A close-up photograph of a child's hand interacting with a colorful wooden abacus. The hand is moving a green bead along one of the horizontal rods. The abacus has several rows of beads in different colors: white, green, yellow, blue, and red. The background is softly blurred, showing more of the abacus structure.

Nova Scotia Early Learning and Child Care Design Guide

Version 1.0 – August/2024



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For: Nova Scotia Department of Public Works

Acknowledgments

The Province of Nova Scotia extends its warmest thanks to those child care centres whose welcoming and enthusiastic cooperation enabled the sharing of important knowledge. We also extend thanks and appreciation to all Nova Scotian Early Childhood Educators whose skills and dedication lay the social foundations of our collective future. This Design Guide has been prepared with you in mind, in the hope that the design of Nova Scotia's early learning and child care centres shall support and enrich your essential and critical work.

We would also like to acknowledge the review and feedback provided by some members of the Minister's Engagement Table, whose insights and expertise have contributed significantly to the development of this guide.

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1.0 Introduction

1.1

Glossary of Terms

For the purposes of this Design Guide the following definitions are applicable.

People

Early Childhood Educator (ECE)

Individual employed to plan, organize, and implement programs for children in licensed child care centres.

Facility Director

From the Regulations: A person who provides daily on-site supervision of a facility.

Infant

From the Regulations: A child who is younger than 18 months old.

Parent/Guardian

The person legally entitled to custody of the child, or the person who usually has the care and control of the child.

Preschooler

From the Regulations: A child who is 36 months old or older and is not attending school.

Toddler

From the Regulations: A child who is between 18 months old and 35 months old, inclusive.

Governance*

Act

The [Early Learning and Child Care Act](#).

Codes and Standards

Documents setting out mandatory technical provisions for the design and construction of new buildings, and the alteration, change of use, and demolition of existing buildings.

Department of Education and Early Childhood Development (EECD)

Provincial government department responsible for children's education, including early years and pre-primary to grade 12.

Design Guide

Recommended course of action or approach for the design of a child care centre.

License

A license issued by EECD to a person or agency to operate a child care centre.

Regulations

Early Learning and Child Care Regulations made under Section 15 of the Early Learning and Child Care Act.

➔ Regulation references are indicated throughout this Design Guide in pink.

*(at the time of publishing this guide)

Architecture and Design

Accessible

From the Regulations: In relation to a building or outdoor play space, means able to accommodate persons with disabilities.

Child Care Centre

A building, or portion of a building, and outdoor space dedicated to licensed child care programming.

Circulation

Space within a building that is used for pedestrian travel, including portions of rooms subject to frequent traffic.

Developmentally Appropriate

Spaces, equipment, and materials are suitable for the age and skill levels of the children participating.

Program

A list of building room and space types and their estimated areas.

HVAC

Abbreviation for heating, ventilation, and air conditioning.

Sightlines

Line of sight which permits an observer to view an object or area.

Wayfinding

Planning and design strategies used to help people navigate their physical environment and orient themselves in a space.

1.2

Nova Scotia Early Learning and Child Care

1.2.1

Mission and Vision

The mission of this Design Guide is:

To provide safe, comfortable and functional spaces and environments that support quality child care.

The vision of this Design Guide is:

To support the development of child care centres that aspire to best practice by effectively communicating how design excellence can improve the flow, function, efficiency and quality of child care.

This Design Guide is intended to assist designers with finding design solutions that are suitable for their specific context through a guide that is easy to read and navigate, making the content accessible.

With a focus on architectural design, this Design Guide encourages child care spaces that are functional, responsive, safe and healthy, to the benefit of children, staff, parents and caregivers. Through recognizing the importance and influence that physical environments have on the development of children, this Design Guide supports an investment in child development and starts children on an excellent path forward for continued investment in their future education.

