

Design Resource for Child Care Facilities



Provided by:
Community Care Facilities Licensing

Child Care Design Resource Table of Contents

Section One: Purpose of the Child Care Design Resource	Page 4
➤ Introduction	
➤ Jumping into the Sandbox together	
➤ Definitions	
Section Two: The Feasibility of Your Child Care Plan	Page 7
➤ Determination of Community Need	
➤ Determination of the Type of Child Care to Offer	
➤ Determination of the Location	
➤ Financial Plan	
Section Three: Selecting a Location or Site	Page 8
➤ Location	
➤ Health & Well Being	
➤ Environmental Considerations	
Section Four: Interior Design	Page 10
➤ About Design	
➤ Design Considerations for Specific Areas within a child care facility	
Section Five: Group Child Care (Under 36 Months)	Page 12
➤ Child Care Licensing Regulation Requirements	
➤ Consideration for Group Child Care (Under 36 months)	
Section Six: Group Child Care (30 Months to School Age)	Page 14
➤ Child Care Licensing Regulation Requirements	
➤ Considerations for Group Child Care (30 months to school age)	
Section Seven: Group Child Care (School Age)	Page 16
➤ Child Care Licensing Regulation Requirements	
➤ Considerations for Group Child Care (School Age)	
Section Eight: Adult Space Within A Child Care Facility	Page 17
➤ Storage	
➤ Staff room and washrooms	
➤ Office	
➤ Meetings	
Appendix:	
I Net Area Recommendations for under 36 months programs	Page 18
II Net Area Recommendations for 30 months to school age programs	Page 19
III Net Area Recommendations for Preschool Programs	Page 20
IV Roof Top Outdoor Play Area	Page 21
V General Considerations Checklist	Page 23

Outdoor space requirements please refer to:

The Director of Licensing Standards of Practice – Safe Play Space www.health.gov.bc.ca/ccf/child_care.html

Children are miracles

Believing that every child is a miracle can transform the way we design for children's care.

When we invite a miracle into our lives we prepare ourselves and the environment around us.

We may set out flowers or special offerings.

We may cleanse ourselves, the space, or our thoughts of everything but the love inside us.

We make it our job to create, with reverence and gratitude, a space that is worthy of a miracle!

Action follows thought.

We can choose to change.

We can choose to design spaces for miracles, not minimums.

Quote by Anita Rui Olds

SECTION ONE

PURPOSE OF THE CHILD CARE DESIGN RESOURCE

This document is intended to provide the reader with an understanding of space and design requirements that are required by the Child Care Licensing Regulation for the provision of quality child care. The document is a resource for individuals wishing to create new child care spaces in existing buildings, build a new child care facility or renovate existing child care space.

INTRODUCTION

Noted child care consultant Jim Greenman estimates that children may spend up to 12,000 hours in full day child care before they reach the age when their parents decide child care is no longer necessary. It is during this time in their lives when young children go through critical periods of development. Research has clearly demonstrated that well designed spaces for children contribute greatly to their life long mental and physical health.

A word about PLAY. Joe L. Frost, of the University of Texas states “On no other educational or child development issue is the body of evidence clearer – play is essential to the healthy development of children and to their adaptation to their culture, society and world.” Mr. Frost defines the term “play value” as applied to environments, materials and equipment as those that are selected, designed, or constructed to accommodate the play and games commonly chosen by the age and developmental levels of children who play there. Mr. Frost says that environments for play may differ radically without sacrificing play value.

It is therefore critical to view the construction of a children’s environment as a play environment and that the environment (indoors and outdoors) must allow for play that is active, creative and social, engaging the body in fine and gross motor development and the mind in negotiation, problem solving, imagination and flexibility. These are the qualities that Child Care Licensing will look for when we assess plans for a child care environment.

JUMPING INTO THE SANDBOX TOGETHER

Designing environments for children is a complex task. To succeed, children’s environments must foster and promote children’s safety while allowing them to engage in multiple activities. To achieve such an environment, designers and builders must understand the nature of child care, children’s developmental needs, the needs of child care staff and families and have a solid working knowledge of the local bylaws, building codes and relevant provincial legislation.

Community Care Facilities Licensing recommends the concept of “jumping into the sandbox together”. That is, before the design stage begins there is an initial coming together of as many individuals as possible to provide input from their specific area of expertise. It is also helpful for the group to meet at different points during the planning stage to provide comments on specific areas of the plan. These “experts” might include:

- An architect
- A designer
- An experienced child care administrator or provider
- A parent with children attending a child care program
- A representative from Community Care Facilities Licensing
- A representative from the City Social Planning Department
- A representative from local child care support agencies
- The child care operator if known

Please note that this is not an exhaustive list and you are encouraged to invite other individuals in the community to join in the initial planning. Jumping into the sandbox together is a proven way to avoid design problems.

DEFINITIONS

For the purposes of this resource, the following definitions apply:

