

Child Care Centre Design Guidelines

Manitoba Early Learning and Child Care

February 2012

Introduction

This document is intended to be a summary of information related to the design of best practice child care environments, for use by individuals involved in planning and developing child care facilities in Manitoba. Those involved may include, but not be limited to: boards of directors, early childhood educators, architectural design teams, and child care coordinators.

All licensed child care programs in the Province of Manitoba, including full time centres, school age child care centres and nursery schools, are governed by *The Community Child Care Standards Act* and Manitoba Regulation 62/86. These regulations are referenced within this document and can be found at: www.manitoba.ca/childcare under publications.

When choosing a child care facility location, it is essential that the sponsoring group ensure that it can receive zoning and an occupancy permit and can meet all requirements for licensing under the act and regulations, Public Health and the Manitoba Fire Code.

Key Considerations

1. Overall Space: It is recommended that the overall amount of facility space is based on 88 square feet per licensed child space. Best practice recommends 3.7 to 4.6m² (39.8 to 49.5 square feet) per child of floor space be free and useable for play activities. Regulations require that a minimum of 3.3m² (35.5 square feet) per child of floor space be free and useable for play activities. *Refer to Manitoba Regulation 62/86, Section 9(1).*

The remaining space must accommodate office, kitchen, washrooms, staff room, staff washroom, children's locker area, storage, wall thickness and other areas not used for play.

2. Group Size per Room: It is required that a wall or floor to ceiling partition must be provided when more than 16 infants or 32 preschool children are cared for in one area. For an area to be considered a room there must be a full height sound barrier, such as a wall, folding or sliding partitions. It is best practice to accommodate smaller group sizes in a divided space. For example: 2 rooms for 8 infants rather than 1 room for 16 infants or 2 rooms for 16 preschool children rather than one room for 32 preschool children. If four infants are not accommodated in a separate enclosed space, a written plan must be submitted describing how the children's developmental needs will be met. Ideally infants will be cared for in a separate area from preschool children. *Refer to Manitoba Regulation 62/86, Sections 8(2), 8(3) and 8(5) for specific information on the maximum number of licensed spaces permitted per room.*

3. Emergency Systems: It is required that a fire alarm system, emergency lighting system, as well as hard wired smoke and heat sensors be installed for more than 40 licensed spaces. A sprinkler system is generally recommended, but is required if there are more than 4 infant spaces.

4. Washroom Facilities: It is required that 1 toilet and 1 sink be provided for every 10 licensed spaces. *Refer to Manitoba Regulation 62/86, Section 12(10).* It is recommended that these fixtures are child size and mounted at child height for independent use. One sink should be provided in the play area for general hand washing, while there must be at least one sink provided for every two toilets. This sink (or sinks) in the washroom area should strictly be used for toileting / diapering.

Note: National Building Code requires a minimum of one wheelchair accessible washroom in the building.

5. Access to Natural Light: Regulations require that windows providing natural light be a minimum of 10% of the floor area. *Refer to Manitoba Regulation 62/86, Section 9(1.1).* It is preferable to have some windows operable and for windows to be installed low enough for the children to see outside without obstruction (bottom sill approximately 18 inches to 2 feet off of the floor), in both infant and preschool areas. Best practice is to provide as much natural light each room as possible above and beyond the minimum requirements.

Children's Space and Layout

Note: Group size is defined in Manitoba Regulation 62/86, Sections 8(2), 8(3), and 8(4).

1. While regulations state that the maximum number of infants in one room is 16 and preschool children is 32, it is best practice to design two rooms for 8 infants in each or 2 rooms for 16 preschool children each.
2. The layout of the room should not create any hidden corners and L-shaped spaces should be avoided to facilitate proper supervision.
3. Ideally, all child care spaces should be located in a ground level floor space with direct access to the exterior. This is especially important for infants to facilitate evacuation in an emergency and to simplify daily routines and access to the outdoors.
4. The designated nap area should be situated away from highly active and noisy activity (for example, kitchen, laundry, entrance) and should accommodate no more than two groups of children.
5. A nap area within the playroom is strongly recommended as opposed to a separate and dedicated nap room. This is to enable direct supervision. The nap space can be combined with a quiet play area with low, movable shelving used to separate quiet play from sleeping children. The sleeping area must allow 2.3m² (24.8 square feet) per child while they are sleeping. *Refer to Manitoba Regulation 62/86, Section 9(2).* This should be in addition to the useable playspace requirements. Cots, cribs or playpens must be 915mm (36 inches) apart, unless the crib has clear plexi-glass end panels to maintain visibility and prevent the spread of airborne infection. The layout must also ensure that caregivers have no difficulty accessing children because cots/cribs/or playpens are too close to one another.

6. **a) Child care centres with not more than four children under two years of age.**

Centres in this category are classified as A2 (Assembly Occupancy). If the child care centre is located in an existing school, church or similar assembly type building, there is not likely to be a problem from a Building Code standpoint. If any renovations are to be undertaken, a building permit will be required.

b) Child care centres with more than four children under two years of age.