1.2.2

History of Developing this Design Guide

No formal guidance for the design of child care centres in Nova Scotia currently exists, and knowledge of design issues specific to this specialized use are not widely understood. The Regulations prescribe some requirements for child care spaces such as occupancy, staff ratios and natural light, however these are minimum requirements for critical issues and do not address numerous design objectives that are of equal importance to provide best practice and best value in child care spaces.

The Department of Public Works and consultant architects visited and studied several operational child care centres in Nova Scotia and met with Early Childhood Educators (ECEs) to learn about their center's performance, functionality and current practices. The consensus around best practice was recorded and illustrated to inform this Design Guide. Guides from other jurisdictions have also informed the process of creating this Design Guide for Nova Scotia.

1.3 About this Design Guide

1.3.1 Intended Users of this Design Guide

This Design Guide has been written for the following users:

- Child care owners/operators
- Architects
- Building engineers
- Landscape architects
- Province of Nova Scotia Representatives
- Contractors/Builders
- Developers
- Community members looking to open a child care centre
- Authorities within EECD Licensing, Department of Health, and Office of the Fire Marshal

1.3.2 How to Use this Design Guide

This Design Guide was developed with the intent of effectively communicating the applicable Regulations for the design of a child care centre, as well as design guidance and best practice for creating excellent child care environments beyond minimum standards of design. It is meant to inspire creative and aspirational design solutions to help deliver well-designed, operationally-efficient and quality child care centres which enrich the development of children and support ECEs and other centre staff. While specific examples are provided for explanatory purposes, this Design Guide outlines design criteria and the rationale to enhance the contracted architect's professional judgment, while allowing for flexibility and creativity in their architectural solutions to achieve child care design goals.

This Design Guide reflects the regulatory and operational context at the time of writing and is therefore subject to updates and revisions. This Design Guide does not replace or override any provisions in governing document such as acts, legislation, building codes, bylaws, or any standards referenced within these governing documents.

1.3.3

Overview of the Design Process

Child care service providers who are planning a new child care centre are not expected to be experts in the design and construction of centres. The first step of the design process is to engage an architect. Architects are trained to guide the client through the design's functionality, sustainability, aesthetics and compliance with building codes and regulations, and help provide technical solutions for buildings and landscapes. This involves a broad understanding of diverse technical, social, physiological, biological, historical, and creative requirements. Architects work in the interest of the public's health and safety and often lead and coordinate a larger team of building specialists including civil, structural, mechanical and electrical engineers, landscape architects, building code consultants and cost consultants.

They help a client identify their needs and program, assist in establishing budgets, oversee construction, and more.

The design and construction of a new child care centre follows a process of design phases set out to develop early ideas and information into architectural concepts, detailed design, and technical documents, followed by the construction of the child care centre until it is ready for occupation and operations. This process applies to small and large projects, though the scale and complexity of the project determines the scope and schedule of each phase.

The project begins in the **pre-design** phase where project goals, program, and budget are established, and a project site is selected. Site studies are carried out during pre-design to establish feasibility of various

regulatory, environmental, infrastructural and practical issues. An estimated project budget is calculated and agreed upon, and the estimated cost should be reviewed at each subsequent project phase as further information becomes known.

The next step is the **schematic design** phase where information collected in the pre-design phase is developed into an architectural concept, illustrated by floor plans, elevations and/or 3D models. The schematic design is informed by the features of the site, the building program, operational requirements of the client, the project goals and objectives, and the architect's design approach. Once a schematic design concept is approved by the client, the general layout is fixed and the project moves into the **design development** phase where the scheme is developed in more detail. Technical