- Community Care and Assisted Living Act <http://www.health.gov.bc.ca/ccf/legislation/>
The overarching Act that encompasses the Child Care Licensing Regulation
- Child Care Licensing Regulation <http://www.health.gov.bc.ca/ccf/legislation/>
The regulation describes requirements for establishing child care facilities and for the continued operation of licensed child care facilities.
- Community Care Facilities Licensing Program
Located within each Health Service Delivery Area (HSDA), the Community Care Facilities Licensing Program is responsible for the licensing and monitoring of child and residential licensed facilities.
- Facility
A building or portion of a building in which licensed care is provided as well as the outdoor area dedicated to the program.
- Program
A program consists of daily indoor and outdoor activities that are planned for children and must meet children's developmental needs as described in Schedule G of the Child Care Licensing Regulation.
- Developmentally Appropriate
This term means that the space, activities, equipment and materials are appropriate for the age and developmental level of the children. Developmentally appropriate may also apply to a program of activities for children – indicating that children can participate in an activity or task that is appropriate for their developmental level.
- Adults
For the purpose of this resource adults include the individuals who work or volunteer in a facility including early childhood educators, assistants, responsible adults, administrative, clerical and housekeeping staff.
- Group Child Care
Group child care is care provided on a full time basis (up to 13 hours per day) and includes care for infants, toddlers, 3 –5 year olds, and school age children.
- Family Child Care
Care is provided by the Licensee in the licensee's home for children birth to 12 years of age. The licensee must have completed a course or combination of courses of at least 20 hours to be considered a "responsible adult." The maximum group size is 7
- In-Home Multi Age Child Care
Care is provided by the Licensee in the licensee's home for children birth to 12 years of age. The licensee must be a qualified Early Childhood Educator and the maximum group size is 8.
- Multi Age Child Care
Care that is provided in designated space for children birth to 12 years of age. One Early Childhood Educator is required for every group of 8 children.
- Preschool
A program for children 30 months to school age that typically operates September through June offering activities for no more than 4 hours per day for each child.
- School Age Care
Care for children from Kindergarten – 12 years of age that typically operates before and after school hours and for full days during school vacations.

- Occasional Child Care

Care is provided to children 18 months to 5 years on an occasional or short-term basis.

- Child Minding

Care is provided to children birth-12 years of age. The Licensee has a contract to provide child care for parents who are attending language/settlement classes.

- Infant

A child under the age of 18 months

- Toddler

A child between 18 and 36 months

- Preschooler

A child between 3 and 5 years of age

- School Age Child

A child between 5 – 12 years of age

SECTION TWO

THE FEASIBILITY OF YOUR CHILD CARE PLAN

Whether a new building is planned or an existing space is to be renovated it is important to develop a short and long range business plan. A business plan will help to highlight the projected financial needs of the project and to demonstrate the financial viability of the program.

This document does not provide information on how to determine the financial sustainability of a child care plan. However as this is such an important step in the process the following questions are to assist in developing a business plan.

DETERMINATION OF THE COMMUNITY NEED

- What is the long-term need (at least 5 years) for child care in the immediate and surrounding areas in which the proposed child care will be located?

DETERMINATION OF THE TYPE OF CHILD CARE TO OFFER

- What other child care programs operate in the immediate and surrounding areas?
- Are there gaps in the supply of child care by type and location of services?
- What is the possibility of hiring qualified, experienced staff for the type of proposed care?

THE LOCATION

- Is the location on or close to an arterial route in or out of the City?
- Is the location accessible by public transit?
- Is the location within a residential area?
- Is the location close to places of employment?
- Are there other community services/programs/schools located in the area? School age care should be located close to an elementary school and have a suitable outdoor play area.
- What positive/negative impacts will these services have on your plan?
- What are the environmental issues that could impact positively and negatively on the area? For example: industrial noises/air quality; traffic noise and/or flow; aircraft noise.
- What future changes to the area are anticipated by the city and how might these changes impact on a child care facility?
- Is there sufficient contiguous outdoor space to accommodate the maximum number of children?

FINANCIAL PLAN

- What will your overall building (include site preparation and if necessary re-zoning costs) or renovation costs be?
- What will it cost to fully equip the facility (indoors/outdoors)?
- What are the projected expenses and revenue for the first six to twelve months?
- What other costs are anticipated during the first six to twelve months?
- Long term, what are the expenses/revenue expected over the next five years?

SELECTING A LOCATION OR SITE

LOCATION

As noted earlier, children may spend many hours attending a child care program. It is therefore important to carefully consider the location of a child care facility and its surrounding environments. Studies indicate that ideally located facilities should be in areas where there is little exposure to industrial and/or traffic noise and emissions.

Security and safety are important considerations when planning the location of a child care facility. To reduce break/enter or vandalism, it is recommended that the entire facility and especially its entries should be visible and adjacent to actively used public circulation routes. Entries and routes to the centre should be well lit with the main entry immediately recognizable as a child care facility. Effective signage should denote the facility's use and be visible at all times of the day and night.

HEALTH & WELL BEING

Adjacent Uses - Where possible, it is recommended that child care facilities are in close proximity to other community facilities such as community centres, schools, libraries and parks. Child care should be located in proximity to compatible, safe and environmentally appropriate land uses and when possible areas with high noise levels (air and vehicle traffic) should be avoided.

Residential and/or community use space are ideal. However child care can be successfully located in mixed-use and commercial areas if care is taken with the design, noise mitigation and traffic flow. Sites that include commercial loading, service areas, large parking lots, major mechanical plants, building exhaust fans, electrical substations, major above-grade electrical lines, transformers or other noisy, noxious or dangerous issues are not suitable.

Relationship to Grade – When ever child care facilities are proposed for an above grade level, concerns about emergency evacuation and safety, access to the outdoor play area and the security of the outdoor play area must be addressed.

Relationship of Indoors and Outdoors Spaces - Outdoor space should be at the same level as the indoor space (plus or minus .5m) and contiguous with it. The two areas should be planned together and include ramps for wheeled equipment when the indoor and outdoor space are not at the same level. Indoor and outdoor spaces should allow for inter-related indoor and outdoor activities and free movement by children. See Section 9 for further information.

ENVIRONMENTAL CONSIDERATIONS

Heating, Ventilation and Air Conditioning – It is recommended that child care areas have their own systems for heating, ventilation and air conditioning. This will allow staff to regulate the air temperature according to the children's needs. Ensure all baseboard heaters and radiators be shielded to prevent child access to sharp edges and /or hot surfaces.

