



# Department of Early Education and Care

THE COMMONWEALTH OF MASSACHUSETTS

## Family Child Care Licensing

### **POLICY STATEMENT: Playground Safety [6.06 CMR 7.07(7); 7.07(16)(e); 7.07(13); 7.10(10)]**

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According to the U. S. Consumer Product Safety Commission's (CPSC) Outdoor Home Playground Safety Handbook, there are 50,000 injuries on home playgrounds annually in the United States that result in children needing emergency room treatment. The majority of those injuries are the result of falls from equipment.

EEC has developed this policy based on the recommendations of the CPSC, the recommendations of the revised Family Child Care Environment Rating Scales (FCCERS), and the requirements of 606 CMR Standards for Licensure so that children in care will be provided an outdoor environment that is safe, age appropriate, challenging and promotes healthy growth and development.

This policy will address three areas: who is required to install fall zones, what equipment requires a fall zone, and alternatives to using play equipment in outdoor space.

#### **WHO IS REQUIRED TO HAVE FALL ZONES?**

Any FCC Educator who was licensed after January 1, 2010 and wished to utilize play equipment in their outdoor space must install fall zones (aka "use zones"). Also, any Educator licensed before 2010 who makes changes to their existing play equipment must install fall zones. The fall zones must meet the recommendations of the CPSC guidelines in the Outdoor Home Playground Safety Handbook (<http://www.cpsc.gov/cpsc/pub/pubs/324.pdf>).

#### **WHAT EQUIPMENT REQUIRES A FALL ZONE?**

Any equipment with a fall height of more than eighteen inches (18") requires protective surfacing. Equipment with a fall height of eighteen inches (18") or less does not require a fall zone, provided that equipment is not placed on concrete, asphalt, ceramic tile, stone or other hard surfaces (NOTE: Frozen ground should also be considered a hard surface).

While the CPSC Outdoor Home Playground Safety Handbook and the FCCERS-R contain more comprehensive information on protective surfacing, the CPSC Handbook general recommendations for fall zone fill materials are as follows:

- Maintain a minimum depth of 9 inches of loose-fill materials such as wood mulch/chips, engineered wood fiber (EWF), or shredded/recycled rubber mulch for equipment up to 8 feet high; and 9 inches of sand or pea gravel for equipment up to 5 feet high. NOTE: An initial fill level of 12 inches will compress to about a 9-inch depth of surfacing over time.

The surfacing will also compact, displace, and settle, and should be periodically refilled to maintain at least a 9-inch depth.

- Use a minimum of 6 inches of protective surfacing for play equipment less than 4 feet in height. If maintained properly, this should be adequate. (At depths less than 6 inches, the protective material is too easily displaced or compacted.)
- Use containment, such as digging out around the perimeter and/or lining the perimeter with landscape edging. Don't forget to account for water drainage.
- Check and maintain the depth of the loose-fill surfacing material. To maintain the right amount of loose-fill materials, mark the correct level on play equipment support posts. That way you can easily see when to replenish and/or redistribute the surfacing.
- **Do not** install loose fill surfacing over hard surfaces such as concrete or asphalt.

## **ALTERNATIVES TO OUTDOOR PLAY EQUIPMENT**

EEC regulations require children to spend at least 60 minutes per day in physical activity, and require daily outdoor time periods (weather permitting) that include large and small muscle activities. EEC regulations also require that areas underneath and around swings, slides and climbers be covered with an adequate depth of impact-absorbing materials, to minimize the risk of injury from falls.

The cost of installing and the difficulty of maintaining impact-absorbing use (fall) zones may discourage some early education and care programs from relying on elevated equipment to support large muscle activities. In that event, there are many alternative activities that children may enjoy and benefit from. Some of those options are included here.

To support large motor activities in toddlers, encourage them to kick, throw, chase and catch. Kicking a large ball develops balance and strength. Catching and throwing develop eye-hand coordination. Chasing after a ball they have kicked or thrown develops balance and strength. Playing "Simon Says" when instructions include "hop", "jump", "touch your toes", and "spin like a top" is a great way to get young children moving, as is riding low "scooter" toys, which children power with their feet. Playing "Ring-Around-the-Rosie" is also fun for this group, and older toddlers may enjoy a bean bag toss.

Preschoolers can enjoy all of these activities, as well as games that develop strength and coordination like ring toss, tetherball, kick-ball, bowling, croquet, climbing through tunnels, bouncing in an inflatable "bouncy house", and simple gymnastics. Relay races that use a different "move" for each leg of the race (such as jumping, hopping, twirling, doing somersaults) can be a great group activity, and completing an easy "obstacle course" that includes crawling through a tunnel, jumping over a broom handle, climbing up one or two steps and scooting underneath a picnic table exercises lots of large muscles.

Hop scotch, jumping rope, bouncing (seated) on a large bouncy ball, playing dodge ball and "Duck, Duck, Goose" (or "sit, chill, jet") are fun for young school age children, as are hula hoops and soccer. Older school age children will enjoy playing badminton, basketball, dodgeball, soft ball and touch football as well. Exploratory walks and scavenger hunts are enjoyed by children of all ages, if tailored to the developmental level of the children.

