cats and dogs is somewhat restricted in their outdoor areas. The rules state: “Specific areas shall be designated for animals.” Live animals are prohibited in “food preparation, food storage and dining areas” and “areas where children routinely play (e.g., sand-boxes, playgrounds).” The rules would support OLEs that include dogs or cats but are designed or managed to prevent dogs and cats from accessing sandboxes, play areas, picnic tables where food is served, and fruit and vegetable gardens. This may create	practical hurdles to having dogs and cats in OLEs, particularly in small OLEs. Those interested in bringing dogs and cats into child care facilities should carefully review Section 7.13 of these rules, which provides limits on the number and types of animals allowed (e.g. no strays or aggressive animals). There are also requirements related to the types of enclosures and waste disposal practices, children’s interactions with animals and their waste products, animal vaccinations, reporting animal bites, and how food for animals should be stored. §7.13; §7.13.1A3-4; §7.6.1A; §7.13.3C; §7.13.2, §7.13.5	<i>Considerations:</i> None

Animals: Chickens & Ducks

Keeping chickens and ducks in an outdoor enclosure can be fun. It provides children lessons in biology and taking responsibility for other living things. However, chickens and ducks must be managed more carefully than most pets. Outbreaks of salmonella have occurred where these animals are poorly managed. Local laws and zoning can also impact whether chickens and ducks may be raised on a property.

Salmonella may be spread when children try to kiss birds or touch the birds then put their hands near their mouths. Exposure typically leads to unpleasant but not life threatening symptoms; however young children are more likely to develop serious illnesses, according to the Centers for Disease Control and Prevention (CDC). This led the CDC to opine that chickens and ducks “should not be allowed” in settings serving children younger than 5 years old. The CDC also recommends against contact for people with compromised immune systems and recommends that others wash their hands thoroughly with soap and water immediately after any contact with poultry, their droppings, or their equipment. (For more information, see: <https://www.cdc.gov/features/animalsinschools/index.html>).

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be managed to meet requirements in facilities serving older than kindergarten age <i>Considerations:</i> See 6 CCR 1010-7 (opposite page). <i>Mandates Addressed:</i> Helps meet mandates for “science materials” §7.702.62C8, §7.702.62D4	May be managed to meet requirements <i>Considerations:</i> “[A]nimal(s)... that are dangerous, and/or pose a potential threat to a child's safety or health must be confined in a place away from the child care area and inaccessible to children.” “The provider’s animals must be vaccinated as required by state law and local ordinance, and proof of vaccination must be available for review by the licensing specialist.” “All providers must wash their hands thoroughly with soap under warm running water, when available, and dry with an individual use and/or single use disposable towel... after handling animals, their toys, or food and water bowls.” (See p. 137 for more information on handwashing). “Children must be directly and actively supervised near standing water including, but not limited to... animal troughs.” “Children must not be permitted to mistreat animals.” “The premises of the family child care home must be kept safe and free from hazards to health at all times.” “All outdoor areas where children may pass or play shall be kept free of animal contamination. All animal wastes must be promptly removed and placed in a lidded container or otherwise inaccessible to children.” <i>Mandates Addressed:</i> Helps meet mandates for “nature or science related... materials” such as “pets.” §7.707.72A; §7.707.934A; §7.707.91D, J, L; §7.707.931G; §7.707.83G	May be managed to meet requirements <i>Considerations:</i> None.

Child Care Facility Licensing (Cont.)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)		2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)				
May be managed to meet requirements in facilities serving children older than kindergarten age <i>Considerations:</i> See 6 CCR 1010-7 (two columns to the right). <i>Mandates Addressed:</i> "Children at the center must have access to age-appropriate... science equipment and materials." §7.712.64B5	May contribute to higher rating in facilities serving children age 5 and up and family child care homes All environment rating scales used as part of CO Shines ratings include scale items related to nature/science and reward facilities for having pets. <i>Considerations:</i> Rating will be higher if cages used for pets are clean, outdoor play areas are free of "animal contamination," animals are immunized, and handwashing occurs after handling pets. (See p. 137 for information on handwashing). <i>Early Childhood (ECERS-R):</i> Items 13, 25; <i>Family Child Care (FCCERS-R):</i> Items 11, 22	May be managed to meet requirements in facilities serving children older than kindergarten age and family child care homes <i>Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Considerations for child care centers and school-age child care centers:</i> "No more than three adult animals for every 25 children may be cared for at a child care facility unless the animals are utilized as part of a developed educational program or therapy program with a written plan that outlines the intended goal and need for the animals." "Live poultry including adult birds, chicks, and ducklings... shall be prohibited from: 1. The premises of facilities caring only for children under the age of five; 2. Classrooms with children kindergarten age or younger or communal areas that these children use in facilities that also care for children over the age of	five... Because infections from these animals spread via fecal-oral transmission (hand to mouth behaviors), use of these animals in other classrooms where older children engage in frequent hand to mouth behaviors is discouraged." "Enclosures for... poultry shall be cleaned daily to remove animal waste, soiled bedding and other debris. Runoff from enclosures, barns, corrals, and manure storage areas shall be managed in an approved manner so as not to pollute wells and waterways. Adequate fly and mosquito control measures shall be utilized as needed." §7.13	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> If part of an OLE, chicken coops may qualify as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards, since they provide opportunities for learning. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Animals: Livestock

Some child care programs are hosted on farms or include outbuildings that house ungulates, such as cows, sheep, goats, pigs, ponies, or horses. Children may be able to feed or pet friendly animals or ride horses or ponies. The benefits of children's exposure to livestock may be similar to other animals, however aside from horses, it does not appear to have been carefully studied. Horseback riding, though it may appear to be a passive activity can be quite physical—it may encourage muscle development. Therapeutic horseback riding programs have been shown to help children who are developmentally delayed develop gross motor skills (Winchester, Winchester, Kendall, Peters, Sears & Winkley, 2002). *Caring for Our Children; National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs* (2011) provides recommendations for managing animals in child care facilities https://nrckids.org/files/CFOC3_updated_final.pdf, pages 119-122). Also see the *Compendium of Measures to Prevent Disease Associated with Animals in Public Settings, 2017* (<http://nasphv.org/Documents/AnimalContactCompendium2017.pdf>). The CDC encourages equestrian helmet use.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	
May be managed to meet requirements <i>Considerations:</i> See 6 CCR 1010-7 (opposite page). For Horseback riding, also see §7.719.4	May be managed to meet requirements <i>Considerations:</i> “[A]nimal(s) and/or fish that are dangerous, and/or pose a potential threat to a child's safety or health must be confined in a place away from the child care area and inaccessible to children. The provider's animals must be vaccinated as required by state law and local ordinance, and proof of vaccination must be available for review by the licensing specialist.” “Children must not be permitted to mistreat animals.” “All providers must wash their hands thoroughly with soap under warm running water, when available, and dry with an individual use and/or single use disposable towel... after handling animals, their toys, or food and water bowls” (See p. 137 for more information on handwashing). “Children must be directly and actively supervised near	standing water including, but not limited to... animal troughs.” For Horseback riding, also see §7.719.4. <i>Mandates Addressed:</i> “A selection of at least four (4) types of developmentally appropriate nature or science related games, materials, or activities shall be available [such as]... pets.” §7.707.72A, §7.707.934A, §7.707.91J, L, §7.707.83G

Child Care Facility Licensing (Continued)		Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be managed to meet requirements <i>Considerations:</i> None.	May be managed to meet requirements <i>Considerations:</i> See 6 CCR 1010-7 (opposite page). For Horseback riding, also see §7.719.4. <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... science equipment and materials.” §7.712.64B5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to nature/ science that reward centers for having pets. <i>Considerations:</i> Rating will be higher if cages used for pets are clean, outdoor play areas are free of “animal contamination,” animals are immunized, and handwashing occurs after handling animals. (See p. 137 for more information on handwashing) <i>Infants and Toddlers (ITERS-R):</i> Items 10, 22 <i>Early Childhood (ECERS-R):</i> Items 13, 25; <i>Family Child Care (FCCERS-R):</i> Items 11, 22	May be managed to meet requirements; engage with inspectors during planning stage to minimize risk of noncompliance <i>Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Considerations for child care centers and school-age child care centers:</i> “No more than three adult animals for every 25 children may be cared for at a child care facility unless the animals are utilized as part of a developed educational program or therapy program with a written plan that outlines the intended goal and need for the animals. Nothing in this section shall prohibit the properly located, stabled and corralled livestock, such as horses associated with equestrian programs at children’s camps or fish in bowls or aquariums.” “The grounds and premise shall be... free of... animal droppings... This provision shall not be construed to limit outdoor educational or recreational programs.” Also, “animals other than non-aggressive fish are prohibited in infant programs.” §7.13; §7. 6.1A; §7.13.1B; §7.6.1.A	<i>Design Considerations for family child care homes:</i> None. <i>For other facilities:</i> If they are not located in the enclosed outdoor learning environment used to meet licensing standards, their corrals would <i>not</i> be play components within a play area subject to sections 240 and 1008 of the ADA Standards. May need to be on an accessible path. “Animal containment areas that are not for public use” are not required to comply with ADA or to be on an accessible route; however, an advisory states “public circulation routes where animals may travel, such as in petting zoos and passageways alongside animal pens in state fairs are not eligible for this exception” (203.12). Call the Department of Justice’s toll-free information line to understand the requirements for your situation: 1-800-514-0301.

Bridges (not attached to playground equipment)

Bridges are an archetypal landscape feature with symbolic connotations of “connection,” “crossing,” “rising over,” and so on. At the OLE scale, small bridges can be positioned to prompt such feelings by punctuating a child’s journey by crossing a minor swale, a dry creek bed, sand play setting, or rain garden.

Bridges can provide a change in elevation along a primary pathway, become a lookout, offer a base for chase games, or afford an exciting challenge for wheeled toy riders. For infants and toddlers learning to walk, bridges with just a few inches of rise challenge the vestibular sense and encourage development of balancing skill. As an attractive landmark, a bridge adds visual identity and can serve as a point of reference to an area.

Bridges may be purchased from a manufacturer or custom designed by a landscape architect, architect, or engineer. When bridges are not part of a composite play structure, they are not considered to be playground equipment subject to the regulations and standards for protective surfacing. However, they need to be designed to be structurally sound, to meet the same standards for barrier rails as any other deck or raised platform to minimize injury from falls, and to avoid entrapment hazards.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be appropriate for children’s ages” and “size” as well as the “number attending.” “[M]ust be sturdy, safe, and free of hazards.” While no specific clarification is provided, a bridge for toddlers would need a protective barrier on drops 18 inches or more—as CPSC advises for playground platforms (See Table 4 on p. 21 of CPSC’s <i>Handbook for Public Playground Safety</i> for info on other age groups). Openings between slats on the protective barrier’s rail should have at least one dimension less than 3.5 inches to avoid entrapment hazards. Where a protective barrier is not required, openings between slats of rail should be less than 3.5 or greater than 9 inches. Licensing advises a bridge would not qualify as playground equipment requiring a protective surface if it is not part of a composite play structure and has protective barriers on any drops of 18 inches or more. 7.702.61A-C, 7.702.62B5	May be designed to meet requirements <i>Design Considerations:</i> “Decks that are more than twelve (12) inches high must have or be modified to have a protective railing or other barrier with slats no wider than four (4) inches apart. Additionally, for decks installed at ground level with more than a twelve inch (12”) gap between flooring and ground, the gap must be inaccessible to children.” “Walkways must be cleared of snow and ice to provide safe entry and exit from the home.” Licensing advises a bridge would not qualify as playground equipment requiring a protective surface if it is not part of a composite play structure and has protective barriers on any drops of 18 inches or more. §7.707.931E, §7.707.931O	May be designed to meet requirements <i>Design Considerations:</i> “[S]hall be sturdy, safe and free of hazards.” While no specific clarification is provided, this would likely include providing a guardrail on drops of 30 inches or more and a protective barrier on drops of 48 inches or more—as CPSC advises for playground platforms serving school-age children. Openings between slats on the protective barrier’s rail should have at least one dimension less than 3.5 inches to avoid entrapment hazards. Where a guardrail is used, openings between slats of rail should be less than 3.5 or greater than 9 inches. Licensing advises a bridge would not qualify as playground equipment requiring a protective surface if it is not part of a composite play structure and has protective barriers on any drops of 18 inches or more. §7.720.73A7, §7.720.73A5

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” While no specific clarification is provided, this would likely include providing a guardrail on drops more than 30 inches and a protective barrier on drops more than 48 inches—as CPSC advises for playground platforms serving school-age children. Openings between slats on a protective barrier’s rail should have at least one dimension less than 3.5 inches to avoid entrapment hazards. Where a guardrail is used, openings between slats of rail should be less than 3.5 or greater than 9 inches. Licensing advises a bridge would not qualify as playground equipment requiring a protective surface if it is not part of a composite play structure and has protective barriers on any drops of 18 inches or more.. §7.712.73A7	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to either gross motor skills or active physical play. If a small bridge enables the creation of a looping pathway for tricycles and riding toys, it may contribute to a higher rating, but adding a bridge in isolation would not. <i>Design Considerations:</i> Environment Ratings Score may be adversely affected if setting includes entrapment hazards (head entrapment openings between 3.5 and 9 inches; finger entrapment openings between 3/8 inch and 1 inch), projections, sharp or “dangerous” objects, or other “hazards that could lead to serious injury.” <i>Infants and Toddlers (ITERS-R):</i> Items 11, 16 <i>Early Childhood (ECERS-R):</i> Items 7, 14 <i>Family Child Care (FCCERS-R):</i> Items 12, 26	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are materials “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §2.6.1.A2; §7.4.A37	<i>Design Considerations for family child care homes:</i> None, unless part of the accessible route provided to access outdoor area. If part of the accessible route, see Section 1008 of ADA Standards. <i>For other facilities:</i> Bridge may be part of accessible route used to meet requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. Note requirements for accessible routes in play areas differ from other landscapes.

Composting Settings

Composting leaves, non-animal kitchen scraps, and organic waste from the outdoor learning environment is not only environmentally beneficial, it can teach children about decomposition and life cycles.

The NLI / NC State University Extension publication *Composting in Childcare Production Gardens* is a useful resource for those interested in learning more about composting in child care facilities. The publication recommends against uncontained ‘compost piles’ and suggests purchasing a compost tumbler or constructing compost bins. Discussion includes organic materials that can and can’t be composted (e.g. dirty diapers, dog and cat feces, and animal matter). Inclusion of “greens” (high in nitrogen), and “browns” (high in carbon), is emphasised. The guide also offers guidance on integrating composting into lesson plans for young children. *Composting in Childcare Production Gardens* is available at: <https://naturalelearning.org/wp-content/uploads/2016/12/7-Composting-Final-10192015.pdf>

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> See 6 CCR 1010-7 (opposite page).	May be designed to meet requirements <i>Design Considerations:</i> “All garbage and other wastes must be stored in a manner that is inaccessible to children and disposed of in a manner that does not constitute a health hazard or nuisance.” Contained compost bins or tumblers that are properly managed would not constitute a health hazard or nuisance. §7.707.91F	May be designed to meet requirements <i>Design Considerations:</i> “[S]hall be sturdy, safe and free of hazards.” “[E]xit routes shall be kept free from accumulation of extraneous materials that could cause or fuel a fire or hinder an escape or evacuation.” §7.720.73A7, §7.720.73A5

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... science equipment and materials.” §7.712.73A7, §7.712.64B5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to nature/science and reward staff for using “everyday events” (like decomposition) to teach about nature/science. <i>Management Considerations:</i> The Environment Rating Score may be adversely affected if “hazardous trash is accessible” to children or if children do not wash hands after touching lids of compost bins (See p. 137 for more information on handwashing). <i>Infants and Toddlers (ITERS-R):</i> Items 10, 11, 22 <i>Early Childhood (ECERS-R):</i> Items 13, 14, 25 <i>Family Child Care (FCCERS):</i> Items 11, 12, 22	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Compost containers shall be easily cleanable, covered, and well maintained.” “Stored refuse shall be inaccessible to insects, rodents and other pests.” Staff members and children toddler-aged and older shall wash their hands after “cleaning or handling garbage.” §7.6.2B-C, §7.10.3B	<i>Design Considerations for family child care homes:</i> None <i>For Other Facilities:</i> Despite its teaching potential, a compost area probably would not qualify as a play component subject to sections 240 and 1008 of ADA Standards, since it is not typically “intended to generate specific opportunities for play, socialization or learning.” Science learning related to composting would not need to take place adjacent to the compost area itself.

Decks, Stages, and Raised Platforms (not attached to playground equipment)

Decks and raised platforms can be used to provide dry, even surfaces for a variety of purposes without altering the grade of the ground and disturbing existing tree roots. They may serve as spaces for social gatherings, classroom activities, performances, or informal play. Decks may wrap around mature trees to take advantage of their shade or be integrated with constructed shade structures.

When a deck or platform is part of a freestanding play structure that includes slides or climbers, standards for play-ground equipment would apply. When decks or platforms are not attached to playground equipment, they are not play structures subject to the use zone or protective surfacing standards for playground equipment. They may need to be designed to meet building codes—to protect people from falling long distances and young children from entrapment. They must be designed to be structurally sound; if necessary, involving an engineer.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be appropriate for children’s ages, size,” and “developmental needs.” “[M]ust be sturdy, safe, and free of hazards.” While no specific clarification is provided, a deck serving toddlers would likely need a protective barrier on drops 18 inches or more—as CPSC advises for playground platforms (See Table 4 on p. 21 of CPSC’s Handbook for Public Playground Safety for info on other ages). Openings between slats on protective barriers should have at least one dimension less than 4 inches to avoid entrapment hazards. Where a protective barrier is not required, openings between slats of rail should be <3.5 or > 9 inches. Licensing advises a deck, stage, or platform would not qualify as playground equipment requiring a protective surface if it is not part of a composite play structure and has protective barriers on any drops of 18 inches or more. 7.702.61A-C, 7.702.62B5	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be kept safe” —“free of hazards posing danger of injury including... protrusions ... entrapment.” “Decks that are more than twelve (12) inches high must have or be modified to have a protective railing or other barrier with slats no wider than four (4) inches apart. Additionally, for decks in-stalled at ground level with more than a twelve inch (12”) gap between flooring and ground, the gap must be inaccessible to children.” “Walkways must be cleared of snow and ice to provide safe entry and exit from the home.” Licensing advises a deck, stage, or platform would not require a protective surface if it is not part of a composite play structure and has protective barriers on any drops of 18 inches or more. §7.707.931E, §7.707.931O, §7.707.21, §7.707.934B	May be designed to meet requirements <i>Design Considerations:</i> “[S]hall be sturdy, safe and free of hazards.” While no specific clarification is provided, this would likely include providing a guardrail on drops of 30 inches or more and a protective barrier on drops of 48 inches or more—as CPSC advises for playground platforms serving school-age children. Openings between slats on protective barriers should have at least one dimension less than 4 inches to avoid entrapment hazards. On guardrails, openings between slats of rail should be less than 3.5 or greater than 9 inches. Licensing advises a deck, stage, or platform would not qualify as playground equipment requiring a protective surface if it is not part of a composite play structure and has protective barriers on any drops of 18 inches or more. §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” (While no specific clarification is provided, this would likely include providing a guardrail on drops more than 30 inches and a protective barrier on drops more than 48 inches—as CPSC advises for playground platforms serving school-age children. Openings between slats on a protective barrier should have at least one dimension less than 4 inches to avoid entrapment hazards). On guardrails, openings between slats of rail should be less than 3.5 or greater than 9 inches. Licensing advises a deck, stage, or platform would not qualify as playground equipment requiring a protective surface if it is not part of a composite play structure and has protective barriers on any drops of 18 inches or more. §7.712.73A7	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to either gross motor skills or active physical play, and “provision for children with disabilities.” All scales reward providing “steady surface” for block play, “out of traffic.” ECERS-R rewards creating clearly defined areas for dramatic play that incorporate storage. <i>Design Considerations:</i> Environment Ratings Score may be adversely affected if setting includes entrapment hazards (openings between 3.5 and 9 inches and openings between 3/8 inch and 1 inch), projections, sharp or “dangerous” objects, or other “hazards that could lead to serious injury.” If staff use a deck “for stimulating active play that could lead to a fall with serious consequences,” the lack of “an adequate fall zone” could hurt the rating. <i>Infants and Toddlers (ITERS-R):</i> Items 11, 19, 16, 32 <i>Early Childhood (ECERS-R):</i> Items 7, 14, 22, 24, 37 <i>Family Child Care (FCCERS-R):</i> Items 12, 19, 26, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances”...which are “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1.A1; §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Dry Creek Beds and Rain Gardens

Dry creek beds are shallow, linear, manmade depressions in the ground, typically lined with smooth, rounded river rock, that are usually dry at the surface. Dry creek beds are intentionally designed to convey small amounts of runoff from rainfall, snow melt, or water play to a drain or another depression that continues conveyance beyond the OLE boundary. Children can turn over the stones and see what insects and invertebrates live underneath. Perennial plants adapted to damp soil may grow in the bed between the stones or along the edges to add habitat diversity and sensory richness.

Rain gardens are shallow, manmade depressions of various shapes, planted with plant species adapted to soil types that are normally dry at the surface, become saturated during storm events but dry out rapidly afterwards. Such soils may be modified or engineered for rapid infiltration. Rain gardens are designed to capture and infiltrate runoff from storms but to not retain standing water beyond 24 hours of the storm event they are designed to accommodate. Most often, water will drain in an hour or two. Sometimes referred to as “low impact development (LID),” and considered a best practice, these and similar features help to recharge aquifers and minimize the load on stormwater infrastructure. They may serve as onsite educational features. In the context of child care facilities, we recommend rain gardens be designed to hold no more than three inches of water during the peak of the storm event.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be appropriate for children's ages, size,” and “developmental needs.” “[M]ust be sturdy, safe, and free of hazards.” If accessible to children less than three years old, must not include choking or inhalation hazards (e.g. pebbles <1.25 inches in diameter and <2.25 inches long). “The play area must be designed so that all parts are visible and easily supervised.” <i>Mandates Addressed:</i> May contribute to requirement to have a variety of “science materials.” §7.702.61A-C, §7.702.62F, §7.702.73B4, §7.702.62C8, §7.702.62D4	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be kept safe and free of hazardous materials” including choking hazards (e.g. pebbles <1.25 inches in diameter and <2.25 inches long). “All parts of the play area must be visible and easily supervised.” If feature is designed to fill with standing water during a major storm event and slowly release that water over a 24 hour period, “children must be directly and actively supervised near standing water.” <i>Mandates Addressed:</i> Helps meet mandate for “nature or science related ... materials or activities” such as “plants, gardens ... or science props.” §7.707.21, §7.707.934A-B, 7.707.931C §7.707.83G	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor ... materials ... shall be sturdy, safe and free of hazards.” §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate ... science equipment and materials.” §7.712.73A7, §7.712.64B5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to nature/science and reward staff for using “everyday events” (like observing worms or insects) to teach about nature/science. <i>Design/Management Considerations:</i> The Environment Rating Score may be adversely affected if rocks or stones used are sharp or create choking hazards. Any pebbles should be at least 1 ¼ inches in diameter by 2 ½ inches long or at least 1 ¾ inch spheres. Children should wash hands after messy play. (See p. 137 for more information on handwashing). <i>Infants and Toddlers (ITERS-R):</i> Items 10, 11, 22; <i>Early Childhood (ECERS-R):</i> Items 13, 14, 25; <i>Family Child Care (FCCERS):</i> Items 11, 12, 22	May be designed to meet requirements; CDPHE advises working with its representatives and the local health department to ensure compliance. <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The grounds and premise shall be well drained and free of ... insect and rodent harborages, [AND] weed overgrowth ... This provision shall not be construed to limit outdoor educational or recreational programs.” “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances.” “Pre-school age children shall be appropriately supervised around any poisonous plants either in the child care facility or outdoor areas. Toxic plants are prohibited in areas designated for infants and toddlers” (i.e. children under 36 months old). Toxic or poisonous materials are those which are “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1A; §7.14.2B; §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Earth Play Settings

Earth play settings provide opportunities for tactile interaction with the surface of the planet, through sifting, digging, stroking, smoothing, molding, etc., using bare hands, manufactured implements, and found natural objects. A field-tested, prepared soil mix of equal parts play sand and sphagnum peat moss works well. This mixture retains more moisture than sand, is better for sculpting, provides a different sensory experience, and does not get muddy like many soils.

Earth play areas may be enclosed with boulders or stumps or placed in custom boxes or manufactured containers. Play value may be increased by adding natural loose parts such as seed pods, sticks, or smooth stones and manufactured loose parts like toy shovels, pails, and plastic animals.

The soil used should not have hazardous levels of lead, inorganic fertilizers, pesticides or other toxic substances. If stray cats are present in the neighborhood, the soil should be covered in a way that deters them from using the setting as a litterbox. For more information on earth play, see <https://naturalelearning.org/questions-about-digging-in-the-dirt/>.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be appropriate for children’s ages, size,” and “developmental needs.” “[M]ust be sturdy, safe, and free of hazards.” If accessible to children less than three years old, must not include choking hazards (e.g. pebbles <1.25 inches diameter and <2.25 inches long) or inhalation hazards. <i>Mandates Addressed:</i> Helps to meet requirement for having a variety of “manipulative toys.” In toddler programs, helps to meet requirement for play materials that encourage gross motor development, fine motor development, and social interaction. §7.702.61A-C, §7.702.62C, §7.702.62F, §7.702.62I	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be kept safe and free of hazardous materials” including “‘keep out of reach’ items,” “broken items,” “poisonous chemicals,” and “choking hazards” (e.g. pebbles <1.25 inches in diameter and <2.25 inches long). “If integrated into earth play, “food and/or organic material must be discarded each week.” “Children must be directly and actively supervised near standing water including, but not limited to... buckets.” <i>Mandates Addressed:</i> “Some sand or equivalent dry material or water play should be offered indoors or outdoors at least monthly and year round.” §7.707.21, §7.707.934B, §7.707.934A, §7.707.83M	May be designed to meet requirements <i>Design Considerations:</i> “[S]hall be sturdy, safe and free of hazards.” “[E]xit routes shall be kept free from accumulation of extraneous materials that could... hinder an escape or evacuation.” §7.720.73A7, §7.720.73A5

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... manipulatives... science equipment and materials.” §7.712.73A7, §7.712.64B2,5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to sand and water play for children 1.5 to 6 years old, which would potentially reward earth play. <i>Design/Management Considerations:</i> Must be a dedicated earth play area with enough soil for children to “dig, scoop, pour, and fill and empty containers” to qualify as “sand play.” Having a variety of toys for playing in the earth—that support different types of play (e.g. spoons, small buckets, dump trucks, plastic shovels) will help to get a higher rating. If older toddlers are not supervised to ensure they don’t eat the soil, this may lower the rating, as will “animal contamination,” failing to cover the area (ITERS & FCCERS only), or failing to wash hands after use. Ratings also consider whether hands are washed before use if earth play is incorporated into a sensory table. (See p. 137 for more information on handwashing). <i>Infants and Toddlers (ITERS-R):</i> Items 10, 11, 21, 25; <i>Early Childhood (ECERS-R):</i> Items 11, 12, 23, 27; <i>Family Child Care (FCCERS-R):</i> Items 13, 14, 23, 30; and the 2018 updates to each scale adopted by Clayton.	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances” ...which are “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” “Sand boxes shall be maintained in a sanitary condition and comply with the following requirements: 1. Sandboxes shall be covered with a completely removable lid or other covering at the end of each day; 2. Sand-boxes shall be kept free from cat and other animal excrement, litter and debris; 3. Sand shall be replaced as often as necessary to keep the sand visibly clean and free of extraneous materials; and, 4. These requirements only apply to designated sand boxes and do not include sand used as a resilient material or other ground covering.” §7.6.1.A1, §7.4.A37; §7.6.1.B	<i>Design Considerations for child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Embankment Scrambles

Embankment scrambles are sloping or stepped play surfaces designed to follow the contour of the underlying ground, with a height no greater than 12 inches above the surrounding finished grade. They are most commonly constructed of smooth stones or vertical logs (milled or unmilled) or recycled automobile tires set horizontally or embedded parallel to the sloped surface, and ascended on foot with the hand support. Like embankment slides, embankment scrambles minimize the risk of falling from a height. Embankment scrambles may also provide opportunities for incorporating more vegetation than typical play structures.

