

Child Care Centre Construction and Design Requirements and Considerations

Purpose of this Document

Child care centres require sufficient, thoughtfully-designed space for children to participate in developmentally appropriate programs. The purpose of this document is to provide child care centre developers and architects with essential requirements and considerations for child care centre construction and design.

The Child Care Regulations, 2015, specify minimum requirements for indoor and outdoor space in order for centres to be licensed by the Ministry of Education. These requirements are available in the *Child Care Licensee's Manual* and are also described in this document under the section heading Requirements.

Other considerations are also provided in this document for construction and centre design to enhance children's environments under the section heading Other Considerations. These considerations are not licensing requirements, but are important to reflect upon, and incorporate as appropriate, when constructing and designing child care space.

General Information

Licensee's Manual, Part II – Section 8

Requirements

Child care centres must meet health, fire safety, and heating system standards, as determined by the appropriate officials. Prior to licensing, the following must be completed for the premises in which the centre will be operated:

- a report from the designated public health officer respecting sanitation, lighting, ventilation and general health and safety standards;
- a report from the Fire Commissioner's local assistant respecting fire safety standards;
- a report from a person acceptable to the Ministry of Education respecting the heating system.

Only those areas of the building approved by the fire and health inspectors may be licensed and used for child care.

Other Considerations

Child care centres may be located in many different places, such as residential and commercial areas, schools, and multipurpose buildings.

For new facility construction, some considerations include building codes, fire codes and zoning.

In addition, when determining the placement of a child care centre in a school or multipurpose building, consider:

- placing child care near other early childhood programs located within the school, such as Prekindergarten and Kindergarten;
- access to a community room or room where family activities can take place;
- options for shared space between programs, such as kitchen and storage areas;
- direct access to an outdoor play space; and,
- in the case of a school, shared space of the Prekindergarten or Kindergarten outdoor play area.



In schools, consider joint-use of early learning outdoor environments.

Usable Floor Area Licensee's Manual, Part IV – Section 56

Requirement

Usable floor area excludes space used for offices, hallways, entryways, washrooms, kitchens, closets, locker areas, furnace and boiler rooms and large or fixed equipment (i.e. anything attached to the wall or immovable, including fixed cupboard/counter space).

Deductions from usable floor space will be made for main entryways to the child care centre; no deductions will be made for other doorways in the facility. In the initial stages of development, a 15 per cent deduction may be made to estimate space required for large or fixed structures within the remainder of the space.



Sufficient usable floor space supports children to play, explore, and learn in child care environments.

Centre construction must ensure:

- A minimum of 3.7 square metres of usable floor area for each licensed child care space.
- A sleeping area of at least 2.3 square metres that is separate and apart from the usable floor area for each infant child care space.
- Usable floor areas and sleeping areas are used exclusively by the centre.
- Partial walls, shelving units and folding room dividers (but not hanging fabric) may be used to create infant sleeping space that is separate and apart from the usable floor area as an alternative to having a sleep room. It is recommended that younger infants are in cribs in a separate sleep room.
- A ceiling height of 2.3 metres (7.5 feet) above a minimum of 50% of the floor area for all rooms (any areas where the ceiling height is less than 1.2 metres (4 feet) are not included in the calculation of usable floor space).
- All rooms are heated, cooled and ventilated to maintain required temperatures, humidity and air exchange; ventilation may be in the form of openable windows or electric fans.
- Light levels in all rooms, including sleeping rooms, are maintained at a sufficient level to provide visual observation of the space and to allow the premises to be cleaned properly.

“Young children relate to the world through their bodies and their senses. They require large amounts of space in which to learn by moving and doing.”

- Anita Rui Olds. (2001).
Child Care Design Guide.

Other Considerations

- Placement of electrical outlets throughout the child care space in a variety of positions to allow for multiple activities (e.g. light table, music).
- Interior colours (paint and flooring) that reflect neutral colour tones, providing a sense of a home-like feeling to the interior space.
- Space calculations may accommodate adults as well as children in each group room.
- Areas for adults to store personal belongings.
- Centre room design allows for flexibility, with usable floor space that surpasses minimum standards, if available.
- In large areas, it is beneficial to include an area of shared activity, such as a large muscle area, or a library area, to provide a sense of connectedness between groups.



Large muscle area.