Ventilation should be planned for children's washroom, diaper changing areas, sleeping areas and kitchen. Proper ventilation of these areas will reduce children's exposure to air borne illness and diseases. Ceiling fans, window coverings and window placement should be considered as ways to increase ventilation and air flow. Avoid locating air intakes near source of fumes (eg. laneways, building exhaust systems) or dust eg. (ducting low to the ground)

Natural Lighting - The availability of natural light is important to the creation of a suitable child care space. Exterior window area should be a minimum of 10 percent of the wall area of the room. Care should be taken in selecting and installing window coverings to create a cooling affect during summer months and to provide additional insulation during the winter months.

Noise - Many studies on the affects of noise indicate that young children should not be subjected to constant loud noise. These studies show that noise poses a serious threat to children's hearing, health, learning and behaviour. It is critical that the design of a child care facility includes as many ways as possible to reduce noise. Care must be taken to include noise-absorbing surfaces on floors, ceilings and walls. Studies have shown that where ceiling heights are in excess of 14 feet, noise levels were at a dangerous level. It is recommended that in rooms where the ceiling height is above 12 feet, that materials for muffling and/or absorbing sound be installed on wall surfaces and where possible on ceilings.

Reference: "Noise & Its Effect On Children's Learning" League for the Hard of Hearing, Noise Centre of the League, February 1, 2001

SAFETY AND SECURITY

Parking – Please be aware of the City parking requirements for child care facilities.

Pedestrian Access - Access to public transportation may be an important consideration. Pedestrian access should be safe, well lit, allow for strollers and bikes to be wheeled safely and it must be wheelchair accessible.

Fences and Boundaries – The outdoor space must be enclosed in a manner that is suitable for the ages and development of the children and will ensure that children are free from harm. Gates must be self closing. Rooftop or play spaces above grade must provide perimeter safety rails and fences with vision panels to discourage climbing. Roof top perimeter fences are required to be 8 feet high.

Seismic Safety - Seismic safety must guide the installation of fixed equipment such as cupboards and shelving. Free standing units, media and other equipment must be secured to stud bearing walls. Hot water tanks must be strapped.

Shared Facility - If child care is to be located in a building that contains other businesses or services care must be taken to ensure that access into the child care is free of hazards and for the sole purpose of use by the children, families and staff of the facility.

SECTION FOUR

INTERIOR DESIGN

ABOUT DESIGN

Designing spaces that serve the needs of children and adults is a complex task and requires specialized and unique skills. Well designed child care spaces must serve the needs of growing children who have different levels of ability as well as the needs of staff and other adults who will also use the space.

Research indicates that centre design is one of the major factors that influence the quality of care offered to children. The physical environment where young children spend time profoundly affects their behaviour and development. Adults who work in child care also need spaces in which to work effectively and efficiently.

WHO USES THE CHILD CARE SPACE

Children spend a great part of their day in the facility. Child Care Licensing Regulation describes the minimum amount of child care space that is required for each category of care. The amount of space described in Regulation refers to the space that is used for activities and does not include storage, washrooms, nap rooms, staff rooms, offices, kitchens, hallways, cloakrooms or janitorial storage.

Families dropping off and picking up children need space to assist children in dressing. This means a place to sit down while assisting their children. Typically this area should be located near or in the cubby area and be large enough to accommodate infant car seats or strollers for the short time parents are in the facility. Wall space should be available for bulletin boards and a desk type area set up for daily sign in/out also provided.

Child Care and Support Staff often spend 10 – 12 hours a day in the child care facility. Care must be taken to ensure that environmental design minimizes the risk of injury to staff. For example, the location and style of outdoor storage can reduce the risk of injury if strollers, bikes or wagons can be reached easily and wheeled onto the riding area. Likewise the design and location of a diaper change area can greatly reduce the risk of back injuries.

Staff also need:

- Secure storage for personal items
- Storage for outdoor clothing.
- Private washroom.
- A comfortable space for staff meetings and breaks.
- Adequate shelving and storage for resource materials.
- Bicycle racks and/or parking.
- Secure office
- Easy access to cleaning materials

DESIGN CONSIDERATIONS FOR SPECIFIC AREAS WITHIN A CHILD CARE FACILITY

Common or Shared Areas (eg. entrances or hallways) The number of individuals that are expected to use the space should determine the size of each common or shared area. For example a staff of three would not require the same space for non-teaching duties as a staff of ten or more. As well, a facility with one common entry area will require enough space for groups of adults and children to gather and then move easily into specific rooms.

Entrance into the facility requires that security is provided while also providing safe access into and from the facility. Either classrooms or administration space should provide an unrestricted view of the entrance area with the main entry door fitted with some type of security system. Space in this area should also be allocated for communication media such as bulletin boards.

If children's cubbies will be located in the entrance area, then space for children to sit and remove and/or put on clothing should be allocated.

Kitchens may be used by more than one program within a facility. Therefore the kitchen should be located between individual program areas and easily accessible to staff. Parents may need to place lunches or other food in the kitchen so parental access must be considered.

If food will be prepared and served daily to eight or more children a health permit is required. It is recommended that an initial consultation take place with an Environmental Health Inspector before a kitchen design is completed.

