Guidelines

Childcare Design Guidelines

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Background and Context

The City of Vancouver is committed to supporting the creation of high quality and accessible childcare spaces that promote healthy child development and support working families. The City has adopted a number of goals and objectives to support access to quality, affordable licensed childcare, including:

The Healthy City Strategy: A Good Start (2014)

- Vancouver's children should have access to quality childcare that promotes physical and mental health and social development, and improves school readiness.
- The City seeks to improve access to licensed childcare centres that are affordable and inclusive.

Intent

The intent of the City of Vancouver's Childcare Guidelines is to inform the creation of safe and quality childcare facilities that provide a range of opportunities for the social, intellectual and physical development of children.

These design guidelines apply where childcare facilities that offer licensed childcare serving children up to School Age (except for those in temporary structures) are required:

- as a condition of rezoning; or
- for conditional approval of development permit applications.

The guidelines are to be used by childcare developers, architects and City staff.

Site selection, site planning, and indoor and outdoor design considerations are addressed. Appendix A includes a list of Common Toxic Plants.

In addition to these guidelines, other approvals and permits are required for the design, construction and occupancy of childcare facilities:

- The "Child Care Licensing Regulation" pursuant to the Community Care and Assisted Living Act provides minimum operational and design requirements for Child Care Facilities. The approving agency in Vancouver is the Community Care Facilities Licensing Office (CCFL) at Vancouver Coastal Health which must approve all childcare facility plans and should be consulted in the earliest planning phase.
- Development, Building and Occupancy Permits are required for all new childcare facilities. For detailed information concerning these permits and other relevant codes and requirements, contact the City of Vancouver's Development and Building Services Enquiry Centre.

Definitions

For the purpose of these guidelines, the following definitions apply:

- Program: A group of children having their own room or rooms that are fully furnished and equipped.
- Facility: A building or portion of a building which houses one or more programs.

Age Groups

- 0-3: A child up to 36 months of age.
- Preschooler: A child between 30 months to School Age.

Program Types

- 0-3: A year-round full-day service for children aged 0-3 typically opening between 7:00 and 8:00 am and closing between 5:30 and 6:00 pm.
- 3-5: A year-round full-day service for children aged 30 months to School Age typically opening between 7:00 and 8:00 am and closing between 5:30 and 6:00 pm.
- Preschool: A part-day service for children from 30 months to School Age Children, attending up to 4 hours each day.

Guidelines

1 General Design Considerations

The planning of a childcare facility should consider site suitability, solar orientation, and access to and from the facility.

1.1 Unsuitable Locations/Sites

(a) The impact of inappropriate adjacent uses such as commercial loading or service areas, major mechanical plants, building exhaust fans, electrical substations and major above- grade electrical lines, transformers or other noisy, noxious or dangerous uses should be avoided or mitigated.

(b) Childcare facilities should be sited away from high traffic arterials to avoid traffic related air pollution and noise impacts.

1.2 Relationship of Site to Grade

Whenever childcare facilities are located above grade, concerns about emergency evacuation of the children must be considered, noting that these concerns correspond to increased height above grade. The safety and security of the outdoor play area must be addressed when there are adjacent uses directly aside or above it. Locations below grade may be unacceptable due to requirements for natural light and outdoor areas.

1.3 Relationship of Indoor and Outdoor Spaces

The indoor and outdoor spaces should be planned together.

(a) Outdoor space should be at the same level as the indoor space (plus or minus 0.5 m) and contiguous with it.

(b) A strong visual connection should exist between the indoor and outdoor activity areas.

(c) Indoor and outdoor spaces should allow for inter-related indoor and outdoor activities and free movement by children.

(d) The facility should be oriented to facilitate the surveillance of outdoor play areas from the primary indoor activity area.

Ramps for wheeled equipment should be provided when a level change exists.

1.4 Orientation

The availability of natural light is important to the creation of a suitable childcare space.

(a) The facility should be oriented so that outdoor play areas receive a minimum of three hours of direct sunlight per day at the winter solstice. Two hours of sunlight should occur during the typical playtimes of 9:30 am - 11:30 am or 1:30 pm - 4:00 pm. This is particularly important for 0-3 programs due to the limited mobility of the children.

1.5 Pedestrian Access

(a) Pedestrian access should be safe, secure and accessible for wheeled equipment, including wheelchairs, strollers and bikes.

1.6 Vehicular Access and Parking

Parking Requirements are as follows:

(a) One parking stall for every eight full-time equivalent childcare spaces.

(b) Two parking stalls for staff.

Considerations related to parking are as follows:

(c) Safe vehicular access should be provided to the childcare facility.

(d) Access from the street or drop-off area should be as direct, simple and close as possible to the daycare's entry or elevator, and in no case more than 100 m from the entry.

(e) Drop-off parking spots should be full size; small car only spaces are not acceptable as they do not allow for easy loading and unloading of children into car seats, etc.

(f) Access to drop-off parking should not require children to cross the drive aisle.

(g) Where childcare facilities are located in a school or other community facility, drop-off parking may be combined with that of the school/facility provided that the needs of both are adequately met.

(h) Secure bicycle parking should be provided, in accordance with the City's "Off-street Bicycle Space Regulations"

1.7 Sharing Childcare Space with Other Users

(a) If any childcare space is shared with other users when the childcare facility is not in operation, issues of joint management, maintenance, liability, supervision and financial support should be resolved. In such circumstances, design should consider all uses and allow for adequate storage and equipment.