Whether or not embankment scrambles require protective surfacing alongside will vary based on the jurisdiction and the insurance adjusters. Some regulations may be interpreted to mean protective surfacing is not required if designed as a cobble pavement with edges less than 18 inches higher than the adjacent surface. However, it may be appropriate to consider embankment scrambles like an embankment slide under ASTM F1487, and put protective surfacing 6 feet in every direction at the bottom edge of the scramble. In their recommendations for embankment slides, CPSC and ASTM call for a zone 21 inches on either side and 42 inches above to be free of entanglement and projection hazards (Figure B13, p. 50, [Public Playground Safety Handbook](#)). Related to an embankment scramble, this same zone should be kept free of woody branches that could catch children's clothing and hold their weight.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (7.701, 7.702, 7.719), Family Child Care Homes (7.701, 7.707, 7.719), Neighborhood Youth Organizations (7.701, 7.720) School-Age Child Care Centers (7.701, 7.712, 7.719)

May be designed to meet requirements for all four types of licenses

Design Considerations for child care centers, NYOs, and school-age child care centers only: “[M]ust be sturdy, safe, and free of hazards.”

Design considerations for child care centers and family child care homes: A pavement of cobbles or small boulders integrated with topography, would not be considered playground equipment and would not be subject to requirements in child care centers and family child care homes that “all pieces of permanently installed playground equipment must be surrounded by a resilient surface” or “protective surface.” Avoid drops 18” or higher between adjacent surfaces (e.g. boulder to boulder or boulder to finished grade) or scramble could be considered to be “climbing equipment” that does not provide the required protective surfacing.

If the scramble is a freestanding play structure, it would qualify as playground equipment and would be required to be surrounded by a protective surface in child care centers and family child care homes (See section on protective surfacing pp. 100 and discussion on defining playground equipment on p. 29).

For both types, must avoid entrapment hazards (e.g. openings 3.5 to 9 inches wide) and strangulation hazards (e.g. rope used to pull oneself up slope that is not tied down at both ends.).

Design Considerations for child care centers only: “[M]ust be appropriate for children's ages, size,” and “developmental needs.”

Metal equipment “must be placed in the shade when possible.”

When working with an embankment scramble that is a free-standing structure, note a clarification to the rule requiring it be “safe and free of hazards” in the administrative guide for child care centers, which states playground equipment “must be commercial grade and meet current Consumer Product Safety standards or be inspected and approved by a Certified Playground Safety Inspector (CPSI).” It notes: “The Department [of Human Services] can provide this service at no cost.” The most current standards for free-standing play structures are in ASTM F1487-17 for structures serving children 2-12 years old and ASTM F2373-17 for structures serving children 6 to 23 months old. Although Licensing advises guidelines provided in CPSC’s [Public Playground Safety Handbook](#) must also be followed, none consider embankment scrambles as a type of play setting. ASTM F1487-17 is flexible regarding equipment that does not fit into its “designated types.” It states “the designer, manufacturer or both shall use professional judgement to perform and document a hazard analysis and follow appropriate requirements to mitigate hazards” (See section 1.6.1 of ASTM F1487-17). (Continues on opposite page)

Child Care Facility Licensing 12 CCR 2509-8 (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
<i>For family child care homes only:</i> “All play equipment... must be correctly assembled, well maintained, and securely stabilized or anchored.” “[M]ust be kept safe”—“free of hazards posing danger of injury including... protrusions.” <i>For school-age child-care centers only:</i> “All outdoor climbing equipment over eighteen (18) inches provided by the center must have least six (6) inches resilient surface throughout the use zone.” Avoid drops 18” or higher between adjacent surfaces (e.g. boulder to boulder or boulder to finished grade) or scramble could be considered to be “climbing equipment” that does not provide the required protective surfacing. <i>Mandates Addressed:</i> Helps meet child care center requirements for “large muscle equipment” and supporting toddlers’ “gross motor development.” Helps meet family child care homes “outdoor physical free play equipment” requirements. Helps meet requirement that school-age children “have access to age-appropriate... recreation equipment.” <i>Child Care Centers:</i> 7.702.61A-C; 7.702.62B; 7.702.62C; 7.702.62I; Administrative Guide <i>Family Child Care Homes:</i> §7.707.91M, §7.707.83K, §7.707.932A; Administrative Guide <i>Neighborhood Youth Orgs:</i> §7.720.73A7 <i>School-Age Child Care Centers:</i> §7.712.73A7, §7.712.64B3; §7.712.71D5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to free play and either gross motor or active physical play. Variety in experience is rewarded. Score may be adversely affected if equipment is “too high (e.g. more than 1 foot per year of age above fall surface)” —embankment design provides penalties while avoiding penalties. <i>Design Considerations:</i> Score could be adversely affected if scramble includes entrapment hazards (openings between 3.5 and 9 inches or openings between 3/8 inch and 1 inch), projections, sharp or “dangerous” objects, or other “hazards that could lead to serious injury.” Rating considers whether there is an “adequate fall zone,” with protective surface (See p. 100), whether features are designed in a way that interferes with other activities, how disabled children are served, and how children are supervised—including removing loose parts from foot of feature as necessary. If designed as playground equipment for ages 2 and up, should be at least 6 feet apart from other playground equipment <i>Infants and Toddlers (ITERS-R):</i> Items 11, 16, 30, 32; <i>Early Childhood (ECERS-R):</i> Items 7, 8, 14, 29, 35, 37; <i>Family Child Care (FCCERS-R):</i> Items 12, 26, 32, 34; <i>“Back Page All Scales” from Clayton Early Learning</i>	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are materials “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §2.6.1.A1; §7.4.A37	<i>Design Considerations for child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Embankment Slides

Embankment slides offer similar play value to traditional slides but provided additional opportunities for adjacent planting and natural shade. The U.S. Consumer Product Safety Commission (CPSC) defines an embankment slide as “a slide that follows the contour of the ground and at no point is the bottom of the chute greater than 12 inches above the surrounding ground.” As the CPSC (2010) notes, this “basically eliminates the hazard of falls from elevated heights,” so it only recommends a use zone with protective surfacing at the foot of the slide.

The slides themselves are typically manufactured playground equipment designed to meet CPSC guidelines and ASTM standards. They may be set into a variety of different surfaces including turf covered mounds, stairs, or rock scrambles. CPSC and ASTM call for a zone 21 inches on either side of the slide and 42 inches above the chute to be free of entanglement and projection hazards (See Figure B13 on page 50 of CPSC’s [Public Playground Safety Handbook](#)). This zone should be kept free of woody branches that could catch children’s clothing and hold their weight. The standard tests for entanglement and projection hazards were created with metal bolts in mind, and it makes no sense to apply them to leaves or stems that don’t support children’s weight or present any risk of impalement. ASTM also calls for no tree limbs within 84 inches of the slide and any platforms attached to it.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (7.701, 7.702, 7.719)

Family Child Care Homes (7.701, 7.707, 7.719)

May be designed to meet requirements

Design Considerations for child care centers and family child care homes: It must guard against “entrapment” and “strangulation” hazards (if slide is connected to a platform, there should be no gaps between slide and platform and no loose ropes within reach of slide).

ASTM F1487 and the U.S. Consumer Product Safety Commission only recommend a use zone free of obstacles with protective surfacing at the foot of an embankment slide. Under CPSC guidelines and ASTM standards, this use zone extending from the base of the slide exit must be 6 feet for slides with a height of 6 feet and under (measured from top of chute to grade at opening). For slides 6 to 8 feet high, the size of the use zone is equal to the height of the slide. For taller slides, the required use zone is 8 feet (See CPSC’s Handbook for Public Playground Safety 5.3.6.5). However licensing regulations state “all pieces of permanently installed playground equipment must be surrounded by

a “resilient surface” or a “protective surface” so a variance would be required for embankment slides without protective surfacing on all sides that meet national standards.

Additional considerations for child care centers only: “[M]ust be appropriate for children’s ages, size,” and “developmental needs,” and be “sturdy, safe, and free of hazards.” A clarification of this rule in the administrative guide for child care centers states playground equipment “must be commercial grade and meet current Consumer Product Safety standards or be inspected and approved by a Certified Playground Safety Inspector (CPSI).” It notes: “The Department [of Human Services] can provide this service at no cost.” The most current standards for free-standing play structures are in ASTM F1487-17 for structures serving children 2-12 years old and ASTM F2373-17 for structures serving children 6 to 23 months old. Or see CPSC’s

[Public Playground Safety Handbook](#) (especially §5.3.6).

“If slide is made of metal, “must be placed in the shade when possible.”

Additional considerations for family child care homes only: “All play equipment... must be correctly assembled, well maintained, and securely stabilized or anchored.” “[M]ust be kept safe”—“free of hazards posing danger of injury including... protrusions.”

Mandates Addressed: Helps meet requirements for “large muscle equipment,” and supporting toddlers’ “gross motor development” in child care centers and “outdoor physical free play equipment” in family child care homes.

7.702.61A-C; 7.702.62B,C,I; §7.707.91M, §7.707.83K, §7.707.932A, Administrative Guides

Child Care Facility Licensing (Continued)		Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[S]hall be sturdy, safe and free of hazards.” §7.720.73A7	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7, §7.712.64B3	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to free play and either gross motor or active physical play. Variety in experience is rewarded. <i>Design Considerations:</i> Environment Ratings Score may be adversely affected if setting includes entrapment hazards (openings between 3.5 and 9 inches and openings between 3/8 inch and 1 inch), projections, sharp or “dangerous” objects, or other “hazards that could lead to serious injury.” Rating considers whether there is an “adequate fall zone,” with protective surface (See p. 100), whether features are designed in a way that interferes with other activities, how disabled children are served, and how children are supervised—including removing loose parts from foot of feature as necessary. <i>Infants and Toddlers (ITERS-R):</i> Items 11, 16, 30, 32; <i>Early Childhood (ECERS-R):</i> Items 7, 8, 14, 29, 35, 37; <i>Family Child Care (FCCERS-R):</i> Items 12, 26, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are materials “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §2.6.1.A1; §7.4.A37	<i>Design Considerations for child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Enclosure Systems (Fencing, Walls, Natural Barriers)

Enclosing outdoor learning environments for young children is common sense where the environment borders a busy street, fast moving stream, or similar hazards difficult for young children to perceive or manage. In licensed child care centers, enclosure of OLES is required to ensure children are protected. These enclosures are often chain-link fences or concrete block walls.

To soften their appearance and add green to OLE edges, fences and walls can be planted with non-poisonous vines. Walls should be planted with vine species that clasp onto a surface. Fences should be planted with twining species that swirl their stems around the fence.

Fences and walls can also support interactive play panels that offer different games, artistic activities, or acoustic play (See p. 38).

Opportunities to use hedges or other natural features as part of the enclosure can also help to create a less cage-like, more pleasing environment.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design/Management Considerations:</i> “The play area must be fenced or have natural barriers, such as hedges or stationary walls at least four (4) feet high, to restrict children from unsafe areas.” The daily playground safety checklist in the administrative guide calls for no large gaps, holes, and the gate to be securely latched <i>Mandates Addressed:</i> See above. § 7.702.73B3	May be designed to meet requirements <i>Design Considerations:</i> “The outdoor play space must be enclosed with at least a forty-two inch (42”) fence or natural barrier. If a natural barrier is used, it must begin no higher than three and one-half inches (3-1/2”) from the ground. If the home does not have a fenced play space, provisions must be made for outdoor play in an area approved by the State Department.” “The premises... must be safe and free from hazards to health at all times.” <i>Mandates Addressed:</i> See above. §7.707.931B, §7.707.934B	May be designed to meet requirements <i>Design Considerations:</i> No enclosure requirements for neighborhood youth organizations. §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> No enclosure requirements for school-age child care centers.	May contribute to higher rating <i>Design Considerations:</i> Failing to provide a “fence or barrier that prevents children from leaving designated safe area” can lead to a lower rating on ITERS-R and FCCERS-R. ECERS-R rating items for enclosure originally encouraged a lower standard than CO’s licensing rules. Updates to all three scales, available on the Clayton Early Learning website, show enclosure may affect scale items for “safety practices” and “active physical play”/“gross motor play space.” The updates reiterate height requirements for fences (42” in family child care homes; 48” in child care centers), reiterate the need for the area to be completely enclosed, call for latches on fences to be 34-48 inches high (no upper limit for FCCERS-R), and spacing of 4 inches or less between the verticals of a fence. The updates also refer to ASTM F2049, stating: “A barrier needs to be in place to prevent a vehicle from accidentally entering the play space. This can be done one of 3 ways: 1.) Discrete barrier such as structural bollards, trees, or posts, should be placed along any side of the playground which is within 30 feet of streets or parking. Discrete barriers need to be placed with a maximum of 42 in. apart from each other. The distance from the fence to the barrier is a minimum of 2 feet and the height of the barrier should be at least 2 feet. 2.) Continuous Barrier such as guardrails, concrete or brick reinforced wall should be placed along any side of the playground which is within 30 feet of streets or parking. The distance from the fence to the barriers is a minimum of 2 feet and a height of at least 48 in. 3.) Compliant impact tested fence: Need proof of compliance.” Failure to comply with these recommendations could affect ratings. <i>Infants and Toddlers (ITERS-R):</i> Item 11; <i>Early Childhood (ECERS-R):</i> Item 14; <i>Family Child Care (FCCERS-R):</i> Item 12; <i>Updates to these scale items available from Clayton Early Learning</i>	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> If a hedge is included as part of the enclosure, regulations related to poisonous plants would apply: “Pre-school age children shall be appropriately supervised around any poisonous plants either in the child care facility or outdoor areas. Toxic plants are prohibited in areas designated for infants and toddlers” (i.e. children under 36 months old). Toxic materials are materials “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” Hedges must also be maintained so that they “are free of... insect and rodent harborages.” §7.6.1A; §7.14.2B; §7.4.A37	<i>Design Considerations:</i> None

Fruit and Vegetable Gardens

Annual vegetable and permanent fruit gardens engage children in growing their own food, and encourage children to try fruits and vegetables and acquire healthy nutrition habits (Bell and Dymont, 2008). Through gardening, children begin to learn science concepts like growth, decay, life cycles, predation, and pollination, and to experience diverse cultural expressions of food.

Locate vegetable and fruit gardens in areas with direct sunlight (at least 6 hours/day during the gardening season), with access to water for irrigation and, ideally, potable water for washing hands and produce. Vegetable and fruit gardens may be created directly in the ground, in raised beds, and in all types of containers—recycled plastic “kiddie pools,” pots large and small, and manufactured growing bags. Raising beds or providing plant protection railings (see p. 84) helps to stop children from inadvertently running through planting beds. Raised beds also allow more control over the growing medium. Avoid reusing lumber from prior to 2004, as it may contain copper chromate arsenate. Avoid pesticides and fertilizers that may negatively impact health of children or ecosystems. Consider cultural, mechanical, and biological pest control methods (See: <https://extension.colostate.edu/docs/pubs/garden/xcm221.pdf>). NLI resources created for North Carolina may have value in Colorado: <https://naturalearning.org/local-foods-childcare-center-production-gardens-2/>

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> When used in meals or snacks, “All food prepared by the center must be from sources approved by the local health department or the State Department of Public Health and Environment. All food must be prepared, served, and stored in such a manner as to be clean... free from spoilage, and safe for human consumption.” Must not include choking hazards (e.g. stone mulches with pieces <1.25 inches in diameter and <2.25 inches long) if accessible to children under 3. <i>Mandates Addressed:</i> May help meet mandate for a variety of “science materials.” §7.702.55A7, §7.702.61A; §7.702.62C8, §7.702.62D4	May be designed to meet requirements <i>Design Considerations:</i> When using as part of meals or snacks: “Food must be... stored in a safe and sanitary manner.” “Outdoor play space ... must be free from safety hazards including, but not limited to... tools.” However, this would not limit the use of tools for educational activities like gardening. “The premises... must be safe and free from hazards to health,” or “posing danger of injury including but not limited to... choking hazards...” (e.g. stone mulches with pieces <1.25 inches in diameter and <2.25 inches long accessible to children under 3). <i>Mandates Addressed:</i> Helps meet mandate for “nature or science related... materials or activities” such as “plants, gardens” §7.707.21, §7.707.73, §7.707.91D; §7.707.934B, §7.707.83G	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System (2015)		Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)	CO Shines Program Guide	Environmental Rating Scales (ITERS-R, etc.)		
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings must be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> Children at the center must have access to age-appropriate ... science equipment and materials.” §7.712.73A7, §7.712.64B5	May contribute to higher rating <i>Possible Points:</i> 2 points <i>Evidence required:</i> Observation of garden during assessment visit (1 point); a written description of the garden and how children use it and photos stamped within the past 12 months that make the garden’s location clear, show kids sampling produce, and show at least two types of produce (1 point) §5.7	May contribute to higher rating All environment rating scales include scale items for nature/ science. <i>Design Considerations:</i> Providers who point out to infants/toddlers and use everyday events to teach children about nature or science are rewarded. So are those that do nature/science activities (e.g. sprouting seeds and planting), at least once every two weeks. Hands should be washed after messy activities. (See p. 137 for more information on handwashing). Tools not meant for children shouldn’t be accessible. <i>Infants and Toddlers (ITERS-R):</i> Items 10, 11, 22; <i>Early Childhood (ECERS-R):</i> Items 13, 14, 25; <i>Family Child Care (FCCERS):</i> Items 11, 12, 22	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth orgs:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e.... soil, wood chips...) in play areas shall not contain hazardous levels of any toxic chemical or substances.” “Pre-school age children shall be appropriately supervised around any poisonous plants either in the child care facility or outdoor areas. Toxic plants are prohibited in areas designated for infants and toddlers” (i.e. children under 36 months old). Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” Facilities incorporating fruits or vegetables into meals or snacks must wash it using their approved method for food preparation. Use of hand or dish sink may be possible if plan is approved (See 7.11.1A(1-3)). “Raw, uncut produce, including those grown on site, shall be permitted provided gardens and greenhouses conform to USDA Good Agricultural Practices. See Interpretive Memo 14-08 Determining ‘Approved Source’ for Raw, Uncut Fruits and Vegetables” and CDPHE’s guidance document Food Safety for Vegetable Gardens (click title or see Appendix). §7.6.1A1; §7.11.6H; §7.4.A37; §7.14.2B	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route (but do not need to be an accessible route themselves) and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for routes aren’t typical.

Infant Pull-up Walking Rails

Pull-up walking rails enable infants to self-support as they learn about gravity, and practice balance and standing as a prelude to walking.

Rails may be made of circular cross-sectioned wood, bamboo, and ¾" plastic pipe supported on vertical posts, the sides of raised planters, or other suitable structures.

Rails should be smooth without sharp edges and should not be breakable into smaller pieces that could become choking hazards. Avoid protrusion hazards (parts that stick out and could poke out an eye, etc.). Adjacent surfaces should be relatively soft (e.g. a lawn rather than a paved surface) but do not need to be protective surfaces.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> Only age and developmentally appropriate in spaces serving infants and toddlers. "[M]ust be sturdy, safe, and free of hazards." (e.g. no sharp edges, protrusions, or entrapment hazards—gaps between 3.5 and 9 inches). Does not qualify as play-ground equipment (as it is not primarily used for play) and so it does not require protective surfacing. Must not be made of "brittle, easily breakable plastic or glass." <i>Mandates Addressed:</i> Helps meet requirement for "large muscle equipment" for infants. §7.702.61A-C, §7.702.62D5	May be designed to meet requirements <i>Design Considerations:</i> "[M]ust be kept safe"—"free from hazards posing danger of injury including but not limited to... protrusions, broken items, areas of entrapment..." (e.g. gaps between 3.5 and 9 inches). <i>Mandates Addressed:</i> Helps meet requirement for equipment allowing for "outdoor physical free play" for infants. §7.707.91D, §7.707.21, §7.707.83K	Not developmentally appropriate for such facilities.

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
Not developmentally appropriate for such facilities.	May contribute to higher rating in areas serving infants and toddlers Environment rating scale for infants and toddlers used as part of CO Shines ratings includes scale items for safety practices and active physical play that may be affected by the inclusion or design of pull-up rails. Pull-up rails are an example of “sturdy things to pull up on,” a type of equipment for “active physical play” appropriate for infants. <i>Design Considerations:</i> Appropriate outdoor spaces and equipment “must be safe for infants and toddlers. For example... no sharp edges, splinters, protrusions, or entrapment hazards” (gaps between 3.5 inches and 9 inches or 3/8 inch and one inch) to score well. <i>Infants and Toddlers (ITERS-R):</i> Item 11, 16	May be designed to meet requirements <i>Design Considerations for family child care homes and neighbor-hood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances.” “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1.A1; §7.6.1.A2; §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Loose Parts Play Settings and Natural Construction Settings

Loose parts play settings provide a variety of natural and manufactured loose parts that are lightweight enough to be manipulated by the age group targeted by the OLE. Natural construction settings are a specific type of loose parts play setting where older preschool and school age children can construct free-form structures. Settings provide opportunities for open-ended socio-dramatic play, construction play, large muscle exercise, and elevated levels of physical activity.

Examples of manufactured loose parts include pieces of textile, PVC pipe, and lightweight blocks made of foam, wood, or cardboard (needs to be stored in a dry place). Examples of natural loose parts for construction include straw bales, rounded stones, smoothed sticks or branches, prepared lengths of bamboo, small timbers, tree cookies, corn stalks, or whatever is at hand that is safe to use. Inclusion of permanent elements like trees, shrubs, mounds, or fences provides support for children's own structures.

Access to dress-up clothes or seasonal loose parts such as flowers, leaves, and seedpods may facilitate imaginative scenarios. Providers should monitor building to make sure heavy items that may injure children are not used to create unstable overhead structures.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> "[M]ust be appropriate for children's ages, size," and "developmental needs." "[M]ust be sturdy, safe, and free of hazards." If accessible to children less than three years old, must not include choking hazards (loose parts <1.25 inches diameter and <2.25 inches long). "[E]xit routes must be kept free from accumulation of extraneous materials." <i>Mandates Addressed:</i> Helps to meet requirement for having a variety of "blocks and accessories" and "manipulative toys." In toddler programs, helps to meet requirement for play materials that encourage gross motor development, and social interaction. §7.702.61A-C, §7.702.62C, §7.702.62F, §7.702.62I	May be designed to meet requirements <i>Design Considerations:</i> "[M]ust be kept safe and free of hazardous materials" including "'keep out of reach' items," "broken items," and "choking hazards" (loose parts <1.25 inches diameter and <2.25 inches long accessible to children under 3). <i>Mandates Addressed:</i> "Some sand or equivalent dry material or water play should be offered indoors or outdoors at least monthly and year round." §7.707.21, §7.707.934B §7.707.83M; §7.707.934A	May be designed to meet requirements <i>Design Considerations:</i> "[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards." "[E]xit routes shall be kept free from accumulation of extraneous materials that could cause or fuel a fire or hinder an escape or evacuation." "Equipment, materials, and furnishings, including durable furniture such as tables and chairs, shall be stored in a manner that is safe for youth." §7.720.73A7, §7.720.73A8, §7.720.73A5

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings must be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... manipulatives... recreation equipment” and may address requirement for “science equipment and materials.” §7.712.73A7, §7.712.64B2,3, 5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items for free play that could be raised by having loose parts. The score for “blocks” could be raised by having materials for stacking and building in an OLE serving children 12 months or older. The blocks scale item is not used for children under 12 months of age. <i>Design/Management Considerations:</i> Loose parts shouldn’t be sharp or dangerous and should be kept off of protective surfaces used in use zone. Tools should be intended for children’s use. For something to qualify as a block and increase the rating for blocks, a majority of its sides must be 2 inches or more, it must be stackable but cannot be interlocking. The minimum number of blocks to qualify for having “some” is at least 15 blocks for preschoolers or at least 6 for toddlers. At least two sets of different types of blocks for each age group that children can play with without “undue competition” is required for highest rating (Minimum 10 per set for toddlers). To count as a set, blocks “must obviously be designed to be used as a group” and be made of the same materials. Centers are rewarded for providing blocks that are a variety of shapes, sizes, and colors, providing space “out of traffic, with a steady surface,” for stacking, sorting blocks by type, and providing at least 5 people figurines, at least 5 animal figurines, and at least 5 transportation toys that can be used in combination with blocks. Staff must be observed playing with blocks with children to receive highest score for the blocks scale item. Also, may affect ratings for supervision (e.g. “staff act to prevent dangerous situations before they occur,” removing loose parts from use zone of playground equipment) and disability. <i>Infants and Toddlers (ITERS-R):</i> N/A <i>Early Childhood (ECERS-R):</i> Items 14, 22, 30, 35, 37 <i>Family Child Care (FCCERS):</i> Items 19, 27, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips...)... shall not contain hazardous levels of any toxic chemical or substances.” “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1.A1-2; §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> If an area is specifically provided for natural construction, it would qualify as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes.

Mounds and Sloping Topography

Mounds and sloping topography may stimulate running. They provide “high ground” where both children and those supervising them can look out over the OLE. Turf surfaces afford rolling in the summer and winter sledding. Adding elements such as an embankment scramble (see p. 56), an embankment slide (see p. 58), embedded stones, ornamental grasses, and a summit deck (see p. 50) add play value by extending activity choices and more challenging ways of ascending.

Mounds may incorporate tunnels that children can crawl through (see p. 116). Sloping topography can add variety of movement to unitary protective surfaces in the use zone of playground equipment.

Mounds often occupy a relatively large footprint, partly because turf slopes must be gentle enough to avoid excessive wear and erosion. Otherwise, there are few restrictions on the design of mounds. A landscape architect or other professional familiar with grading can help to ensure appropriate topographical profiles, proper drainage and accessibility. Consideration should be given to how views may be affected by a mound to ensure any equipment or settings requiring supervision are visible.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “The play area must be designed so that all parts are visible and easily supervised.” Visibility may be accomplished a variety of ways including providing ways the supervisor could walk around the mound, creating mounds an adult caretaker could see over, or having a raised area over-looking the area. §7.702.73B4, 7.702.62	May be designed to meet requirements <i>Design Considerations:</i> “All parts of the play area must be visible and easily supervised.” Visibility may be accomplished a variety of ways including providing ways the supervisor could walk around the mound, creating mounds an adult caretaker could see over, or having a raised area over-looking the area. “Tiered yards that have drop offs of more than more than twelve inches (12”) must have a protective railing or other barrier with slats no wider [than] four inches (4”) apart.” §7.707.931C, F	May be designed to meet requirements <i>Design Considerations:</i> None.

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> None	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to either gross motor play or active physical play which providing sloping topography may contribute to. Sloping topography may stimulate gross motor skills (See Fjortoft, 2001). It encourages use of different large muscles than walking or running on flat earth. Topography could also be used to define space for privacy for preschool or school age children. <i>Design/Management Considerations:</i> Consider how topography will affect visibility of the most hazardous areas/activities during typical use of the space. If embankment scrambles or slides are incorporated into topography, see sections on those items. If partially covered with garden or another activity, see appropriate section. Providing transfer platform for children in wheelchairs may help the facility to score higher on scale related to children with disabilities. Item on space for privacy considers if such spaces are “easily supervised” (See section on supervision, p. 148). <i>Infants and Toddlers (ITERS-R):</i> Items 16, 25 <i>Early Childhood (ECERS-R):</i> Items 5, 7, 8, 29, 37 <i>Family Child Care (FCCERS):</i> Items 6, 26, 27, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1.A1; §7.4.A37	<i>Design Considerations for child care homes:</i> None <i>For other facilities:</i> Not every mound would be subject to ADA Standards. Intention is key here. If a mound is treated as a play component, particularly if it is used to gain points on assessments for providing an active physical play area, it would seem to qualify as a play component subject to requirements for Accessibility contained in Sections 240 and 1008 of ADA Standards. Guidance is available from the Department of Justice toll-free information line: 1-800-514-0301. The primary question is whether or not a mound may be defined as an elevated or a ground level play component.

Multipurpose Lawns

Multipurpose lawns provide a soft surface for active play, such as ball games and parachute play, and quieter group activities like story time. Combined with mounds or sloping topography, lawns create opportunities for rolling. However, the truth is most early childhood facilities have too much lawn, which at a certain point becomes a boring monoculture.

We recommend designating a multipurpose lawn setting just large enough for active use by one class at a time, and converting the remaining space into a variety of play and learning settings. Thus, grassy areas are reduced, irrigation is minimized, biodiversity is increased, and a greater diversity of play and learning is possible.

Multipurpose lawns may have shade trees, gardens, or sloping lawn at their periphery to increase play value. For information on these features, see discussion of trees (p. 114), plantings (p. 82), and mounds/sloping topography (p. 68). Use turf grass species suitable for the amount of shade and rainfall or irrigation available. Avoid pesticides and fertilizers that may impact health of children or ecosystems. Do not fret too much about weeds as they often add play value and general interest for children. Daisies and dandelions are classic examples.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> None.	May be designed to meet requirements <i>Design Considerations:</i> None.	May be designed to meet requirements <i>Design Considerations:</i> None.