Kitchens must have:

- Adequate storage for dishes/cutlery for all of the individuals attending as well as pots and other cooking equipment and food serving carts.
- Adequate and sufficient storage for food products.
- Secure storage for products for cleaning and sanitizing.
- A dishwasher, or two compartment sink, (4 step method) stove with exterior venting, refrigerator with a thermometer. Depending on the number of individuals enrolled in the facility more than one appliance may be necessary. eg: individual refrigerators or stoves/microwave, ovens/bottle warmers for facilities offering infant/toddler/preschool programs.
- Sufficient counter space for food preparation. Overhead counters should not obstruct views of the activity areas.
- Wall space located next to a hand-washing sink for paper towel and soap dispensers.
- Contained garbage and recycling bins.
- Flooring that is durable and easily washable.
- Walls and ceiling surfaces to be non-absorbent, smooth, crack-free and easily washable

Laundry if the facility offers infant or toddler care, it is helpful to have the laundry (washer/dryer/laundry sink) located in close proximity to a diaper changing area. For facilities serving multi-ages it is also possible to create a shared laundry area. Provide an area for folding clothes and a separate storage area for both soiled and clean laundry.

Janitorial space must be lockable and large enough to house cleaning supplies, equipment and a floor janitorial sink.

Storage must be located in convenient areas in order that staff can retrieve equipment and materials quickly and easily. Storage areas should be ventilated, incorporate flexible shelving, and have a variety of options for hanging supplies. Common indoor storage areas may include but not limited to:

- Art supplies
- Posters
- Washroom items
- Sleeping mats & bedding
- Adaptive Equipment
- Toys in a variety of sizes & types
- Paper
- Kitchen supplies & dishes
- Extra clothing for children
- Step stools

Accessible Washroom with one toilet and sink suitable for persons with disabilities available in all facilities.

Sleeping Area should be designed in a way that will allow staff to see and hear children during the nap period. Sight lines may be achieved by the use of small windows placed on the interior wall or door of the sleep room. Consideration should also be given to the use of baby monitors that can be used while children are in the nap area. Windows that provide natural light into the nap room should have coverings that will allow the room to be darkened. Nap rooms must also be designed to ensure adequate soundproofing, ventilation, heat and air flow.

The sleeping area for children over 36 months children should be large enough to allow room for staff to support each child if necessary in their nap time routine. The separate sleeping area for children under 36 months must be located away from any activity area and be large enough to hold 12 approved cribs/mats. There must also be adequate space to allow staff to access children who are in cribs. Please refer to Sections 5 and 6 and the Design Resource for Licensing of Group Child Care 30 months to school age for further information on nap room requirements.

SECTION FIVE

GROUP CHILD CARE (Under 36 Months)

The Child Care Licensing Regulation states:

- The maximum group size of children under the age of 36 months is 12.
- A minimum of 3.7m² of floor area per child is required excluding hallways, built in storage, bathrooms and fixed appliances.
- A minimum of 6m² of outdoor play area per child is required.
- A sleeping area that is not located in the activity area.
- One toilet and one wash basin for every 10 children or fewer. Group child care facilities must have the washrooms located on the same floor as the community care facility
- A diaper changing area or table conveniently located near a wash basin. The diaper change area must be located away from a food preparation area and have adequate storage room for containers for soiled clothing.

See Appendix I and II for net area recommendations for children under 36 months of age.

COMMON DESIGN CONSIDERATIONS FOR CHILDREN UNDER 36 MONTHS

STORAGE

- Clothing & Diapers – each child will require space to store at least two sets of clothing, diapers (enough for one week), creams, lotions, washcloths and blankets. Diapers, creams and lotion storage should be located on shelves or cupboards close to the diaper change area. Extra clothing, blankets and toys may be located either in the main playroom or in a cupboard located in the sleeping area.
- Food – Food storage must include refrigerators adequate to hold food for the number of children in care. They must be in good working order and at a temperature of 4 degrees Celsius or below. (Fridge thermometer is required) Cupboard space is also necessary to store dry foods, and other items that do not require refrigeration.
- Strollers – Two areas for the storage of these items are necessary. One area that can be accessed by families for their infant car seats or strollers. This space should be located close to the main entrance into the facility and be large enough to provide safe storage of the equipment. The second area is for the storage of equipment owned by the centre. It is critical that this storage be located close to the exit used by staff when taking the children outside. Facilities often purchase and use double or triple strollers that require storage be spacious. Measure the strollers to ensure the space is large enough. If elevators are being used ensure they are large enough to accommodate the double or triple strollers.
- Children's Personal Items – Families will bring the daily food, beverages and other items for their children in large "diaper" bags. Space for storage of these items should be located close to the entrance of the facility and be large enough to hold one bag per child.
- Sleeping Mats & Bedding - Toddlers will sleep on mats that need to be stored. Infants will require approved cribs. Additional individual storage for children's bedding is required.

FOYER

Many programs for infants ask that street shoes be taken off or covered before a person enters the activity room. It is recommended that a foyer area be designed outside the infant activity room that is large enough to allow one or two adults to sit and remove street shoes. A shelf or other storage should be provided for street shoes or for shoe covers.

MAIN ACTIVITY AREA

This area is designed for a variety of activities. The area must be safe, bright, and aesthetically pleasing. Spaces for crawling, touching, climbing and early walking should be provided. Staff must have a full view of the activity area with no visual barriers. Design consideration for the activity area should include:

- Soft-surfaced level changes. The level changes should be slight, with a maximum of 3 – 4 inches between levels.
- Nests and crawl spaces constructed with low and moveable soft or padded barriers.
- Low padded grab bars at 1.5 ft above floor level to help infants pull themselves up to a standing position.
- Wall coverings that allow for mounting safety mirrors or children's art work. Framed sheets of Plexiglas mounted at the children's eye level and open at the top provides an excellent way of displaying colorful pictures while protecting them from being torn by the children.
- An art sink
- Flooring – a section of the activity area covered with a durable washable carpet with good under padding and a second section covered with heavy wear linoleum or vinyl tile. The entryway into the infant or toddler room should be covered with a washable linoleum or vinyl tile.
- Windows placed at children's eye level allows for views to the outside.