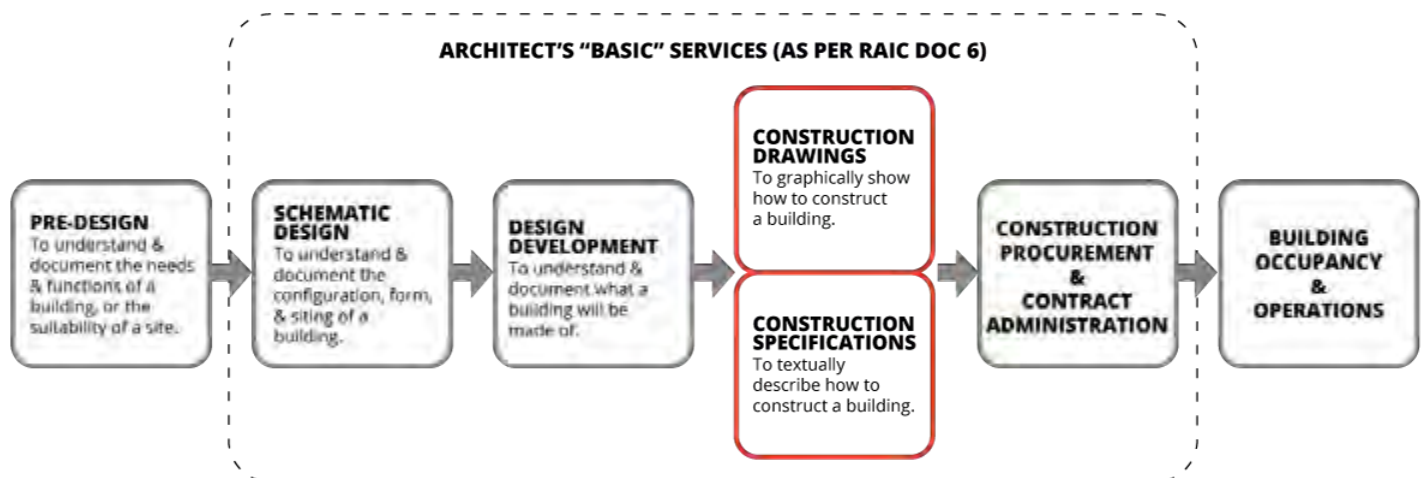


Figure O1 – Phases of the Design Project

decisions to achieve the schematic design intent are made, and engineering systems are further integrated into the building design. Following the design development phase, the consultant team will prepare **construction documents**. These are the technical drawings and specifications which the builder will use to price and construct the facility (the contract documents).

During the **construction procurement** phase is when a builder is contracted to construct the building. There are several methods of procurement and types of construction contracts, each with unique relationships between clients, builders, and design consultants. In a traditional project delivery, builders provide bids based on the contract documents and the successful bidder enters into a contract with the owner. The procurement phase is an opportunity for bidders to ask the consultant team questions about the contract documents and the consultant team responds with addenda to the contract documents.

Once a builder begins constructing the project, the project enters the **contract administration** phase where the consultant team reviews the work of the builder to ensure it is in compliance with the contract documents. The architect acts as the client representative through construction. The consultant team does this through regular field reviews, reviewing submittals from the builder and answering their questions or providing clarification, as required. The architect and consultant team determine when the building is substantially complete and ready for **building occupancy**. At this time, and with all

life-safety systems functioning and occupancy permits in place, the building owner can move into the building and begin their setup and **operations**. There is often a small percentage of work still required to be completed following substantial completion, which may take place after the building is occupied. On typical projects, builders are required to provide a one-year warranty on defects.

For more information on the Phases of a Design Project or working with an architect, contact the [Royal Architecture Institute of Canada](#) or the [Nova Scotia Association of Architects](#). An informative resource which describes the work of an architect and how to engage an architect is the [Canadian Handbook of Practice for Architects](#).

Owners entering into the design process should be aware of local requirements for permit to ensure that all approvals are in place with local authorities having jurisdiction prior to proceeding with the design and construction of a project. In addition to development and building permits, the project may require review and approval from the Office of the Fire Marshal, the Public Health Officer, Environment and Climate Change, and the Department of Education and Early Childhood Development. A license may only be issued after the centre receives final occupancy permit, has met fire and public health inspections, and has met all regulated licensing requirements for child care.