## **REFERENCE MATERIALS AND LINKS**

### **EEC Regulations and Definitions**

The regulations that impact outdoor space, surfacing, fall zones, equipment, entrapments, hazards and supervision are:

#### **6.06 CMR 7.07(7) Outdoor Space**

The licensee must maintain, or have access to, an outdoor play area of at least 75 square feet per child who is outside at any one time.

- (a) The play area must be accessible to children with disabilities.
- (b) The outdoor play space must be appropriate for each age group served.
- (c) The outdoor play area must provide for both direct sunlight and shade.
- (d) The outdoor play area must be free from hazards including but not limited to: a busy street, a parking lot, poisonous plants, water hazards, debris, broken glass, chipping, peeling or flaking paint, dangerous machinery or tools, and weather related and environmental hazards or small objects that could present a choking hazard to young children. Any such hazard must be removed or fenced by a sturdy, permanently installed barrier which is at least four feet high or otherwise protected or removed, as appropriate.
- (e) If the outdoor play space is located on a roof, it must be protected by a barrier at least seven feet high, which cannot be climbed by children.
- (f) The outdoor play space must not be covered with a dangerously harsh, abrasive, or toxic material.
- (h) Suitable barriers, including but not limited to bulkhead doors, must be installed to prevent falls into outdoor stair or window wells.

#### **6.06 CMR 7.07(16)(e) Playground Safety**

The use zones under and around swings, slides, and climbing structures must be covered with an adequate depth of an impact absorbing material, in accordance with EEC policy. Pea gravel and wood chip nuggets must not be used in areas used by infants and toddlers.

#### **6.06 CMR 7.07(13) Safety Requirements for Equipment, Material and Furnishings**

The licensee must only use indoor and outdoor equipment, materials, furnishings, toys, and games that are appropriate to the ages, needs and developmental level of the children enrolled. They must be sturdy, safely constructed and installed, non-tippable, flame retardant, easily cleaned, and free from lead paint, protruding nails, rust, and other hazards that may be dangerous to children.

- (a) The licensee must not use any equipment, materials, furnishings, toys, or games identified by the U.S. Consumer Product Safety Commission as being hazardous.
- (b) The licensee must keep all equipment, materials, furnishings, toys, and games clean and in a safe, secure, and workable condition.
- (c) All play equipment, fences and structures must be free of entrapment hazards.

#### **7.10(5) Supervision**

All licensees and educators must exercise appropriate supervision of the children in their care in order to ensure their health and safety at all times. Such supervision must include, but not be limited to, indoor and outdoor activities, mealtimes, naptime, transportation, field trips and transitions between activities.

**Definitions:**

Consumer Product Safety Commission (CPSC) - The federal agency charged with protecting the public from unreasonable risks of injury or death from consumer products under the agency's jurisdiction including all aspects of playground safety.

American Society for Testing Materials (ASTM) - An organization that develops safety standards for consumer products including public playground equipment and surfacing.

ASTM F1292 test data - Identifies the amounts of a surfacing material needed to lessen the impact of falls in the use zones of playground equipment.

Unitary materials - Manufactured materials such as rubber mats or tiles that are held in place by a binder to form a unitary shock absorbing surface that has ASTM F1292 test data from the manufacturer documenting critical height information.

Loose fill materials- Shredded/recycled rubber, pea gravel, wood mulch, and wood chips that are used in accordance with CPSC guidelines and manufactured loose fill products such as engineered wood fiber that have ASTM F1292 test data from the manufacturer documenting critical height information.

Fall height- The distance between the highest designated play surface of the equipment and the protective surfacing under it.

Fall zones- The surface under and around equipment where impact absorbing surfacing is required. It is the area where children are predicted to land when falling or exiting from the equipment. In general, the fall zone for each piece of equipment must extend a minimum of 6 feet in all directions from the perimeter of the equipment.

Entrapment - Any opening that is greater than 3 1/2 inches but less than 9 inches that can entrap a child's head creating risk for serious injury or death.

Entanglement - Any area on playground equipment that can "catch" children's clothing including bolts that are exposed more than two threads, open "s" hooks and spaces on equipment especially at the tops of slides.

CCA - Chromate copper arsenate used to treat wood prior to 2003 that has been found to cause certain types of cancer.

**CPSC Home Playground Safety Handbook**

The CPSC Handbook provides guidelines for impact absorbing materials, fall zones and equipment. The Department of Early Education and Care (EEC) recommends that programs follow the CPSC Handbook as a way to reduce the number of these injuries.

<http://www.cpsc.gov/cpscpub/pubs/324.pdf>

**FCCERS-R**

The Family Child Care Environment Rating Scales are an integral tool in the Massachusetts Quality Rating and Improvement System that licensed Educators are currently participating in. The FCCERS primarily defers to the CPSC guidelines, and has also provided additional technical assistance regarding fall zones in Family Child Care.

<http://ers.fpg.unc.edu/sites/ers.fpg.unc.edu/files/playground.pdf>