2 Facility Size and Shared Spaces

Sufficient space is essential to quality childcare. The following space requirements are based on research and experience with purpose-designed childcare facilities in high-density urban settings.

Note: These guidelines' space requirements are higher than the minimums required by the Provincial Child Care Licensing Regulation.

Be aware that the maximum number of spaces and minimum child to staff ratios depend on the ages of the children and are specified in Provincial regulations. These should be confirmed with Community Care Facilities Licensing (CCFL) of Vancouver Coastal Health.

2.1 Indoor and Outdoor Space by Program Type

The most common program sizes have been used to develop the indoor and outdoor space requirements (Table 1). These program sizes are generally preferred and are most economically viable due to staff ratios requirements under the BC Child Care Licensing Regulation. Facilities proposing to accommodate fewer children per program should consult with CCFL staff.

Table 1: Recommended Indoor and Outdoor Space by Program Type

Program	# of Spaces	Minimum Net Activity Area		Gross Indoor Area		Covered Outdoor		Total Outdoor	
		m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2
Group Daycare Age 0-3	12	82	872	182	1959	33	355	170	1830
Group Daycare Age 3-5	16	101.5	1092	209	2250	34	366	224	2411
Group Daycare Age 3-5	25	128	1378	247	2659	45	484	350	3767
Preschool	20	78	840	153	1647	33	355	140	1507

Note: The Recommended Gross Indoor Area is exclusive of mechanical and electrical rooms, stairwells, elevator shafts and lobbies. Consider an extra 15% of floor area for these items.

(a) Childcare facilities constructed as a condition of development should meet the minimum net activity areas set out in Table 1 and provide the support spaces as described in Section 3.2 of these guidelines.

(b) Total net area for support spaces ranges from 40 m^2 to 62 m^2 per licensed program (see Tables 2-5 for details).

(c) A net to gross ratio of 1 to 1.3 should be allowed at the initial planning stage, although an efficiency factor of 80 percent to 85 percent should be the goal (e.g., net activity area + net support area x 1.3 = gross area recommended for planning purposes).

Note: Provincial Childcare licensing has a different method of space calculation for indoor space. Contact CCFL for more information on their space calculation.

Area recommendations for indoor activity rooms and settings, support spaces, and outdoor spaces of common programs are shown in Tables 2-5.

Table 2: 0-3 Group Daycare (12 Space Program)

1 Indoor Activity Rooms and Settings			
1.1	Art Area	9 m^2	97 ft^2
1.2	Table Area	11 m^2	118 ft^2
1.3	Area for Other Activity Settings	20.5 m^2	221 ft^2
1.2	Gross Motor/Nap Room	28 m^2	301 ft^2
1.2.1	Storage for Mats & Equipment	4.5 m^2	48 ft^2
1.3	Quiet Room	9 m^2	97 ft^2
	Net Activity Area	82 m^2	883 ft^2
2 Support Spaces			
2.1	Cubby	12 m^2	129 ft^2
2.2*	Kitchen	9.5 m^2	102 ft^2

Table 2 continued: 0-3 Group Daycare (12 Space Program)

2.3	Storage	7 m^2	75 ft^2
2.4	Accessible Child W/C & Diapering Area	8 m^2	86 ft^2
2.5**	Parent's Room	6 m^2	65 ft^2
2.6	Staff Office	7 m^2	75 ft^2

2.7**	Accessible Staff W/C	4.5 m^2	48 ft^2
2.8**	Laundry/Janitorial	4 m^2	43 ft^2
	Net Support Area	58 m^2	624 ft^2
	Total Net Indoor Area	140 m^2	1507 ft^2
	Gross Indoor Area	182 m^2	1959 ft^2
3 Outdoor Area			
3.1	Covered Outdoor Space	33 m^2	355 ft^2
3.2	Open Outdoor Space	137 m^2	1475 ft^2
	Total Outdoor Area	170 m^2	1830 ft^2
	Total Gross 0-3 Group Daycare Area	**352 m^2**	**3789 ft^2**

* Where a kitchen is shared by two programs the total kitchen area should be at least 12 m^2.

** Where multiple programs are located in one facility, support spaces may be shared if they are easily accessible and functional for all programs.

Table 3: 3-5 Group Daycare (16 Space Program)

1 Indoor Activity Rooms and Settings			
1.1	Dedicated Art Area (wet messy)	8 m^2	86 ft^2
1.2	Table Area	12 m^2	129 ft^2
1.3	Area for Other Activity Settings	39 m^2	420 ft^2
1.4	Quiet Room	9 m^2	97 ft^2
1.5	Gross Motor/Nap Room	29 m^2	312 ft^2
1.6	Storage with Large Motor/Nap Room	4.5 m^2	48 ft^2
	Net Activity Area	101.5 m^2	1092 ft^2
2 Support Spaces			
2.1	Cubby	13 m^2	140 ft^2
2.2*	Kitchen	9.5 m^2	102 ft^2
2.3	Accessible Children's W/C	8 m^2	86 ft^2
2.4	Storage	7.5 m^2	81 ft^2
2.5**	Parent's Room	6 m^2	65 ft^2
2.6	Staff Office	7 m^2	75 ft^2
2.7**	Accessible Staff W/C with Diapering Area	4.5 m^2	48 ft^2
2.8**	Laundry/Janitorial	4 m^2	43 ft^2
	Net Support Area	59.5 m^2	640 ft^2
	Total Net Indoor Area	161 m^2	1733 ft^2
	Gross Indoor Area	209 m^2	2250 ft^2
3 Outdoor Area			
3.1	Covered Outdoor Space	34 m^2	366 ft^2
3.2	Open Outdoor Space	190 m^2	2045 ft^2
	Total Outdoor Area	224 m^2	2411 ft^2
	Total Gross 0-3 Group Daycare Area	**433 m^2**	**4661 ft^2**

* Where a kitchen is shared by two programs the total kitchen area should be at least 12 m^2.