- Rooms are large enough to accommodate more than one group of children to allow for a staff member to give full attention to the needs of an individual child, without compromising supervision of the group.
- Large areas may be divided by screens, half-height barriers, built-in platforms or levels, accommodating areas for gross motor play and dramatic play spaces.
- Layout of rooms assists with developmental transitions. Toddler and infant rooms are located adjacent to each other, while toddler rooms are in proximity to preschool rooms.
 - Room design includes regions of similar activities, such as: messy zones, entry/transition zones, active zones, and quiet zones.
 - Wet areas such as water/sand table and paint easels have appropriate flooring and access to nearby sinks.
 - Water tables may be plumbed in for ease of filling and draining by the children and staff. Children should have access to plumbed-in water tables from three sides.



Child care centre design should accommodate a variety of areas, such as spaces for quiet play, messy zones and active zones.

Natural Light

Licensee's Manual, Part IV – Section 57

Requirement

Centre construction is required to accommodate window area equivalent to 10% of the usable floor area in at least 50% of the areas used for children's play space. These areas must be made available to each child attending the centre for at least 50% of the day.

Natural light is calculated as follows:
The areas/rooms that have the required natural light must equal 50% or more of the facility's usable floor area.

The windows (not including the frame) in each of those areas/rooms must be equivalent to at least 10% of the usable floor areas in that area/room.

Glass bricks, translucent or muted windows that allow light directly into the child care facility are acceptable.

The amount of natural light must be controlled (e.g. adjustable blinds, curtains). All window coverings must comply with local fire bylaws, ULC Standard CAN/ULC-S109, and Health Canada's Corded Window Coverings Regulations. It is recommended that operators confirm compliance with local fire inspector prior to purchase of window coverings.



Natural light requirements ensure the benefits of natural light are available to children throughout their day.

“Natural light helps the body maintain its circadian rhythms and influences many health related factors and many psychological factors such as orientation, security, variety, motion, and change (difference-within-sameness).”

- Anita Rui Olds. (2001). *Child Care Design Guide*.

Other Considerations

- Natural light is a feature in every room used by children and staff.
- Windows are on two sides of each room to balance light and reduce glare.
- Windows can be opened, have low sills and frame interesting views.
- Clear windows are low enough so children can look out of them.
- Windows are not in excess of more than 420 mm from finished floor to the top of the bottom window jam. This allows children to view the outdoors which provides a connection to nature and enhanced learning.



Consider incorporating low windows for children to look outdoors.

Kitchen and Dining

Licensee's Manual, Part IV – Section 58 & Part III – Section 25

Requirement

Centre developers must ensure that the centre has access to sufficient kitchen and dining facilities to provide food for children attending the centre.

Centre developers must facilitate adequate and safe procedures for cleansing utensils for eating and drinking through provision of a mechanical dishwasher approved by the local public health inspector or a three compartment sink.

Other Considerations

- Kitchen area is at least 14 square metres and convenient to the entrance area.
- Kitchen area includes:
 - adequate/appropriate storage for bulk and daily food supplies; and,
 - an openable window for ventilation and natural light
- Children can watch the cook work through large, low viewing windows.



Children's usable floor space may serve a dual purpose as activity and dining areas.



Kitchen area

Washroom and Diapering Facilities Licensee's Manual, Part III – Section 22

Requirement

Centre construction must provide for adequate and convenient washroom and diapering facilities for the children attending the facility, including one toilet and one sink for every 15 child care spaces (excluding infant spaces) in the centre. Additional requirements include:

Washrooms

- The hot water temperature is no higher than 43C (110F) in all washrooms to protect children from scalds and burns.
- School-age children are assured of privacy when using washroom facilities.
- Washrooms have provisions for accessibility, such as steps near sink or toilet, adjustable toilet seats, and handrails for children with physical disabilities.
- Washrooms are located in or directly adjacent to each group room so that children have independent access.
- Where the centre is located in a school or multi-purpose building, the centre has exclusive use of the washroom facilities during the centre's hours of operation.



Diapering Areas

- The diapering area is separate from the food preparation area.
- Diapering areas are located within each infant and toddler group room so that staff do not have to leave the room for each diaper change.
- The area is made of a material that is smooth, impervious to moisture and easy to clean.
- A sink, liquid soap, and paper towels are located near and in the same room as the diapering area.
- A plastic lined waste container with a foot operated lid is within easy reach of the diapering area.



Diapering areas must be provided in each infant and toddler room, with a sink near and in the same area.

Diapering Facilities

- Pull-out steps are available at the diaper change table to allow toddlers to climb up independently.
- To occupy children and provide a basis for infant/caregiver conversation while diapering, the following are provided:
 - Hooks over the changing table to suspend mobiles
 - Pictures/mirror pasted on the ceiling or the underside of an overhead shelf
 - A mirror placed along one side of the changing surface (also adds educational value).

