

# Elements of Architectural Design for Early Childhood Programs

## Indoor Area

### Required by Rule 11

- Thirty-five square feet per child of space usable by the children
  - Count only the space where the children spend their time; do not include storage space or bathroom facilities or areas that are only used by an adult such as an “office area”. All indoor space, including bathrooms, should be accessible to individuals with disabilities.
- Safe, durable, age-appropriate equipment and materials
  - Furniture must be appropriate for the size of the children using it. All equipment and materials should be in good repair.
- Modified equipment for children with disabilities attending program
  - Modified equipment will be dependent upon the children’s needs in the classroom. Examples may include specific chairs, adjustable tables for a child in a wheelchair, or drinking fountains.
- Meet fire, safety, and health codes
  - For fire codes, visit the Nebraska State Fire Marshall’s website:  
<http://www.sfm.state.ne.us/>
  - For health and safety codes, visit the Nebraska Department of Health and Human Services school health website:  
<http://dhhs.ne.gov/publichealth/Pages/schoolhealth.aspx>
  - Information is also available at the Nebraska Department of Education website:  
<http://www.education.ne.gov/safety/index.html>

### Recommended to increase quality according to Environment Rating Scale

- Space large enough to allow staff and children to circulate without interrupting play
  - The space should easily accommodate at least 5 interest centers where children interact freely with materials. Larger space should be provided for areas that require more room for children to move and work such as blocks and dramatic play. The space should also permit adults to supervise visually.
- Controlled natural lighting
  - While natural lighting is a great asset to a classroom, staff should be able to control lighting through the use of adjustable blinds or curtains. Reducing glare and brightness will allow for a more comfortable environment and promote engagement.
- Ventilation
  - Classroom ventilation provides for comfort in the environment. Control can be provided in a variety of ways including opening windows or fans.
- Bathrooms within classrooms
  - Bathrooms within the classroom alleviate issues with supervision. Child-sized fixtures encourage independence, self-help skills and cleanliness.

- Child-sized toilets—at least 2  
Multiple child-sized toilets will support cleanliness and independence along with reducing the possibility of bathroom accidents.
- Child-sized sinks—at least 2  
Providing at least two child-sized sinks will promote sanitary conditions in the classroom. One sink should be used for washing hands after using the bathroom; a different sink should be used for other hand washing instances including before and after eating, before and after wet messy play such as play dough, and following sand play, and to reduce the spread of germs due to blowing noses or other germ spreading instances.  
Sinks should be at a height where children are able to use them independently.
- Floor covering
  - Tile for eating/sand/art area
  - Carpet for quiet/cozy area and for block area to reduce noise  
Utilizing tile for areas with activities that may be messy assists in clean up while carpet in other areas will reduce noise and provide softer spaces for children to relax.
- Space for large motor play
  - Space indoors should be available for gross motor play when outdoor play is unavailable due to weather conditions. There should be enough space for children to run, jump, and move around. Spaces could include a gymnasium or all-purpose room.
- Accessible storage—for both children and teacher
  - Storage for children should include low, open shelves for toys and materials that are easily reached by the child. Teacher storage provides space for additional toys and materials that may be rotated through the classroom.
  - Adult storage should keep items out of children’s reach and eyesight as well as provide for some locked space to keep hazardous cleaning supplies.
- Furniture
  - Child-sized tables and chairs  
Child-sized tables allow children to rest their elbows on the top of the table while their legs fit comfortably underneath the table. Child-sized chairs allow children’s feet to touch the floor without having to be perched on the edge of their seat.
  - Cubbies within classroom  
Providing spaces for children to store their personal belongings inside the classroom helps with supervision. Individual cubbies should be large enough that one child’s belongings such as coat or backpack would not touch another child’s belongings.
  - Furniture designed for a specific activity  
Easels, sand table, dramatic play furniture and wood working bench are examples of furniture designed for a specific activity. These types of furniture promote mature play that enhances a child’s growth and development.

## Additional considerations

- Adult area (separate from classroom)
  - Staff who have their personal needs met are more likely to feel respected and appreciated. An adult area will allow for the space to conduct necessary day-to-day functions such as planning and professional development along with providing personal time and space for the adults who are caring for children.
    - Lounge with adult-sized furniture
    - Space for individual conferences and adult group meetings
    - Separate office space for program administration
  - Separate adult restrooms outside of classroom  
Adults should have access to adult-sized restroom facilities outside of the classroom.

## Additional Recommendations for Infant/Toddler Space

- Floors, walls, and other built-in surfaces made of easy-to clean materials
- Changing areas/tables within classroom  
A room with easy-to-clean surfaces helps maintain sanitary conditions. In addition to child-sized bathrooms and facilities, a space inside the classroom should also be available to change diapers or soiled clothing to help maintain proper supervision of the rest of the children.