** Where multiple programs are located in one facility, support spaces may be shared if they are easily accessible and functional for all programs.

Table 4: 3-5 Group Daycare (25 Space Program)

1 Indoor Activity Rooms and Settings			
1.1	Dedicated Art Area (wet messy)	10 m^2	108 ft^2
1.2	Table Area	14 m^2	151 ft^2
1.3	Area for Other Activity Settings	60.5 m^2	651 ft^2
1.4	Quiet Room	9 m^2	97 ft^2
1.5	Gross Motor/Nap Room	30 m^2	323 ft^2
1.6	Storage with Large Motor/Nap Room	4.5 m^2	48 ft^2

	Net Activity Area	128 m^2	1378 ft^2
2 Support Spaces			
2.1	Cubby	14 m^2	151 ft^2
2.2*	Kitchen	9.5 m^2	102 ft^2
2.3	Accessible Children's W/C	9 m^2	97 ft^2
2.4	Storage	8 m^2	86 ft^2
2.5**	Parent's Room	6 m^2	65 ft^2
2.6	Staff Office	7 m^2	75 ft^2
2.7**	Accessible Staff W/C with Diapering Area	4.5 m^2	48 ft^2
2.8**	Laundry/Janitorial	4 m^2	43 ft^2
	Net Support Area	62 m^2	667 ft^2
	Total Net Indoor Area	190 m^2	2045 ft^2
	Gross Indoor Area	247 m^2	2659 ft^2
3 Outdoor Area			
3.1	Covered Outdoor Space	45 m^2	484 ft^2
3.2	Open Outdoor Space	305 m^2	3283 ft^2
	Total Outdoor Area	350 m^2	3767 ft^2
	Total Gross 0-3 Group Daycare Area	**597 m^2**	**6426 ft^2**

* Where a kitchen is shared by two programs the total kitchen area should be at least 12 m^2.

** Where multiple programs are located in one facility, support spaces may be shared if they are easily accessible and functional for all programs.

Table 5: Preschool Space List (20 space program)

1 Indoor Activity Rooms and Settings			
1.1	Art Area	7.5 m^2	81 ft^2
1.2	Table Area	14 m^2	151 ft^2
1.3	Other Activity Settings	47.5 m^2	511 ft^2
1.4	Quiet Room	9 m^2	97 ft^2
	Net Activity Area	78 m^2	840 ft^2
2 Support Spaces			
2.1	Cubby	12 m^2	129 ft^2
2.3	Accessible Children's W/C	7 m^2	75 ft^2
2.4	Storage	9 m^2	97 ft^2
2.6	Staff Office & W/C	12 m^2	129 ft^2
	Net Support Area	40 m^2	430 ft^2
	Total Net Indoor Area	118 m^2	1270 ft^2
	Gross Indoor Area	153 m^2	1647 ft^2

Table 5 continued: Preschool Space List (20 space program)

3 Outdoor Area			
3.1	Covered Outdoor Space	33 m^2	355 ft^2
3.2	Open Outdoor Space	107 m^2	1152 ft^2
	Total Outdoor Area	140 m^2	1507 ft^2
	Total Gross 0-3 Group Daycare Area	**293 m^2**	**3154 ft^2**

Note: Based on the assumption that access to a kitchen will be provided in a shared facility. Otherwise add 9 m^2 for kitchen.

2.2 Shared Facilities and Efficiencies

Most new childcare facilities should house two or more programs, each with different age ranges. This facilitates a sequenced graduation of children among a population of friends and enhances economic viability.

(a) The design of the shared facility should encourage cross-daycare contact and opportunities to share materials and equipment.

(b) If facility design permits, support spaces, such as laundry rooms, parents' rooms and staff washrooms may be shared by two or three programs to improve efficiency (see Table 6).

(c) When four or more programs are aggregated, support spaces may be shared but no reduction in total area should occur. Aggregating four or more programs create additional space requirements for circulation, garbage collection, central storage and janitorial functions. Space gained from sharing office, washroom and parent rooms should be devoted to the above noted spaces.

Table 6: Recommended Indoor and Outdoor Space: Shared Facilities

Program	# of Spaces	Minimum Net Activity Area		Gross Indoor Area		Covered Outdoor		Total Outdoor	
		m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2
0-3 (12 space program) & 3-5 (25 space program)	37	210	2260	429	4618	78	840	520	5597
0-3 (two 12 space programs) & 3-5 (two 16 space programs)	56	367	3950	782	8417	105	1130	703	7567
0-3 (two 12 space programs), 3-5 (25 space program) & Preschool (20 space program)	69	370	3983	764	8224	113	1216	745	8019

Note: 25% outdoor space reduction for two 12-space programs has been applied to 56 and 69 space shared facilities. The Recommended Gross Indoor Area is exclusive of mechanical and electrical rooms, stairwells, elevator shafts and lobbies. Consider an extra 15% of floor area for these items.