Washrooms

- At least one toilet and hand-washing sink is located within 12 metres of the door to the outdoor play area.
- One toilet and one sink are provided for every 10 child care spaces in the centre.
- Washrooms have child-sized toilets and low sinks. Child-sized sinks encourage autonomy and independence. Child-sized toilets remove fears of falling.
- Facilities with mixed ages (toddler to school-age) have both child-sized and adult-height toilets and sinks.



Primary toilet seat.

- Primary toilet seats by Kohler Model K-4686-A or equal are used. The toilet seat has scalloped side handles for comfort and support of young children, increasing independence.
- Locate toilet paper dispenser near toilet at child-sized heights relative to the toilet.
- Locate mirror, soap dispenser, and paper towel dispenser near the sink at child-sized heights to agree with the size of children. This allows for autonomy and independence by the children.
- Child-sized sink heights are 608 mm from floor to rim of sink. Children should reach the faucets without using a stepping stool.
- Facility has adequate adult washrooms. In the case of a child care centre, at least one adult washroom is located near the main entrance, with a diaper changing area, for parents and visitors.



Consider designing centres with child-sized toilets and low sinks to encourage autonomy.

Outdoor Play Area

Licensee's Manual, Part IV – Section 59

Requirements

Centre developers must provide for:

- a safe outdoor play area of seven square metres per licensed child care space for at least half of licensed child care spaces, provided that an outdoor play space is available for the remainder of licensed spaces within walking distance, as determined in relation to the youngest age category for which the centre is licensed;
- the outdoor play area is enclosed with a fence or natural barrier (e.g. dense hedge) to ensure proper supervision, injury protection and area control;
- playspaces and equipment meet the requirements as per CSA Standard CAN/CSA - Z614, Children's Playspaces and Equipment;
- sandboxes are constructed to be covered when not in use and permit drainage;
- outdoor play space is designed with defined circulation and traffic paths for both people and wheeled toys to prevent collision (e.g. between swings and slides);
- there is adequate accessible storage for equipment and toys (storage structures will be deducted from the outdoor play space measurements before calculating the required area per licensed child care space);
- adequate safety provisions made for any standing bodies of water (e.g. swimming pools) are fenced.

Other Considerations

- Direct access at grade (i.e. no stairs or ramps) from each group room to the outdoor play space is provided to create increased use and greater flexibility for children to move in and out independently.
- The space has a variety of surfaces permitting different types of play, such as sand, black top, wood chips, grass, as well as an intriguing mix of trees, flowers, garden boxes, inclines, gentle hills, and pathways to inspire children to engage in creative explorations and connect to nature.



Outdoor play spaces may be designed to enhance children's early learning experiences.



Pathways of various textures.

- Sunlit areas and shaded areas are provided by means of open space and tree plantings or other covered outdoor spaces such as a porch (ideally 3 to 5 metres deep), veranda, gazebo, play shed or hut, lean-to, or roofed activity space.
- The outdoor space has access to water (e.g. fountains, water table) for both drinking and playing.
- 9 to 18 square metres/child is preferable to allow each child enough outdoor play space to play safely and exuberantly.
- The following areas are included in the design of the play yard:
 - Private places that are easily occupied by a single child;
 - Places for small groups of 2 to 4 children;
 - Places for large muscle activity involving groups of up to 10 children;
 - Places for games and sports involving more than 10 children;
 - Plenty of free space for children to gather spontaneously.
- Play yards are outdoor extensions of the indoor environment, providing many of the same opportunities as indoor spaces. Opportunities are provided for active, creative, structured, quiet, fantasy and therapeutic (i.e. for children with diverse needs) activities.
- Outdoor play space has at least two supervisable exits.
- Proper drainage is essential for year-round use of outdoor space, with the quickest drying surfaces located closest to the building's entry.
- The outdoor play space incorporates natural landscape features.



Consider designing outdoor play spaces to incorporate natural elements and landscaping, such as: hills, pathways, and open, grassy spaces.

“It’s the small things in a child’s environment that create the biggest interest and excitement: a splashing puddle, a delicate butterfly, or a lawn dotted with dandelions.”

*Rusty Keeler. (2008).
Natural Playscapes.*

Resources for Child Care Centre Construction and Design

Child Care Licensee's Manual <http://publications.gov.sk.ca/details.cfm?p=76930>

Curtis, D. & Carter, M. (2003). *Designs for Living and Learning: Transforming Early Childhood Environments*. St. Paul, MN: Redleaf Press

Keeler, R. (2008). *Natural Playscapes: Creating Outdoor Play Environments for the Soul*. Redmond, WA: Exchange Press, Inc.

Olds, A. (2001). *Child Care Design Guide*. New York: McGraw-Hill