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> None	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to either gross motor play or active physical play which encourage the use of a variety of different surfaces supporting a variety of different types of play. Infant/Toddler and Family Child Care programs may receive higher ratings when children are allowed to experience the natural world (including grass). <i>Design/Management Considerations:</i> Higher rating if a variety of age-appropriate portable equipment that stimulates physical activity on lawn is provided—balls, etc. Programs serving infants may be rated higher if infants are placed on a blanket on the grass. <i>Infants and Toddlers (ITERS-R):</i> Items 16, 22 <i>Early Childhood (ECERS-R):</i> Items 7, 8 <i>Family Child Care (FCCERS):</i> Items 22, 26	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1.A1; §7.4.A37	<i>Design Considerations for child care homes:</i> None <i>For other facilities:</i> “Lawn seating areas and exterior overflow seating areas, where fixed seats are not provided, shall connect to an accessible route” (221.5). A lawn would not typically qualify as a play component subject to Sections 240 and 1008 of ADA Standards because it is not “intended to generate specific opportunities for play, socialization, or learning.”

Orchards

Orchards are groups of fruit trees. In the context of child care facilities, an “orchard” will likely contain at the most a modest grove of 10 or so trees providing many of the same benefits, such as shade, as other groves. Orchards provide fruit that can be incorporated into educational activities, snacks, or meals. They may not be planted grove-like in a single location but scattered singly, in duets and trios, wherever space and sunlight are available. Fruiting vines and shrubs may be intermixed with trees.

Orchard trees need to be selected that are adapted to regional climatic and site conditions (sun/shade, soil pH, water/drainage, hardiness). For example, some cherry trees may grow wonderfully on a sites with acidic soils but may be short-lived and not particularly productive in soils with a high pH, common in Colorado.

It’s also best to avoid fruit tree varieties known to be highly susceptible to insects, fungi, or diseases that cannot be managed without toxic pesticides. Avoid pesticides and fertilizers that may negatively impact health of children or ecosystems. Consider cultural, mechanical, and biological pest control methods (See: <https://extension.colostate.edu/docs/pubs/garden/xcm221.pdf>). Consider age of children using the space when specifying mulch to use at the base of trees to avoid creating choking hazards.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “A shaded area in the fenced play area of at least one hundred fifty (150) square feet must be provided by means of trees or other cover to guard children against the hazards of excessive sun and heat.” Trees help to meet these requirements based on their size at the time of inspection—not their potential future size. The trunks of trees must not be located within the use zone of playground equipment, obscure the target on an archery range or be part of bullet-stop on a rifle range. Tree limbs may not hang within 84 inches above any designated play surface of playground equipment (larger than 2” x 2”), its use zone, or the pivot points of swings. (See ASTM F1487, especially section 9.8.4.1 and ASTM F2373, especially section 11.1.6). Avoid choking hazards (e.g. stone mulches <1.25 inches in diameter and <2.25 inches long) if accessible to children under 3. <i>Mandates Addressed:</i> May contribute to requirement for variety of “science materials.” §7.702.73B6, §7.719.31B, 7.702.61-62, Administrative Guide, §7.719.31B; §7.719.32D	May be designed to meet requirements <i>Design Considerations:</i> Trees must not be located in the use zone of playground equipment, obscure target on archery range or be part of bullet-stop on a rifle range. Avoid choking hazards (e.g. stone mulches <1.25 inches in diameter and <2.25 inches long accessible to children under 3). <i>Mandates Addressed:</i> Helps meet mandate for “nature or science related... materials or activities” such as “plants, gardens ...or science props,” and requirement that “[s]hade must be available.” §7.707.931D, §7.707.21, §7.707.91D, §7.707.83G, §7.707.932A, Administrative Guide, §7.719.31B, §7.719.32D	May be designed to meet requirements <i>Design Considerations:</i> None.

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System (2015)		Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)	CO Shines Program Guide	Environmental Rating Scales (ITERS-R, ECERS-R, FCCERS-R)		
May be designed to meet requirements <i>Design Considerations:</i> “Access to a shaded area, sheltered area, or inside building area must be provided at all times to guard children against the hazards of excessive sun and heat.” Trees should not be located in a way that obscures the target on archery range or as part of the bullet-stop on a rifle range. <i>Mandates Addressed:</i> May contribute to requirement for “age-appropriate... science equipment and materials.” §7.712.71D2, §7.719.31B, §7.719.32D, §7.712.64B5	<i>Possible Points:</i> 2 points <i>Evidence required:</i> observation of garden during assessment visit (1 point); a written description of the garden and how children use it and photos stamped within the past 12 months that make the garden’s location clear, show kids sampling produce, and show at least two types of produce (1 point) §5.7	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to nature/science, free play, and either gross motor play or active physical play. Trees may increase the rating on these items by providing shade and natural experiences. They may also be used to make a space where children can have privacy. <i>Design Considerations:</i> Under the rating systems, six “tree roots that are unlikely to cause tripping” could lead to lowest rating on safety practices for ECERS-R. <i>Infants and Toddlers (ITERS-R):</i> Items 16, 22, 25; <i>Early Childhood (ECERS-R):</i> Items 7, 8, 14, 25, 29, 35; <i>Family Child Care (FCCERS):</i> Items 6, 22, 26, 27, 32	May be designed to meet requirements <i>Design Considerations for family child care homes and neighbor-hood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (...soil, wood chips...) in play areas shall not contain hazardous levels of any toxic chemical or substances”... “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” Eating fruit is “permitted provided gardens and greenhouses conform to U.S. Department of Agriculture Good Agricultural Practices.” See: Interpretive Memo 14-08 Determining ‘Approved Source’ for Raw, Uncut Fruits and Vegetables” and CDPHE’s Food Safety for Vegetable Gardens (click on title to link to resource or see address in Appendix). §7.6.1A1; §7.4.A37; § 7.11.6H	<i>Design Considerations for all child care facilities:</i> Vertical clearance of 80 inches must be provided wherever trees overhang accessible routes serving ground level play components (See 1008.2). <i>For child care facilities not in homes:</i> When trees are used to create spaces for socialization in play environments, these areas would qualify as play components subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route. (Note: May be achieved with pervious surface.)

Ornamental Grass Mazes

Ornamental grass mazes offer active, highly sensory settings, where children can explore, play hide-and-seek and other chasing games. Ornamental grasses chosen should be soft to the touch, grow high enough to screen views between the young children using the space, and grow low enough for adults to see over them and into the space from some part of the area.

Take care to select non-invasive species that are native or adapted to the local region. Regional natives often support local ecosystems and should be used if they are available, affordable, and meet other needs. In places where they are hardy, switch grasses (e.g. *Panicum virgatum* 'Shenandoah') are excellent choices for sunny areas. Many species of *Carex* can tolerate shady conditions. NLI recommends grass mazes be at least 100 square feet. Be sure to leave enough room for children to move between the clumps of grass as they mature. Grasses may be planted in tires to both protect the plants and define circulation spaces more clearly (See p. 96). More information on creating grass mazes is available here:

<https://naturalelearning.org/sites/default/files/Grass%20mazes2.pdf>.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> "The play area must be designed so that all parts are visible and easily supervised." Visibility may be accomplished in a variety of ways including having the caretaker move through the space so their point of view is changing, using species that an adult caretaker could see over or through, or having a raised area where the caretaker could overlook the setting. <i>Mandates Addressed:</i> May contribute to requirement to have a variety of "science materials." §7.702.73B4, §7.702.62C8, §7.702.62D4	May be designed to meet requirements <i>Design Considerations:</i> "All parts of the play area must be visible and easily supervised." Visibility may be accomplished in a variety of ways including having the caretaker move through the space so their point of view is changing, using species that an adult caretaker could see over or through, or having a raised area where the caretaker could overlook the setting. "Developmentally appropriate supervision" is required. "The premises... must be safe and free from hazards to health at all times." (e.g. poisonous plants in infant/toddler areas) <i>Mandates Addressed:</i> Helps meet mandate for "nature or science related... materials or activities" such as "plants, gardens... or science props." §7.707.931C, §7.707.934B, §7.707.83G, §7.707.933B	May be designed to meet requirements <i>Design Considerations:</i> None

Child Care Facility Licensing (Continued) School-Age Child Care Centers (7.701, 7.712, 7.719)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
May be designed to meet requirements <i>Design Considerations:</i> See 6 CCR 1010-7 (two columns to the right). <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... science equipment and materials.” §7.712.64B5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to nature/science and free play. Facilities rewarded for having a variety of “nature/science materials” (e.g. gardens) and materials for free play. <i>Design/Management Considerations:</i> Should be designed to allow for the necessary level of supervision. When scoring supervision, rating system considers ages and abilities of children and whether provider is supervising the most hazardous areas/activities adequately. Ornamental grass areas designed with soft species in areas where there are no dangerous snakes (or snakes are prevented from entering the environment by adequate snake fencing) do not typically present hazards to children who are over 3. Younger children may need some supervision to prevent them from eating the soil. Providers who use everyday events (such as emergence of seed heads on grass) to teach children about nature or science are rewarded. Consider providing options for disabled users’ immersion, if served. <i>Infants and Toddlers (ITERS-R):</i> Items 22, 25, 30, 32 <i>Early Childhood (ECERS-R):</i> Items 7, 25, 29, 35, 37 <i>Family Child Care (FCCERS):</i> Items 22, 27, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (...soil, wood chips...) in play areas shall not contain hazardous levels of any toxic chemical or substances.” “Pre-school age children shall be appropriately supervised around any poisonous plants either in the child care facility or outdoor areas. Toxic plants are prohibited in areas designated for infants and toddlers” (i.e. under 36 months old). Toxic materials are “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” Must be maintained so they are “free of... insect and rodent harborage.” §7.6.1A; § 7.14.2B; §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Outdoor Classrooms

Outdoor classrooms provide spaces, usually covered for use during inclement weather, for managed or self-directed activities. This section only addresses outdoor classrooms within programs that also have indoor classrooms. It does not address fully outdoor programs.

There are few regulations or standards specifically focused on outdoor classrooms in programs that serve children both indoors and outdoors. To the extent they are regulated at all, outdoor classrooms tend to be regulated based on the other features that may (or may not) be integrated into them—decks, shade structures, pathways, seating and tables, etc. Please refer to relevant sections for more information.

One exception is accessibility standards. Outdoor classrooms, if they are intended to function as classrooms, have different requirements for accessibility than play areas. They may also provide opportunities for meeting mandates and environment rating scale items related to fine motor development and artistic play.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> See design considerations associated with features that make up the outdoor classroom. “Volatile substances such as... oil-based paints... and other hazardous items must not be stored in any area of the building used for child care.” <i>Mandates Addressed:</i> If art supplies are provided in outdoor classroom areas, may help to meet requirements for providing “art supplies.” May also provide opportunities for fine motor development for toddlers §7.702.73B6, §7.702.81C, §7.702.62C1, §7.702.62H2	May be designed to meet requirements <i>Design Considerations:</i> See design considerations associated with features that make up the outdoor classroom. Note that standards state “the provider shall encourage individual expression and adult directed projects shall be kept to a minimum, since children’s work is varied and individual.” <i>Mandates Addressed:</i> “Each child in care must be provided with an opportunity for both group and individual play.” If art materials are provided in outdoor classroom, would help meet requirements for providing “art materials.” §7.707.82D,E; §7.707.83E, I	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” “Equipment, materials, and furnishings, including durable furniture such as tables and chairs, shall be stored in a manner that is safe for youth.” “Volatile substances such as... oil-based paints... and other hazardous items shall be stored away from the area used for youth care and be inaccessible to youth.” §7.720.73A7, §7.720.73A8, §7.720.73A3

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> None <i>Mandates Addressed:</i> Depending on type of outdoor classroom and materials provided within it, may help to meet requirement that “children at the center must have access to age-appropriate... activity supplies... manipulatives and games... science equipment and materials.” §7.712.64B	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to a variety of different activities. Outdoor classrooms may, together with the programming they receive and the materials used in them facilitate higher ratings on some of these activities depending based on how it is programmed. An outdoor classroom with tables may provide opportunities to incorporate programming related to art and fine motor skills that will not be possible in most settings within the OLE. <i>Design/Management Considerations:</i> Will vary based on the type of activities they facilitate. Should not include “hazards that could lead to serious injury.” <i>Infants and Toddlers (ITERS-R):</i> Items: N/A <i>Early Childhood (ECERS-R):</i> Items 10, 13-14, 19-22, 25-26, 30, 35-37 <i>Family Child Care (FCCERS):</i> Items 9, 10-11, 15, 17-19, 21-22, 24, 27, 32-34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighbor-hood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1.A1; §7.4.A37	<i>Design Considerations:</i> (See Advisory 201.3; 206.2.4).

Pathways

An outdoor learning environment typically provides pathways of different scales. Curvy, looping primary pathways provide opportunities for continuous circulation on tricycles and other wheeled vehicles. They are associated with higher levels of physical activity than straight paths, and those with dead ends (Cosco, 2006). Secondary pathways provide richer networks for walking, running, and exploring on foot.

Primary pathways are typically at least 5 feet wide so two tricycles can pass. Secondary pathways are typically at least 3 feet wide.

A variety of surfacing materials including some engineered wood fibers, decomposed granite, concrete, and asphalt, may be used to create wheelchair (and stroller) accessible paths that may link play and learning settings.

The best material for primary pathways is either concrete or asphalt to provide accessible, wheelable surfaces. Although more expensive, pathways properly constructed of these materials will be greatly appreciated by children and teachers and last for decades with minimal maintenance requirements, unmatched by other materials. Deck pathways are the next best alternative but rarely used except where topography or wet ground require.

Secondary pathways are more likely to be surfaced with wood chips, decomposed granite, or stepping stones.

Try to buffer primary pathways from sand areas (to avoid slip hazards) and immovable objects like trees, fences, and walls (that could create wheeled toy obstacles). For more info, see: <https://naturalearning.org/primary-pathways>.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> Those portions of paths that function as “exit routes must be kept free from accumulation of extraneous materials.” Pathways that are surfaced with loose materials that could create a choking hazard (e.g. decomposed granite <1.25 inches in diameter and <2.25 inches long) must not be accessible to children under 3. §7.702.81I, §7.702.61A	May be designed to meet requirements <i>Design Considerations:</i> “Walkways must be cleared of snow and ice to provide safe entry and exit from the home.” “[M]ust be kept safe”—“free from hazards posing danger of injury.” Pathways that are surfaced with loose materials that could create a choking hazard (e.g. decomposed granite <1.25 inches in diameter and <2.25 inches long) must not be accessible to children under 3. § 7.707.931O, §7.707.91D, §7.707.21	May be designed to meet requirements <i>Design Considerations:</i> Those portions of paths that function as “exit routes shall be kept free from accumulation of extraneous materials that could cause or fuel a fire or hinder an escape or evacuation.” §7.720.73A5

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> Those portions of paths that function as “exit routes must be kept free from accumulation of extraneous materials.” §7.712.73A5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items rewarding spaces for gross motor play or active physical play, opportunities for free play, and provision for children with disabilities. <i>Design Considerations:</i> Providing at least one hard surface and one soft surface (that is not a protective surface for playground equipment) outdoors is rewarded within ratings. Ratings are lower if the tricycle path is not free of obstructions or if the pathway interferes with other activity areas (particularly use zones of play equipment), or if there is an “unsafe walkway.” (The meaning of this phrase is not clearly defined.) Other items note sand on sidewalk and shallow puddles are considered minor hazards that can lead to a diminished scored on safety practices. “Sand on sidewalk” is specifically called out as a minor hazard that can lead to lower rating on safety practices in ECERS-R. Contain sand and/or locate away from primary pathway to minimize hazards/maintenance. ECERS-R Ratings are higher when staff are “positioned to see all areas” used for gross motor activities. ITERS-R ratings are higher when “children are within sight, hearing, and easy reach of staff with no more than a few momentary lapses.” <i>Infants and Toddlers (ITERS-R):</i> Items 11, 16, 30, 32 <i>Early Childhood (ECERS-R):</i> Items 7, 14, 29, 35, 37 <i>Family Child Care (FCCERS-R):</i> Items 12, 26, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances”—those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1.A1; §7.4.A37	<i>Design Considerations for both child care centers and homes:</i> Both must have an accessible route serving the space, though the requirements for what play features are connected by that route varies. The path used by wheeled toys may serve (or help serve) this purpose if it meets the requirements contained in Sections 206.2.17, 240, and 1008. Five feet is the minimum clear width for an accessible route at ground level in play areas with an area of 1000 feet or more (See Section 1008.2.4.1). A clear width of forty-four inches is permitted in smaller areas. For 44” wide paths, at least one turning space complying with Section 304.3 would be required if route exceeds 30 feet. “The clear width of accessible routes shall be permitted to be 36 inches (915 mm) minimum for a distance of 60 inches (1525 mm) maximum provided that multiple reduced width segments are separated by segments that are 60 inches (1525 mm) wide minimum and 60 inches (1525 mm) long minimum.” “Ramp runs connecting ground level play components shall have a running slope not steeper than 1:16” (1008.2.5.1). See other requirements related to handrails on ramps (1008.2.5.3), maximum rise of ramp (1008.2.5.2), accessible routes serving water play components (See 1008.2.3), and turning spaces (1008.4.1).

Performance Settings

Socio-dramatic play has a variety of benefits for children, including strengthening language and executive functioning skills such as self-control, memory, and cognitive flexibility—skills that are correlated with math and reading outcomes. Socio-dramatic play may be encouraged at a variety of scales in many different types of spaces.

Performance spaces differ from other dramatic play areas (like playhouses) as those taking part are on display. Performance settings range in size from a puppet theater to a small stage-like deck with no seating to places that may facilitate productions by school-age groups or group musical activities. Play props such as puppets, costumes, and hats are possibly more important for facilitating dramatic play (and scoring points on environmental assessments) than providing a fancy stage.

Performance spaces do not typically have many considerations beyond those associated with their component parts (See sections on decks and other features as appropriate). When large outdoor performance areas are created that are intended to serve whole classes or groups, these areas will have greater requirements for accessibility than a smaller setting in a play area.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> See considerations for decks, platforms, and stages (p. 50), seating and tables in OLEs (p. 104), and any other features that make up space. Any electrical outlets must be safety outlets or have a protective cover. If serving children less than 5 years old, should not incorporate “easily breakable plastic or glass.” If serving children less than 3 years old, dramatic play materials must not include choking hazards (e.g. toys <1.25 inches diameter and <2.25 inches long). <i>Mandates Addressed:</i> Would help to meet requirements for “dramatic play area.” §7.702.62C4, F, G §7.702.81G	May be designed to meet requirements <i>Design Considerations:</i> See considerations for decks, platforms, and stages (p. 50), seating and tables in OLEs (p. 104), and any other features that make up performance space. “[M]ust be kept safe and free of hazardous materials” including “‘keep out of reach’ items,” “broken items,” and “choking hazards” (e.g. toys <1.25 inches diameter and <2.25 inches long). <i>Mandates Addressed:</i> If play props are stored within the area and accessible, it can help to meet the requirement that at least 4 “types of dramatic play materials shall be accessible for free play daily” in typical homes (at least 8 types in large homes). Examples: “backpacks, purses, hats, dress up clothing, house-keeping toys, dolls and accessories, toy telephones, play houses, toy animals, cars and trucks, costumes, and safe jewelry.” §7.707.83J, §7.702.62F, §7.707.21, §7.707.934B	May be designed to meet requirements “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” “Equipment, materials, and furnishings, including durable furniture such as tables and chairs, shall be stored in a manner that is safe for youth.” §7.720.73A7, §7.720.73A8

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings must be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> May help to meet requirement that “children at the center must have access to age-appropriate... activity supplies and manipulatives.” §7.712.73A7, §7.712.64B	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to dramatic play. However, the sort of dramatic play that tends to be rewarded is child-initiated pretend activities rather than formal dramatic performances. There is active discouragement of always keeping children together in group activities—particularly those not suitable for children’s age and individual needs. <i>Design Considerations:</i> Providing an area for dramatic play, with materials to facilitate dramatic play and storage for those materials could lead to higher rating, as could integrating children with disabilities who are served by the facility. Rating higher if dress up clothes are provided (For FCCERS, at least 5 items for groups of 2-3 toddlers and two year olds and 10 items for older children or larger groups). Highest rating on dramatic play requires materials to be rotated or added to at least monthly. Environment Ratings Score may be adversely affected if setting includes entrapment hazards (openings between 3.5 and 9 inches and openings between 3/8 inch and 1 inch), projections, sharp or “dangerous” objects, or other “hazards that could lead to serious injury.” <i>Infants and Toddlers (ITERS-R):</i> 11, 20, 30, 31, 32; <i>Early Childhood (ECERS-R):</i> Items 7, 14, 24, 35, 36, 37; <i>Family Child Care (FCCERS-R):</i> Items 12, 20, 32, 33, 34; <i>Updates to these scale items available from Clayton</i>	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips...)... shall not contain hazardous levels of any toxic chemical or substances.” “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1.A1; §7.6.1.A2; §7.4.A37	<i>Design Considerations for formal assembly areas:</i> There are a variety of requirements. See 36.406(f), and Sections 221 and 802 of ADA Standards). <i>For less formal spaces used during free play:</i> A simple puppet theater or stage-like deck with no seating within a play area will likely just qualify as a play component and not an assembly area. It would be subject to requirements for accessibility contained in Sections 240 and 1008. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Plantings: Perennials, Shrubs, and Vines

Here the topic is plants and gardens other than annual vegetable production gardens. Perennial plants, shrubs, and vines not only add beauty to the OLE but also offer a great variety of opportunities for children to play and learn. Children may express themselves artistically using the flowers, petals, leaves, and seeds found in the garden or use them as props for dramatic play. Armed with child-sized watering cans, gloves, or tools, children may playfully mirror adult behaviors such as watering and weeding. Plantings may define rooms for activities or nooks for hiding or places for having a moment to oneself. Flowers themselves may create sensory experiences for children as well as attract butterflies, other pollinators, and micro wildlife in general.

The key to successful planting is to choose the right plants for the conditions present (sun or shade, soil acidity or alkalinity, soil moisture, etc.) and to irrigate as necessary. Flowering perennial gardens will return year after year if the plants have been selected to fit local conditions and if they receive adequate water from rainfall or irrigation. Plants that present hazards when small quantities are ingested or tasted should be excluded from outdoor learning environments serving infants and toddlers, as should plants with thorns. In areas with little rain, the need for water can be minimized by choosing low-water plants and installing drip irrigation.

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May be designed to meet requirements <i>Design Considerations:</i> “The play area must be designed so that all parts are visible and easily supervised.” Visibility may be accomplished a variety of ways including having supervisor move through space so their point of view is changing, using species that an adult caretaker could see over or through and having a raised area overlooking the area. Avoid choking hazards (e.g. stone mulches must not include pieces <1.25 inches in diameter and <2.25 inches long) if accessible to children under 3. <i>Mandates Addressed:</i> May contribute to requirement to have a variety of “science materials.” §7.702.73B4, §7.702.62C8, §7.702.62D4, §7.702.61A	May be designed to meet requirements <i>Design Considerations:</i> “All parts of the play area must be visible and easily supervised.” Visibility may be accomplished a variety of ways including having supervisor move through space so their point of view is changing, using species that an adult caretaker could see over, or having a raised area over-looking space. “Outdoor play space... must be free from safety hazards including, but not limited to... tools.” However, this would not limit the use of tools for educational activities. Avoid choking hazards (e.g stone mulches <1.25 inches in diameter and <2.25 inches long for children under 3). <i>Mandates Addressed:</i> Helps meet mandate for “nature or science related... materials or activities” such as “plants, gardens... or science props.” §7.707.931C, §7.707.934B, §7.707.83G, §7.707.21, §7.707.91D	May be designed to meet requirements <i>Design Considerations:</i> None

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> See 6 CCR 1010-7 (two columns to the right). <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... science equipment and materials.” §7.712.64B5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to nature/science. Facilities are rewarded for having a variety of “nature/science materials” such as flower gardens. <i>Design/Management Considerations:</i> Providers who point out flowers to infants/toddlers and use everyday events (such as the transformation from a flower to a seed) to teach children about nature or science are rewarded. So are those that do nature/science activities such as sprouting and planting seeds, at least once every two weeks. Hands should be washed after messy activities. (See p. 137 for more information on handwashing). Tools not meant for children should not be accessible to them. <i>Infants and Toddlers (ITERS-R):</i> Items 10, 11, 22 <i>Early Childhood (ECERS-R):</i> Items 13, 14, 25 <i>Family Child Care (FCCERS):</i> Items 11, 12, 22	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances.” “Pre-school age children shall be appropriately supervised around any poisonous plants either in the child care facility or outdoor areas. Toxic plants are prohibited in areas designated for infants and toddlers” (i.e. children under 36 months old). Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” Plantings must be maintained “free of... insect and rodent harborages.” §7.6.1A1; §7.14.2B; §7.4.A37	<i>Design Considerations for child care homes:</i> None <i>For other facilities:</i> If a garden is intended as a setting for learning, it would qualify as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of TA. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated components. Not every part of the garden would be required to be accessible.

Plant Protection Systems

While adults will typically see a flower garden as an edge and make an effort to avoid walking through it. Children are not always so perceptive or so inclined. Sometimes, plantings are designed for children to enter and explore them, as with a grass maze. But this is not always possible, particularly when working with tender young perennials or vegetables. Too much stomping through the garden can be a major detriment to the plants' health. In these cases, plant protection is a good idea, which can also be designed to deter children from running through areas where tree roots are deemed a tripping hazard.

A variety of simple plant protection options have been documented, evaluated, and in most cases field tested by NLI. They include dimensioned lumber single or double railings; traditional, two-hole rough-sawn split railings; cable and eye-ring steel stakes; and rope strung between lumber posts. Remember to avoid any edging with sharp ends. See NLI's website for more information on plant protection: <https://naturalearning.org/protecting-new-plants>

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe, and free of hazards.” Should not be made of “easily breakable plastic or glass” in area serving children under 5 years old. §7.702.62G, §7.702.61B	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be kept safe”—“free of hazards posing danger of injury including... protrusions.” §7.707.21, §7.707.934B	May be designed to meet requirements <i>Design Considerations:</i> “[S]hall be sturdy, safe and free of hazards.” §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” §7.712.73A7	Would not by itself lead to higher rating, but may lead to higher rating in combination with other features. May lead to increase in rating on ECERS-R if used to minimize the likelihood that children trip on tree roots, as six “tree roots that are unlikely to cause tripping” could lead to lowest rating on safety practices for ECERS-R. It may also contribute to ratings on ECERS-R and other scales by protecting plants that help to increase ratings. See sections on plantings (p. 82), fruit and vegetable gardens (p. 62), and wildlife gardens (p. 130). <i>Design Considerations:</i> Environment Ratings Score may be adversely affected if setting includes entrapment hazards (openings between 3.5 and 9 inches and openings between 3/8 inch and 1 inch), projections, sharp or “dangerous” objects, or other “hazards that could lead to serious injury.” Plant protection barriers do not require a fall zone. <i>Infants and Toddlers (ITERS-R):</i> Items 11, 19, 16, 32 <i>Early Childhood (ECERS-R):</i> Items 7, 14, 22, 24, 37 <i>Family Child Care (FCCERS-R):</i> Items 12, 19, 26, 34	May be designed to meet requirements <i>Design Considerations:</i> Should not be treated or finished in a way that is hazardous to children. “Poisonous or toxic materials shall not be stored or used in a way that could contaminate food, food utensils and equipment, bedding, sleeping mats, toys and other equipment, materials and items that will come into contact with food or children.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.14.2D; §7.4.A37	<i>Design Considerations:</i> None

Playhouses (at ground level)

Playhouses are classic play settings that afford a variety of dramatic play opportunities. Through playing “house,” children emulate adult roles and informally learn social and problem-solving skills as they invent rules that spawn made-up, domestic scenarios.

Playhouses come in many shapes and sizes. They may look like miniature versions of actual houses and be made of similar materials. Or they may be abstract expressions of shelter—created with manufactured or natural materials—that allow children to imagine them as shops or animal dens as well as “homes.” Access to loose parts, such as pots, pans, dishes, and natural loose parts can help facilitate and broaden play scenarios.