2.3 Reduction in Outdoor Areas

A reduction in outdoor areas may be considered in the following situations, to the satisfaction of the Managing Director of Social Policy and Projects:

(a) All outdoor areas may be reduced by up to 25% if an appropriate playground or park within a 0.5 km safe walking distance is available for regular use; or

(b) Outdoor area for 0-3 programs only may be reduced by up to 25% (see Table 6) if:

- two 0-3 programs have contiguous outdoor spaces;
- the outdoor spaces can be used as one larger play space with covered outdoor area adjacent to each program; and
- the resulting combined outdoor space is easily supervisable.

3 Internal Design Considerations

Comfortable surroundings reduce anxiety and aggression, promote understanding, and enable children to engage in genuine exploratory and discovery behaviours.

Childcare facilities should be designed to ensure that the facility, the outdoor space and pedestrian and vehicular approaches are defensible spaces and can be readily seen from the childcare and surrounding uses.

All major indoor activity spaces used by children should have a direct source of natural light from a minimum of 10% of the wall area of the room. Natural light is also preferred for staff offices and rooms, while support areas such as washrooms, kitchens and storage rooms do not require natural light.

3.1 Indoor Activity Spaces

Provision of a range of activity settings is a key determinant of the quality of the childcare program. Activity settings are those areas in which activities or programs directly involving the children take place. They should be designed to accommodate a variety of discrete activities. Most childcare facilities accommodate activity settings in the following discrete spaces: the Activity Room, the Gross Motor/Nap Room, and the Quiet Room. See Table 3 below for details.

Table 7: Activity Settings by Program and Room

Program	Room	Activity Settings
Group Daycare – 0-3	Activity Room	Art-Sensory
		Dramatic Play
		Blocks
		Climbing & Crawling
		Puzzles and Manipulative Toys
		Water, Sand, Sensory
		Reading
	Quiet Room	Quiet Reading Settings
		Quiet Retreat
Group Daycare – 3-5 and Preschool	Activity Room	Art
		Water
		Sand/Texture
		Dramatic Play
		Science
		Puzzles and Games
		Manipulative Toys
		Blocks
		Gross Motor, Circle
		Reading
		Wheeled and Construction Toys
	Gross Motor/Nap Room	Gross Motor, Nap, and Movement
	Quiet Room	Quiet Retreat

3.1.1 General Considerations for Activity Setting

(a) Movement activities require a dedicated area which should include convenient storage for wheeled toys, large blocks, musical instruments, and climbing equipment.

(b) Activity settings are defined by the following: physical location, visible boundaries, work and sitting surfaces, materials storage and display, a mood or personality.

(c) Activity settings should be delineated by a combination of fixed and movable elements:

(i) Fixed elements include changes in level, ceiling height, materials, room corners, partial walls, special windows.

(ii) Movable elements include movable and hung partitions, bookcases, storage units and furniture. Where changes in level are employed ramps should be used.

(d) Activity settings should include places to observe, to play alone, to play alongside, and to play together.

(e) Retreat points should be provided adjacent to activity areas and should be visually monitorable by staff in the main activity area.

3.1.2 The Activity Room

This should be the largest of the program spaces.

Design Considerations

(a) It should include a mixture of open spaces and smaller alcove-type spaces and be designed to accommodate a variety of activity settings. The design should emphasize flexibility by utilizing movable elements to define spaces.

(b) An irregular square with alcoves and nooks is recommended. Avoid long narrow rooms. The plan should direct children from one activity to the next and delineate, protect and support activities in each setting.

(c) The messy/wet area will be used for art activities and eating. There should be enough space for art/eating tables, easels, water and texture tables, and adequate storage. Enough space is required to seat all children at once for snacks and meals.

(d) An art sink with clay trap, at least 1.0 m of counter space and closed cupboards above and below should be provided.

(e) Circulation within an activity room should be clear and straightforward, but not overly simplified and uninteresting. The optimum circulation path is highly visible and snakes through a childcare, overlooking each activity. "Shopping" among activities is itself an activity. Circulation paths should respect the boundaries of activity areas by meandering around but not passing through activity settings. Allow sufficient space for children engaged in activities to play uninterrupted by others passing by them.

Adjacency

(f) The Activity Room should connect and flow to the Gross Motor/Nap Room and the Quiet Room to enable shared use and to enhance flexibility.

(g) Location of the activity settings are such that noisy and quiet, intense and calm and messy (or wet) and tidy activities are separated (see Section 6.1). These areas should be shown on submitted plans.

(h) The messy/wet area should be located adjacent to the kitchen and to the outdoor play area so that on sunny days doors can be open and activities can flow between indoor

3.1.3 Gross Motor/Nap Room

When used as a gross motor room it can be the setting for noisy, boisterous, physical activities such as climbing or group games or larger scale, intense, small group activities such as large blocks, music and noise makers. It also can accommodate large scale group activities such as singing, and circle time.

Design Considerations

(a) As a nap room, it should be sized to accommodate all children for napping and allow children to sleep without being disturbed by activities around them.

(b) Activity setting can be planned for this room with the inclusion of storage.

(c) Facilities for ages 0-3 may consider providing two smaller rooms for napping so that fussy infants do not disturb sleeping infants. Again, these rooms can accommodate more than one activity and should both open up to the primary activity space

Adjacency

(d) The room should be located away from outdoor play areas.

(e) An enclosed Gross Motor/Nap Room should be provided which can be opened up to the Activity Room to promote shared use.