2.0 Planning a Child Care Centre

2.1 Size of Child Care Centres

2.1.1

Centre Size – Small, Medium and Large

Providing sufficient space for children and staff is essential for quality care. The number of children to be cared for will influence the size of the child care centre. The minimum area for child care play spaces and minimum staff to child ratios are specified in the Nova Scotia Early Learning and Child Care Regulations, and referenced in section 2.3.2 of this Design Guide.

When designing classrooms within child care centres, the multiple functions of the space must be considered. Allowance must be made for play materials and book storage, linen and cot storage, supply storage, diapering station and washrooms, serving space, and sufficient circulation. Supporting rooms and spaces used for entry, circulation, staff, and building services must be factored into the overall area of a child care centre.

For the purpose of the Design Guide, a small child care centre is one which has less than 52 children, a medium child care centre ranges between 52 and 86 children, and a large child care centre is one that has more than 86 children.

2.1.2

Considerations for Small, Medium and Large Child Care Centres

Small child care centres need many of the same supporting rooms and spaces that are required in medium and large centres. More pressure is put on smaller child care centres to eliminate space redundancies and the operational viability of the centre must be carefully considered when looking to develop a small child care centre. They may also be more likely to require mixed-age rooms which carry considerations for managing the needs and regulatory requirements of multiple age groups in one space.

If space allows, medium and large child care centres could benefit from a flexible space for larger groups to use during transition times of day, as alternative activity spaces, or for other community purposes. However, implications for provincial funding models for these spaces should be considered.

Large child care centres typically require more private space for staff and more administrative and office spaces due to the increase in staff numbers. Storage requirements increase in large centres to accommodate additional general storage, programming equipment and building maintenance needs.

Centres containing infant rooms must be sprinklered in accordance with the Nova Scotia Building Code Regulations.

2.2 Configuration of Child Care Centres

2.2.1

Number of Storeys

There are many viable ways to configure the building layout of a child care centre. One critical decision that service providers may be faced with is whether to construct a one or two-storey building.

Although a one-story building is often the more obvious choice for a child care centre for accessibility and efficiency, there are several reasons why a two-storey building may be considered, such as:

- Availability of space for the building footprint on a site.
- Renovating an existing two-storey building.
- Construction costs may be reduced with a decrease in site preparation and excavation area, and reduced foundation size.
- The building design may take advantage of an existing slope on the site.
- The building design may take advantage of height for views or access to natural light.

Some considerations when designing and constructing a two-storey building include:

- Stairs add risk for small children and caregivers.
- Space is required for emergency exit stairs and stairs which interconnect multiple floors (these may be the same).
- The nature of stairs as not inclusive or accessible.

- The need for an elevator or a lift for accessibility.
- Two-storey buildings require space to bring mechanical and electrical services vertically through the building.
- Two-storey buildings may pose circulation and wayfinding constraints.
- Two-storey buildings may result in fewer connections between classrooms, and the staff and children, if classrooms are located on different levels.
- Direct access to outdoor play space and perceived connection to outdoor environments becomes constrained on upper floors.