Centres in this category are classified as B3 (Care Occupancy). The Code requirements for B3 occupancies are more complex than A2 occupancies, and upgrading of the premises to comply with the Building Code will likely be required. The Building Code therefore requires that all plans be under the seal of an Architect or Professional Engineer licensed to practice in the Province of Manitoba, and who will take responsibility for the design.

Washrooms & Diapering

1. The washroom area should be directly accessible from the playspace, include 1 toilet and 1 sink for every 10 children for full time child care centres and nursery schools. School-age centres must include 1 toilet and 1 sink for every 15 children. *Refer to Manitoba Regulation 62/86, Section 12(10)*. To facilitate children's independence, the fixtures should be child-sized and the toilet should have a lid. Mirrors over sinks in the washroom area are an asset. Single use paper towel dispensers and soap dispensers are required at child height.

2. Sink heights should be at 500 to 560mm (20 to 22 inches) for infants and at 560 to 600mm (22 to 24 inches) for preschool children. Sinks should also be mounted toward the front edge of a 450 to 500mm (18 to 20 inch) deep counter. The sink in washroom area should be specific to toileting related hand washing. A separate sink in the playspace to be used for all other general hand washing is recommended. Hands free faucets are also recommended to prevent the spread of germs.

3. Child size toilet seat height is approximately 250 to 300mm (10 to 12 inches). Low partitions and doors, approximately 1020 to 1070mm (40 to 42 inches) in height, should enclose toilet stalls to provide child privacy from their peers but still allow adult supervision.

4. The diaper changing area should be close to the washroom to facilitate waste disposal and should contain an adult height sink for hand washing and a toilet to enable direct waste disposal. By incorporating a large deep sink for staff hand washing, it may also act as a fixed sink and bathing area for infants. This should be incorporated and located directly next to the change surface. *Refer to Manitoba Regulation 62/86, Section 12(10.2)*. The diapering surface should be made of smooth, non-porous, moisture resistant, easily cleanable material. A physical separation between the diapering area and all food, play or sleeping areas will reduce the chance of spreading germs.

5. The diaper area should be oriented to face the playspace to allow staff to visually supervise the other children while changing a diaper. Hands-free taps at the sink are recommended in the diaper change area. The diaper change surface should be approximately 71 to 81 cm (28 to 32 inches) in height plus a 150 mm (6 inch) high guard along the outside edge of the diapering counter for safety. Length of the change surface should be 900 to 1200mm (36 to 48 inches) with a separate area from the change mat to set out diapering supplies. Pull-out steps are

recommended to allow staff to help children climb up and prevent back injury caused by lifting. Children must never be left unattended.

6. Wall cubicles within easy reach above the diapering counter are recommended for storage of diapers and personal items. One cubicle approximately 30 by 30 cm (12 by 12 inches) per child is recommended.

7. Lockable cupboards and a foot operated waste disposal unit should be provided below the diapering counter and out of reach of children.

8. In school age programs separate washroom facilities for boys and girls with private toilet stalls should be provided. In addition to toilets, urinals are appropriate for school age children only.

Storage

1. Shelving units containing materials for the children's use will only be included in the calculation of useable playspace to a maximum of 20% of the floor space. Any fixed equipment beyond this will be deducted from the useable floor space calculation to determine licensed spaces. *Refer to Manitoba Regulation 62/86, Section 9(1).*

2. Lockers should be provided within the playspace to allow children independent access to their belongings. The locker footprint cannot be included as part of minimum playspace requirements.

3. Best practice is to provide individual lockers for storage of children's personal belongings and clothing. Hooks should be provided on both sides of the lockers. The hooks should be approximately 1070 to 1200mm (42 to 48 inches) from the floor level. The width of the locker should be approximately 300 to 350mm (12 to 14 inches).

4. Staff require a closet or hooks to store outer wear within the playspace and individual, lockable storage for personal belongings.

5. Consider space for a closed storage area for cots or mats near the preschool napping area.

6. Wall-mounted closed storage above floor level must be well secured and should be provided wherever possible to avoid taking up valuable playspace.

7. A separate lockable cupboard must be provided for cleaning and hazardous products.

8. A separate room(s) with ample space for storage of toys, equipment and materials that are rotated through the program.

9. An estimate of storage requirements can be based on 10% of the net building square footage.

10. Storage for outdoor equipment should be located either near the centre exit to the outdoor play area or in an outdoor shed next to the play area.

Food Preparation

1. Provide space for a food preparation area with a dedicated-use adult height sink and/or a food serving counter. This area should be located separate from the washrooms and diaper change area.
2. Space for a refrigerator should be available in infant areas, along with a microwave shelf incorporated above the serving counter.