3.1.4 The Quiet Room

A quiet room fulfills a number of other useful functions: a space where children can be quiet and escape briefly from the hubbub of the activity room, a room for the use of professionals working with children on a one-to-one basis, napping and/or a place where sick children can rest while waiting for parents to pick them up.

Design Considerations

(a) The Quiet Room should be a separate room with a door, which can be used for quiet activities for smaller groups (3-8 children). There should be enough space for a small table, chairs and some storage.

Adjacency

(b) An enclosed Quiet Room should be provided which can be opened up to the Activity Room to promote shared use.

3.2 Support Spaces

3.2.1 Kitchen

A kitchen should be provided for the preparation and clean-up of snacks and lunches.

Design Considerations

(a) Two programs could share one kitchen if it is located to be readily accessible to both.

(b) Kitchens should be located and designed to allow staff to supervise children in the Activity Room while in the kitchen.

(c) If there is a shared kitchen, 0-3 programs should have separate fridges and small microwave ovens properly mounted at counter height. If infants are in the childcare program, include microwave for bottle warming and fridge.

Circulation/Path

(d) Kitchen location should not require staff to pass through the space in order to access laundry, janitorial, washrooms, etc. to mitigate food safety concerns.

3.2.2 Cubby Area

Design Considerations

(a) A cubby area should be provided for each program. One cubby for each child should be provided. Daycares with part-time children should include extra cubbies.

(b) There should be sufficient open floor space for a group of eight children with one staff to get dressed for winter conditions separated from the activities of the other children.

Adjacency

(c) The cubby area is best located immediately inside the entry used by children when using the outdoor play yard. This arrangement ensures that wet and muddy outer clothes and boots are not brought into the activity areas of the childcare.

(d) Each cubby area should be easily accessible to the washroom and to the outdoor covered play area.

(e) If possible, parents of children aged 0-3 should enter through the cubby area so that shoes can be removed before entering areas where children are playing on the floor.

3.2.3 Storage

Storage is a key factor in providing good childcare.

Design Considerations

Three categories of storage should be provided for each childcare program:

(a) active storage - accessible to children from activity setting;

(b) semi-active storage shelves and cabinets accessible to staff above or near activity settings; and

(c) a storage room for longer-term storage and larger equipment.

Storage includes open and closed, fixed and movable, and multi-use and specialized storage elements.

(d) All daycares should provide storage space for parent-owned strollers, bike trailers, and for car seats left for a return trip in another vehicle.

(e) The storage room for longer-term storage may be shared by the programs within the facility.

(f) All storage should be designed to address seismic safety concerns by ensuring that tall, heavy cupboards and other furniture items are fixed to the wall.

Adjacency

(g) Dedicated built-in storage for sleeping mats adjacent to the sleeping area, personal storage for children and staff, a variety of wall cabinets and shelves, floor units and open visible storage should be provided.

3.2.4 Children's Washrooms and Diapering Area

For programs including children under 36 months, children with disabilities or children who need additional support, a dedicated diaper changing area should be provided within the washroom.

Design Considerations

(a) When designing the diaper changing area keep in mind that children cannot be left unattended for even a moment. Everything the caregiver might need to complete the change should be within reach.

(b) The space should be separated from activity areas by a low gate or other partition 75 cm to 90 cm high to protect children from potential harm.

The diaper changing area should include:

(c) a changing surface approximately 80 cm high and 60 cm deep by any length sufficient to conduct diapering and dressing routines for two children simultaneously;

(d) an adjacent sink large and deep enough to bathe and wash off children, outfitted with elbow faucet handles to prevent contact with contaminated hands, and equipped with a hand-held shower attachment;

(e) space for several large, lined containers with lids for soiled diapers within arm's reach of the caregiver but out of reach of the child;

(f) shelves or drawers for storing all supplies: wipes, clean diapers, salves, towels, etc. within easy reach of the caregiver but out of reach of the child;

(g) enough shelf space for storage of children's individual supplies;

(h) hooks or shelves for mobiles and small toys, and a mirror along or behind the changing surface;

(i) adequate ventilation to remove odours without drafts and sufficient heat to allow for children's comfort during changing and bathing;

(j) a nearby toilet for disposing and flushing away feces; and

(k) room for 3 to 4 potties.

Staff should be able to visually supervise the entrance to the washroom from the main activity area.

(l) In 0-3 programs the children's toilets should be unscreened.

(m) For 3-5 programs there should be one partially screened toilet. The number of fixtures must conform to the CCFL regulations.

(n) Do not provide a urinal.

Adjacency

(o) It should be located near and have visual access to the main activity area and be close to the laundry.

3.2.5 Staff/Accessible Washroom

A separate staff/accessible washroom should be provided.

Design Considerations

(a) One individual staff/accessible washroom with one toilet and a sink for each facility should be provided. Staff from more than one program may share a washroom.

(b) An additional washroom should be provided if there are more than two programs in a facility, or if a program is too far from the staff washroom.

(c) The washroom should be large enough to permit assisted toileting.

(d) Provision of an accessible shower within the staff washroom is a desirable feature.

3.2.6 Parents' Room

A small separate room should be provided for parents as a resource room for reading, staff/parent conferences, or breast feeding.

Design Considerations

(a) It should be private from the program areas and separate from the staff office with a one way glass to observe the activity area.

(b) One parent room may be shared by two or more programs.