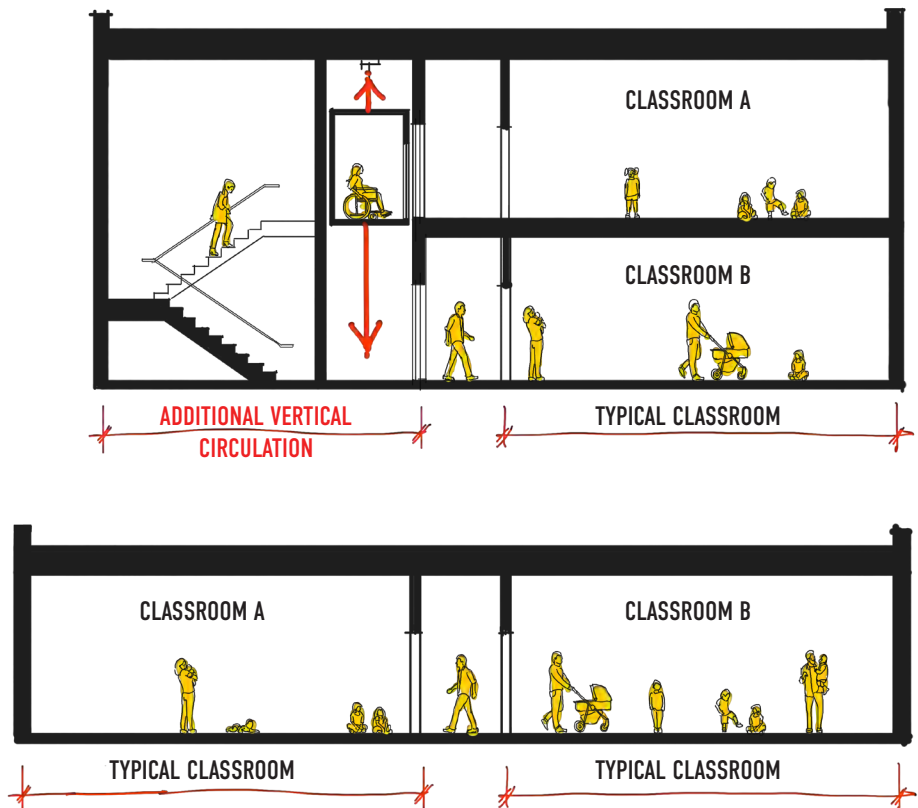


Figure O2 – One-storey vs. Two-storey Circulation

2.2.2

Floor Plan Configurations

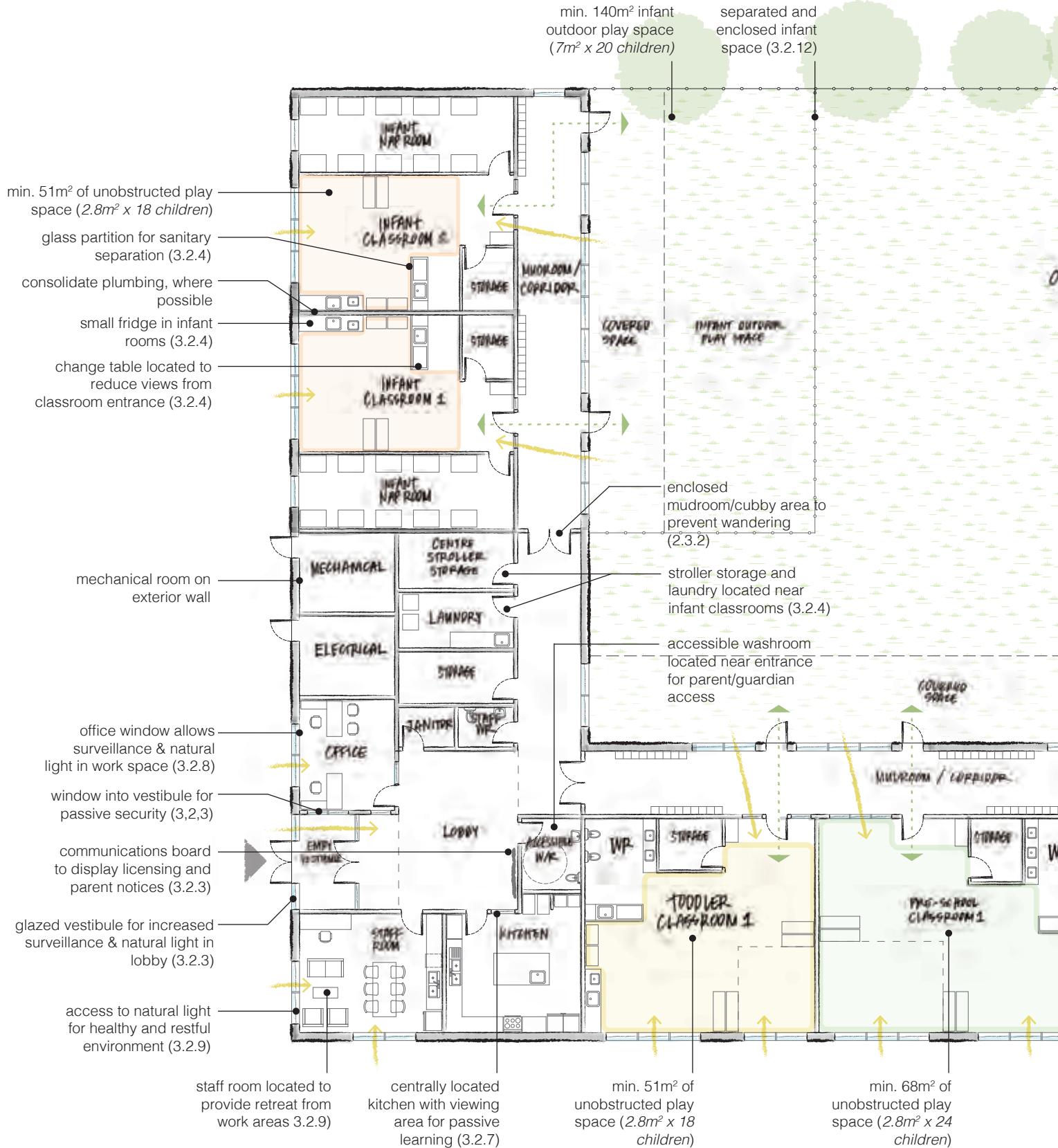
When designing a child care centre, the building form and program layout plays an important role in helping to shape the healthy development of young children, and to create efficiencies and a positive working environment for staff.