Entry, Access & Security

1. The entrance to the child care centre should be accessible for safe and convenient drop-off and pick-up of children. There should be a fence and/or other barrier between centre exits and vehicular traffic.
2. Access to the centre must be controlled at all times. At minimum, all doors to the centre must be locked to prevent unmonitored entry. The main entry must have a system in place that allows staff to verbally or visually confirm the identity of visitors before providing entry. Examples include: a door with a bell and a window or peep hole; or an audio or video intercom system with a staff-controlled remote door release. To facilitate parent and staff access, a coded or card access system is an additional measure that could be considered.
3. All locked doors must be easily opened from the inside without the use of keys, special devices or specialized knowledge.
4. All door hardware should meet accessibility requirements, be easily operated with limited hand mobility, but should also be out of reach for children's operation, to a maximum of 4 feet from floor.
5. An audible signal can be included to alert staff to playspace door opening.

Outside Playspace

1. An outdoor play area large enough to provide 75 square feet (7m²) per child for a minimum of ½ of the total licensed spaces at one time is required by Regulation. *Refer to Manitoba Regulation 62/86, Section 9(3).* This area, if owned or rented by the child care centre, must be fenced and 50% of the area must be grass, sand or a similar surface. It is desirable to provide 9.3 to 13.9 m² (100 to 150 square feet) of outdoor space per child enrolled in the centre to move towards best practices.
2. Best practice is also to provide direct access from the inside playspace to an immediately adjacent outdoor playspace.
3. If the outdoor area is close to a parking lot or busy street cement barriers or bollards in addition to a fence should be in place as extra protection
4. All outdoor playspace development must meet CSA standards.
5. Natural playspace development that connects children with nature is highly recommended.

Adult Use - Support Spaces

Central Kitchen

1. Public Health requires that the kitchen meet the code for an institutional food preparation area, including seamless flooring, epoxy wall paint, and a ceiling with a smooth washable finish (no perforated ceiling tiles).
2. The kitchen should be adjacent to both the preschool and the infant areas but access must be controlled by a door.
3. Space in the kitchen should allow for a refrigerator, freezer, stove with proper ventilation and commercial dishwasher (or a triple sink).
4. Separate food preparation and hand washing sinks are required.
5. A microwave is recommended to be included in the kitchen.

Laundry

1. Laundry facilities should be provided, preferably accessible to the infant area. Laundry facilities should not be located within (or accessed through) the kitchen space to protect from cross contamination of surfaces.

Office, Administration & Staff Space

1. The office area should be close to the child care centre entrance and be fully enclosed for privacy.
2. It is preferable to include windows from the office into the entrance and play areas.
3. One way glass from the office could be provided for observation purposes.
4. Locked storage is required for personal information.
5. Ideally a staff computer and photocopier will be in a common work space that staff can also use to prepare program materials. The fax machine should be in a secure area to protect confidentiality.
6. A comfortable staff room should be to provide for staff lunches and breaks.
7. A staff washroom is required and is often designed as a wheelchair accessible washroom.

Design Details

Flooring and Finishes

1. A balance of 30% resilient flooring and 70% carpet within the play area floor space is recommended. This can be accomplished with area carpets on resilient flooring to allow flexibility with room arrangement and enable thorough cleaning. All area carpets must be secured and have non-slip backing.

2. Commercial grade finishes and hardware are recommended throughout.
3. Avoid the use of primary colours or overuse of strong colour schemes on walls, floors or furniture.
4. A bulletin board should be installed for parent information.
5. Baseboard mouldings should be applied in continuous strips, even at corners, where possible.
6. Acoustic ceiling tile are recommended as a means to help control sound and open joists should be treated with sound absorbing material and/ or sound absorbing panels installed throughout centre.

Lighting

1. Proper zoning of lights and separate control switches allow staff to dim lighting in areas of the playspace used for napping.
2. General lighting, as required by Public Health, should be at 500 lux and all light fixtures must be covered with lenses.
3. Natural light should be able to be controlled with window coverings. Rollers shades with child safe controls are recommended.
4. It is best practice for natural light to be a feature in every room used by children and staff. *Refer to Manitoba Regulation 62/86, Section 9(1.1).*

Windows

1. Interior windows should be used wherever suitable to create a feeling of openness and bring natural light into interior spaces. Some examples are: at a door to the infant area at the child's height; and in fixed walls to facilitate supervision, staff communication and children's interaction.
2. Window seats are an asset. These seats should be well padded especially in the infant room.
3. Windows should have low sills, frame interesting views and be operable for fresh air.

Air Quality

1. The minimum outdoor air requirement for acceptable indoor air quality for classrooms/child care is 15 cubic feet per minute per person (ASHRAE 62-1999 MBC 6.2.2.1.(2)). The mechanical contractor or a professional engineer must certify in writing that these requirements have been incorporated in the H.V.A.C. system for this occupancy.
2. An exhaust fan should be provided in diaper change and toileting areas.
3. At least some of the exterior windows should open for ventilation. Operable windows must have screens as well as limiting hardware to prevent the window opening beyond 100mm (4 inches) as a safety precaution.

Electrical

1. Electrical outlets must be according to code and out of reach of children. Safety receptacles are required where outlets are accessible to children.
2. Electrical outlets should be considered above counter height to avoid dangling cords.
3. Telephone connections should be available in the office, staff area and playspace. An internal intercom system is beneficial.

If you have any questions about these guidelines, contact your child care coordinator or:

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