Toddlers

Care must be taken to include adequate space for appropriately sized tables and chairs as well as room for exploratory activities such as sand and/or water play. Quiet areas for reading and story time, music and listening activities are necessary. Toddlers are developing their large muscle coordination and require space for tumbling, climbing and dancing.

NAP ROOM

Infants

A nap room that is separate from active play areas is required. Nap rooms must be large enough to house twelve approved cribs/mats, storage/shelving for blankets, be well ventilated and where possible have natural lighting. Allow at least 2 ft. between each crib/mat, except where adjacent to a wall or partition. The design and location for sleep space should ensure that the rooms are free from noise and it is highly recommended that visual and acoustical accessibility to the nap rooms be provided for supervision purposes. (baby monitor) Infants do not generally sleep at the same time; therefore the nap room should be for the sole purpose of providing a quiet sleep area.

Toddlers

The nap room for toddlers should provide most of those items noted for infants however toddlers may use sleeping mats.

EATING & TABLE AREA

Infants

An area in the classroom should be available for adults to sit with a child for bottle feeding. For infants able to sit and take food from a spoon or beginning to feed themselves, low tables/chairs should be placed on a solid floor and be located close to a food preparation/storage area.

Toddlers

Toddlers generally are able to feed themselves and do well at tables and chairs. Adult supervision is usually required so space for eating should also accommodate room for one adult at each lunch table.

SECTION SIX

GROUP CHILD CARE (30 Months to School age)

The Child Care Licensing Regulation states:

- The maximum group size is 25.
- A minimum of 3.7m² of floor area per child is required, excluding hallways, built in storage, bathrooms and fixed appliances.
- A minimum of 6m² of outdoor play area per child is required.
- One toilet and one washbasin for every 10 children or fewer.
- A sturdy surface for changing diapers, located outside the food preparation area next to a covered container for soiled clothing, and a wash basin

See Appendix III for net area recommendations for facilities designed for children 30 months to school age.

COMMON DESIGN CONSIDERATIONS FOR GROUP CHILD CARE (30 MONTHS TO SCHOOL AGE)

STORAGE

In addition to the general storage requirements noted earlier, design considerations should include some storage that can be accessed by small children. For example, accessible space that would allow children to place their take home art projects would encourage children to help keep their centre tidy. In addition, children need space to store extra clothing – this space should accommodate warm and cold weather clothing.

Storage for children's sleeping mats is an important consideration and should be provided within the sleeping area. Mat storage can be achieved by a variety of methods however, a built-in closet with individual shelves for each mat or a closet large enough to hold a roll-out mat storage dolly are recommended as being ergonomically appropriate. Additional individual storage for children's bedding is required.

CUBBY AREA

Each child must have a space for hanging coats, holding shoes/boots, lunch bags or other personal affects. Cubbies should be built to allow for ventilation in the shoe area.

The location of the cubby area is critical. This is the area where families gather and help children to dress. The area needs to be large enough to allow for several adults and children to congregate and must also provide seating for children when they are changing their foot wear. The cubby area should be placed as close to an exit as possible. However the exit chosen must be both the doorway through which families come into the centre as well as the main access for children to the outdoor play yard.

MAIN ACTIIVITY AREAS

The play areas must be designed so that a wide variety of activities can take place – often at the same time. For example, children need to be able to engage in social interactions and an area set-up to replicate a home works very well. This area can include small kitchen like equipment (sink/stove/table and chairs, dolls and buggies.) Likewise an area for working with small toys such as Lego or puzzles requires tables and chairs set close to shelves that hold a variety of table top toys is necessary. Open floor space is necessary for group activities, block play and other play.

The play area should also be easily adaptable. For example, play areas that can be sectioned to allow for open space for group games, dance or other large muscle activities and then rebuilt for a science or act activity work very well.

NAP ROOM

While not all preschool age children sleep, a sleeping area that can be separated from the main play areas is highly recommended. The sleep area may serve as one of the play areas during the day however the design or layout should allow for children to rest in a space where they are not subject to noise and bright light. If any child is younger than 36 months of age you are required to provide a separate sleeping area located away from any activity area.

EATING & TABLE AREA

It is recommended that an area within the main play space be used for eating. Children will be served two snacks and one lunch during the day. The tables and chairs should be located close to the food preparation/ kitchen area and as far away from the bathroom areas as possible. Flooring in the eating area should be durable and washable.

GROUP CHILD CARE SCHOOL AGE

The Child Care Licensing Regulation states:

- The maximum group size where any child is in kindergarten or grade 1 is 24
- Where children are in grade 2 or higher the maximum group size is 30
- One toilet and washbasin for every 10 children or fewer.
- A minimum of 3.7m² of indoor space per child is required excluding hallways, built in storage areas, bathrooms, fixed appliances.
- A minimum of 6m² of outdoor space per child is required.

COMMON DESIGN CONSIDERATIONS FOR SCHOOL AGE CHILDREN

School age facilities are often located in space in public schools classrooms or other community space. This shared space poses challenges that cannot be addressed in this resource and must be dealt with between the licensee and the landlord. Licensing Officers will assist and will provide resources specific to these shared spaces.

The age range of the children using school age care places unique demands on the design space. Some key design considerations for school age space are:

- Flexible use of space to allow for a variety of development stages for children between 5 – 12 years.
- Enough space to accommodate a wide variety of activities including social interactive games, sports and mixed media, arts, as well as space for quiet activities such as reading or working on school projects.
- Access for children to food preparation/storage areas.
- Food service that is hygienic but allows children to access food and beverages when they are hungry.
- Immediate access to the outdoor area and storage for equipment such as hockey gear, soccer/foot/base balls and bats.
- Reading areas with large comfortable chairs or sofas.
- Storage for large backpacks.