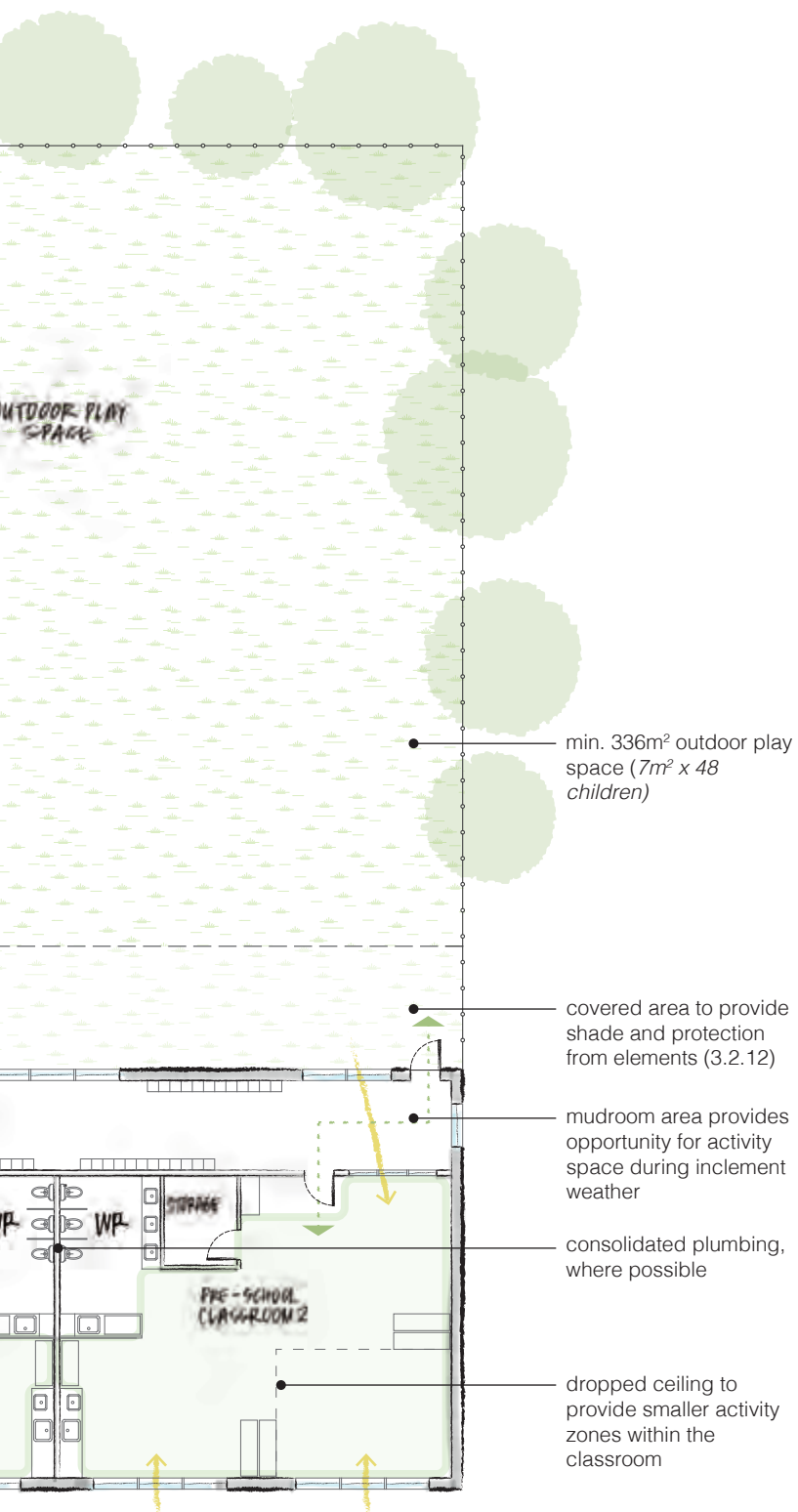
The following is an example of a building program to accommodate 86 children and one of many possible floor plan configurations that offers an overview of how the program could be arranged to exemplify this Design Guide and applicable Regulations. Additional plan sketches can be found in Appendix B for reference.