## Outdoor Area

### Required by Rule 11

- Protected by fences or physical barriers
  - The space should be enclosed by at least 36" fences or physical barriers to provide for easy supervision of children. The fence or barrier should be flush to the ground without gaps to ensure children cannot exit the outdoor area.
- Seventy-five square feet per child
- Safe, durable, age-appropriate equipment
  - If playground equipment is included in the outdoor area, it must be appropriate for the children using it. Age limits and restrictions must be followed. School-age equipment is often not safe or appropriate for use in an early childhood outdoor area. To see requirements, visit the Consumer Product Safety Commission websites "Handbook for Public Playground Safety":  
<http://www.cpsc.gov/PageFiles/122149/325.pdf>
- Modified equipment for children with disabilities attending program
  - Gross motor equipment such as an adaptive swing should be available based on the needs of children with disabilities who are enrolled in the program.
- Meet fire, safety, and health codes
  - For fire codes, visit the Nebraska State Fire Marshall's website:  
<http://www.sfm.state.ne.us/>

- For health and safety codes, visit the Nebraska Department of Health and Human Services school health website:  
<http://dhhs.ne.gov/publichealth/Pages/schoolhealth.aspx>
- Information is also available at the Nebraska Department of Education website:  
<http://www.education.ne.gov/safety/index.html>

### Recommended to increase quality according to Environment Rating Scale

- Fence—at least 4 feet tall
  - The entire outdoor play area should be enclosed by either a fence or wall.
- At least 30' away from streets or parking lots
  - If the playground is within 30' of a street or parking lot, a discreet barrier should be placed along the outside of the fence to prevent a vehicle from accidentally entering the space.
- Variety of surfaces -at least one hard and one soft surface not including fall zones
  - A variety of surfaces helps promote successful participation in different types of active play such as bouncing balls, riding wheel toys, digging, and running. Surfaces possibilities could include sand, black top, wood chips, grass.
- Close to toilets and drinking water
  - These features allow for ease of care and supervision by adults and promote independence in children.
- Accessible storage
  - Storage should be readily available in the outdoor area to store portable equipment such as balls, tricycles, and sand toys.
- Direct and easy access from classroom
  - Easy access alleviates supervision and safety issues. Children should not have to use steep staircases, walk long distances either inside or outside, or go through rooms that are being used on the way to the playground.
- 9 inches protective surfacing in fall zones with appropriate equipment spacing
  - Climbing, sliding, or swinging gross motor equipment in the outdoor area require a protective surface in all fall zones in order to promote safety for all children. Protective surfacing can include sand, pea gravel, wood chips, and recycled rubber. All materials must meet ASTM (American Society for Testing and Materials Standards) requirements and should be re-assessed frequently for upkeep or replacement.  
[http://ersi.info/ecers3\\_supmaterials.html](http://ersi.info/ecers3_supmaterials.html)
- Protection from weather elements such as sun, wind, rain
  - Providing protection relieves discomfort or problems that may be caused by the natural elements. Protection can include shade trees, covered areas, or windbreaks.
- Age appropriate equipment
  - See link for appropriate sizes under “Playground Safety Information”
- Programs should provide a minimum of 30 minutes per day of outside time, weather permitting

## Additional Recommendations for Infant/Toddler Space

- Separate from older children  
Infants/Toddlers should have their own outdoor play area to allow for stationary and portable equipment that is developmentally appropriate for their age and ability.

## Additional Resources

### *Accessible Play Areas*

U.S. Access Board

<http://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/background/adaag#15.6> Play Areas

Environment Rating Scales

<http://www.ersi.info/index.html>

### *Infant and Toddler Spaces: Design for a Quality Classroom*

Community Playthings

[www.communityplaythings.com/resources/articles/RoomPlanning/Spaces/InfantToddlerSpaces.pdf](http://www.communityplaythings.com/resources/articles/RoomPlanning/Spaces/InfantToddlerSpaces.pdf)

National Program for Playground Safety

<http://playgroundsafety.org>

### *Nature Explore Classroom*

Dimensions Educational Research Foundation

<http://www.natureexplore.org/classrooms/>

Playground Safety Information

[www.ersi.info/PDF/playground%20revised%2009-28-11.pdf](http://www.ersi.info/PDF/playground%20revised%2009-28-11.pdf)

### *Pre-K Spaces: Design for a Quality Classroom*

Community Playthings

[www.communityplaythings.com/resources/articles/RoomPlanning/Spaces/SpacesBooklet.pdf](http://www.communityplaythings.com/resources/articles/RoomPlanning/Spaces/SpacesBooklet.pdf)

Spaces for Children

[www.spacesforchildren.com/profile.html](http://www.spacesforchildren.com/profile.html)