ADULT SPACE WITHIN A CHILD CARE FACILITY

Storage

Adults require secure space to store personal affects as well as to hang coats. Additional space needs to be allocated for other outdoor clothing such as rain boots and umbrellas.

Staff Room / Washroom

Teachers and other adults working in the facility need to have allocated space for meal and rest breaks. A kitchen sink, shelving, a telephone, and microwave oven are important items to have in a staff room. The staff washroom should be centrally located and have shelving for personal affects and toiletries.

Office

Typically office space should be provided for a variety of purposes including:

- Secure storage of records for children and staff.
- Secure storage of administrative records.
- Interior windows to provide maximum visibility of the activity space
- Working space for administrative tasks such as report writing, bookkeeping.
- Space for a photocopier, laminator, computer, telephone and/or fax machine.
- Private meetings with staff, families and other individuals.

If a director or administrator will be employed, the office space for this employee should be located next to the entrance or reception area. This placement allows the administrator to monitor the entrance to the facility and to connect with staff and families on a daily basis. The office should be large enough to accommodate equipment for administrative tasks as well as providing a meeting area for four – six individuals.

Meeting space

It is important to consider space to hold staff/family meetings. From time to time, the families of children attending the facility will come together with staff for meetings and/or social occasions. If child care space is to be used for this purpose, then it is recommended that adult sized chairs be provided and safe storage allocated for the chairs.

APPENDIX I

NET AREA RECOMMENDATIONS FOR GROUP CHILD CARE UNDER 36 MONTHS (12 CHILDREN MAXIMUM)

Child Care Licensing Regulation requires a minimum of 3.7m² per child of indoor space and 6m² per child of outdoor space. Therefore, 12 children must have 44.4m² of indoors and 72m² of outdoor space that is dedicated to the children's activities and does not include sleep rooms or support areas. This chart reflects the minimum requirements and therefore it is recommended that where ever possible additional space is added.

Indoor Space	Activities	Infants	Toddlers
Main Activity Area	Open play area (main activity room)	15	15
	Climbing, crawling, interactive	20	20
	Quiet area, reading, cozy corner	9.4	9.4
Total Activity Area		44.4m	44.4m
Sleep Areas (required for infant/toddler)	2 rooms at 13m ² or 1 room	26 ² meters	26 ² meters
Total Space		71	71
Support Areas	Cubby area	8	8
	Kitchen	9	9
	Washroom & Diapering	9	9
	Storage	7.5	7.5
	Administration (office)	8.5	8.5
	Wheelchair accessible washroom*	4.5	4.5
	Laundry / Janitorial	4	4
Total Support Area		50.5m	50.5m
Net Indoor Area		120.9	120.9
Outdoor Space		Infants	Toddlers
Covered area	Variety of activities for infants that include soft surfaces.	24m ²	24m ²
Open area	Variety of activities including grass, climbing & resilient surfacing, sand area, riding area and other large muscle activities for toddlers	48m ²	48m ²
Total required outdoor space		72m²	72m²
Out door Storage	Shed: Strollers, buggies etc.	30m ²	30m ²
Net Outdoor Space		102m²	102m²

NOTE:

- A shared kitchen is possible and should be at least 12 square meters.
- Administration space, wheelchair, washroom, kitchen and laundry/janitorial spaces in a multi-age or multi-purpose facility may be common space shared by the programs. If this is the case the space requirements for a specific program should be reduced accordingly.

*BC Building Code requirement

APPENDIX II

NET AREA RECOMMENDATIONS FOR GROUP CHILD CARE (30 months to school age) (Maximum group size 25)

Child Care Licensing Regulation requires a minimum of 3.7m² of indoor space per child and 6m² of outdoor space per child. Therefore, 25 children must have 92.5m² of indoor space and 150m² of outdoor space that is dedicated to the children's activities and does not include sleep rooms or support areas. This chart reflects the minimum requirements and therefore it is recommended that where ever possible additional space is added.

Indoor Space	Square Meters
Activity Areas	
Art, water play, eating	20
Other activities	40.5
Quiet area	14
Large Motor/Nap Room	18
Total Required Activity Area	92.5
Support Areas	
Children's washroom	11
Wheelchair accessible washroom*	4.5
Cubby area	12
Kitchen & storage area	8.5
Storage room	8.5
Storage for nap room	4
Administration (office)	8.5
Laundry/Janitorial	4
Total Support Area	61m²
Net Indoor Area	180m²
Outdoor Space	Square Meters
Outdoor Space	
Covered	39m ²
Open	111m ²
Total Required Outdoor Space	150m²
Outdoor Storage	8
Net Outdoor Area	158m²

NOTE:

- A shared kitchen is possible and should be at least 12 square meters.
- Administration space, kitchen, wheelchair accessible washroom and laundry/janitorial spaces in a multi-age or multi-purpose facility may be common space shared by the programs. If this is the case the space requirements for a specific program should be reduced accordingly.

*BC Building Code requirement

APPENDIX III

NET AREA RECOMMENDATIONS FOR PRESCHOOL PROGRAMS (GROUP SIZE 20)

Child Care Licensing Regulation requires a minimum of 3.7m² of indoor space per child and 6m² of outdoor space per child. Therefore, 20 children must have 74m² of indoor space and 120m² of outdoor space that is dedicated to the children's activities and does not include support areas. This chart reflects the minimum requirements and therefore it is recommended that where ever possible additional space is added.