3.2.7 Staff Offices

Staff offices should be provided for administrative activities, storage of confidential files, private interviews and meetings, and as a refuge during staff breaks.

Design Considerations

(a) A single staff office may be shared by two or more programs.

(b) If a single office is shared by more than two programs, a staff lounge should also be provided.

3.2.8 Laundry/Janitorial Area

Design Considerations

(a) A laundry area should be provided, which is not accessible to children. A washer, dryer and folding counter should be provided.

(b) One laundry area may be shared between two programs.

(c) A janitorial area, which is not accessible to children, with a floor sink, storage shelves and impervious wall coverings should be provided. This may be shared between two programs.

(d) If there are more than two programs, or if a program is too far from the laundry/janitorial area, another laundry/janitorial area is recommended.

3.2.9 Shared Support Spaces

Design Considerations

(a) Where four or more programs are located together, additional shared support spaces should be provided. Support spaces should provide for central bulk storage, garbage collection, reception and janitorial functions. See Section 5.1 for further information.

3.3 Entry/Exit Security

Design Considerations

(a) The entry should be designed to facilitate supervision and security and to provide a welcoming reception.

(b) Entries and routes should be well lit.

(c) The main entry should be immediately recognizable as a childcare with effective signage.

(d) Care should be taken with design to ensure that potential security problems are recognized and avoided, particularly when facilities are not located at grade.

(e) There should be only one entry door with additional locked or alarmed doors as required by regulations for emergency egress only. Multiple entries can pose circulation and security problems.

(f) It should not be necessary to enter one program's space to access another.

Circulation/Path

(g) Ideally, for security and programming reasons, the entry should be directly from the covered outdoor play space.

(h) The preferred entry sequence is via the cubby area and from there to the primary activity space. This arrangement minimizes tracking wet and dirt into the childcare. This is particularly important in 0-3 programs where children spend much of their time on the floor.

(i) If the entry is through a hallway or stairway and not directly from the outdoors, the route should provide views to the outdoors, community spaces, or into the childcare.

3.4 Circulation

Design Considerations

Design to reduce circulation requirements and increase natural surveillance for supervision.

(a) Corridors may be necessary in facilities where three or more programs are located. In these circumstances long, harshly lit institutional hallways should be avoided. Partial walls to delineate a circulation path may be necessary.

(b) Access should be provided to all childcare programs within a facility to permit visiting of siblings, occasional use of each other's program spaces, staff sharing and support.

4 Outdoor Design Considerations

A sufficiently large outdoor play area is necessary to provide opportunities for children of varying abilities to experience adventure, challenge and wonder in as natural an environment as possible. Provincial childcare regulations require that all children spend some time outdoors every day regardless of the weather.

4.1 General Design Considerations

(a) Each licensed program requires a dedicated, on-site fenced outdoor play area that is planned together with the indoor area.

(b) The outdoor play space should have a favourable microclimate (i.e., wind protection and direct sunlight), have a rich range of materials and settings including contact with the living natural world, and be safe and secure.

(c) Outdoor space should be at the same level as the indoor space (plus or minus 0.5 m) and contiguous with it.

(d) Ramps for wheeled equipment should be provided when a level change exists.

(e) The outdoor area should be protected against flooding.

(f) The outdoor play space should include a covered area and an uncovered area to accommodate the various outdoor activities. Between 1/3 and 1/2 of the outdoor area should be clear space for group activities and physical movement.

(g) Play structure locations along walls or back to back with another play structure may be used to reduce fall zones.

4.2 Environment

Design Considerations

(a) The outdoor space should be protected from dirt, wind, pollution, noise, fumes and noxious smells or any hazardous elements. It should be acoustically buffered from traffic and parking.

(b) Exhaust vents from building or parking garages and other hazardous elements should not be located adjacent to outdoor play areas.

(c) Sunlight access (refer to Section 1.4) should be protected by design techniques such as glazing in south-facing fences or parapets. North-facing sites are problematic if sun cannot reach the transition zone between indoor and outdoor space.

(d) Non-glare surfaces should be used on highly-exposed sun areas. Some shading should be provided for a portion of the outdoor play area to offer a retreat on hot days. Where a facility has limited shade, consider shade sails, plantings, arbours, and ground coverings that minimize heat retention, especially for children aged 0-3.

4.3 Activity Zones

Outdoor space should be organized to offer specific activity zones for exploration by the children. It is recommended that the outdoor play area be divided into play zones, as follows:

Table 8: Activity Zones

Play Area	Location	Activity
Covered Play Area	This is a transition zone from the indoors to the outside and should be located adjacent to the entry.	This zone is intended for quiet or concentrated activities such as painting/art, clay/water table, outdoor meals and for active play on rainy days. It is also used for napping in infant programs.

Table 8 continued: Activity Zones

Creative Zone	This should be located near the indoors and may be part of covered area.	Activities may include carpentry and art projects that are messy and/or noisy.
Sand and Water Zone	This area should be near the covered play area, the Social Zone and the Dramatic Zone.	This zone provides for play either standing or sitting and encourages projective and fantasy play. Activity areas should include sand, water table, water source, table and other small toys as well as storage for these play props.
Social Zone	A central location that is shady in the summer and sunny in winter.	This zone should provide a quiet place to sit, tell and listen to stories, talk with staff or friends.
Dramatic Zone		A place for imaginative play and dress-up should be provided. This zone provides for symbolic and parallel play and for associative and co-operative activities. Space should be provided for a house setting, props and utensils, large blocks and interlocking construction toys. It is appropriate for the wheeled toy route to extend into this area.
Physical Zone	This zone should be located away from quieter zones but adjacent to the Dramatic Zone.	An area with equipment for balancing, climbing, sliding and swaying is recommended. Equipment should be designed to provide graduated challenges to the appropriate program.