Playhouses tend to be considered at the margins of what is considered to be playground equipment. As freestanding play structures, they would meet the definition of playground equipment in ASTM F1487 (See p. 31). To avoid any confusion over whether they are subject to playground equipment standards for protective surfacing, we recommend not constructing raised floors within playhouses. Both CPSC guidelines and ASTM standards clearly state that protective surfacing is not required for playhouses designed so children’s feet remain in contact with the ground. ASTM goes further to state use zones are not required for such structures.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)	
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)
May be designed to meet requirements <i>Design Considerations:</i> See design considerations for playground equipment (p. 88). Note that ASTM F1487-17, the most recent standard for playgrounds, does not require a use zone or protective surfacing around playhouses (See 11.2.1). However, 7.702.62B7 states “all pieces of permanently installed playground equipment must be surrounded by a “resilient surface.” (See protective surfacing p. 100). So, a variance would be required for a permanently installed playhouse surrounded by foundation plantings but not a portable playhouse surrounded by foundation plantings. <i>Mandates Addressed:</i> A playhouse with access to play props could help meet requirements for “dramatic play area,” “manipulative toys,” “language development,” and “social interaction.” §7.702.61A-C, §7.702.62 §7.702.73B4	May be designed to meet requirements <i>Design Considerations:</i> See design considerations for playground equipment (p. 88). Note that ASTM F1487-17, the most recent standard for playgrounds, does not require a use zone or protective surfacing around playhouses (See 11.2.1). However, 7.702.62B7 states “all pieces of permanently installed playground equipment must be surrounded by” a “protective surface.” (See p. 100). So, a variance would be required for a permanently installed playhouse surrounded by foundation plantings but not a portable playhouse surrounded by foundation plantings. <i>Mandates Addressed:</i> A playhouse with access to play props would help to meet requirement that at least 4 “types of dramatic play materials” in typical homes (at least 8 types in large homes). Examples include: “house-keeping toys, dolls and accessories, toy telephones, play houses, toy animals...” §7.707.83J, §7.702.62F, §7.707.21, §7.707.934

Child Care Facility Licensing (Continued)		Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” “Equipment, materials, and furnishings, including durable furniture such as tables and chairs, shall be stored in a manner that is safe for youth.” §7.720.73A7, §7.720.73A5, §7.720.73A8	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> May help meet requirement that “children at the center must have access to age-appropriate... manipulatives... recreation equipment.” §7.712.73A7, §7.712.64B2,3	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to dramatic play, free play, and provision for children with disabilities. <i>Design Considerations:</i> Providing an area for dramatic play, with materials to facilitate dramatic play, and storage for those materials could lead to higher rating, as could integrating children with disabilities who are served by the facility. Environment Ratings Score may be adversely affected if setting includes entrapment hazards (openings between 3.5 and 9 inches and openings between 3/8 inch and 1 inch), projections, sharp or “dangerous” objects, or other “hazards that could lead to serious injury.” <i>Infants and Toddlers (ITERS-R):</i> 11, 20, 30, 31, 32; <i>Early Childhood (ECERS-R):</i> Items 7, 14, 24, 35, 36, 37; <i>Family Child Care (FCCERS-R):</i> Items 12, 20, 32, 33, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances.” “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1.A1; §7.6.1.A2; §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Playground Equipment: Manufactured

Manufactured playground equipment is typically designed to provide opportunities for children to develop gross motor skills as well as opportunities for sliding, swinging, and twirling that provide vestibular stimulation. Discretionary “play panels” and acoustic play accoutrements may also be added.

Most new manufactured playground equipment for child care centers is designed to meet standards from ASTM International and/or guidelines from the U.S. Consumer Product Safety Commission (CPSC). There are some differences in which standards or guidelines apply based on the ages of the children served, the type of facility, and the type of equipment. Home-based child care facilities are within the scope of standards for residential playground equipment, while child care centers are within the scope of standards for public-use playground equipment. There is also a special category of equipment known as soft-contained playground equipment that has its own standards. Work with the manufacturer or sales representative to ensure manufactured equipment is properly located and has adequate protective surfacing. If working with a playground equipment supplier who does not regularly work with childcare facilities in Colorado, provide them with a copy of this section, as some of Colorado’s childcare licensing rules go beyond national standards and guidelines.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (7.701, 7.702, 7.719)

May be designed to meet requirements

Design Considerations: “Indoor and outdoor play equipment and materials must be appropriate” for “children’s ages, size, and activities.” The administrative guide clarifies that this means “items labeled for specific ages by the manufacturer will be followed. For example, if the product is labeled ‘Not for children under the age of three,’ then the product should be inaccessible to children under the age of three.”

“Indoor and outdoor materials and equipment must be sufficiently varied and appropriate for the developmental needs of the children and the number attending.”

“Indoor and outdoor equipment, materials, and furnishings must be sturdy, safe, and free of hazards.” A clarification of this rule in the administrative guide states “all playground equipment must be commercial grade and meet current

Consumer Product Safety Standards or be inspected and approved by a Certified Playground Safety Inspector (CPSI).” It notes: “The Department [of Human Services] can provide this service at no cost.” The most current standards are in ASTM F1487-17 for free-standing play structures serving children 2-12 years old and in ASTM F2373-17 for free-standing play structures serving children 6 to 23 months old. The U.S. Consumer Product Safety Commission also issues guidance on playground equipment design and layout in its [Public Playground Safety Handbook](#). Licensing uses all of these documents to evaluate hazards. However, where greater or lesser standards are explicitly stated in their licensing rules, those rules set the minimum requirement.

“Swings must have seats made of a flexible material.”

“Moving equipment [e.g. swings and merry-go-rounds] must be located toward the edge or corner of a play area or be designed in such a way to discourage children from running into the path of the moving equipment.”

“Metal equipment must be placed in the shade when possible and must be arranged so that children playing on one piece of equipment will not interfere with children playing on or running to another piece of equipment.”

“The maximum height of any piece of playground equipment is six (6) feet if accessible to children 2-1/2 to 6 years of age, and three (3) feet if accessible to children less than 2-1/2 years of age.” The administrative guide clarifies that “the height of the climbing equipment is generally measured from the platform, or designated play space (space where children are intended to play) to the ground.”

Department of Human Services, Social Services Rules (Continued)
Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (Continued)
(7.701, 7.702, 7.719)

"All pieces of playground equipment must be designed to guard against entrapment and strangulation." The administrative guide clarifies: "Potential entrapment hazards are openings or spaces on equipment between three and one half (3.5) inches and nine (9) inches." To guard against entrapment, "children should not wear their bicycle helmets while on playground equipment. There have been recent head entrapment incidents in which children wearing their bicycle helmets became entrapped in spaces that would not normally be considered a head entrapment." The administrative guide notes: "Strangulation hazards can be avoided by not adding additional ropes on playground equipment. Any climbing rope installed by the manufacturer should always be attached at both ends to avoid strangulation/ entanglement. Gaps between a platform on a climbing structure and the slide poses a potential for entanglement. A child's drawstring from coats, hoodies or sweatshirts can become entangled.

Gaps on slides should be repaired according to the manufacturer's instructions. If a manufacturer is no longer available for recommendations, then the gap can be corrected in a number of ways. This could be a sealant or caulk can be applied and maintained."

"Any permanently installed outdoor climbing equipment or portable climbing equipment eighteen (18) inches or higher must have protective surfacing, meeting current federal safety requirements, underneath and in the use zone surrounding the equipment, and installed according to manufacturer instructions." (For information on use zone for climbing equipment, see Section 5.32 of the U.S. Consumer Product Safety Commission's [Public Playground Safety Handbook](#), which is recommended as a resource for this regulation in the administrative guide. Note that it defines a "use zone" as "The surface under and around a piece of equipment onto which a child falling from or exiting

from the equipment would be expected to land. These areas are also designated for unrestricted circulation around the equipment" (CPSC, p. 4). For protective surfacing, see p. 100.

"All pieces of permanently installed playground equipment must be surrounded by a resilient surface of a depth of at least 4 inches. For equipment over three (3) feet in height, resilient material must be a depth of at least six (6) inches. Mats manufactured for resilient material for both equipment heights must meet current federal safety standards. Written documentation from manufacturer must be available for review at all times."

"Sand used as a resilient surface must be raked regularly to retain its resiliency and to retain a depth of at least six (6) inches."

"Department approved resilient surfacing includes loose fill materials such as wood chips, wood mulch, engineered wood fiber, pea gravel,

synthetic pea gravel, shredded rubber tires, and fine loose sand. Solid unitary materials include poured in place surfacing, approved rubber mats, playground tiles, and astro turf with built in resilient pad."

"The play area must be designed so that all parts are visible and easily supervised."

"All outdoor areas available to children's activities must be maintained in a safe condition by removal of... dilapidated structures, and broken or worn play equipment. The center must identify hazardous, high-risk areas. These areas must be made inaccessible to children."

"Playground surfaces must be checked on a daily basis for the presence of dangerous or other foreign materials. Playground equipment must be checked for safety on a monthly basis."

(Continued on next page).

Department of Human Services, Social Services Rules (Continued)
Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (Continued)
(7.701, 7.707, 7.719)

Family Child Care Homes
(7.701, 7.707, 7.719)

Mandates Addressed:
May help to meet requirement for a variety of “large muscle equipment.”

§7.702.62A-C, §7.702.62B1,
§7.702.73B4, §7.702.81L,M,
Administrative Guide

May be designed to meet requirements

“The premises of the family child care home must be kept safe and free from hazards to health at all times.” “‘Safe’ means free of hazards posing danger of injury including, but not limited to, “keep out of reach” items, protrusions, broken items, areas of entrapment, strangulation or choking hazards, insufficient cushioning ...”

“All play equipment must be designed to guard against entrapment and strangulation. Swing sets and other outdoor play equipment must be correctly assembled, well maintained, and securely stabilized or anchored. All swings for children three (3) years of age and older must have seats made of flexible material.” The administrative guide clarifies that “Potential entrapment hazards are openings or spaces on equipment between three and one half inches (3-1/2”) and nine inches (9”). For example, slats used on platform railings. Children should not wear their bicycle helmets while on playground equipment. There have been head entrapment incidents in

which children wearing their bicycle helmets became entrapped in spaces that would not normally be considered a head entrapment. Strangulation hazards can be avoided by reducing the number of additional ropes on playground equipment. Any climbing rope installed by the manufacturer should always be attached at both ends to avoid strangulation/entanglement. Gaps between a platform on a climbing structure and the slide poses a potential for entanglement. A child’s drawstring from coats, hoodies or sweatshirts can become entangled.”

“The use of a trampoline by children in care is prohibited. If there is a trampoline on the property of the home, it must be stored in a way that makes it totally inaccessible to children.”

“All pieces of permanently installed climbing equipment must be surrounded by and have at least four inches (4”) of a nationally recognized protective surface underneath the equipment.”

“By December 31, 2010, all pieces of permanently installed playground equipment must be surrounded by and have at least six inches (6”) of a nationally recognized protective surface underneath the equipment.”

“Sand may be used as a protective surfacing when regularly raked, rototilled or replaced to retain its resiliency.”

“If during any type of licensing visit the sand has become compacted and lost resiliency or depth, the provider must immediately replace the sand with one of the other approved protective surfacing materials.”

“Portable climbing equipment over two feet (2’) in height, whether indoor or outdoor, must be on a protective surfacing. No equipment can be placed on cement or grass.”

“By December 31, 2010, all swing sets or permanent climbing equipment must ensure a minimum fall zone consistent with the nationally recognized standards.”

(Continued on opposite page)

Department of Human Services, Social Services Rules (Continued)
Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)
(Continued from opposite page) “All protective surfacing (excluding sand, wood chips, wood mulch, engineered wood fiber, pea gravel, synthetic pea gravel, and shredded rubber tires) and rubber mats must be manufactured for such use consistent with federal guidelines and be approved by the State Department.” “All outdoor play areas shall frequently be surveyed and must be kept safe and free from hazardous materials or debris that could cause harm to children.” <i>Mandates Addressed:</i> “Outdoor physical free play materials shall consist of at least four (4) age appropriate toys and equipment including, but not limited to, the following in good repair: push toys, riding toys, tossing toys, climbing equipment, balance boards, stationary swings, slides, balls, toss games, and sports equipment.” §7.707.21, §7.707.91D,M; §7.707.931M; §7.707.932; §7.707.933E, §7.707.83K	May be designed to meet requirements <i>Design Considerations:</i> “Indoor and outdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” §7.720.73A7	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” “Outdoor play areas provided by the center must not have equipment that exceeds six (6) feet in height for any surface area intended for children’s play unless equipped with a protective barrier to prevent children from falling.” “All outdoor climbing equipment over eighteen (18) inches provided by the center must have least six (6) inches resilient surface throughout the use zone.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7; §7.712.64B3; §7.712.71D4, 5

Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)			Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010- 7 (2016)
May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to gross motor play or active physical play, free play, and provision for children with disabilities. ECERS-R and FCCERS-R will rate higher based on space for privacy. <i>Design Considerations:</i> Refer to latest version of “back page all scales” available from Clayton Early Learning at https://www.claytonearlylearning.org/quality-improvement/ers-notes-for-clarification.html. This sheet contains a variety of standards that are used for rating playground equipment. Rating for gross motor equipment in ECERS-R is higher when there is equipment appropriate to the ages and abilities of the children who use the space (refer to manufacturers’ age recommendations), if it is in good repair, if it stimulates 7-9 different gross motor skills, if there is enough equipment so children don’t have to wait in lines to use it,	and if equipment is accessible to those with disabilities. Environment Ratings Score may be adversely affected if equipment or setting includes entrapment hazards (openings between 3.5 and 9 inches and openings between 3/8 inch and 1 inch), projections, sharp or “dangerous” objects, pinch-points, or other “hazards that could lead to serious injury.” Having playground equipment without “an adequate fall zone” could hurt the rating (See protective surfacing, p. 100), as could failure to anchor play equipment, and having play equipment that is “too high” (defined in FCCERS-R and ITERS-R to mean higher than 1 foot per year of age). FCCERS-R considers trampolines a hazard. ECERS-R emphasizes staff being able to see areas used for gross motor play. Rating for space for privacy considers if spaces are “easily supervised.” (See p. 148).	<i>Infants and Toddlers (ITERS-R):</i> Items 11, 16, 26, 30, 32; <i>Early Childhood (ECERS-R):</i> Items 5, 7, 8, 14, 29, 35, 37; <i>Family Child Care (FCCERS-R):</i> Items 6, 12, 26, 27, 32, 34; “Back Page All Scales” from <i>Clayton Early Learning</i>	May be designed to meet requirements <i>Design Considerations for family child care homes and neighbor-hood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are materials “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §2.6.1.A1; §7.4.A37

2010 ADA Standards for Accessible Design

Design Considerations for family child care homes:
None

For other facilities: Would be or include play components subject to requirements in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Playground Equipment: Custom-Made

Creating custom playground equipment can provide opportunities for more sculptural, or naturalistic OLEs. It may offer innovative scenarios for play and skill development and additional opportunities for incorporating mature trees and play equipment into topography, making the OLE more comfortable and verdant. However, creating custom playground equipment usually requires more expertise than other features discussed in this guide.

Custom designed playground equipment, including playground equipment made with natural materials, tends to be subject to the same standards as manufactured equipment (See p. 88). In Colorado child care facilities, custom playground equipment must be inspected by a certified playground safety inspector to ensure it meets CPSC guidelines or ASTM standards. It is a good idea to work with a designer or certified playground safety inspector who has knowledge of the relevant standards whenever creating something that fits into this category. The design considerations are more extensive than can be discussed here.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> Custom play structures and free-standing play structures made using natural materials would be required to meet the same requirements as other playground equipment (See p. 88). They would need to be inspected and approved by a certified playground safety inspector (CPSI). <i>Mandates Addressed:</i> Custom play structures and play free-standing structures made using natural materials would help to meet the same mandates as manufactured playground equipment. (See p. 88)	May be designed to meet requirements <i>Design Considerations:</i> Custom play structures and free-standing play structures made using natural materials would be required to meet the same requirements as other playground equipment. (See p. 88). <i>Mandates Addressed:</i> Custom play structures and free-standing play structures made using natural materials would help to meet the same mandates as manufactured playground equipment. (See p. 88)	May be designed to meet requirements <i>Design Considerations:</i> “[S]hall be sturdy, safe and free of hazards.” §7.720.73A7

Child Care Facility Licensing (Continued) School-Age Child Care Centers (7.701, 7.712, 7.719)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)		Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” “Outdoor play areas provided by the center must not have equipment that exceeds six (6) feet in height for any surface area intended for children’s play unless equipped with a protective barrier to prevent children from falling.” “All outdoor climbing equipment over eighteen (18) inches provided by the center must have least six (6) inches resilient surface throughout the use zone.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7; §7.712.64B3; §7.712.71D4, 5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to either gross motor play or active physical play, free play, and provision for children with disabilities. ECERS-R identifies “custom-made, and/or natural objects used for climbing, sliding, balancing or other gross motor activity” as gross motor equipment. ECERS-R and FCCERS-R will rate higher if there’s a space for privacy. <i>Design Considerations:</i> Refer to “Back Page All Scales” available at https://www.claytonearlylearning.org/quality-improvement/ers-notes-for-clarification.html from Clayton Early Learning. This sheet contains a variety of standards that are used for rating playground equipment. Ratings are higher when there is equipment appropriate to the ages and abilities of the children who use the space, if it is in good repair, if it stimulates 7-9 different gross motor skills, if there is enough equipment, and if it is accessible to those with disabilities. Environment Ratings Score may be adversely affected if equipment or	setting includes entrapment hazards (openings between 3.5 and 9 inches and openings between 3/8 inch and 1 inch), projections, sharp or “dangerous” objects, pinch-points, or other “hazards that could lead to serious injury.” Having playground equipment without “an adequate fall zone” (See protective surfacing, p. 100), failure to anchor playground equipment, or having equipment that is “too high” (defined in FCCERS-R and ITERS-R to mean higher than 1 foot per year of age) could hurt the rating. Sand wood equipment to avoid FCCERS-R and ITERS-R deduction for allowing splinters. ECERS-R emphasizes staff being able to see areas used for gross motor play. Rating for space for privacy considers if spaces are “easily supervised.” <i>Infants and Toddlers (ITERS-R):</i> Items 11, 19, 16, 32; <i>Early Childhood (ECERS-R):</i> Items 7, 8, 14, 22, 24, 37; <i>Family Child Care (FCCERS-R):</i> Items 6, 12, 26, 32, 34, 27; “Back Page All Scales” from Clayton Early Learning	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are materials “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §2.6.1.A1; §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Would be or include play components subject to requirements in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes are not typical.

Potted Plants and Tire Planters

Planting in containers, including grow bags and tire planters offers a quick, affordable way to add new plantings to a facility without the need for digging and soil preparation. Many local mechanics and tire stores will be willing to provide used tires at little or no cost.

Tire planters may be created using a single tire laid flat on the ground or by bolting together 2 tires. Painting the tires light colors will make them more attractive and help to keep them from heating up during hot summer months and drying out the soil. Drilling holes in their sidewalls ensures water will not build up within and create drainage issues. A number of USDA publications have discouraged schools from using tires for growing food plants, since there are concerns about them leaching heavy metals that may be absorbed by the vegetables (See: https://www.fns.usda.gov/sites/default/files/foodsafety_schoolgardens.pdf.) More research may be needed to be conclusive. Nonetheless, given the variety of options available for creating planters, using tires for growing vegetables is discouraged. For more information on tire planters, see: <https://naturalelearning.org/installing-tire-planters>.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe, and free of hazards.” Must not be located in use zone of playground equipment. Must not include choking hazards (e.g. stone mulches with pieces <1.25 inches in diameter and <2.25 inches long) if accessible to children under 3. <i>Mandates Addressed:</i> May contribute to requirement to have a variety of “science materials.” §7.702.61C, §7.702.62C8, §7.702.62D4	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be kept safe” —“free from hazards posing danger of injury including but not limited to... protrusions...” “Outdoor play space... must be free from safety hazards including, but not limited to... tools” and “choking hazards.” (e.g. stone mulches with pieces <1.25 inches in diameter and <2.25 inches long for children under 3). However, this would not limit the use of tools for educational activities involving gardening. Planters must not be located in the use zone of playground equipment. <i>Mandates Addressed:</i> Helps meet mandate for “nature or science related... materials or activities” such as “plants, gardens... or science props.” §7.707.91D, §7.707.21, §7.707.934B, §7.707.83G	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” Planters must not be located in the use zone of playground equipment. <i>Mandates Addressed:</i> May help to meet requirement that “children at the center must have access to age-appropriate... science equipment and materials.” §7.712.73A7, §7.712.64B5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to nature/science. Facilities are rewarded for having a variety of “nature/science materials” such as flower gardens. <i>Design/Management Considerations:</i> Providers who point out flowers to infants/toddlers and use everyday events (such as the transformation from a flower to a seed) to teach children about nature or science are rewarded. So are those that do nature/science activities such as sprouting and planting seeds, at least once every two weeks. Hands should be washed after messy activities. (See p. 137 for more information on handwashing). Tools not meant for children should not be accessible to them. <i>Infants and Toddlers (ITERS-R):</i> Items 10, 11, 22 <i>Early Childhood (ECERS-R):</i> Items 13, 14, 25 <i>Family Child Care (FCCERS):</i> Items 11, 12, 22	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are materials “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” “The grounds and premise shall be well drained and free of... insect and rodent harborages,” so make sure any tires used on site are able to drain and do not hold standing water that may harbor mosquitoes. §2.6.1.A1, §7.4.A37, §7.6.1A	<i>Design Considerations for family child care homes:</i> None. <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Project Settings

Outdoor project settings are typically smaller than an outdoor classroom and are not expected to serve a full class, rather they provide activities requiring some management of materials during periods of free play. They may be programmed for art and science activities and furnished with easels, tables, or work benches. They usually serve children who are at least toddler age.

Provision of shade and storage is essential to the success of these spaces (see page 110 on outdoor storage and page 106 for more information about shade structures). The ground surface may be a deck or a paved surface (see page 50 for more information on decks).

The design of project spaces is largely regulated based on the components provided within them. See sections on decks, seats and tables, shade structures, and other relevant features. There are also childcare regulations associated with the materials children use for art and science projects in these settings that are covered here. Because project settings provide different play and learning value than a simple deck, table, or shade structure alone, they are assessed differently on environment rating scales.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> See design considerations associated with features that make up the project space. “Volatile substances such as... oil-based paints... and other hazardous items must not be stored in any area of the building used for child care.” <i>Mandates Addressed:</i> If art supplies are provided in project settings, this may help to meet requirements for providing “art supplies.” May also provide opportunities for fine motor development for toddlers §7.702.73B6, §7.702.81C, §7.702.62C1, §7.702.62H2	May be designed to meet requirements <i>Design Considerations:</i> See design considerations associated with features that make up the project space. Note that “the provider shall encourage individual expression and adult directed projects shall be kept to a minimum, since children’s work is varied and individual.” <i>Mandates Addressed:</i> “Each child in care must be provided with an opportunity for both group and individual play.” If art materials are provided in project settings, this would help meet requirements for providing “art materials.” §7.707.82D,E; §7.707.83E, I	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” “Equipment, materials, and furnishings, including durable furniture such as tables and chairs, shall be stored in a manner that is safe for youth.” “Volatile substances such as ... oil-based paints ... and other hazardous items shall be stored away from the area used for youth care and be inaccessible to youth.” §7.720.73A7, §7.720.73A8, §7.720.73A3

Child Care Facility Licensing (Cont.) School-Age Child Care Centers (7.701, 7.712, 7.719)	Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings must be sturdy, safe and free of hazards.” “Equipment, materials, and furnishings... must be stored in a manner that is safe for children.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... activity supplies, manipulatives, and science equipment and materials.” §7.712.73A7-8, §7.712.64B	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items rewarding spaces for providing fine motor, art, and nature/science activities, provision for children with disabilities, and furniture. <i>Design Considerations:</i> ECERS-R specifically rewards having an “easel” or “woodwork bench.” To obtain the highest rating on ECERS-R’s fine motor item, a program will have 3 types of “art materials,” and “manipulatives,” for much of the day (and other materials not typically found in these settings). Materials, such as crayons, peg boards, and large stringing beads count toward fine motor ratings for toddlers. Ratings are higher for facilities that provide fine motor materials that are labeled, “well-organized,” allow children to access them independently, and include different levels of challenge for children in the group. Ratings are higher when art materials are “non-toxic, safe, and appropriate” for the children’s age (e.g. no glitter or Styrofoam for infants/ toddlers). Additions to ITERS-R and FCCERS-R call for using thick crayons, avoiding use of art materials with food-like scents, and making caps inaccessible. Art activities that involve higher levels of individual expression receive higher ratings. <i>Infants and Toddlers (ITERS-R):</i> Items 11, 15, 17, 22. <i>Early Childhood (ECERS-R):</i> Items 2, 14, 19, 20, 25. <i>Family Child Care (FCCERS-R):</i> Items 12, 26, 32, 34; <i>Updates to these scale items available from Clayton Early Learning</i>	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface... in play areas shall not contain hazardous levels of any toxic chemical or substances.” “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” “Art and science materials shall be used in a way so as not to constitute a hazard to the children or staff. Children using potentially toxic materials shall be directly supervised by staff ... Non-toxic, water-based materials should be used whenever possible. The use or storage of concentrated or strong acids and bases; carcinogenic materials; toxic organic solvents; materials that produce toxic dusts, and materials with heavy metals such as lead, mercury, or cadmium are prohibited. Bulk art and science materials shall be stored in original containers, clearly labeled, and stored in accordance with manufacturer’s instructions. All art and science materials transferred into a secondary storage container must be clearly labeled. If food items are used as art and science materials they shall be labeled for the intended use (e.g., ‘not for consumption’...)” §7.6.1.A1; §7.6.1.A2, §7.14.3, §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Workbenches, and easels used for play, learning, and socialization activities would qualify as play components subject to requirements in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread out. A more complex rule applies when there are elevated play components. Note requirements for accessible routes and play tables.

Protective Surfacing

Protective surfacing is the shock-absorbing material used under and around playground equipment. A variety of different types of natural and artificial are available. Standards for protective surfacing were created with the goal of protecting children against serious head injuries caused by falling from playground equipment. Providing best practices for designing protective surfacing or reviewing research about the highly controversial subject of effectiveness of different surfaces for preventing different types of injuries is beyond the scope of this guide.

Refer to the U.S. Consumer Product Safety Commission's *Public Playground Safety Handbook* to learn about the industry standards for protective surfacing, where it is typically used, how to establish the critical height of equipment, and selecting proper unitary or loose-fill surfacing materials (See Sections 2.4 and 5 at: <https://www.cpsc.gov/s3fs-public/325.pdf>.)

The accessibility of protective surfacing materials (i.e. whether it meets *ASTM F1951*) will also be a consideration. It is good practice to shade any dark colored rubber surfaces. Finally, it is a good idea to contact others who have experience with the specific product being considered. Some surfacing materials on the market emit unpleasant chemical odors on a hot summer day.

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Child Care Centers (7.701, 7.702, 7.719)

May be designed to meet requirements

Design Considerations: "All pieces of permanently installed playground equipment must be surrounded by a resilient surface of a depth of at least 4 inches. For equipment over three (3) feet in height, resilient material must be a depth of at least six (6) inches. Mats manufactured for resilient material for both equipment heights must meet current federal safety standards. Written documentation from manufacturer must be available for review at all times."

Note that for loose fill materials, this minimum requirement is lower than what is suggested by ASTM Standards and CPSC's *Public Playground Safety Handbook*, which states "never use less than 9 inches of loose fill material except for shredded/recycled rubber (6 inches recommended). Shallower depths are too easily displaced and compacted" (2.4.2.2).

"Department approved resilient surfacing includes loose fill materials such as wood chips, wood mulch, engineered wood fiber, pea gravel, synthetic pea gravel, shredded rubber tires, and fine loose sand. Solid unitary materials include poured in place surfacing, approved rubber mats, playground tiles, and astro turf with built in resilient pad." Retain documentation from contractor/ manufacturer that any unitary materials installed meet ASTM F1292.

Avoid choking hazards in areas for children under 3.

"Sand used as a resilient surface must be raked regularly to retain its resiliency and to retain a depth of at least six (6) inches."

§ 7.702.62B6-9

Family Child Care Homes (7.701, 7.707, 7.719)

May be designed to meet requirements

Design Considerations: The regulation states protective surfacing must be "at least six inches (6") of a nationally recognized protective surface." Note that this is a minimum requirement and is lower than what is suggested by ASTM Standards and CPSC's *Public Playground Safety Handbook*, which states "never use less than 9 inches of loose fill material except for shredded/ recycled rubber (6 inches recommended). Shallower depths are too easily displaced and compacted" (2.4.2.2).

The administrative guide for 7.707 states: "The facility must have documentation from the installer stating any mat, tile or poured in place surfacing meets ASTM F1292 standards. The documentation must be site specific."

Avoid choking hazards in areas for children under 3.

"Sand may be used as a protective surfacing when regularly raked, rototilled or replaced to retain its resiliency." However, "if during any type of licensing visit the sand has become compacted and lost resiliency or depth, the provider must immediately replace the sand with one of the other approved protective surfacing materials."