Indoor Space	Square Meters
Activity Areas	
Art, water play, eating	19.5
Other activities	45.5
Quiet area / large motor	9
Net Activity Area	74m²
Support Areas	
Cubby area	10
Kitchen or food preparation & storage area	8.5
Children's washroom	9
Storage room	8
Nap room storage	4
Administration	8.5
Wheelchair accessible washroom*	4.5
Total Support Area	52.5m
Net Indoor Area	126.5m
Outdoor Space	
Covered	18m ²
Open	102m ²
Total Required Outdoor Area	120m²
Outdoor Storage	8

NOTE:

- If there is no provision for a shared kitchen within the facility add 10m² for food preparation and storage.
- Administration, wheelchair accessible adult washroom and laundry/janitorial spaces in a multipurpose facility may be common space shared by the programs. If this is the case the space requirements for a specific program should be reduced accordingly.

*BC Building Code requirement

ROOF TOP OUTDOOR PLAY AREA

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 constraints and opportunities include, but are not limited to:

CONSTRAINTS

- Weight
- Wind and anchorage
- Added construction costs
- More severe climate
- Safety
- Increased Technical design challenge

OPPORTUNITIES

- Better privacy and security
- Good Sun access
- Separation from traffic and noise
- Potential for greater area of tight sites

WEIGHT

- Heavy items are located over beams and columns
- Light weight soil, equipment and surfacing (e.g. rubber mat impact protection under play equipment) are used where possible

CLIMATE

- Sun access is available for at least 3 hours a day in all seasons
- Play yards are not in a north shaded location
- At least 1/3 of the play area is provided with summer shading.
- Non glare surfacing is used on highly exposed sun areas.

WIND AND ANCHORAGE

- Location is protected from exaggerated wind effects
- Wind shields are provided for example: fences, screens, and deflectors, as required up to 3 m. high.
- Trees and structures are anchored. Provide anchorage for all planting and equipment. It is better to plan and prepare for anchorage points during construction. Design anchorage to retain the integrity of roof membranes.
- Awnings are designed to resist wind
- Smaller equipment is used to reduce wind effects

SAFETY

- Higher equipment is located at the centre of the deck.
- All equipment is anchored appropriately.
- Surfaces are non slip.
- Secure perimeter fencing is provided to a minimum of 8 feet from last foothold.
- Fencing has a top overhang to prevent climbing.
- Vision panels are provided in the perimeter safety rails or fences to discourage climbing for views.
- Play yard is secure and has controlled access.
- Resilient surfacing is used in all potential fall zones per requirements.

CONSTRUCTION AND TECHNICAL DESIGN

- Playground is located away from noise and fumes which may be caused by roof top mechanical equipment and building exhaust systems.
- Skylights, roof vents and mechanical equipment are not permitted in play area.
- Roof is protected against leakage.
- Play yard has adequate drainage. Clean-outs should be accessible and have catch basins. A 2 percent slope to drain all hard surfaces and a greater slope for other surfaces is required.
- Ensure rooftop play yard is designed to permit substantial areas of landscaping to be supported. Provide at least one grassed area of about 30 meters. The use of wind tolerant and draught resistant landscaping planting and plant boxes is recommended.
- An elevator able to accommodate replacement sand etc. and yard maintenance equipment.
- Ensure unpleasant scale effects are reduced by the use of overhead structures such as arbors, trellis or planting against adjacent high building faces to soften the environment.

DESIGN CONSIDERATIONS CHECKLIST**GENERAL CONSIDERATIONS INDOORS:****Natural Light**

- all primary indoor activity spaces have a direct source of natural light equal to a minimum of 10% of the wall space

Windows

- child-accessible opening windows must be limited to a maximum opening of 4 in. for low-level windows, (i.e. sill less than 18 in. above floor) use tempered or laminated glass where impact with a window may occur
- if the window opens into a walkway or play area, provide either a sliding window or restrict window swing out to avoid creating a safety hazard outside
- window covering cords must be out of the reach of children
- all opening windows should be screened
- exterior windows should be at a height that children can see out of

Lighting

- provide a minimum lighting level of:
 - 30 ft. candles (320 lux) in nap rooms, quiet rooms, and infant activity room
 - 40 ft. candles (420 lux) in the 3-5, toddler, and school age activity rooms
 - 50 ft. candles (540 lux) in the kitchen and washrooms
- each room has its own light switch/controls
- provide two banks of lights on separate switches/controls in activity rooms
- provide dimmers in quiet rooms and gross motor/nap rooms
- diaper-changing areas must have glare shielding for overhead fixtures
- all fixtures to be properly shielded or use shatterproof bulbs

Floor Covering

- floor coverings in kitchens, washrooms, laundry, janitorial closets, and art areas must be smooth, non-absorbent, and washable
- other activity areas should have smooth, non-absorbent, and washable flooring
- nap rooms and quiet rooms should be carpeted
- all edges and base boards must be sealed

Heat

- where electric or hot water heat is being used, provide an individual thermostat in each activity room and sleep/gross motor room
- ensure the heating system does not limit the functional use of the space
- all baseboard heaters and radiators must be shielded to prevent child access to sharp edges and/or to hot surfaces

Electrical Outlets

- child-accessible electrical outlets must be childproof

Ventilation

- ensure all rooms are adequately ventilated to remove odours, especially from diapering, laundry, maintenance, and washroom areas
- avoid locating air intakes near sources of fumes (e.g. laneways) or dust (e.g. ducting low to the ground)

Counters, Ledges, Shelves and Cabinets

- round off all corners and edges
- all tall cabinets (> 4 ft.) must be secured to prevent tipping

Telephone Jacks

- provide a minimum of one jack in each activity room, kitchen, and staff office

Doors/gates

- provide piano hinges on all gates
- ensure doors/gates can be secured in the open position
- provide a locking mechanism on all sliding doors in both the open and closed position (to prevent fingers/toes being pinched)