Other Play Considerations

(a) Wheeled Toy Path: a paved path or route for wheeled toys should wind around other activity areas.

(b) Physical development can also be promoted through the use of mounds, boulder clusters, paths for wheeled toys and other features throughout the outdoor setting.

(c) Natural elements should be included everywhere to provide an experience of nature including vegetable plots, fragrant flowers, soil for digging, sand, water, trees and shrubs, and wind toys such as sails or banners.

4.4 Landscaping

Design Considerations

(a) The outdoor space should offer a variety of surfaces and terrains.

(b) Significant areas of soft landscaping should be provided in all outdoor play yards whether above grade or at grade.

(c) Natural features and vegetation are important. This may include grassed areas, shrubs, trees and planters to allow for gardening opportunities. Hardy native plants and edible landscaping is encouraged while plants with thorns should be avoided. Appendix A provides a list of common toxic plants that should be avoided in childcare design.

(d) A hose bib should be provided for watering purposes; it would also be useful to support sand play and water play by filling wading pools or operating a sprinkler to run through on a hot day.

(e) A resilient fall surface, as approved by the Public Health Inspector, should be provided at all places where children can climb, slide, or fall. Assume that children will climb everywhere possible.

(f) Loose materials such as engineered wood chips and pea gravel can be contained with curbs or planters, surrounds of wooden decking or other edging solutions. Areas of loose materials should be separated from the entry to indoors by an expanse of paving which can be swept clean periodically.

4.5 Fences and Boundaries

Design Considerations

(a) The boundaries of the outdoor space should be secure and supervisable from many vantage points within the outdoor space and have a strong visual connection with the main indoor activity area.

(b) Fences and gates should be designed to be non-climbable. For above-grade facilities, fencing should incorporate opportunities for children to view their surroundings and the world below.

4.6 Outdoor Storage and Security

Design Considerations

(a) Outdoor childcare areas should be secure, with controlled access during program hours. Consideration should be given for security and controlled access outside of program hours to discourage vandalism, littering and theft of equipment.

(b) Convenient and secure storage is key to the regular use and maintenance of outdoor play equipment. Storage should be protected from rain and wind to prevent equipment from rusting or getting water- logged and dirty. It should be securely locked to prevent unauthorized entry.

(c) Outdoor toys, wheeled vehicles, play equipment and maintenance equipment should be stored convenient to points of use. All storage should be secure from unsupervised entrance by children and outfitted with appropriate hooks, bins and shelving.

(d) Maintenance and landscaping material and equipment should be stored separately from program equipment.

4.7 Rooftop Play Spaces

Rooftop play areas allow access to open outdoor space on densely developed sites, and present opportunities for separation from traffic and noise and greater access to sunlight. However, they may involve increased construction costs and present additional technical design challenges to address constraints such as more severe climate (i.e. wind), weight, and safety above grade.

Design of play spaces above grade should incorporate planning principles already discussed in sections on indoor and outdoor spaces with additional consideration for the opportunities and constraints offered by the above grade location. The design should allow for the safe exposure of children to natural elements and sun, wind, rain, plants, water and animals.

Design Considerations

(a) Locate to reduce noise from children disturbing adjacent uses and to reduce noise from rooftop equipment disturbing the play space.

(b) Play space should be free of skylights, roof vents and/or other mechanical equipment.

(c) Select a location that is protected from exaggerated wind effects around buildings. A wind test area model may be required to determine the adequacy of setting and design.

(d) Wind effects can usually be mitigated through design techniques such as fences, screens and deflectors. Awnings should be retractable or designed to resist the wind.

(e) Provide anchorage for all planting and equipment against the wind, and normal use. Use smaller equipment to reduce weight and wind effects.

(f) The roof structure must be designed to carry the weight of landscaping and play equipment, including heavy elements such as sand, water and shade trees. Location of heavy elements over beams and columns may be needed. Consider options for lighter weight soil, equipment and surfacing. The effect of weight is a major cost determinant.

(g) Use wind tolerant and draught resistant landscape planting (small soil pockets dry out quickly). All vegetation should be irrigated.

(h) Protect against future roof leakage. Provide sectional play elements that allow for incremental roof repair. Consider a redundant roof layer for extra protection.

(i) Provide adequate drainage. Clean outs should be accessible and have catch basins

Appendix: Common Toxic Plants

This list includes the more common toxic plants used in landscaping in North America. It is **not** an exhaustive list of all toxic plants. The B.C. Poison Control Centre reports that many of these plants do not cause toxicity unless ingested in very large amounts and that symptoms may vary from a mild stomach ache, skin rash, swelling of the mouth and throat to involvement of the Heart, Kidneys or other organs. If in doubt about a particular plant, check with your local Botanical Garden or consult the **AMA Handbook of Poisonous and Injurious Plants**.