§ 7.707.932A-E

Child Care Facility Licensing (Continued)		Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> No specific requirements for protective surfacing. Just a general requirement that “outdoor equipment, materials, and furnishings” must or shall “be sturdy, safe and free of hazards.” Licensing advises that this rule is interpreted to require compliance with protective surfacing guidelines in CPSC’s <i>Public Playground Safety Handbook</i> (See Sections 2.4 and 5 available at: https://www.cpsc.gov/s3fs-public/325.pdf.) §7.720.73A7	May be designed to meet requirements <i>Design Considerations:</i> “Outdoor equipment, materials, and furnishings” must or shall “be sturdy, safe and free of hazards.” “All outdoor climbing equipment over eighteen (18) inches provided by the center must have least six (6) inches resilient surface throughout the use zone.” Note that for loose fill materials, this minimum requirement is lower than what is suggested by ASTM Standards and CPSC’s <i>Public Playground Safety Handbook</i>, which states “never use less than 9 inches of loose fill material except for shredded/recycled rubber (6 inches recommended). Shallower depths are too easily displaced and compacted” (2.4.2.2). §7.712.73A7; §7.712.71D4, 5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items with wording similar to <i>ECERS-R</i>’s that measure if there is “sufficient cushioning” in areas to which children may fall from playground equipment and <i>ECERS-R</i> specifically requires cushioning for all such features used for active play. <i>Design Considerations:</i> Reference CPSC’s <i>Public Playground Safety Handbook</i> for information about loose fill surfacing needed to achieve minimal score on items for gross motor spaces/physically active play (per <i>ECERS</i> 3rd Edition). Poured or tiled rubber or foam surfaces must meet <i>ASTM F1292</i> to achieve minimal score. To receive highest score on gross motor/physical activity items, outdoor areas should have at least 2 surfaces, one hard and one soft, large enough to permit different types of play. <i>Infants and Toddlers (ITERS-R):</i> Item 11, 16; <i>Early Childhood (ECERS-R):</i> Item 7; <i>Family Child Care (FCCERS-R):</i> Items 12	May be designed to meet requirements <i>Design Considerations for family child care homes and neighbor-hood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances”... “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” “The grounds and premise shall be well drained and free of refuse, litter... and unused equipment. This provision shall not be construed to limit outdoor educational or recreational programs.” §7.6.1.A1, §7.4.A37	<i>Design Considerations:</i> Section 240 of the ADA standards explains where accessible routes are required within play areas containing designed and constructed components—either natural or manufactured—that generate opportunities for play, learning, and socialization. Section 1008 has more specific requirements for designing these routes. Note that “ground surfaces on accessible routes, clear floor or ground spaces, and turning spaces...shall comply with ASTM F1951 (incorporated by reference...). Ground surfaces shall be inspected and maintained regularly and frequently to ensure continued compliance with ASTM F1951.” And “ground surfaces located within use zones shall comply with ASTM F1292 (1999 edition or 2004 edition) (incorporated by reference)” (Section 1008.2.6).

Sand Play Settings

Sand play areas provide opportunities to dig, scoop, pour, sculpt, fill and empty containers, and participate in rich, cooperative imaginative play. In family child care homes that serve a small number of children, the smaller plastic containers sold in many toy stores may be adequate, however they are likely too small to meet the needs of a child care center. Sand play areas for such facilities may be constructed with dimensioned lumber or bounded by stumps or boulders. Ideally, they should be sized so several small groups of children can play simultaneously.

Access to water increases the play value of sand areas considerably. Water should be potable.

NLI recommends that sand areas be located away from primary pathways because sand can create a slip hazard on pavements. Tucking the sand play area in the corner of the site will help to minimize the tendency of sand to “travel” all over the OLE. Enclosing the setting with high edges to keep the sand contained will also help to keep the sand in place. The sand itself should be “play sand” free of fine silica dust that can be harmful if inhaled. Where stray cats are a concern, sand areas should be covered. Covering sand play settings may also be regulated in some contexts. Consider whether the sand play setting will need to be covered and take this into consideration when you lay out the space. For more tips on designing sand play areas, see: <https://naturalearning.org/sand-play-areas-design>.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be appropriate for children’s ages, size,” and “developmental needs.” “[M]ust be sturdy, safe, and free of hazards.” If accessible to children less than three years old, must not include choking hazards (e.g. pebbles <1.25 inches diameter and <2.25 inches long) or inhalation hazards. <i>Mandates Addressed:</i> Helps to meet requirement for having a variety of “manipulative toys.” In toddler programs, helps to meet requirement for play materials that encourage gross motor development, fine motor development, and social interaction. §7.702.61A-C, §7.702.62C, §7.702.62F, §7.702.62I	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be kept safe and free of hazardous materials” including “‘keep out of reach’ items,” “broken items,” and “poisonous chemicals,” and “choking hazards” (e.g. pebbles <1.25 inches in diameter and <2.25 inches long). If integrated into sand play, “food and/or organic material must be discarded each week.” “Children must be directly and actively supervised near standing water including, but not limited to ... buckets.” <i>Mandates Addressed:</i> “Some sand or equivalent dry material or water play should be offered indoors or outdoors at least monthly and year round.” §7.707.21, §7.707.934B, §7.707.934A, §7.707.83M	May be designed to meet requirements <i>Design Considerations:</i> “[S]hall be sturdy, safe and free of hazards.” “[E]xit routes shall be kept free from accumulation of extraneous materials that could... hinder an escape or evacuation.” §7.720.73A7, §7.720.73A5

Child Care Facility Licensing (Cont.) School-Age Child Care Centers (7.701, 7.712, 7.719)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... manipulatives.” §7.712.73A7, §7.712.64B2	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to sand and water play for children 1.5 to 6 years old. <i>Design Considerations:</i> Must be a dedicated sand play area with enough soil for children to “dig, scoop, pour, and fill and empty containers” to qualify as “sand play.” Having a variety of toys for playing in the earth—that support different types of play (e.g. spoons, small buckets, dump trucks, plastic shovels) will help to get a higher rating. Failing to cover the area may lower the rating (ITERS & FCCERS only), as may “animal contamination,” failing to supervise toddlers to ensure they don’t eat the sand, or failing to wash hands after use. (See p. 137 for more information on handwashing). Ratings also consider whether hands are washed before use if sand play is incorporated into a sensory table. “Sand on sidewalk” is specifically called out as a minor hazard that can lead to lower rating on safety practices in ECERS-R. Containing sand play with benches, log sections, or other edging and providing a buffer between the sand play area and the primary pathway will help to minimize opportunities for sand on sidewalk. <i>Infants and Toddlers (ITERS-R):</i> Items 10, 11, 21, 25; <i>Early Childhood (ECERS-R):</i> Items 11, 12, 14, 23, 27; <i>Family Child Care (FCCERS-R):</i> Items 12, 13, 14, 23, 30; and the 2018 updates to each scale adopted by Clayton.	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances”... “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” “Sand boxes shall be maintained in a sanitary condition and comply with the following requirements: 1. Sandboxes shall be covered with a completely removable lid or other covering at the end of each day; 2. Sand-boxes shall be kept free from cat and other animal excrement, litter and debris; 3. Sand shall be replaced as often as necessary to keep the sand visibly clean and free of extraneous materials; and, 4. These requirements only apply to designated sand boxes and do not include sand used as a resilient material or other ground covering.” §7.6.1.A1, B; §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Seating and Tables

Seating and tables are an important part of many OLE settings including outdoor classrooms and project settings. Seating may also be spread throughout the OLE to provide areas where quiet activities may take place. Seating may be provided using manufactured benches or chairs or natural materials such as boulders and logs.

When using logs or stumps for outdoor seating, hardwoods like cedar, oak, or maple are preferable to softwoods, such as pine, that decompose too fast. Sharp edges should be avoided.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor... furnishings must be sturdy, safe, and free of hazards.” Also, “Durable furniture such as tables and chairs must be child-sized or appropriately adapted for children’s use.” “[F]urnishings ... accessible to children less than three (3) years of age must not be a choke hazard or able to be inhaled.” “[F]urnishings ... made of brittle, easily breakable plastic or glass are not permitted for children less than five (5) years of age.” §7.702.61C, F; §7.702.62F,G	May be designed to meet requirements <i>Design Considerations:</i> “Furnishings and equipment in the area approved for child care must be in good repair.” “[M]ust be kept safe”—“free from hazards posing danger of injury including but not limited to... protrusions, broken items, areas of entrapment...” (i.e. gaps between 3.5 and 9 inches). §7.707.922D, §7.707.91D, §7.707.21	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor... furnishings shall be sturdy, safe and free of hazards.” “Equipment, materials, and furnishings, including durable furniture such as tables and chairs, shall be stored in a manner that is safe for youth.” §7.720.73A7, §7.720.73A8	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor... furnishings must be sturdy, safe and free of hazards.” “Equipment, materials, and furnishings, including durable furniture such as tables and chairs, must be stored in a manner that is safe for children.” §7.712.73A7, §7.712.73A8

Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, etc.)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design		
May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items for furniture. <i>Design Considerations:</i> To score well, furniture must be “sturdy and in good repair.” Rewarded for having “child-sized furniture” (chairs that “allow children to sit back in the chair with feet touching the floor” and tables that allow “knees to fit comfortably under the table while elbows rest on table surface”). Having furniture adapted for children with disabilities that encourages “inclusion” and “comfortable adult seating” rewarded too. <i>Infants and Toddlers (ITERS-R):</i> Item 2; <i>Early Childhood (ECERS-R):</i> Item 2; <i>Family Child Care (FCCERS-R):</i> Item 2	May be designed to meet requirements <i>Design Considerations:</i> Should not be treated or finished in a way that is hazardous to children. “Poisonous or toxic materials shall not be stored or used in a way that could contaminate food, food utensils and equipment, bedding, sleeping mats, toys and other equipment, materials and items that will come into contact with food or children.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.14.2D; §7.4.A37	<i>Design Considerations for all facilities (including portions of residence used for family child care homes):</i> There are currently no requirements for benches in OLEs that are not part of a play component, work surface, or dining area. “Where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with 902. In addition, where work surfaces are provided for use by other than employees, at least 5 percent shall comply with 902.” “Dining surfaces and work surfaces required to comply with 902 shall be dispersed throughout the space or facility containing dining surfaces and work surfaces.” (Section 226). Note that Section 902 provides requirements for dining and work tables, with 902.4 focusing on children. Review this section. On dining and work surfaces for children’s use, “The tops of tables and counters shall be 26	inches (660 mm) minimum and 30 inches (760 mm) maximum above the finish floor or ground.” (902.4.2) and a table top between 28 and 30 will satisfy requirements for adults as well as children (902.3). For requirements for clear floor space around the tables as well as knee and toe clearance under it, see Sections 902.2 and 902.4.1 and Sections 305 and 306, which they refer to. <i>For all facilities but family child care homes:</i> Tables, used for play, learning, and socialization activities in an OLE would qualify as play components subject to requirements in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread through-out the play area. A more complex rule applies when there are elevated play components. Section 1008.4 includes specific requirements for play tables and play components where persons in	wheelchairs transfer to seats. “Where play tables are provided, knee clearance 24 inches (610 mm) high minimum, 17 inches deep (430 mm) minimum, and 30 inches (760 mm) wide minimum shall be provided. The tops of rims, curbs, or other obstructions shall be 31 inches (785 mm) high maximum. EXCEPTION: Play tables designed and constructed primarily for children 5 years and younger shall not be required to provide knee clearance where the clear floor or ground space required by 1008.4.2 is arranged for a parallel approach” (1008.4.3). “Where play components require transfer to entry points or seats, the entry points or seats shall be 11 inches (280 mm) minimum and 24 inches (610 mm) maximum from the clear floor or ground space.” EXCEPTION: Entry points of slides. Where play components require transfer to entry points or seats, at least one means of support for transferring shall be provided” (1008.4.4-5).

Shade Structures and Devices (Arbors, Trellises, Shade Sails, Umbrellas)

The cooler shade of a mature tree is typically preferable to the shade from a shade structure. However, on sites where trees were just installed or in desert areas with limited water resources, shade structures may be the best option. Shade structures may include arbors, pergolas, or trellises covered in vines, shade sails suspended between poles, or unenclosed structures with roofs that also provide cover from rain. Devices such as umbrellas are also an option. Shade structures and devices may be purchased from a catalogue or custom designed to fit particular spaces.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “A shaded area in the fenced play area of at least one hundred fifty (150) square feet must be provided by means of trees or other cover to guard children against the hazards of excessive sun and heat.” Also, “must be sturdy, safe, and free of hazards.” <i>Mandates Addressed:</i> See above. Also, note “metal equipment must be placed in the shade when possible.” §7.702.73B6, 7.702.62B3	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be kept safe”—“free from hazards posing danger of injury including but not limited to... protrusions, broken items, areas of entrapment...” (i.e. gaps between 3.5 and 9 inches). <i>Mandates Addressed:</i> “Shade must be available.” No specific quantity of shade required. §7.707.91D, §7.707.21, §7.707.931D	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> “Access to a shaded area, sheltered area, or inside building area must be provided at all times to guard children against the hazards of excessive sun and heat.” §7.712.73A7, 7.712.71D2	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include a scale item that addresses “protection from the elements” within the outdoor area used for active physical play or gross motor play. The protection provided may be “shade in summer” where that is appropriate. For FCCERS-R and ITERS-R, having shade in the outdoor play area is also rewarded under “health practices” item. <i>Design Considerations:</i> Lower portions of shade structure accessible to children should be free of protrusions. <i>Infants and Toddlers (ITERS-R):</i> Item 10, 16 <i>Early Childhood (ECERS-R):</i> Item 7 <i>Family Child Care (FCCERS-R):</i> Item 11, 26	<i>Design Considerations:</i> None.	<i>Design Considerations:</i> Posts supporting shade structure should not be located within accessible route or wheelchair turning area.

Stationary Natural Features that Are Not Freestanding Structures (Logs, Boulders, Stumps)

Stationary natural play features that are not freestanding structures include logs, boulders, and stumps. They may be used for sitting, balancing, edging, creating habitat, or defining play and learning settings.

Standalone logs, boulders, and stumps are outside of the scope of playground equipment standards and under *ASTM F1487* can be introduced into to an OLE without surrounding them with protective surfacing. However, a freestanding structure made of natural materials that is intended for climbing would qualify as playground equipment requiring protective surfacing. In Colorado, Licensing also advises logs, boulders, and stumps 18 inches or higher that are regularly used for gross motor play should also be treated as playground equipment and designed with protective surfacing surrounding them on all sides from which a fall is possible.

Cooper (2014) provides some advice on how to manage risk and remove hazards in nature play and learning areas that do not include features that qualify as playground equipment. See: https://naturalearning.org/wp-content/uploads/2019/06/Nature-Play-Learning-Places_v1.6_Sept_2015-Chapter-6.pdf.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (7.701, 7.702, 7.719); Family Child Care Homes (7.701, 7.707, 7.719)

May be designed to meet requirements

Design Considerations for both: If logs, boulders, or stumps are attached together to create a freestanding play structure, it would be defined as custom playground equipment. Additionally, Licensing advises that standalone logs, boulders, and stumps would be regulated as custom playground equipment if supervisors regularly allow their use for a gross motor play activity (climbing, swinging, sliding down, balancing, or jumping off) where children’s feet are 18 inches or more above the adjacent ground surface. If a feature qualifies as playground equipment, see p. 88 for requirements for playground equipment. If it is installed as climbing equipment 18 inches or higher, it “must have protective surfacing, meeting current federal safety requirements, underneath and in the use zone surrounding the equipment,” which is 6 feet in all directions from the outside of the equipment for preschool climbing equipment and 3 feet in

all directions from the outside of the equipment for toddler climbing equipment (See requirements for protective surfacing, p. 100.) If children are jumping off logs or boulders not designed for gross motor play, supervisors would be expected to intervene. However, Licensing has advised a single observation of children using such an area for a gross motor activity would not lead to its designation as playground equipment.

Stationary natural features would not be considered to be playground equipment and would not be required to be surrounded by protective surfacing, if they are less than 18 inches above the adjacent ground surface or they are not regularly used for gross motor play. A log, boulder, or stump that is used for sitting or forms of play where the child’s feet would be in contact with ground (as with a table in a dramatic play area) would not be considered playground equipment.

Child care centers only: Whether or not it is playground equipment, “must be appropriate for children’s ages, size,” and “developmental needs” and “must be sturdy, safe, and free of hazards.”

Family child care homes only: Whether or not it is playground equipment, “[M]ust be kept safe”—“free from hazards posing danger of injury including but not limited to... protrusions, broken items, areas of entrapment...” (i.e. gaps between 3.5 and 9 inches).

Mandates Addressed: Depends on use. May help to meet requirements for “large muscle equipment,” “gross motor development,” or “social interaction” in child care centers. May help to meet requirement for “nature or science related” materials or “outdoor physical free play materials” in family child care homes.

§7.702.61A-C; §7.702.62B6, C5, C8, D4, H1; §7.707.91D; §7.707.21; §7.707.83G,K

Child Care Facility Licensing (Continued)		Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” §7.720.73A7	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” If it is installed as outdoor climbing equipment over 18 inches, “must have [at] least six (6) inches resilient surface throughout the use zone” and must not have any surface for play that exceeds 6 feet “unless equipped with a protective barrier to prevent children from falling.” <i>Mandates Addressed:</i> Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7, §7.712.64B3, §7.712.71D4, 5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to either gross motor play or active physical play, free play, and provision for children with disabilities. ECERS-R identifies “natural objects used for climbing, sliding, balancing or other gross motor activity” as gross motor equipment. ECERS-R and FCCERS-R will rate higher if there’s a space for privacy. <i>Design Considerations:</i> Ratings are higher when there is equipment appropriate to the ages and abilities of the children who use the space, if it is in good repair, if it stimulates 7-9 different gross motor skills, if there is enough equipment, and if it is accessible to those with disabilities. Environment Ratings Score may be adversely affected if equipment or setting includes entrapment hazards (gaps between 3.5 and 9 inches or 3/8 and 1 inch), projections, sharp or “dangerous” objects, or other “hazards that could lead to serious injury.” Having playground equipment without “an adequate fall zone” (See protective surfacing, p. 100), failure to anchor playground equipment, or having equipment that is “too high” (defined in FCCERS-R and ITERS-R to mean higher than 1 foot per year of age) could hurt the rating. Sand wood equipment to avoid FCCERS-R and ITERS-R deduction for allowing splinters. ECERS-R emphasizes staff being able to see areas used for gross motor play. <i>Infants and Toddlers (ITERS-R):</i> Items 11, 19, 16, 32; <i>Early Childhood (ECERS-R):</i> Items 7, 8, 14, 22, 24, 37; <i>Family Child Care (FCCERS-R):</i> Items 6, 12, 26, 32, 34, 27	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §2.6.1.A1, §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Storage (Outdoors)

Providing storage in the OLE helps to ensure materials, tools for children, toys, and equipment used to enliven and manage the space are close at hand. Storage can take many forms—including chests that double as benches, shelves in covered areas, plastic bins with lids, cupboards with doors and walk-in sheds.

The main considerations when designing storage areas are what will need to be stored, who will need to access the materials stored (will children be able to access the materials on their own?), and where within the OLE those materials will be used. The closer the materials are to the use location the more likely that they will be brought out on a regular basis.

Materials to be used within the outdoor classroom should be stored within that setting. Sand and earth play toys should be stored in their respective settings. Tricycles and riding toys should be stored in areas along the primary path or made easily accessible to it. One successful possibility is a drive-thru storage structure that resembles a covered bridge. Lockable storage should be provided as needed for tools or materials that are not for children's use or that require close supervision.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> "An appropriate supply of play materials must be readily accessible to children and must be arranged in an orderly manner so that children can select, remove, and replace the play materials either independently or with minimum assistance." "[O]utdoor furnishings must be sturdy, safe, and free of hazards." "[F]urnishings ... made of brittle, easily breakable plastic or glass are not permitted for children less than five (5) years of age." Should be designed and situated in a way that does not obscure views into play areas. "The play area must be designed so that all parts are visible and easily supervised." §7.702.73B4; §7.702.61C, F; 7.702.62F,G§7.702.62E;	May be designed to meet requirements <i>Design Considerations:</i> "Furnishings and equipment in the area approved for child care must be in good repair." "Age-appropriate blocks and accessories shall be accessible for free play daily allowing at least two (2) children to play independently, yet simultaneously." "[D]ramatic play materials shall be accessible for free play daily such as: backpacks, purses, hats, dress up clothing, house-keeping toys, dolls and accessories, toy telephones, play houses, toy animals, cars and trucks, costumes, and safe jewelry" "'Accessible' means children being able to obtain equipment and materials without adult aid, may be age/development specific." Should be designed and situated in a way that does not obscure views into play areas. "All parts of the play area must be visible and easily supervised." §7.707.922D; §7.707.83F,J; §7.707.21; §7.707.931C	May be designed to meet requirements <i>Design Considerations:</i> "[O]utdoor ... furnishings shall be sturdy, safe and free of hazards." "Equipment, materials, and furnishings, including durable furniture such as tables and chairs, shall be stored in a manner that is safe for youth." "Volatile substances such as... oil-based paints... other hazardous items shall be stored away from the area used for youth care and be inaccessible to youth." §7.720.73A7, §7.720.73A8, §7.720.73A3

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” “Equipment, materials, and furnishings, including durable furniture such as tables and chairs, must be stored in a manner that is safe for children.” <i>Mandates Addressed:</i> Depending on type of outdoor storage and materials provided within it, may help to meet requirement that “children at the center must have access to age-appropriate... activity supplies... manipulatives and games... recreation equipment... science equipment and materials.” §7.712.73A7-8, §7.712.64B	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include multiple items related to different activities. Providing storage is in many cases a key part of facilitating these activities. And whether and how storage is provided is specifically called out in some items. <i>Design/Management Considerations:</i> Should not include “hazards that could lead to serious injury.” Storage should be designed based on how accessible different materials need to be—the ages of children who would need to access the materials (or be prevented from accessing them) (e.g. certain art materials should not be freely available to those under 3). The ratings reward when certain materials (e.g. blocks and materials for use in nature/science activities, math/number activities, fine motor play, dramatic play) are well organized (typically by type in labeled containers). <i>Infants and Toddlers (ITERS-R):</i> Items: 10, 15-22, 30; <i>Early Childhood (ECERS-R):</i> Items 14, 19-26, 35; <i>Family Child Care (FCCERS):</i> Items 12, 16-23, 26, 32	May be designed to meet requirements <i>Design Considerations:</i> All outdoor storage areas need to be maintained so that they are “free of insect and rodent harborages.” Custodial and maintenance storage areas “shall be kept clean, sanitary, and inaccessible to children.” §7.6.1A; §7.8.6A3	Section 225.2 of the ADA Standards provides the following information on the scope of storage in areas required to be accessible: 1) “Where storage is provided in accessible spaces, at least one of each type shall comply with 811” (225.2). Advisory 225.2: “Types of storage include but are not limited to: closets, cabinets, shelves, clothes rods, hooks, drawers. Where provided, at least one of each type of storage must be in reach ranges specified in 308; however, it is permissible to install additional storage outside the reach ranges.” 2) “Where lockers are provided, at least 5 percent, but no fewer than one of each type, shall comply with 811” (225.2.1), Advisory 225.2.1: “Different types of lockers may include full-size and half-size lockers, as well as those specifically designed for storage of various sports equipment.” 3) “Self-service shelves shall be located on an accessible route complying with 402. Self-service shelving shall not be required to comply with 308” (225.2.2). Section 811 discusses how storage in accessible areas must be made accessible. It notes: 1) “A clear floor or ground surface complying with 305 shall be provided” (811.2). 2) “Storage elements shall comply with at least one of the reach ranges specified in 308” (308.1). Advisory 308.1 provides the same information on reach range for children under 12 as found in 1008.4.2 (See box on p. 27). 3) “Operable parts shall comply with 309,” which only adds the following to 811: “operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum” (309.4).

Teepees

Teepees provide nooks for socialization, dramatic play, and small group gathering. Covered with annual vegetable or permanent fruiting vines, they may add interest to a vegetable garden. Teepees can be made with bamboo poles, steel rods, dimensioned lumber or long straight sticks. Twine or netting can be used to support twirling vines. Or structures may be covered with a fabric to shade the interior.

Twine is frequently used to provide support for twirling plants. Note that entrapment is less of a concern with teepees than raised equipment because children use them while their feet are in contact with the ground. However, given the unpredictability of children's behavior, the best way to avoid entrapment is to make sure the perimeter of all openings created by the twine are less than 17 inches or greater than 28 inches (following CPSC's guidance on preventing entrapment hazards in flexible climbers; see Figure 13, p. 28 of their *Public Playground Safety Handbook*). The easiest solution may be to purchase netting with square openings no more than 4 inches or greater than 7 inches. NLI offers a resource to help people create teepees. See: <https://naturalearning.org/creating-a-vine-teepee-2/>.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)
May be designed to meet requirements <i>Design Considerations:</i> "The play area must be designed so that all parts are visible and easily supervised." Children in teepees should be visible from some part of the space. "[M]ust be sturdy, safe, and free of hazards." Teepees that are not part of a composite play structure (e.g. connected to a slide or climber) are not considered to be playground equipment, and so they do not require a use zone or protective surfacing. According to ASTM F1487-17, the voluntary standard for public use playground equipment in the U.S., "products or materials (site furnishings) that are installed outside the equipment use zone, such as... independent shade structures... are not considered playground equipment" (See Section 1.4). <i>Mandates Addressed:</i> May help meet requirement for "dramatic play area," "social interaction, and, when covered in canvas or vine, for a "shaded area in the fenced play area of at least one hundred fifty (150) square feet... to guard children against the hazards of excessive sun and heat." §7.702.61C; §7.702.62B6-7; §7.702.73B6, B4, C4, H4	May be designed to meet requirements <i>Design Considerations:</i> "All parts of the play area must be visible and easily supervised." Children in teepees should be visible from some part of the space. "[M]ust be kept safe"—"free from hazards posing danger of injury including but not limited to... protrusions, broken items, areas of entrapment ..." (See summary of CPSC's guidelines for preventing entrapment in flexible openings in the box on the far left of this page). <i>Mandates Addressed:</i> Helps meet requirement for at least 4 "types of dramatic play materials for free play" (8 in large homes). Helps to meet requirement that "shade must be available." No specific quantity of shade required. §7.707.91D; §7.707.21; §7.707.931C, D; §7.707.83J

Child Care Facility Licensing (Continued)		Colorado Shines Quality Rating and Improvement System		Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)	CO Shines Program Guide (2015)	Environmental Rating Scales (ITERS-R, ECERS-R, FCCERS-R)		
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” §7.720.73A7	May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> Helps to meet requirement that “children at the center must have access to age-appropriate ... recreation equipment” and may help to meet requirement for “science equipment and materials” if it is used as a structure to grow vines that serve that function. §7.712.73A7, §7.712.64B3, 5	May contribute to higher rating <i>Possible Points:</i> 2 points (if they alone or together with another garden area incorporate plants bearing 2 types of fruits or vegetables that are made available to children to taste) <i>Evidence required:</i> observation of garden during assessment visit (1 point); a written description of the garden and how children use it and photos stamped within the past 12 months that make the garden’s location clear, show kids sampling produce, and show at least two types of produce (1 point) §5.7	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include a scale items that address dramatic play and safety of space. Providing shade is only rewarded in context of gross motor equipment. <i>Design Considerations:</i> Should be free of protrusions and entrapment hazards. <i>Infants and Toddlers (ITERS-R):</i> Item 11, 20; <i>Early Childhood (ECERS-R):</i> Item 11, 24; <i>Family Child Care (FCCERS-R):</i> Item 12, 20	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface... in play areas shall not contain hazardous levels of any toxic chemical or substances.” “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1.A1, §7.6.1.A2, §7.4.A37	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Trees

Individual trees and groves of trees and tree-like shrubs perform many functions in the outdoor learning environment. They create cool shade in the summer months, help to minimize exposure to harmful UV rays, and keep playground equipment and protective surfaces from overheating. A growing amount of research suggests the many beneficial effects to humans from exposure to forest or woodland settings, including the possibility that green park settings may help children concentrate. Trees also provide play props—helicopters that fly through the air, cones as “money” for an imaginary world, or leaves to jump in during the Fall. Weeping trees may become forts, and low branching and multi-trunk trees may create opportunities for sitting or perching between trunks.