ACTIVITY AREAS:

Activity Rooms

- provide at adult height, a stainless steel art/clean up sink with a riser tap
- provide a minimum of 3 ft. of counter space adjacent to the sink, with cupboards above and below
- a sediment trap is recommended

Gross Motor/Sleep Rooms (3-5 years of age and Toddlers)

- provide enclosed area for mat storage sufficient for licensed capacity (e.g. a sliding door cabinet)
- mats/cots may be stacked for storage
- provide individual storage for blankets and stuffies
- provide storage for extra clean sheets and blankets
- floor area must allow sufficient space between mats so that staff can move/sit comfortably between mats

Infant/Toddler Sleep Rooms

- provide two sleep rooms for infants to accommodate a total of twelve cribs/mats
- allow 2 ft. between each crib/mat, except where adjacent to a wall or partition
- provide storage for extra clean sheets and blankets
- provide a baby monitor

SUPPORT AREAS:

Preschool Washrooms (for 25 children – 3-5 years of age)

- provide a diaper and/or soiled clothing change area with readily access water
- provide three toilets sealed to the floor
- provide closed front toilet seats
- provide privacy for one toilet (e.g. using a low partition and ½ door)
- provide three hand basins, a maximum 2 ft. high with the bowl placed as close to the front of the vanity as possible and with lever faucets

- hand sink's maximum hot water temperature must not exceed 49°C (120°F)
- provide mirrors over the hand basins
- provide back splash at all sinks
- provide location for child-accessible soap dispensers
- provide two paper towel dispensers at child height (ensure location and/or type does not pose risk of head injury) or provide alternate child-accessible storage for paper or cloth towels
- provide a toilet roll holder adjacent to each toilet at child height
- provide shelves at adult height for storage of toothbrushes and other supplies (toothbrushes must not touch each other)

NOTE: If adult-sized toilets are used the bowl should be round and a suitable child-sized seat insert available. A 6 in. step should be provided in front of the toilet.

Infant/Toddler Washrooms (for 12 children – under 3 years of age)

- provide two 10 in. toilets sealed to the floor
- provide closed front toilet seats
- provide a toilet roll holder adjacent to each toilet placed at child height
- provide two hand basins, a maximum of 18 in. high with the bowl placed as close to the front of the vanity as possible and with lever faucets
- provide location for child-accessible soap dispensers
- hand sink's maximum hot water temperature must not exceed 49°C (120°F)
- provide 1 change counter with cove tops, 3 ft. (length) x 2 ft. (width) x 3 ft. (height)

NOTE: If only infants are being cared for, provide 2 change counters.

- provide one stainless steel sink
- provide 1 ft. deep open shelves 2 ft. above the change counters
- provide a rack above the sink for storage of sanitizers, etc.
- provide a mirror above the hand basin
- provide a back splash at all sinks
- provide a full length, high quality mirror behind the change counter
- provide a paper towel dispenser in the vicinity of the change sink (ensure the location does not pose a risk of injuring a child while being changed or limit the use of the change counter)
- provide enough open space for two potties
- provide shelves for storage of toothbrushes and other supplies (toothbrushes must not touch each other)
- provide steps for children to access the change table
- provide space for diaper buckets

Staff Washrooms

- provide a change counter, wide sink, and storage shelf if no other diaper change counter is provided in the centre
- provide a towel and soap dispenser
- provide a back splash at the sink

Staff Offices

- provide storage shelves/cupboards
- provide space for a lockable filing cabinet
- place interior windows to ensure maximum visibility of activity space

Staff Rooms

- provide individual storage for staff belongings

Janitorial Closets (may be combined with the laundry area)

- ensure adequate space to store mops, brooms, ladder, cleaning chemicals, and personal safety equipment
- place janitorial sink at floor level; equip the sink with an approved backflow preventer valve
- provide storage shelves
- provide an inside releasing-locking mechanism for securing the door

Laundry Areas

- provide a washer and dryer durable enough for the number of children enrolled and the volume of laundry
- provide an area for folding clothes
- provide separate storage areas for both soiled and clean laundry
- recommend two washers/dryers when capacity exceeds 37 children

Cubbies

- provide a sufficient number for the licensed capacity and an extra 20% for part-time children

Storage

- provide adequate storage space for supplies and equipment, both inside and outside
- provide storage for centre strollers and parent strollers, car seats, etc.

Kitchen

- provide at least 100 sq. ft. (9.3 sq. m.) of floor space. When the capacity exceeds 25 children and a kitchen is to be shared, provide an additional 3 sq. ft. per licensed space.
- walls and ceiling surfaces to be non-absorbent, smooth, crack-free, and easily washable
- provide a two-compartment sink plus dishwashing machine which operates with a sani-cycle. If the licensed capacity exceeds 25 children, a commercial dishwasher might be more practical.
- provide a paper towel dispenser and a soap dispenser by the two-compartment sink and hand sink
- provide one refrigerator per program that is equipped with a thermometer
- provide a microwave oven and a domestic stove. A stove canopy exhausting to the outside is required.
- overhead counters should not obstruct views of the activity areas, etc.
- in a multi-program facility, in addition to the main kitchen, provide a small kitchen (approx. 40 sq. ft.) in the infant room to accommodate a full fridge, microwave, and single sink

NOTE: If a food permit is required, there may be additional requirements for the kitchen (e.g. additional hand sink, commercial dishwasher, stove hood).

Building Security

- all gates to be equipped with childproof latches
- utilize an appropriate entry security system (e.g. bell, buzzer, intercom, etc. which will operate during program hours)
- ensure all fire alarms, building alarms, speakers, etc. can be heard in the outdoor play space