Table 1: Common Toxic Landscape Plants

Botanical Name	Common Name	Toxic Part
Aconitum spp	Monkshood, Wolfbane	all parts
Actaea spp	Baneberry, Cohosh	berries & roots
Aesculus spp	Chestnut, Buckeye	
Allium Canadense	Wild Garlic, Wild Onion	bulbs, flowers, stems
Anemone spp	Anemone, Pasque Flower	whole plant
Arisaema spp	Jack-in-the-Pulpit, Bog Onion	whole plant
Atropa belladonna	Deadly Nightshade	whole plant
Aucuba japonica	Aucuba, Japanese Laurel	fruit
Baptisia spp	Wild Indigo, Rattle bush	whole plant
Buxus sempervirens	Boxwood, Box	
Calla palustris	Water Arum, Wild Calla	whole plant, esp root
Caltha spp	Marsh Marigold	whole mature plant
Calycanthus spp	Carolina Alspice, Spice bush	seeds
Capsicum spp	Chili Pepper, Bird Pepper	fruit & seeds
Celastrus scandens	Bittersweet	fruit
Clematis spp	Clematis	whole plant
Colchicum spp	Autumn Crocus	whole plant
Convallaria majalis	Lily-of-the-Valley	whole plant
Daphne mezereum	Daphne, February Daphne	whole plant
Datura spp	Jimson Weed	whole plant, esp seeds
Delphinium spp	Larkspur, Delphinium	
Dicentra spp	Bleeding Heart	
Digitalis purpurea	Foxglove	whole plant
Dirca palustris	Leatherwood	whole plant
Echium spp	Bugloss, Snake Flower	whole plant
Euonymus spp	Burning Bush, Spindle Tree	fruit
Euphorbia spp	Spurge, Gopher Purge	latex
Galanthus nivalis	Snowdrop	bulb
Gelsemium sempervirens	Yellow Jesamine	flowers
Gymnocladus dioicus	Kentucky Coffee Tree	seeds
Hedera spp	English Ivy	berry & leaf
Heliotropium spp	Heliotrope	whole plant
Helleborus niger	Christmas Rose	whole plant
Hyacinthus orientalus	Hyacinth	
Hydrangea spp	Hydrangea	flower bud
Ilex spp	Holly, English Holly	fruit
Iris spp	Iris, Flag	roots, flowers
Jasminum nudiflorum	Jasmine	
Kalmia spp	Mountain Laurel	leaves, nectar

Table 1 continued: Common Toxic Landscape Plants

Botanical Name	Common Name	Toxic Part
Laburnum spp	Laburnum, Golden Rain Tree	all parts
Lantana camara	Lantana	
Leucothoe spp	Pepper Bush, Sweet Bells	leaves, nectar
Ligustrum vulgare	Privet	whole plant
Lobelia spp	Cardinal Flower	whole plant
Lonicera spp	Honeysuckle	possibly berries
Lycoris spp	Spider Lily	bulb
Morus rubra	Red Mulberry	
Narcissus spp	Daffodil, Jonquil, Narcissus	bulb
Nerium oleander	Oleander	whole plant
Nicotiana spp	Flowering tobacco	whole plant
Ornithogalum spp	Star of Bethlehem	whole plant
Parthenocissus quinquefolia	Virginia Creeper	fruit
Pernettya spp	Pernettya	leaves & nectar
Physalis spp	Chinese or Japanese Lantern	fruit
Pieris spp	Lily-of-the-Valley Bush	leaves & nectar
Podophyllum peltatum	May Apple	whole plant
Prunus spp	Cherries, Plums, Peaches	pit kernals only
Quercus spp	Oak	
Ranunculus spp	Buttercup	sap, roots
Rhamnus spp	Buckthorn, Cascara	fruit & bark
Rheum rhabarbarum	Rhubarb	leaves
Rhododendron spp	Azalea, Rhododendron	leaves, nectar
Rhodotypos spp	Jetbead	berries
Rhus vernix	Poison Sumac	
Ricinus communis	Castor Bean	seeds
Robinia pseudoacacia	Black Locust	leaves, roots, bark
Sambucus spp	Elderberry	whole plant except cooked berries
Scilla spp	Squill, Star Hyacinth	whole plant
Senecio spp	Groundsel, Ragwort	whole plant
Solanum spp	Nightshade, Potato, Jerusalem Cherry	uncooked sprout, green skin
Sophora spp	Scholar Tree	seeds
Symphoricarpos spp	Snowberry, Waxberry	berries in large quantities
Taxus spp	Yew	most of the plant, but **not** the red aril around the seed
Wisteria spp	Wisteria	
Zantedeschia aethiopeca	Calla Lily	leaves
Zephyranthes atamasco	Zephyr Lily, Rain Lily	bulb
Sophora spp	Scholar Tree	seeds
Symphoricarpos spp	Snowberry, Waxberry	berries in large quantities

Table 2: Common Toxic Tropical Plants

Botanical Name	Common Name	Toxic Part
Aloe spp	Aloe	latex beneath skin
Amaryllis	Amaryllis, Belladonna	bulbs
Anthurium	Anthurium	leaves & stems
Arum	Arum, Solomon's Lily	whole plant
Caladium spp	Caladium, Elephants Ear	whole plant
Clivia spp	Kaffir Lily	whole plant
Crinum spp	Spider Lily	whole plant, esp bulb
Dieffenbachia	Dumbcane	leaves
Epipremnum aureum	Pothos	whole plant
Eriobotrya	Loquat	pit kernel
Hymenocallis spp	Spider Lily	bulbs
Monstera deliciosa	Monstera, breadfruit	leaves
Philodendron spp	Philodendron	leaves
Spathiphyllum	Spathe Flower, Anthurium	whole plant