Trees shading playground equipment should be located and pruned with ASTM standards in mind. Using vase-shaped shade trees near equipment minimizes potential for future overhead obstructions. Mature trees may be incorporated into the decks of playground equipment, just as shade sails are often integrated into composite playground structures.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “A shaded area in the fenced play area of at least one hundred fifty (150) square feet must be provided by means of trees or other cover to guard children against the hazards of excessive sun and heat.” (Based on size at time of inspection). The trunks of trees must not be located within the use zone of playground equipment. Tree limbs may not hang within 84 inches above any designated play surface of playground equipment (larger than 2”x 2”), its use zone, or the pivot points of swings. However, trees may be incorporated into elevated decks of playground equipment to create a composite play structure, much like posts holding up shade sails and roofs, if accessible surface of trunk has no protrusions or entanglements, and limbs meet requirements mentioned above (See ASTM F1487, especially 9.8.4.1 and ASTM F2373, especially 11.1.6). Mulch must not create a choking hazard (e.g. stone mulch <1.25 inches in diameter and <2.25 inches long) if accessible to children under 3. Trees should not be located in a way that obscures the target on archery range or as part of the bullet-stop on a rifle range. <i>Mandates Addressed:</i> May contribute to requirement to have a variety of “science materials.” §7.702.73B6, §7.719.31B, 7.702.61-62, Administrative Guide, §7.719.31B, §7.719.32D	May be designed to meet requirements <i>Design Considerations:</i> “Shade must be available.” “Tree houses must be inaccessible to children in care.” Trees must not be located in the use zone of playground equipment. Mulch must not be <1.25 inches in diameter and <2.25 inches long) if accessible to kids < 3. Should not obscure the target on archery range or be part of the bullet-stop on a rifle range. <i>Mandates Addressed:</i> Helps meet mandate for shade, “nature or science... materials.” §7.707.931D,N; §7.707.83G; §7.707.91D §7.707.21; §7.707.932A; §7.719.31B; §7.719.32D Administrative Guide	May be designed to meet requirements <i>Design Considerations:</i> None

Child Care Facility Licensing (Cont.)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “Access to a shaded area, sheltered area, or inside building area must be provided at all times to guard children against the hazards of excessive sun and heat.” Trees should not be located in a way that obscures the target on archery range or as part of the bullet-stop on a rifle range. <i>Mandates Addressed:</i> May contribute to requirement for “age-appropriate... science equipment and materials.” §7.712.71D2, §7.719.31B, §7.719.32D, §7.712.64B5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to nature/science, free play, and either gross motor play or active physical play. Trees may increase the rating by providing shade or natural experiences. May also “create a space for privacy.” <i>Design Considerations:</i> Six “tree roots that are unlikely to cause tripping” could lead to lowest rating on safety practices for ECERS-R. <i>Infants and Toddlers (ITERS-R):</i> Items 16, 22, 25 <i>Early Childhood (ECERS-R):</i> Items 7, 8, 14, 25, 29, 35 <i>Family Child Care (FCCERS):</i> Items 6, 22, 26, 27, 32	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth orgs:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “The ground surface (i.e., sand, soil, wood chips, and other resilient surfaces) in play areas shall not contain hazardous levels of any toxic chemical or substances.” “Pre-school age children shall be appropriately supervised around any poisonous plants either in the child care facility or outdoor areas. Toxic plants are prohibited in areas designated for infants and toddlers” (i.e. children under 36 months old). Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1A1, §7.14.2B, §7.4.A37	<i>Design Considerations for all child care facilities:</i> Vertical clearance of 80 inches must be provided wherever trees overhang accessible routes (See 1008.2). <i>For child care facilities not in homes:</i> When trees are installed as gross motor features or used to create spaces for socialization in play environments, these trees/areas would qualify as play components subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route. This may be achieved using a pervious surface that is accessible (e.g. some types of decomposed granite or engineered wood fiber).

Tunnels (not attached to playground equipment)

A tunnel can provide a place to hide during a game of hide and seek, a place to gather and talk with one or two other children away from the surrounding excitement of the outdoor learning environment. Tunnels can add new opportunities for chasing games. If made with a round pipe, a tunnel can serve as a place to roll balls to try to get them to defy gravity.

A major consideration with tunnels at ground level is to ensure they are structurally sound and can be supervised by adults. Can an adult get to a child who is in the tunnel without getting stuck? Can those maintaining the space get in to clean up any accumulated debris? If the outside of a tunnel is designed to encourage climbing, then it would qualify as a climber, a type of playground equipment, and would need to follow standards and regulations for climbers. If a tunnel goes through a mound, it would be best to have a barrier rail at the top if a platform or bridge would need a barrier rail at that height (See Table 4 on p. 21 of CPSC's *Handbook for Public Playground Safety*). If a thin metal pipe is used to create a tunnel, it is best to add faceplates at each end to keep children from bumping their heads on its edges when entering.

Department of Human Services, Social Services Rules, Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> "The play area must be designed so that all parts are visible and easily supervised." Children in tunnels should be visible from some part of the space. "[M]ust be appropriate for children's ages" and "size." "[M]ust be sturdy, safe, and free of hazards." While no specific clarification is provided, a tunnel for toddlers creating a freefall situation would likely need a protective barrier at the top of the tunnel—as CPSC advises for playground platforms of 18 inches or more. See Table 4 on p. 21 of CPSC's <i>Handbook for Public Playground Safety</i> for info on other age groups. Openings between slats on the rail should have at least one dimension less than 3.5 inches to avoid entrapment hazards. Would not qualify as playground equipment requiring a protective surface if it is not part of a composite play structure and does not function as a climber. §7.702.73B4, §7.702.61A-C, §7.702.62B5	May be designed to meet requirements <i>Design Considerations:</i> "[M]ust be kept safe"—"free from hazards posing danger of injury including but not limited to... protrusions..." §7.707.91D; §7.707.21;	May be designed to meet requirements <i>Design Considerations:</i> "[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards." §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” “Outdoor play areas provided by the center must not have equipment that exceeds six (6) feet in height for any surface area intended for children’s play unless equipped with a protective barrier to prevent children from falling.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7; §7.712.64B3; §7.712.71D4, 5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to gross motor play or active physical play, free play, and provision for children with disabilities. ECERS-R and FCCERS-R will rate higher based on space for privacy. <i>Design Considerations:</i> Rating for gross motor equipment in ECERS-R is higher when there is equipment appropriate to the ages and abilities of the children who use the space (refer to manufacturers’ age recommendations), if it is in good repair, if it stimulates 7-9 different gross motor skills (e.g. crawling), if there is enough equipment so children don’t have to wait in line to use it, and if equipment is accessible to those with disabilities. Environment Ratings Score may be adversely affected if equipment or setting includes entrapment hazards (openings between 3.5 and 9 inches and openings between 3/8 inch and 1 inch), projections, sharp or “dangerous” objects, pinch-points, or other “hazards that could lead to serious injury.” ECERS-R emphasizes staff being able to see areas used for gross motor play. Rating for space for privacy considers if spaces are “easily supervised.” 2018 update to ECERS-R clarified: “space is open enough to allow for visual supervision” and “it is not required that the teachers can see the space(s) at all times, as long as teachers move about the room and can see the spaces... frequently enough to ensure that each child is safe.” Update to FCCERS-R: “Momentary lapses in supervision are allowed when scoring as long as children are in a safe place, the provider checks on them frequently, and the children are not involved in high risk activities.” <i>Infants and Toddlers (ITERS-R):</i> Items 11, 16, 26, 30, 32 <i>Early Childhood (ECERS-R):</i> Items 5, 7, 8, 14, 29, 35, 37 <i>Family Child Care (FCCERS-R):</i> Items 6, 12, 26, 27, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” “The grounds and premise shall be well drained and free of refuse, litter, animal droppings, insect and rodent harborages...” “Pre-school age children shall be appropriately supervised around any poisonous plants either in the child care facility or outdoor areas. Toxic plants are prohibited in areas designated for infants and toddlers” (i.e. children under 36 months old). Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” §7.6.1A, §17.14.2B, §7.4.A37	<i>Design Considerations for family child care homes:</i> None. <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.

Water Play: Hands-in

Hands-in water play settings typically contain interconnected components designed for children to interact with water, using natural and manufactured loose parts. Hands get wet, sometimes other parts of the body get wet too from children splashing, but the body is not immersed or sprayed with water. Examples include water tables and raised channels that allow children to manipulate water flow. These features may be constructed of metal, wood, plastic, concrete, stone, or a combination of materials. They may be mass produced or custom made.

Water must be potable to meet local health codes. In childcare facilities water is usually supplied directly by a garden hose, via an elevated reservoir filled by a hose or faucet, or via a hand-operated pump. Water may exit directly to a ground drain or into a rain garden (see p. 52). In public facilities catering to young children such as nature centers, botanical gardens, zoos, and museums, where demand for water play is much larger and continuous through the summer season, recirculation systems are used to conserve water. They are larger and far more costly because filtering, pumping, and water treatment are required (as for a swimming pool), along with additional public health requirements and approvals.

Children under 3 need close supervision near any type of standing water. A 2012 study by the U.S. Consumer Product Safety Commission found 91% of all reported injuries and deaths involving submersion of children 0-5 that did not take place in a pool or spa were children under 3. They did not identify a single fatality or injury associated with water tables.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)			
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Orgs (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> Helps to meet requirements for providing “manipulative toys” and “science materials.” §7.702.61C; §7.702.63 C6, C8, D4	May be designed to meet requirements <i>Design Considerations:</i> “Water used by children in play areas... must be clean and not left to stand more than one (1) day.” “Children must be directly and actively supervised near standing water including, but not limited to, fountains, buckets, wading pools, and animal troughs.” <i>Mandates Addressed:</i> “Some sand or equivalent dry material or water play should be offered indoors or outdoors at least monthly and year round.” §7.707.83M; §7.707.931I; §7.707.934A	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” §7.720.73A7	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings must be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7, §7.712.64B3

Colorado Shines Quality Rating Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)		2010 ADA Standards for Accessible Design
May contribute to higher rating for spaces serving children 18 months and older All environment rating scales used as part of CO Shines ratings include scale items related to sand and water play (for children 18 months or older), free play, and provision for children with disabilities. <i>Design Considerations:</i> Highest scores for ECERS-R given for facilities that have both sand play and water play both indoors and outdoors that is available to children for at least one hour daily. ITERS-R and FCCERS-R give highest score for facility that has sand or water play daily. All rate higher when facility provides a variety of toys for water play (different uses, colors, sizes, etc.), and various activities are done with sand or water (washing, floating, etc.). Children drinking water used for play or falling on slippery floors in play area can lead to lower ratings (particularly on ITERS-R and FCCERS-R). Hands must be washed before and after hands-in water play to achieve higher ratings on health practices. (See p. 137 for more information on handwashing). Rating may be lower if infants or toddlers can access “any container of water” without supervision. <i>Infants and Toddlers (ITERS-R):</i> Items 10, 11, 21, 25, 30, 32; <i>Early Childhood (ECERS-R):</i> Items 13, 14, 23, 30, 35, 37; <i>Family Child Care (FCCERS-R):</i> Items 11, 12, 23, 27, 32, 34; and the 2018 update to these scales adopted by Clayton.	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth orgs:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> If water tables are permanent, the plumbing must meet local plumbing codes, ordinances, regulations, and standards, and must be designed and constructed according to the <i>2009 International Plumbing Code</i> except where the local building departments have adopted equivalent or more stringent codes. Staff members and children over 12 months who walk independently must wash hands before and after use of a “sensory table” filled with water. Indoor sensory tables need to be emptied “after use by each group of children and at least daily” and “organic materials” like pasta and beans used with indoor sensory tables must be discarded after a	week. CDPHE advises the same rules will apply to outdoor sensory tables. “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials” — “capable of causing injury, illness, or death when ingested, inhaled, or absorbed” —in hazardous amounts.” “All swimming and recreational water-based activities shall be prohibited if a suspected outbreak of a gastrointestinal illness is occurring at the facility. These activities shall not resume until the Department provides approval.” CDPHE advises any recirculating system would require special approvals, as would any feature that does not get emptied, cleaned, and sanitized between groups of children and at the end of the day. §7.8.3, §7.10.3B1d, §7.6.1A, §7.4.A37, §7.6.3C	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Qualifies as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes

Water Play: Sprinklers and Spraying Features that Do Not Pool Water

The distinguishing characteristic of these features is that children soak their whole bodies, but do not immerse themselves in water to do so. This category covers everything from a domestic lawn sprinkler or sprinklers designed for water play connected to a garden hose, as typically used in child care facilities, to fancy splash pads with computer operated nozzles flush to the ground or overhead sprays. In all such cases, water does not pool to any significant extent, so there is almost no drowning risk. However, these features do not allow for swimming skill development that can lead to reduction in risks in the long run.

In child care facilities, sprinklers and spraying features use potable water, usually via a garden hose, operated in lawn settings to minimize injuries from falls. In public facilities with recirculating systems, water is typically treated to meet the same quality standards as swimming pools and may be turned on via a motion detector or button that children press. Permanent spray pads typically use non-slip paving or resilient rubber surfaces.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> None §7.702.61C;	May be designed to meet requirements <i>Design Considerations:</i> “Water used by children in play areas... must be clean and not left to stand more than one (1) day.” <i>Mandates Addressed:</i> “Some sand or equivalent dry material or water play should be offered indoors or outdoors at least monthly and year round.” §7.707.931J; §7.707.83M	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings must be sturdy, safe and free of hazards.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7, §7.712.64B3	May contribute to higher rating for spaces serving children 18 months and older All environment rating scales used as part of CO Shines ratings include scale items related to sand and water play (for children 18 months or older), free play, and provision for children with disabilities. <i>Design Considerations:</i> Highest scores for ECERS-R given for facilities that have both sand play and water play both indoors and outdoors that is available to children for at least one hour daily. ITERS-R and FCCERS-R give highest score for facility that has sand or water play daily. All rate higher when facility provides a variety of toys for water play (different uses, colors, sizes, etc.), and various activities are done with sand or water (washing, floating, etc.). Children drinking water used for play or falling on slippery floors in play area can lead to lower ratings (particularly on ITERS-R and FCCERS-R). Hands must be washed before water play, and, if messy, afterwards. (See p. 137 for more information on handwashing). <i>Infants and Toddlers (ITERS-R):</i> Items 11, 12 21, 25, 30, 32; <i>Early Childhood (ECERS-R):</i> Items 13, 14, 23, 30, 35, 37; <i>Family Child Care (FCCERS-R):</i> Items 11, 12, 23, 27, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> This feature must not create risks associated water that stands for more than 24 hours (e.g. mosquitoes). “The ground surface... in play areas shall not contain hazardous levels of any toxic chemical or substances.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” “Towels used for recreational water activities shall be individually identified, stored in a sanitary manner, laundered at least weekly, and not to be shared or intermingled among children.” §7.6.1A, §7.4.A37, §7.10.3I	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> A fixed sprinkler would qualify as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes. Note Section 1008.2.3 includes specific exceptions for accessible routes serving water play components.

Water Play: Portable Wading Pools

Portable wading pools are shallow containers designed to be filled with water and, typically, emptied after each use. They provide small children a chance to cool off, to be physically active, to get used to being immersed in water, to practice floating, and play at swimming skills. Portable wading pools are an inexpensive alternative to permanent wading pools.

The CDC (2016) and *Caring for Our Children; National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs* (2011) advise against (but do not regulate) the use of small plastic or inflatable wading pools that do not treat or filter water in child care facilities, due to concerns about spreading recreational water illnesses. Portable wading pools are regulated to minimize sanitation hazards rather than prohibited outright in Colorado child care facilities. Strict supervision ratios apply due to drowning risks associated with pooling water. Water in portable wading pools should be emptied as soon as the play session is over.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” Also, see requirements for managing swimming (p. 150). <i>Mandates Addressed:</i> None §7.702.61C	May be designed to meet requirements <i>Design Considerations:</i> “Water used by children in play areas, including wading pools, must be clean and not left to stand more than one (1) day.” “Children must be directly and actively supervised near standing water including, but not limited to, fountains, buckets, wading pools, and animal troughs.” Also, see requirements for managing swimming (p. 150). <i>Mandates Addressed:</i> “Some sand or equivalent dry material or water play should be offered indoors or outdoors at least monthly and year round.” §7.707.83M; §7.707.931J; §7.707.934A	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” Also, see requirements for managing swimming (p. 150). §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings must be sturdy, safe and free of hazards.” Also, see requirements for managing swimming (p. 150). <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7, §7.712.64B3	May contribute to rating for ECERS-R and ITERS-R (toddlers only) but not FCCERS-R. All environment rating scales used as part of CO Shines ratings include scale items related to sand and water play (for children 18 months or older), free play. <i>Design Considerations:</i> FCCERS-R states: “portable wading pools... cannot be counted as water play due to extreme health and safety risks.” No other rating system includes such language. Highest scores for ECERS-R given for facilities that have both sand play and water play both indoors and outdoors that is available to children for at least one hour daily. ITERS-R calls for sand or water play daily. Both rate higher when facility provides a variety of toys for water play, and various activities are done with sand or water. Children drinking water or falling on slippery floors can lower rating. <i>Infants and Toddlers (ITERS-R):</i> Items 11, 12, 21, 25, 30, 32; <i>Early Childhood (ECERS-R):</i> Items 13, 14, 23, 30, 35, 37; <i>Family Child Care (FCCERS-R):</i> Items 11, 12, 23, 27, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Use of... portable or permanent wading pools by children who are not toilet trained shall be prohibited. Portable wading pools shall be emptied and disinfected after use by each group of children, emptied and disinfected at the end of each day, and placed in storage when not in use. A contaminated wading pool shall be emptied, cleaned and disinfected.” Has rules for suspending use if there is an outbreak of gastrointestinal illness at the facility (See §7.63C) and pool temperature during normal use: “Except for natural swimming areas, the water temperature shall be maintained between 77°F and 90°F while the pool is in use.” “Towels used for recreational water activities shall be individually identified, stored in a sanitary manner, laundered at least weekly, and not to be shared or intermingled among children.” §7.6.3; §7.10.3I	<i>Design Considerations:</i> None, as portable wading pools are manufactured products and not facilities. The definition of facility used in ADA Standards is “all or any portion of buildings, structures, site improvements, elements, and pedestrian routes or vehicular ways located on a site.” It defines element as “an architectural or mechanical component of a building, facility, space, or site” (106.5).

Water Play: Permanent Wading Pools and Naturalistic Settings for Wading (up to 18 inches deep)

Permanent wading pools provide small children a chance to cool off, to be physically active, and practice floating and other swimming skills. They are considerably more expensive than portable wading pools and require extensive maintenance.

Pools must be secured to prevent children from accessing them when they are not in use, and strict supervision ratios apply when they are in use to minimize drowning risks. They may also be subject to regulations and standards beyond those for child care facilities that are not fully addressed in this guide. In Colorado, permanent wading pools that are not at private residences must be constructed and operated in compliance with the *Swimming Pool and Mineral Bath Regulations*, 5 CCR 1003-5. *Caring for Our Children; National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs* (2011) provides a variety of recommendations related to wading pools in child care (See http://nrckids.org/files/CFOC3_updated_final.pdf, p. 7, 68-70, 278-283, 380).

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” Also, see requirements for managing swimming (p. 150). <i>Mandates Addressed:</i> None §7.702.61C	May be designed to meet requirements <i>Design Considerations:</i> “Swimming pools, permanent wading pools, and above ground pools located on the property of the home must be enclosed with a five foot (5’) fence and a locked gate.” “Water used by children in play areas, including wading pools must be clean and not left to stand more than one (1) day.” “Children must be directly and actively supervised near standing water including, but not limited to, fountains, buckets, wading pools, and animal troughs.” “With written permission of the parent(s) or guardian(s), children in care shall be permitted to use the permanent pool in the presence of an adult who holds a current Red Cross basic lifeguarding certificate or equivalent, and is actively responsible for lifeguarding protection.” Also, see requirements for managing swimming (p. 150). <i>Mandates Addressed:</i> “Some sand or equivalent dry material or water play should be offered indoors or outdoors at least monthly and year round.” §7.707.83M; §7.707.931I,J; §7.707.934A; §7.707.933F	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” Also, see requirements for managing swimming (p. 150). §7.720.73A7

Child Care Facility Licensing (Cont.)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings must be sturdy, safe and free of hazards.” Also, see requirements for managing swimming (p. 150). <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7, §7.712.64B3	May contribute to higher rating when serving children 18 months and older All environment rating scales used as part of CO Shines ratings include scale items related to sand and water play. <i>Design Considerations:</i> Highest scores for ECERS-R given for facilities that have both sand play and water play both indoors and outdoors that is available to children for at least one hour daily. ITERS-R and FCCERS-R give highest score for facility that has sand or water play daily. All rate higher when facility provides a variety of toys for water play (different uses, colors, sizes, etc.), and various activities are done with sand or water (washing, floating, etc.). Children drinking water used for play, or falling on slippery floors in play area can lead to lower ratings (particularly on ITERS-R and FCCERS-R). “Unfenced swimming pool; pool accessible without adequate supervision,” specifically called out as a safety hazard in FCCERS-R, lowers rating in all three. <i>Infants and Toddlers (ITERS-R):</i> Items 11, 12 21, 25, 30, 32; <i>Early Childhood (ECERS-R):</i> Items 13, 14, 23, 30, 35, 37; <i>Family Child Care (FCCERS-R):</i> Items 11, 12, 23, 27, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “[P]ermanent wading pools ... shall be constructed, operated, and maintained in accordance with the Colorado Department of Public Health and Environment Swimming Pool and Mineral Bath Regulations, 5 CCR 1003-5, and Title 15, United States Code (USC), Section 8001, et 11 seq” or local health or building departments codes if they are equivalent or more stringent. See: http://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=375&fileName=5. Prohibits use of hot tubs and swimming by children who are not toilet trained, and has rules for suspending use if there is an outbreak of gastrointestinal illness (See 7.6.3C). Notes “a contaminated wading pool shall be emptied, cleaned and disinfected. “Except for natural swimming areas, the water temperature shall be maintained between 77°F and 90°F while the pool is in use.” “Towels used for recreational water activities shall be individually identified, stored in a sanitary manner, laundered at least weekly, and not to be shared or intermingled among children.” §7.6.3; §7.10.3I	<i>Design Considerations:</i> “At least one accessible means of entry shall be provided for wading pools. Accessible means of entry shall comply with sloped entries complying with 1009.3.” At family child care homes, these requirements would only apply if the wading pool was considered to be part of the child care facility or a shared space used by the facility at the time it was constructed/ altered. 242.3

Water Play: Swimming Pools and Swimming Areas (more than 18 inches deep)

Provision of swimming pools and swimming areas is rare in for child care facilities serving preschool age children. They require intense maintenance and supervision—particularly for younger children who are less likely to have swimming skills and may not be able to stand in all parts of the pool.

For facilities serving older school-age children, such as neighborhood youth organizations or summer day camps (which often fall under the category of school-age child care centers), swimming pools may support part of the program.

No attempt is made here to provide advice on constructing or managing swimming pools. Those constructing pools should hire experienced professionals who are familiar with local codes and national standards. Pools may be subject to additional regulations beyond those for child care facilities that are not fully addressed in this guide. In Colorado, permanent swimming pools that are not at private residences must be constructed and operated in compliance with the *Swimming Pool and Mineral Bath Regulations*, 5 CCR 1003-5.

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Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” Also, see requirements for managing swimming (p. 150). <i>Mandates Addressed:</i> None §7.702.61C	May be designed to meet requirements <i>Design Considerations:</i> “Swimming pools, permanent wading pools, and above ground pools located on the property of the home must be enclosed with a five-foot (5’) fence and a locked gate.” “All hot tubs must have bolted and securely locked covers.” “Children must be directly and actively supervised near standing water including, but not limited to, fountains, buckets, wading pools, and animal troughs.” Also, see requirements for managing swimming (p. 150). <i>Mandates Addressed:</i> “Some sand or equivalent dry material or water play should be offered indoors or outdoors at least monthly and year round.” §7.707.83M; §7.707.931I,J,K; §7.707.934A	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” Also, see requirements for managing swimming (p. 150). §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings must be sturdy, safe and free of hazards.” Also, see managing swimming (p. 150). <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7, §7.712.64B3	May contribute to higher rating when serving children 18 months and older All environment rating scales used as part of CO Shines ratings include scale items related to sand and water play. <i>Design Considerations:</i> Highest scores for ECERS-R given for facilities that have both sand play and water play both indoors and outdoors that is available to children for at least one hour daily. ITERS-R and FCCERS-R give highest score for facility that has sand or water play daily. All rate higher when facility provides a variety of toys for water play (different uses, colors, sizes, etc.), and various activities are done with sand or water (washing, floating, etc.). Children drinking water used for play, or falling on slippery floors in play area can lead to lower ratings (particularly on ITERS-R and FCCERS-R). “Unfenced swimming pool; pool accessible without adequate supervision,” specifically called out as a safety hazard in FCCERS-R, lowers rating in all three. <i>Infants and Toddlers (ITERS-R):</i> Items 11, 12 21, 25, 30, 32; <i>Early Childhood (ECERS-R):</i> Items 13, 14, 23, 30, 35, 37; <i>Family Child Care (FCCERS-R):</i> Items 11, 12, 23, 27, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth org:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Swimming pools ... hot tubs and swim areas shall be constructed, operated, and maintained in accordance with the Colorado Department of Public Health and Environment Swimming Pool and Mineral Bath Regulations, 5 CCR 1003-5, and Title 15, United States Code (USC), Section 8001, et 11 seq” or local health or building departments codes if they are equivalent or more stringent. See: http://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=375&fileName=5. Prohibits use of hot tubs and swimming by children who are not toilet trained, and has rules for what to do if there is an outbreak of gastrointestinal illness (See §7.6.3C). “Except for natural swimming areas, the water temperature shall be maintained between 77°F and 90°F while the pool is in use” not higher than 104°F in hot tubs. “Towels used for recreational water activities shall be individually identified, stored in a sanitary manner, laundered at least weekly, and not to be shared or intermingled among children.” §7.6.3; §7.10.3I	<i>Design Considerations:</i> Section 242.2 of the ADA Standards provides general accessibility requirements for swimming pools and Section 242.4 provides requirements for spas. Section 1009 provides requirements for any pool lifts, sloped entries, transfer walls, transfer systems, and pool stairs that are provided. At family child care homes, these requirements would only apply if the pool or spa was considered to be part of the child care facility or a shared space used by the facility at the time it was constructed/ altered.

Wheeled Toys: Tricycles, Bicycles, Scooters, Skateboards, Rollerblades, and Child-Propelled Riding Toys

Bicycles, tricycles, and other self-propelled riding toys help children to develop gross motor skills and provide opportunities for engaging in physical activity. During periods of free play, such vehicles may become part of elaborate dramatic play sequences linking several settings and/or children may circle around the primary path.

While children using bicycles must wear helmets in some types of child care facilities, there are no similar rules related to tricycles and riding toys, due to their greater stability. Helmet use in outdoor learning environments may, in fact, present a hazard if the helmet continues to be worn on climbing or sliding equipment. The U.S. Consumer Product Safety Commission warns that a helmet can create entrapment and strangulation hazards in combination with climbing or sliding equipment. See: <https://www.cpsc.gov/content/after-recent-death-cpsc-warns-against-wearing-bike-helmets-on-playgrounds>. As it is often difficult to control children's movement between different settings during free play, a child could move un-noticed from trike to slide or climber.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> "[M]ust be sturdy, safe and free of hazards." "Children must wear helmets when riding scooters, bicycling, skateboarding, or rollerblading." There is no helmet requirement for tricycles or the wheeled riding toys often used by toddlers. <i>Mandates Addressed:</i> Helps to meet requirements for "large muscle equipment" and toddlers "gross motor development" §7.702.61C,G; §7.702.62C5, H1	May be designed to meet requirements <i>Design Considerations:</i> "The premises ... must be kept safe"— "free from hazards posing danger of injury including but not limited to... broken items..." "Children must wear helmets, wrist protection, and knee and elbow pads when riding a scooter, bicycle, skateboard, or rollerblades." There is no helmet requirement for tricycles or the wheeled riding toys often used by toddlers. "[W]ritten policies and procedures must be developed, implemented and followed, which include all updates, changes, and must include... How and by whom children are supplied with... helmets, wrist protection, and knee and elbow pads." <i>Mandates Addressed:</i> May help meet requirement for "outdoor physical free play materials... in good repair" such as "push toys, riding toys." §7.707.91D, §7.707.21, §7.707.41B12, §7.707.933D, §7.707.83K	May be designed to meet requirements <i>Design Considerations:</i> "[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards." No specific requirements for wearing helmets or other protective equipment. §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> “[M]ust be sturdy, safe and free of hazards.” “Children must wear helmets when riding scooters, bicycling, skateboarding, or rollerblading.” <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... recreation equipment.” §7.712.73A7, §7.712.63C, §7.712.64B3	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to either gross motor play or active physical play, free play, and provision for children with disabilities. <i>Design Considerations:</i> ECERS-R treats these as “gross motor equipment.” Other scales treat them as equipment for “active physical play.” All ratings are higher when there are foot-powered toys appropriate to the ages and abilities of the children who use the space, if they are in good repair, if there is equipment that stimulates 7-9 different gross motor skills (e.g. “steering and pedaling wheeled toys”), if there is enough equipment, and if it is accessible to those with disabilities. ECERS-R ratings are also higher if it serves children at different skill levels (e.g. providing “tricycles with and without pedals”). Environment Ratings Score may be adversely if this equipment has sharp edges. <i>Infants and Toddlers (ITERS-R):</i> Items 11, 16, 30, 32 <i>Early Childhood (ECERS-R):</i> Items 8, 14, 35, 37 <i>Family Child Care (FCCERS-R):</i> Items 12, 26, 32, 34	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> “Outdoor play equipment accessible to children shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts.” Toxic materials are those “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” Although helmets are not addressed in the regulations, CDPHE advises that if helmets are shared between children, they should be wiped with a damp cloth between uses as recommended by Caring for our Children: National Health and Safety Performance Standards (Section 6.4.2.2) to avoid the spread of head lice. Detergents and other cleaners/sanitizers should not be used on helmets, as they may break down the shock-absorbing material and make helmets less effective. §2.6.1.A1, §7.4.A37	<i>Design considerations:</i> None, as they are manufactured products and not constructed facilities.

Wildlife Gardens: Attracting Birds, Butterflies, and Other Pollinators

Wildlife gardens provide birds, butterflies, and other flying creatures with food, water, cover, and habitat to raise young. Wildlife gardens may also serve as places for children to play and learn. As with similar flower gardens, children may use flowers, petals, leaves, and seeds as dramatic play props or as motivation for early science activity, or as the stimulus for artistic expression.

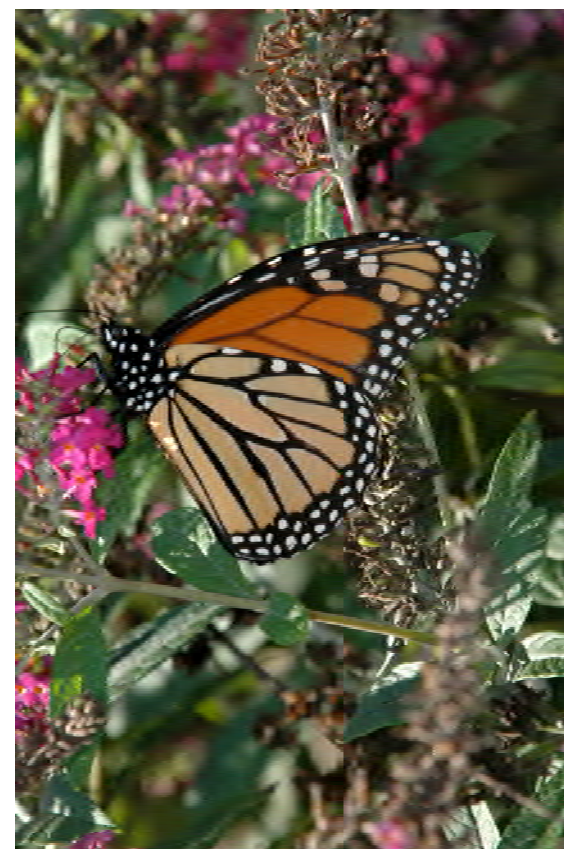
Wildlife gardens are distinguished from other flower gardens because the plants are chosen to attract specific types of wildlife. Choose plants adapted to the site conditions (sun/shade, soil acidity/alkalinity, soil moisture, etc.). The National Wildlife Federation *Native Plant Finder* can help identify regional native host plants for butterflies and moths. (See: <https://www.nwf.org/NativePlantFinder/>.)

Engage children in helping to “make a home for animals.” Armed with child-sized watering cans, gloves, and hand tools, children will love to help—especially watering. The planting design may include quiet nooks, where children can observe the comings and goings of flying critters.

Plants that present hazards when consumed at doses expected should be excluded from outdoor learning environments serving infants and toddlers.

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		
Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)
May be designed to meet requirements <i>Design Considerations:</i> “The play area must be designed so that all parts are visible and easily supervised.” Visibility may be accomplished a variety of ways including having supervisor move through space, using species that an adult caretaker could see over or through and having a raised area overlooking the area. Mulch must not have pieces <1.25 inches in diameter and <2.25 inches long) if accessible to children under 3. <i>Mandates Addressed:</i> May contribute to requirement to have a variety of “science materials.” §7.702.73B4; §7.702.61A; §7.702.62C8, D4	May be designed to meet requirements <i>Design Considerations:</i> “Decorative ponds in the designated play area must use childproofing grates to prevent risk of drowning when there is no fence.” “Children must be directly and actively supervised near standing water including, but not limited to, fountains, buckets, wading pools, and animal troughs.” “All parts of the play area must be visible and easily supervised.” Visibility may be accomplished a variety of ways including having supervisor move through space, using species that an adult caretaker could see over, or having a raised area overlooking the area. Mulch must not have pieces <1.25 inches in diameter and <2.25 inches long) if accessible to children under 3. <i>Mandates Addressed:</i> Helps meet mandate for “nature or science related... materials or activities” such as “plants, gardens... or science props.” §7.707.931L, §7.07.934A, §7.707.91D, §7.707.21, §7.707.83G	May be designed to meet requirements <i>Design Considerations:</i> “[O]utdoor equipment, materials, and furnishings shall be sturdy, safe and free of hazards.” §7.720.73A7

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	2010 ADA Standards for Accessible Design
School-Age Child Care Centers (7.701, 7.712, 7.719)			
May be designed to meet requirements <i>Design Considerations:</i> See 6 CCR 1010-7 (two columns to the right). <i>Mandates Addressed:</i> “Children at the center must have access to age-appropriate... science equipment and materials.” §7.712.73A7, §7.712.64B5	May contribute to higher rating All environment rating scales used as part of CO Shines ratings include scale items related to nature/science. Facilities are rewarded for having a variety of “nature/science materials” such as flower gardens. <i>Design/Management Considerations:</i> Providers who point out flowers to infants/toddlers and use everyday events (such as the transformation from a flower to a seed) to teach children about nature or science are rewarded. So are those that do nature/science activities such as sprouting and planting seeds, at least once every two weeks. Hands should be washed after messy activities. (See p. 137 for more information on handwashing). Tools not meant for children should not be accessible to them. <i>Infants and Toddlers (ITERS-R):</i> Items 10, 11, 22; <i>Early Childhood (ECERS-R):</i> Items 13, 14, 25; <i>Family Child Care (FCCERS):</i> Items 11, 12, 22	May be designed to meet requirements <i>Design Considerations for family child care homes and neighborhood youth organizations:</i> None. <i>Design Considerations for child care centers and school-age child care centers:</i> While the rules prohibit “stray or wild animals,” CDPHE clarified that it is fine to attract butterflies and birds, with the exception of animals that are otherwise prohibited (e.g. psittacine birds and poisonous insects). The rules specifically forbid poisonous animals of all types including spiders, insects, reptiles, snakes, and amphibians that are poisonous or venomous. “The ground surface... in play areas shall not contain hazardous levels of any toxic chemical or substances.” “Pre-school age children shall be appropriately supervised around any poisonous plants either in the child care facility or outdoor areas. Toxic plants are prohibited in areas designated for infants and toddlers” (i.e. children under 36 months old). Toxic/poisonous means “capable of causing injury, illness, or death when ingested, inhaled, or absorbed.” “The grounds and premise shall be well drained and free of refuse, litter, animal droppings, insect and rodent harborages, weed overgrowth... This provision shall not be construed to limit outdoor educational or recreational programs.” §7.6.1A, §7.14.2B, §7.4.A37, §7.13.1A3	<i>Design Considerations for family child care homes:</i> None <i>For other facilities:</i> Area from which viewing of space takes place may qualify as a play component subject to requirements for accessibility contained in Sections 240 and 1008 of ADA Standards. At least one of each type of ground level play component must be on an accessible route and these components must be spread throughout the play area. A more complex rule applies when there are elevated play components. Note requirements for accessible routes differ from other landscapes.



**Left: Children hunt for butterflies in a wildlife garden.
Right: A monarch butterfly perches on a butterfly bush.**



Managing OLEs and Outdoor Activities

7

7. Managing OLEs and Outdoor Activities

Section 7 focuses on the management of outdoor learning environments and outdoor activities that may connect children to nature—either inside or outside the licensed childcare OLE.

The section discusses Colorado licensing requirements on the amount of time children should spend outdoors involved in gross motor play. It lays out handwashing requirements that could affect how children use the outdoor learning environment and its features and how any handwashing facilities provided would need to be designed..

Supervision is discussed in a limited way in this section with a focus is on how rules and rating items related to supervision and visibility may affect the design and planning of OLEs. Rules and rating items related to adult-child interactions are not covered here in depth.

Pest management and sunscreen application are also discussed—as it seemed helpful to understand how design solutions and management approaches to pest control and sun protection might be considered in concert.

Other rules discussed here deal with managing activities that are more risky or complicated than those offered by a typical child care facility—like swimming and rock

climbing. Colorado has considered and regulated a variety of activities child care facilities may organize either on or off site beyond what we get into here.

Section 7.719 of the Social Service Rules for Child Care Facility Licensing lays out *Rules Regulating Special Activities* in certain types of child care facilities. There are rules for boating, canoeing, sailing, and kayaking on calm water (7.719.22), as well as rules for Class I and Class II moving water (07.719.23), and even for white water rafting on Class III and IV Rivers (07.719.24). There are rules for managing archery (7.719.31) and also rules for managing riflery (7.719.32)—both of which would seem like odd choices for a child care facility if it weren't for the fact that seasonal day camps are regulated as school-age child care centers in Colorado. There are also rules for horseback riding (7.719.4); trampolines (7.719.5); rock climbing (7.719.6); and hiking, backpacking, and camping (7.719.7).

Childcare centers, family child care homes, and school-age child care centers must all comply with section 7.719 if they offer any of those activities. Neighborhood Youth Organizations were not subject to this section at the time of publication. However, we would suggest that any new construction in Neighborhood Youth Organizations involving activities covered by section 7.719, consider this section in case they become subject to it in the future.



Right: A water pump can enliven and extend the range of play and learning opportunities in a sand play area and may provide an opportunity for handwashing outdoors.

Gross Motor Activities/Time Outdoors

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (7.701, 7.702, 7.719)

- “1. The center must carry out a planned program suitable to the needs of the children. This program must be described in writing and be available for review when requested by the department or by parents or guardians of children in care.
2. Daily physical gross motor activities, with or without equipment or materials, must be provided outdoors, or indoors during inclement weather, to preschool age and older children for no less than sixty (60) minutes total for full day programs. Activities do not have to occur all at one time.
3. Daily physical gross motor activities, with or without equipment or materials, must be provided outdoors or indoors during inclement weather, to preschool age and older children for no less than thirty (30) minutes total for part day programs operating from three (3) to five (5) hours per day. Activities do not have to occur all at one time.
4. Daily physical gross motor activities, with or without equipment or materials, must be provided outdoors or indoors during inclement weather, to preschool age and older children daily for no less than fifteen (15) minutes total

- for part day programs operating up to three (3) hours per day. Activities do not have to occur all at one time.
5. Daily physical gross motor activities, with or without equipment or materials, must be provided to toddler age children outdoors for no less than fifteen (15) minutes for part day programs operating up to three (3) hours per day, no less than thirty (30) minutes total for part day programs operating from three (3) to five (5) hours per day, and no less than sixty (60) minutes for full day programs.
6. When inclement weather limits outdoor activities, indoor physical daily gross motor activities, with or without equipment or materials, must be provided to toddler age children outdoors for no less than fifteen (15) minutes for part day programs operating up to three (3) hours per day, no less than thirty (30) minutes total for part day programs operating from three (3) to five (5) hours per day, and no less than sixty (60) minutes for full day programs.
7. Infants must be provided outdoor play at least three (3) times per week, weather permitting.”
- §7.702.58A2-7

Family Child Care Homes (7.701, 7.707, 7.719)

- “The home program must include outdoor play for all ages each day except when the severity of weather, including temperature extremes, makes it a health hazard or when a child must remain indoors as indicated in writing by a health care provider or in a health care plan.”
- “Outdoor physical free play materials shall consist of at least four (4) age appropriate toys and equipment including, but not limited to, the following in good repair: push toys, riding toys, tossing toys, climbing equipment, balance boards, stationary swings, slides, balls, toss games, and sports equipment. These must be provided daily except in extreme weather, such as rain, snow, or extreme temperatures when indoor physical play may be substituted.”
- §7.707.83K, §7.707.933A

Child Care Facility Licensing (Continued)		Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)
Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)		
None	“Daily physical gross motor activities, with or without equipment or materials, must be provided outdoors, or indoors during inclement weather, for no less than 60 minutes total for programs operating over five hours per day. Activities do not have to occur all at one time.” “Daily physical gross motor activities, with or without equipment or materials, must be provided outdoors or indoors during inclement weather, for no less than 30 minutes total for programs operating from three to five hours per day. Activities do not have to occur all at one time.” “Daily physical gross motor activities, with or without equipment or materials, must be provided outdoors or indoors during inclement weather, for no less than 15 minutes total for programs operating less than 3 hours per day. Activities do not have to occur all at one time.” §7.712.64	<i>Infants and Toddlers:</i> Minimal rating for 1 hour of free play and “some outdoor time daily, weather permitting.” Good rating for 1 hour of physical activity outdoors and free play “for much of the day both indoors and outdoors.”* <i>Early Childhood:</i> Minimal rating for Schedule requires having at least one hour of outdoor play each day (weather permitting) / one hour of free play. Good rating requires free play to occur for “a substantial portion of the day both indoors and outdoors.”* <i>Family Child Care Homes:</i> Minimal rating for Schedule requires having at least one hour of outdoor play each day (weather permitting) / one hour of “free play.” Good rating requires one hour of “active physical play” outdoors and free play to occur for “much of the day both indoors and outdoors.”* *All times for 8 hour program. Times for part day programs align with licensing requirements aside from 5-hour programs for which 40 minutes would be required to achieve minimal rating. Update provides the following clarification for when weather permits: “20 degrees is the suggested minimum and 90 degrees is the maximum. Consider humidity, wind chill, and shade.” It suggests less time outdoors and more gross motor time indoors at either extreme. <i>Infants and Toddlers (ITERS-R):</i> Items 16, 29, 30; <i>Early Childhood (ECERS-R):</i> Items 34, 35; <i>Family Child Care (FCCERS):</i> Items 26, 31, 32; and the 2018 updates to each scale adopted by Clayton.	None

Handwashing Requirements Relevant to OLEs

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (7.701, 7.702, 7.719)

“Children's hand washing must be supervised and must be taught when necessary.”

§7.702.53A

Family Child Care Homes (7.701, 7.707, 7.719)

“1. All providers must wash their hands thoroughly with soap under warm running water, when available, and dry with an individual use and/or single use disposable towel before preparing, serving, and eating food; before administering medication... after wiping a child’s nose; whenever possible on field trips, at a park, or at another location away from the home; after handling animals, their toys, or food and water bowls; after contact with bodily fluids or secretions; and, any other time the hands become soiled or contaminated.

2. All children must wash their hands thoroughly with soap under warm running water, when available, and dry with an individual use and/or single use disposable towel; before preparing and eating food... after wiping his/her nose; whenever possible on field trips, at a park, or at another location away from the home; after handling animals, their toys, or food and water bowls; after contact with bodily fluids or secretions; and, any other time the hands become soiled or contaminated.

3. The hand washing area should promote self-help skills to include, but

not be limited to, step stools, soap, and towels accessible to children.

4. If paper towels are not used, each child shall have an assigned towel that is used consistently, doesn’t touch other towels, and is laundered weekly or more often if needed

5. Children’s towels and drinking cups must not be shared.

6. Hand washing areas shall be routinely disinfected when visibly dirty or prior to use different from hand washing.

7. Hand sanitizers and wipes are not acceptable alternatives to hand washing, except on outings where running water may be unavailable. Alcohol based hand sanitizers shall not be used for children under three (3) years of age.

§7.707.72

Neighborhood Youth Organizations (7.701, 7.720)

None

Child Care Facility Licensing (Continued)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	
School-Age Child Care Centers (7.701, 7.712, 7.719)			
None	Rating stresses handwashing as part of “health practices.” Handwashing practices generally align with <i>Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of Colorado</i> (6 CCR 1010-7, on this page) and the <i>Social Services Rules Child Care Facility Licensing</i> (12 CCR 2509-8, on previous page). One additional consideration is staff must wash their hands separately from children’s hands to receive credit for handwashing. Also, hand sanitizer or spray bottles cannot be substituted for handwashing with soap and warm running water. <i>Infants and Toddlers (ITERS-R):</i> Item 10; <i>Early Childhood (ECERS-R):</i> Item 13; <i>Family Child Care (FCCERS):</i> Item 11, and Clayton’s 2018 update to these scales.	<i>Child care centers and school-age child care centers only:</i> “Handwashing and bathing facilities shall be installed and maintained in a clean, sanitary condition. 1. Handwashing facilities shall be located... within food preparation areas as well as any other area where activities require frequent handwashing. 2. In all new or extensively remodeled facilities providing care to infants, toddlers or preschoolers, a handwashing sink shall be accessible without barriers, allowing the caregiver to visually supervise the children during handwashing activities. Children's handwashing sinks shall be at an appropriate height for the children in the facility or be equipped with a step platform to make the sink available to children. If a platform is used, it shall be stable and easily cleanable. 4. Soap and single-service towels from a dispenser or clean cloth towels laundered after each use shall be provided at each handwashing sink, at a height for those children in the facility utilizing the handwashing sinks and supplies. Mechanical air drying devices may be used in lieu of disposable or cloth towels.	5. Except as allowed in Section 7.8.5(A) (7), if cloth towels are used to dry hands they shall be immediately placed in a container and laundered after each use. 6. The use of common towels or washcloths is prohibited.” “Staff members and children shall wash their hands using the following procedures: 1. Moisten hands with warm running water; 2. Apply soap; 3. Rub hands vigorously until a soapy lather appears; 4. Continue washing for at least 20 seconds outside of the water, rubbing areas between fingers, around nail beds, under fingernails, under jewelry and the backs of hands; 5. Rinse hands under warm running water until they are free of soap and dirt; and, 6. Dry hands with a disposable towel, a clean cloth towel laundered after use, or a mechanical drying device.” “Staff members and children toddler-aged and older shall wash their hands at the following times: Before and after: Preparing food or beverages; Eating, handling food, or feeding a child... Setup or use of a sensory table. After... Handling animals or cleaning up animal waste; Coming in from outdoors;

Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)

Cleaning or handling garbage; and, At any other time that hands become soiled.” “Infants shall have their hands washed with: Soap and running water; or, A clean cloth that contains soap and is laundered after each use; or, The use of soap and warm water solution dispensed from a clean spray bottle, followed by a rinse before drying with a clean cloth or disposable towel: Before and after meals and snacks. After: Coming in from outdoors; and, Whenever their hands become soiled.” “The use of hand sanitizers or wipes in lieu of handwashing is not approved for use within the facility. Hand sanitizers or wipes may be used for staff and children three years of age and older and only at times and in areas where handwashing facilities are not available, such as while out of doors in remote locations. Hand sanitizers and wipes shall be stored out of reach of children. “	“Staff shall supervise children's handwashing to assure adequacy of the procedure.” “ All staff members shall practice good personal hygiene in order to reduce the potential for disease transmission.” §7.8.5 ; §7.10.3		
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Pest Control	Pest control refers to a variety of methods used to manage undesirable weeds, rodents, insects, fungi, and other creatures defined as pests. Certain pests can be vectors for disease, and regulators may require them to be controlled at child care facilities. However, much of the management of so-called pests in American landscapes is aesthetic and unnecessary. Misunderstanding often exists regarding beneficial, indigenous animal life that is always part of a healthy habitat and has educational value. Careful consideration of how to control pests—and whether they need to be controlled at all—is especially important in child care OLEs and other environments serving children. Children are in closer contact with ground surfaces and plants than adults. Toddlers will taste things adults wouldn't. Children's developing bodies and brains are especially vulnerable to toxins (American Academy of Pediatrics, 2012; Grandjean, 2013; Roberts, Karr & Council on Environmental Health, 2012). A recent review of existing research published in <i>Pediatrics</i> showed children's exposure to residential herbicides was associated with significantly higher risk of leukemia (Chen, Chang, Tao, & Lu, 2015). Some pesticides also pose risks to pollinators and other wildlife. Research has shown neonicotinoid pesticides negatively impact bees (Wood & Goulson, 2017). Prompted by the pioneering efforts of Rachel Carson, integrated pest management (IPM) was developed as a research-based approach that focuses on cultural, mechanical, and biological pest control methods. Least toxic pesticides are used and only as a last resort. Colorado State University Extension offers useful resources (https://extension.colostate.edu/docs/pubs/garden/xcm221.pdf). In particular its <i>School IPM</i> website (http://schoolipm.colostate.edu/) is useful for understanding what is meant by an integrated approach to pest management. Note that the website discusses a level of pest control—particularly with regard to weeds and lawn pests—that is unnecessary in a child care OLE.	Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)	
		Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)
		"Items labeled 'keep out of reach of children' must be inaccessible to children." §7.702.810	"Flammable or combustible items must be stored in a locked area remote from the kitchen, at least three (3) feet from the furnace, hot water heater or any other heating device. These items include, but are not limited to... insecticides" §7.707.923L

Child Care Facility Licensing (Continued)		Colorado Shines Quality Rating and Improvement System (2015)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)	
Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)			
“[H]azardous items shall be stored away from the area used for youth care and be inaccessible to youth.” §7.720.73A4	“[H]azardous items must be stored away from the area used for child care and be inaccessible to children.” §7.720.73A3	All ratings include an item on safety practices, on which the rating would be lower if pesticides were not “locked away.”	<i>Child care centers and school-age child care centers only:</i> “Pests shall be managed with integrated strategies for long-term pest suppression, using the most cost-effective means with the least possible hazard to people, property, and the environment. The use of poisonous compounds to control weeds, rodents, insects, and other pests shall be implemented only after other means have been used for control, such as the elimination of harborages, removing access to food, and sealing of points of entry. These compounds shall be used according to labeled instructions. All food, food utensils, and equipment, bedding, toys, sleeping mats and other equipment, materials and items that will come into contact with food or children shall be protected during the time pesticide application is conducted. Pesticides shall be applied in a manner as to prevent skin contact and other exposure to children or staff. Application of pesticides shall not be conducted when children are present. Only approved, U.S.	Environmental Protection Agency, registered insecticides, rodenticides and herbicides may be used. Application must strictly follow all label instructions and must be authorized by the director. Rodenticides shall be dispensed in tamper proof boxes, shall have a distinctive color so as not to be mistaken for food, and shall be in cake or pellet form. Restricted pesticides shall be applied only by a certified pest control applicator or under the direct supervision of a certified pest control applicator.” §7.14.1

Rock Climbing (with Ropes) and Ropes Courses

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (7.701, 7.702, 7.719)

For child care centers, family child care homes and school-age child care centers: "A. When a child care facility offers basic/single-pitch rock climbing or advanced/multi-pitched climbing, which includes such topics as the care and use of basic equipment, knots, anchors and belays, verbal signals, safely measures, basic climbing holds and moves, and techniques of rappelling, the following rules must be complied with:

1. The climbing supervisor shall:

- a. Be at least 18 years old;
- b. Have certification or documented experience in knots, anchors, safety zones, verbal signals, belaying, rappelling, and safe tie-ins, or training or experience from a recognized organization, such as the Association for Challenge Course Technology or certifying body for the type of activities offered; and,
- c. Have at least six weeks' experience in a management or supervisory capacity in similar types of programs.

2. A climbing instructor shall have verified knowledge of technical climbing by completion of a course or climbing school, or a minimum of ten hours of instruction.

3. At least two climbing instructors must be present at the climbing site at all times.

4. There shall be one climbing instructor for each six (6) climbers or two climbing instructors for thirteen (13) children.

5. There shall be a staff member who holds at least a current Red Cross standard First Aid and safety certificate or equivalent at the rock climbing site.

6. First Aid supplies, put together by a person knowledgeable in First Aid supplies needed for climbing activities and possible injuries, shall be present at the climbing site.

7. No child shall be forced to participate in this activity.

8. The climbing supervisor shall be responsible for the proper maintenance of all equipment used. Equipment shall be checked by the supervisor immediately prior to use.

9. All rock climbing equipment shall meet industry standards and shall be maintained, visually and physically inspected, and replaced on a timely basis.

10. Climbers must wear helmets at all times when in designated helmet zones.

11. The child care facility shall not permit an unsupervised climb.

12. The climbing supervisor must have knowledge of where the climb is to occur and must give approval on the day of the climb for the climb to occur.

13. Each rock climber must be visually supervised.

(Continued on next page)

**Department of Human Services, Social Services Rules
Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)**

**Child Care Centers (Continued)
(7.701, 7.702, 7.719)**

14. Children waiting to climb must be supervised by a staff member.

15. All climbers and rappellers shall be belayed in a top rope manner by a belayer that has been instructed in proper procedures, and directly supervised until competency has been demonstrated.

B. If the child care facility offers advanced/multi-pitched climbing, the following rules shall also be complied with:

1. The climbing supervisor accompanying participants shall:

- a. Hold a current Red Cross standard First Aid and safety certificate or equivalent, and a current certificate for cardiopulmonary resuscitation;
- b. Have been an instructor, under supervision, for two seasons with verifiable experience and a review of any serious accidents;
- c. Have completed a technical climbing

school or training in technical climbing with evidence by letter of such completion;

d. Have led ten additional multi-pitched Class V climbs (the classification of the climbs as defined by the American Alpine Club) within the last two years; and,

e. Have knowledge of mountain rescue techniques. If the climb is more than sixty (60) minutes from emergency medical services, the climbing supervisor must hold a current wilderness First Aid training certificate or equivalent.

2. The climbing instructor or the rope leader shall have:

- a. The same training as the climbing supervisor;
- b. Have been an instructor, under supervision, for one season with verifiable experience and a review of any serious accidents;
- c. Completed a technical climbing school or training in technical climbing;

d. Led five additional multi- pitched climbs; and,

e. Knowledge of mountain rescue techniques. No instructor shall take campers on a climb he/she has not completed previously.

3. No child will be the rope leader.

4. A child who is permitted to participate in the climb must be at least thirteen (13) years old. The climbing supervisor shall assess the ability of the child as to the difficulty of the climb.

5. The climbing instructor and climbing site must be approved by the climbing supervisor for each climb.

6. The climbing supervisor, an equally qualified person, or two (2) equally qualified rope leaders shall be present at the climb site.

7. There shall be one rope leader that is at least eighteen (18) years of age to each three climbers in an extended climb.

8. First Aid equipment must be carried with the staff on each climb."

Department of Human Services, Social Services Rules
Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers
(7.701, 7.702, 7.719)

For child care centers, family child care homes and school-age child care centers: “If the child care facility offers high and/or low ropes courses or a climbing wall, the following rules must be complied with at all times:

1. The rope supervisor must have training and experience on the type of rope course or climbing wall being used and must hold a current standard First Aid and safety certificate or, if the ropes course or climbing wall is more than sixty (60) minutes from definitive care, must hold a wilderness First Aid card.
2. The rope instructor must have training and experience on the type of rope course or climbing wall being used and must be supervised by the rope supervisor and must hold a current standard First Aid and safety certificate or, if the ropes course or climbing wall is more than sixty (60) minutes from definitive care, must hold a Wilderness First Aid card.

3. Ropes courses must have written evidence of annual inspection by qualified Association of Challenge Course Technology (ACCT) personnel of course elements for integrity of all hardware, materials, and equipment.
4. Ropes courses must be inspected regularly before use by the rope supervisor or the rope instructor.
5. All equipment and elements of a rope course or climbing wall must be safety checked prior to each use and have written records of regular inspection and maintenance of all equipment and elements utilized.
6. Children must wear safety equipment appropriate to the size of the child and appropriate helmets when using the high ropes course or climbing wall.
7. At all times, there must be a rope supervisor or rope instructor on the ropes course with children.
8. Ropes courses and climbing walls must be off limits to children when a rope supervisor or rope instructor is not present

9. Access to ropes courses and climbing walls must be controlled by education, signs, and whatever other means are necessary to control unsupervised access.

10. The child care facility must have written safety procedures for use of the ropes course(s) and climbing wall. Staff must be trained on the safety procedures.

§7.719.61

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)			Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)
Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)		
Rules are the same as in child care centers. See pages 142-144.	None	Rules are the same as in child care centers. See pages 142-144.	None	None

Sun Protection	Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)			
	Child Care Centers (7.701, 7.702, 7.719)		Family Child Care Homes (7.701, 7.707, 7.719)	
	“Topical preparations such as... sunscreen... may be administered to children with written parental authorization.” “1. The center must obtain the parent or guardian's written authorization and instructions for applying sunscreen or use of another form of parent or guardian approved sun protection to their children's exposed skin prior to outside play. A doctor's permission is not needed to use sunscreen at the center. 2. The center must apply sunscreen, have the parent or guardian apply sunscreen, or use another form of parent or guardian approved sun protection for children prior to children going outside. Sunscreen must be reapplied as directed by the product label.	3. When supplied for an individual child, the sun-screen must be labeled with the child's first and last name. 4. If sunscreen is provided by the center, parents must be notified in advance, in writing, of the type of sunscreen the center will use. 5. Children over four (4) years of age may apply sun-screen to themselves under the direct supervision of a staff member.” §7.702.52E, §7.702.52C14	“Topical preparations used for prevention on unbroken skin including, but not limited to... sunscreen... can be administered solely with written parent authorization.” “1. The provider must inform the parent or guardian, through the policies and procedures statement or an authorization form, that sunscreen will be applied to the children’s exposed skin prior to outside play. A doctor’s permission is not needed to use sunscreen at the home. When a parent or guardian supplies sunscreen for an individual child, the container must be labeled with the child’s first and last name. If sunscreen is provided by the provider, parents must be notified in advance, in writing, of the type of sunscreen the provider will use. Parent(s) or guardian(s) must notify the provider if sunscreen has been applied to the child’s skin prior to arriving at the home.	Sunscreen must never be applied to an infant’s skin. 2. Children over four years of age may apply sunscreen to themselves under the direct supervision of the provider. 3. Sunscreen used must be full spectrum UVA/UVB with an SPF of thirty or greater and applied according to manufacturer’s instructions.” “Use of and how often sunscreen is applied, including authorization for use of sunscreen, and how infants are protected from sun exposure without the use of sunscreen” must be covered in statement of policies (See 7.707.41) §7.707.71E, 7.707.71C1c, 7.707.41B23

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)
Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)		
None	“1. The center must obtain the parent/guardian’s written authorization and instructions for applying sunscreen or use of another form of parent/guardian approved sun protection. A health care provider’s permission is not needed to use sunscreen at the center. 2. When supplied for an individual child, the sunscreen must be labeled with the child's first and last name. 3. If sunscreen is provided by the center, parents must be notified in advance, in writing, of the type of sunscreen the center will use. 4. Children may apply sunscreen to themselves under the direct supervision of a staff member. 5. The center must apply sunscreen, have the child apply sunscreen, have the parent or guardian apply sunscreen, or use another form of parent or guardian approved sun protection for children prior to children going outside. Sunscreen must be reapplied as directed by the product label.” §7.712.52D	Rating considers whether sun protection is provided. Sun protection practices generally align with CO, 6 CCR 1010-7 and 12 CCR 2509-8. <i>Infants and Toddlers (ITERS-R):</i> Item 10; <i>Early Childhood (ECERS-R):</i> Item 13; <i>Family Child Care (FCCERS):</i>Item 11	None

Supervision rules aside from ratios that may affect planning of OLEs

**Department of Human Services, Social Services Rules
Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)**

**Child Care Centers
(7.701, 7.702, 7.719)**

General:
"1. All children must be under direct supervision of responsible adult at all times...

3. Staff must be awake, alert and supervising all children...

9. The center must ensure that children are dressed appropriately for the weather before going outside."

Infant and Toddler Programs:
"2. Children must not be confined for prolonged periods of time to cribs, playpens, swings, high chairs, infant seats, or other equipment that confines movement. They must have an opportunity each day for freedom of movement,

such as creeping, crawling, or walking in a safe, clean, open, uncluttered area.

3. Throughout the day, each child must have frequent, individual, personal contact and attention from an adult, such as being held, rocked, taken on walks inside and outside the center, talked to, and sung to.

6. Staff must investigate whenever children cry."

(Note: This section does not include information on supervision ratios)

§7.702.52E

**Family Child Care Homes
(7.701, 7.707, 7.719)**

"The primary provider must supervise and know the location and activity of all children at all times while they are in care." This has been clarified within the administrative guide to mean: "If children are being cared for in a separate area, the provider must be able to see or hear the activities of the children at all times. When awake, if children are not in the line of sight supervision, the provider must be physically checking in on them at least every five (5) minutes" (p. 46).

"Children must be provided a developmentally appropriate environment."

"Provider(s) must provide for children's appropriate care and well-being, taking into consideration the individual needs of each child."

"Throughout the day, each child must have frequent, individual personal contact and attention from an adult, such as being held, rocked

taken on walks inside and outside the home, talked to, and sung to."

"Children leaving the family child care home for school or other activities must be dressed appropriately to protect the health and safety of children for the weather."

"Provider(s) must respond to the needs of a child, including, but not limited to: crying, toileting, hunger, and thirst. The timing of the response must not result in physical harm to the child.

"Providers must investigate whenever children cry."

"Providers must develop/provide an environment that minimizes the risk to children from hurting themselves or each other."

(Note: This section does not include information on supervision ratios)

§7.707.741A, §7.707.742

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)		Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)
Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)		
“The activities shall occur in an environment in which youth have written parental or legal guardian consent to become a youth member of the Neighborhood Youth Organization and to arrive at and depart from the primary location of the activity on their own accord, without supervision by a parent, legal guardian, or organization.” “Visitors and youth members shall always be supervised by a staff member. §7.720.1A, §7.720.42D	“At all times, school-age child care personnel must be directly supervising the children.” §7.712.43H	Ratings for ECERS-R and FCCERS-R consider whether “space for privacy” is provided and rate supervision in multiple categories (e.g. “supervision of gross motor activities” and “general supervision” in ECERS). Indicators related to supervision and adult-child interaction unlikely to have design/planning implications are not discussed in this section. Outdoor and indoor spaces are both considered in rating as to whether it is possible for a child to play alone or with a friend without intrusion by others. Rating for both considers whether spaces are “easily supervised by staff.” FCCERS-R defines this as infants through preschoolers being “easy to supervise visually whenever space is being used.” 2018 update to FCCERS-R notes: “Momentary lapses in supervision are allowed when scoring as long as children are in a safe place, the provider checks on them frequently, and the children are not involved in high risk activities.” 2018 update to ECERS-R notes: being “easily supervised” means “space is open enough to allow for visual supervision” and “it is not required that the teachers can see the space(s) at all times, as long as teachers move about the room and can see the spaces for privacy used by the children frequently enough to ensure that each child is safe.” Both note developmental level of children and their impulsivity should be factored into decision. <i>Infants and Toddlers (ITERS-R): N/A; Early Childhood (ECERS-R): Item 5, 32; Family Child Care (FCCERS): Item 6, 32; and the 2018 update to these scales adopted by Clayton</i>	None

**Department of Human Services, Social Services Rules
Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)**

**Child Care Centers
(7.701, 7.702, 7.719)**

"A. There shall be a swimming supervisor who, as a minimum, holds a current Red Cross life guard training certificate or equivalent, such as a YMCA or Boy Scout aquatics instructor's certificate. If the child care facility is offering swimming instruction, the swimming supervisor must also hold a Red Cross water safety instructor certificate or equivalent.

B. At any time the swimming area is open, there shall be at the swimming area a staff member who holds at least a current life guard training certificate or equivalent for each thirty campers in the water. There shall be present as least one staff member for water. The lifeguard does not count in the staff to child ratio for supervision of children.

C. The swimming area shall be off limits when appropriate numbers of qualified staff members are not present.

D. If the child care facility uses a pool for which the child care facility is not responsible, the child care facility need not provide a lifeguard if there is a qualified lifeguard provided by the pool. If the pool does not provide a qualified lifeguard, staff members meeting qualifications stated at Section 7.719.2, B. must be provided by the child care facility. There shall be at least

one staff lookout counselor at the pool for each ten children in the water.

E. Swimming area rules and emergency procedures shall be posted in a visible location at the swimming area.

F. The swimming pool or swimming area shall meet the standards of the Colorado Department of Public Health and Environment.

G. If children are permitted to swim in a lake or pond, swimming areas shall be clearly designated.

H. Before children are permitted to swim in deep water, swimming skills must be tested by property trained staff members.

I. There shall be a system known to child and lookout staff for checking the children when children are in the water.

J. The following equipment must be available for use at the pool side or the take shore in which swimming is permitted: 1. A rescue tube; 2. Reach pole; and, 3. Backboard.

K. Where the size of the body of water makes it impossible to reach victims by reach pole,

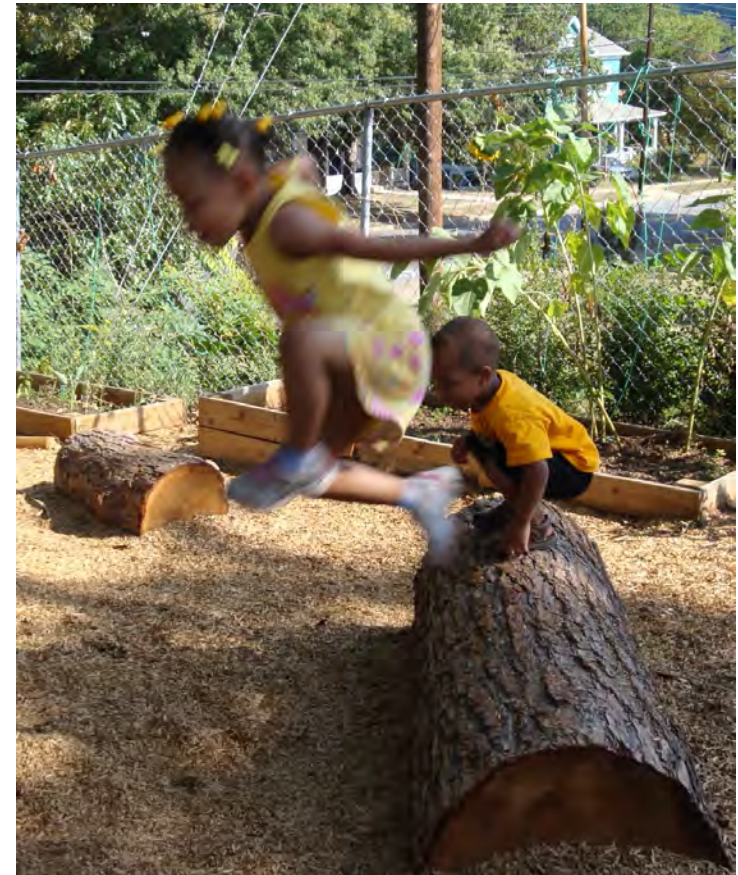
rescue tube or other rescue device, a rescue boat must be available at all times.

L. If a child care facility has shoreline activities such as wading, fishing, ecology or nature studies, the child care facility shall have a written policy which defines qualifications of persons accompanying the group and safety, factors to be followed. Staff members shall be acquainted with the policy.

M. In the case of a travel-trip camp, there shall be a minimum of one staff member who holds at least current Red Cross life guard training certificate or equivalent who is responsible for all swimming activities."

§7.719.21

Child Care Facility Licensing (Continued)			Colorado Shines Quality Rating and Improvement System Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)
Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)		
Rules are the same as in child care centers. See page 150.	None	Rules are the same as in child care centers. See page 150.	None	<i>Child care centers and school-age child care centers only:</i> Requires compliance with Swimming Pool and Mineral Bath Regulations, 5 CCR 1003-5



Above: Natural features like lawn-covered mounds can facilitate gross motor activity in an outdoor learning environment. **Right: Left:** A log may be used for sitting, balancing or jumping off of. It is considered as a type of stationary natural feature.



Beyond the Licensed Space

8

8. Beyond the Licensed Space

Section 8 introduces ways child care facilities may organize activities that connect to nature beyond the outdoor learning environment—beyond the licensed child care facility. This may include bringing children into more natural parts of the child care facility’s property that offer different sorts of opportunities for learning about the natural environment and engaging playfully with nature. For example, a facility might bring children on field trips beyond the fence to a remnant woodland that exists on their property.

Or educators may decide to take some restless school-age children on a bike ride along a local greenway or mountain trail. The regulators responsible for child care licensing in Colorado have actually considered that possibility and have created child care licensing regulations related to biking on public roads and mountain trails.

Colorado has considered and regulated a variety of activities child care facilities may organize beyond what we get into here. Section 7.719 of the Social Service Rules for Child Care Facility Licensing lays out *Rules Regulating Special Activities* in certain types of child care facilities (See Section 7 for more information).

Biking on Public Roads and Mountain Trails

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (7.701, 7.702, 7.719)	Family Child Care Homes (7.701, 7.707, 7.719)	Neighborhood Youth Organizations (7.701, 7.720)	School-Age Child Care Centers (7.701, 7.712, 7.719)	All Types except NYOs
“Children must wear helmets when riding scooters, bicycling, skateboarding, or rollerblading.” Also, see General Procedures for Field Trips (p. 157) and rules in column labeled “All Types except NYOs” to the right. §7.702.61G, §7.719.8, §7.719.1	“Children must wear helmets, wrist protection, and knee and elbow pads when riding a scooter, bicycle, skateboard, or roller-blades.” “[W]ritten policies and procedures must be developed, implemented and followed, which include all updates, changes, and must include... How and by whom children are supplied with... helmets, wrist protection, and knee and elbow pads.” Also, see General Procedures for Field Trips (p. 157) and rules in column labeled “All Types except NYOs” to the right. §7.707.41B12, §7.707.933D, §7.719.8, §7.719.1	See General Procedures for Field Trips (p. 156).	“Children must wear helmets when riding scooters, bicycling, skateboarding, or rollerblading.” Also, see General Procedures for Field Trips (p. 157) and rules in column labeled “All Types except NYOs” to the right. §7.712.64C	“If a child care facility has bicycling trips either on a public road or on mountain trails, the following rules shall be complied with: A. The bicycling supervisor must be familiar with state laws about bicycling; be knowledgeable about the type of bicycling terrain where the bicycle trips will occur be knowledgeable about bicycling in the mountains, if applicable: shall know how to make simple bicycle repairs; and, shall hold at least a current Red Cross standard First Aid and safety certificate or equivalent. B. At least two (2) staff members must accompany a group while biking. From time to time, biking groups may divide up as long as bikers are always with one staff member and staff members are in visual, verbal or electronic (radio or wireless communication) contact with (Continued on next page)

Child Care Facility Licensing (Continued)			Colorado Shines Quality Rating and Improvement System (2015)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)
All Types except NYOs				
each other. A bicycling supervisor or staff member equally qualified and another qualified staff member must accompany each bicycle trip. Correct staff to child ratios must be complied with at all times. There must be one staff member at the beginning and end of each bicycle group. C. Each bicyclist shall wear head protection and the bicycle shall be equipped with brakes in good condition. Bicycles shall be in good condition, properly maintained, inspected prior to each bicycling trip, and adjusted to the size of the child riding the bicycle. Children using their own bicycles will be informed in advance, in writing, that their bicycles must be in good condition, properly maintained, inspected prior to each bicycling trip, and adjusted to the size of the child riding the bicycle. D. An appropriate bicycle repair kit and First Aid equipment must be taken on each trip. The First Aid supplies must be put together by a	person knowledgeable in First Aid supplies needed for bike trips and possible accidents and/or injuries. E. The bicycling supervisor must instruct children as to emergency procedures, safe riding practices, and road and trail etiquette. F. The bicycling supervisor shall evaluate each child as to his/her physical capability to participate in the planned bicycling trip, keeping in mind the trip length, terrain, altitude of the trip, and weather conditions. G. Water/fluids must be taken on each bicycle trip. H. An itinerary of the biking trip and a list of all people on the biking trip must be kept at the child care facility. I. The child care facility must have written safety procedures of bike trips, including the	written protocol for evacuating a child that becomes sick or injured on a bike trip. Staff and children must be trained on the safety procedures and protocol.” “Parents shall be notified of activity in written program and “given the opportunity to indicate to child care facility staff whether they do not wish their child to participate.” “Each phase of the child care facility program shall be under the supervision of a resident qualified staff member who shall be responsible for health and safety precautions. Verification of experience and/or certification shall be in the staff members personnel files at the child care facility.” “Rules shall be reviewed with children at the beginning of each activity.” “First Aid supplies shall be available at each special activity site.” §7.719.8, §7.719.1	None	Although helmets are not addressed in the regulations, CDPHE advises that if helmets are shared between children, they should be wiped with a damp cloth between uses as recommended by <i>Caring for our Children: National Health and Safety Performance Standards</i> (Section 6.4.2.2) to avoid the spread of head lice. Detergents and other cleaners/sanitizers should not be used on helmets, as they may break down the shock-absorbing material and make helmets less effective.

Field Trips to Natural Parts of Property Outside Licensed Space

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

Child Care Centers (7.701, 7.702, 7.719)

No rule prevents providers from preserving a part of the property outside of the enclosed licensed space as natural and taking children there on regular field trips or excursions.

Relevant language: “At the time of enrollment, and upon amendments to policies and procedures, the center must give the parent(s)/guardian(s) the center’s policies and procedures, and provide the opportunity to ask questions. Written copies must be available either electronically or in hard copy. The center must obtain a signed document stating that the parent(s)/guardian(s) have received the policies and procedures, and by signing the policies and procedures document, the parent(s)/guardian(s) agree to, follow, accept the conditions of and give authorization and approval for the activities described in the policies and procedures. Policies must include the following: ... parental permission for excursions and related activities... The procedure governing field trips... and special activities, including staff

responsibility for the supervision of children... The procedure for caring for children who arrive late to the center and their class/group is away from the center on a field trip or excursion.”

“Portable First Aid kits must be available to staff at all times, including field trips, and must be located out of reach of children and maintained in a sanitary condition. First aid kits must be checked and restocked on at least a monthly basis.”

“The center must notify the children's parents or guardians in advance of any field trip. The staff-child ratio found at Section 7.702.55 must be maintained at all times.”

“All groups of children must be actively supervised by a qualified early childhood teacher at all times.”

“Children must be actively supervised at all times.”

“An accurate itinerary must remain at the center.”

“When taking children on a field trip, staff must have the following information about each child: name, address, and phone number of the child's physician or other appropriate health care professional and the written authorization from the parent or guardian for emergency medical care.”

“If children attending the field trip require routine medications be administered during the field trip or have special health needs, a staff member with current medication administration training and delegation must attend on the field trip.”

“Emergency medications must be stored in accordance with the Child Care Health Consultant’s recommendation. Emergency medications are not required to be stored in a locked area. Emergency medications may be stored in an area easily accessible and identifiable to staff but out of reach of children. When away from the classroom, staff must carry emergency medications in a bag on their person.”

“A list of all children and staff on a field trip must be kept at the center.”

“The center must maintain and update annually a record on each child that includes: ...Written authorization from a parent or guardian for the child to participate in field trips or excursions, whether walking or riding.”

“If the center takes children on routine short excursions, such activities and locations must be posted at the center.”

“If a child participates in activities away from the facility, the center must obtain the parent or guardian's written permission for the child to participate in the activity at a specific location and day. Staff ratios found at Section 7.702.55 must be maintained.”

§7.702.31L,P; §7.702.52B7, C10, E; §7.702.58A8-9, C1-7;

Child Care Facility Licensing (Continued)			
Family Child Care Homes (7.701, 7.707, 7.719)		Neighborhood Youth Organizations (7.701, 7.720)	
No rule prevents providers from preserving a part of the property outside of the enclosed licensed space as natural and taking children there on regular field trips or excursions. “The written policies and procedures must be developed, implemented and followed, which include all updates, changes, and must include at a minimum the following information: ...authorization for field trips... Scheduled and unscheduled trips away from the family child care home; the requirement of notification of the excursion prior to the event and need for signed permission from the parent(s) or guardian(s) for the excursion and a phone number where the provider can be reached during a field trip” “An admission record must be completed for each child prior to or at the time of the child's admission and updated annually, unless otherwise specified in these rules. The admission record must include ...Written authorization, obtained in advance of the event from a parent or guardian, for a child to participate in field trips	or excursions, whether walking or riding in an approved vehicle.” “All providers” and “all children must wash their hands thoroughly with soap under warm running water, when available, and dry with an individual use and/or single use disposable towel... whenever possible on field trips, at a park, or at another location away from the home.” §7.707.41B3, 14; §7.707.51A10; §7.707.72A1-2;	No rule prevents providers from preserving a part of the property outside of the enclosed licensed space as natural and taking children there on regular field trips or excursions. “The Neighborhood Youth Organization [NYO] shall have an established means of communication between staff and the program office when youth are being transported or are away from the permanent site on a field trip.” “The program may include field trips, where youth and staff leave the Neighborhood Youth Organization to visit sites in the community. Youth shall be actively supervised at all times. An accurate itinerary shall remain at the headquarters, office, primary or temporary site of the Neighborhood Youth Organization. During a field trip, the staff shall have the following information with them: Each youth’s emergency contact information; and, The written authorization from parent(s) or guardian(s) for emergency medical care.”	“During a field trip, a list of all youth and staff on the field trip shall be kept at the headquarters or site of the [NYO].” “During all field trips, staff shall bring a First Aid kit.” “During all field trips, youth members shall have access to water and toilet facilities.” “During all field trips, staff shall carry with them information regarding the nearest health care facility.” “Field trip locations shall be accessible to emergency medical service.” “The central administrative facility or Neighborhood Youth Organization site shall maintain and update annually a record on each youth that includes: A dated written authorization by a parent or legal guardian for: ...The youth to participate in field trips and to participate in program activities, listing any possible exclusions.” §7.720.3C-D, §7.720.61; 7.720.81E3

Department of Human Services, Social Services Rules
Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)

School-Age Child Care Centers (7.701, 7.712, 7.719)

No rule prevents providers from preserving a part of the property outside of the enclosed licensed space as natural and taking children there on regular field trips or excursions.

“At the time of enrollment, and upon amendments to policies and procedures, the center must give the parent(s)/guardian(s) the center’s policies and procedures, and provide the opportunity to ask questions. Written copies must be available either electronically or in hard copy. The center must obtain a signed document stating that the parent(s)/guardian(s) have received the policies and procedures, and by signing the policies and procedures document, the parent(s)/guardian(s) agree to follow, accept the conditions of, and give authorization and approval for the activities described in the policies and procedures. Policies must include the following: ... The procedures followed when it has been identified a child is separated from their group and not under the direct supervision of their assigned staff member... The written policy and procedure governing field trips...and special activities, including the staff’s

role for the supervision of children... The procedure for caring for children who arrive late to the center and their class/group is away from the center on a field trip or excursion.”

“Emergency telephone numbers must be posted at each permanent site and taken on all field trips and during mobile school-age child care programs. The emergency numbers must include, at a minimum, 911, or rescue unit if 911 isn't available; the clinic or hospital nearest to the activity location; ambulance service; fire, police, and health departments; and Rocky Mountain Poison Control.”

“Parents/guardians must be notified in advance of all activities that will occur away from the center.”

“On a field trip or during a mobile school-age child care program:

1. The center must notify the children's parents /guardians in advance of any field trip. The staff-child" ratios found at section 7.712.43.C, D, I must be maintained at all times;

2. All groups of children must be directly supervised by a qualified program director or program leader at all times;

3. An accurate itinerary of each field trip must remain at the center;

4. The staff must have the following information about each child: parents/guardians contact information, health care provider’s name, address, and phone number, and the written authorization from parent(s)/guardian(s) for emergency medical care.

5. If children attending the field trip require medications to be administered during the field trip or have special health needs, a staff member with current medication administration training and delegation must attend the field trip;

6. A list of all children and staff on a field trip must be kept at the center; &

7. A copy of the emergency disaster plan must accompany staff offsite.”

“The center must maintain and update annually a record on each child that includes: ...Written authorization from a parent or guardian for the child to participate in field trips and to participate in program activities, listing all exclusions from authorization.”

“Portable first aid kits must be available to staff at all times, including field trips, and must be located out of reach of children and maintained in a sanitary condition. First aid kits must be checked and restocked on at least a monthly basis.”

"Emergency medications must be stored in accordance with the Child Care Health Consultant’s recommendation. Emergency medications are not required to be stored in a locked area. Emergency medications may be stored in an area easily accessible and identifiable to staff but out of reach of children. When away from the classroom, staff must carry emergency medications in a bag on their person."

(Continues on next page)

Department of Human Services, Social Services Rules Child Care Facility Licensing 12 CCR 2509-8 (March 15, 2019)	Colorado Shines Quality Rating and Improvement System: Program Guide (2015) and Environment Rating Scales (ITERS-R, ECERS-R, FCCERS-R)	Rules and Regulations Governing the Health & Sanitation of Child Care Facilities in the State of CO, 6 CCR 1010-7 (2016)
School-Age Child Care Centers (7.701, 7.712, 7.719)		
“Topical preparations such as... bug sprays may be administered to children with parental authorization. These preparations may not be applied to open wounds or broken skin unless there is a written order by the prescribing practitioner. §7.712.31A11, 13, 17; §7.712.32E; §7.712.61C; §7.712.65; §7.712.81 A9; §7.712.52B4, C8, C10	None	<i>Child care centers and school-age child care centers only:</i> Review requirements for handwashing on p. 137. Note that “hand sanitizers or wipes may be used for staff and children three years of age and older... at times and in areas where handwashing facilities are not available, such as while out of doors in remote locations.”



Appendices

Interview Participants and Reviewers

Our grateful thanks to the following individuals for participating in interviews related to this report. An extra special thanks to those individuals marked with an asterisk () who also reviewed an early draft of the report.*

***Robyn Bartling, ASLA, PLA**, Director of Landscape Architecture, hord|coplan|macht

***Susan Bardwell**, landscape designer, Grounds for Learning

***Louise Chawla**, Professor Emerita, Environmental Design, University of Colorado, Boulder

***Tracie Corner**, Assessment Data Manger, Qualistar

***Deb Deverell**, Head of School, Paddington Station Preschool

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Jolene R. Mutchler, Former Executive Director, Colorado Association for the Education of Young Children

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***Teresa Ribble**, Licensing Supervisor, Colorado Department of Human Services, Office of Early Childhood

Carin Rosa, Licensing Administrator, Colorado Department of Human Services, Office of Early Childhood

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Voluntary Guidelines Tied to Public Funding for CO Child Care Facilities

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Grants for Child Care OLEs

Contact your local water authority to learn if grants are available for converting water intensive turf areas into low-water plantings, creating rain gardens, or implementing other water conserving measures.

Health and Wellness Benefits Associated with Access to Nature

American Public Health Association Policy Statement: *Improving Health and Wellness Through Access to Nature*: <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/08/09/18/improving-health-and-wellness-through-access-to-nature>.

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Nature Education

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Seasons of Play by Rusty Keeler (2016). Book published by Gryphon House.

Managing Risks Related to Natural and Naturalistic Features in OLEs

Chapter 6 of *Nature Play and Learning Places: Creating and Managing Places where Children Engage with Nature* by Robin C. Moore with Allen Cooper (2014).

FireWise Plant Materials—6.305 by F. C. Dennis, Colorado State University Extension (2012): <http://extension.colostate.edu/topic-areas/natural-resources/firewise-plant-materials-6-305/>

Get a Heads Up on Equestrian Helmet Safety, Centers for Disease Control and Prevention, https://www.cdc.gov/headsup/pdfs/helmets/headsup_helmetfactsheet_equestrian_508.pdf

Submersions Related to Non-Pool and Non-Spa Products, 2012 Report by Kevin Gipson for the U.S. Consumer Product Safety Commission: <https://www.cpsc.gov/~link/a41131e1b6754605a61c25ea73a86389.pdf>

Managing Risk Related

to Playground Equipment

ASTM F1487-17: Standard Consumer Safety Performance Specification for Playground Equipment for Public Use: https://compass.astm.org/EDIT/html_annot.cgi?F1487+17

ASTM F2223-15: Standard Guide for ASTM Standards on Playground Surfacing (2015): <http://dx.doi.org/10.1520/F2223-15>.

ASTM F2373-11 (2017): Standard Consumer Safety Performance Specification for Public Use Play Equipment for Children 6 Months through 23 Months by ASTM International (2017): [https://compass.astm.org/EDIT/html_annot.cgi?F2373+11\(2017\)](https://compass.astm.org/EDIT/html_annot.cgi?F2373+11(2017))

Public Playground Safety Handbook (2010) by U.S. Consumer Product Safety Commission: <https://www.cpsc.gov/s3fs-public/325.pdf>

Planting to Encourage Play

Plants for Play: A Plant Selection Guide for Children's Outdoor Environments by Robin C. Moore (2002). Book published by MIG Communications.

Planting for Fire Resistance

FireWise Plant Materials—6.305 by F. C. Dennis, Colorado State University Extension (2012): <http://extension.colostate.edu/topic-areas/natural-resources/firewise-plant-materials-6-305/>

Planting Rain Gardens

Building a Rain Garden in Colorado by Colorado Stormwater Center, Colorado State University (2014): <http://stormwatercenter.colostate.edu/wp-content/uploads/2013/05/Colorado-Rain-Garden-Guide1.pdf>

Planting for Pollinators/Wildlife

Bringing Nature Home: How You Can Sustain Wildlife with Native Plants by Douglas W. Tallamy. Book published by Timber Press.

Native Plant Finder by National Wildlife Federation (for finding native plants that support native butterflies and moths): <http://www.nwf.org/NativePlantFinder/>

Native Plants Database by the Lady Bird Johnson Wildflower Center (national database with 9,380 native plants that can be searched by state, habit, light and moisture

requirements, height, and bloom time/color): <https://www.wildflower.org/plants/>

Colorado Native Plant Society Resources for Gardening with Native Plants (including local resources for low water landscapes): <https://conps.org/gardening-with-native-plants/>

The Living Landscape by Rick Darke and Doug Tallamy (2016). Book published by Timber Press.

Shade Planning

Shade Planning for America's Schools, developed for the Centers for Disease Control and Prevention by ORC Macro (2008): https://www.cdc.gov/cancer/skin/pdf/shade_planning.pdf

Sustainable Landscape Design

Sustainable Sites Initiative
<http://www.sustainablesites.org/projects>

U.S. Environmental Protection Agency
Resources on Low Impact Development
<https://www.epa.gov/polluted-runoff-nonpoint-source-pollution/urban-runoff-low-impact-development>