	PROGRAM	*APPROX. AREA (m ²)	*APPROX. AREA (ft ²)	CHILD COUNT	ECE/STAFF COUNT
ENTRY	ENTRY VESTIBULE	8	86		
	LOBBY	20	215		
CLASSROOMS	INFANT CLASSROOM 1	64	690	10	3
	PLAY SPACE	30	320		
	INFANT NAP ROOM	23	250		
	INFANT CLASSROOM 2	64	690	10	3
	PLAY SPACE	30	320		
	INFANT NAP ROOM	23	250		
	TODDLER CLASSROOM 1	64	690	18	3
	PLAY SPACE	54	575		
	PRE-SCHOOL CLASSROOM 1	82	880	24	3
	PLAY SPACE	72	770		
	PRE-SCHOOL CLASSROOM 2	82	880	24	3
	PLAY SPACE	72	770		
STAFF SPACES	OFFICE	16	170		2
	STAFF ROOM	24	260		
	ACCESSIBLE WASHROOM	5	55		
	STAFF WASHROOM	2	25		
SUPPORT SPACES	KITCHEN	20	215		1
	LAUNDRY	6	65		
	STORAGE	8	86		
	CENTRE STROLLER STORAGE	11	115		
	JANITOR ROOM	3	30		
	MECHANICAL ROOM	13	140		
	ELECTRICAL ROOM	13	140		
OUT DOOR	INFANT OUTDOOR PLAY SPACE	140	1500	20	
	OUTDOOR PLAY SPACE	336	3600	48	

**ALL AREAS ARE APPROXIMATE AND INTENDED FOR GUIDANCE ONLY. PROGRAM AREAS SHOULD BE DETERMINED IN CONSULTATION WITH YOUR PROJECT ARCHITECT.*

Figure 03 – Program Example





The adjacent plan diagram is intended for reference only and is not to be used as a basis for construction. The plan diagram does not account for site integration or specific program requirements of individual child care centres. Working with an architect for professional services will facilitate a better understanding of individual goals and construction method input.

Figure 04 – L-Shape Floor Plan Example

2.3 Adjacencies, Flow and Circulation

2.3.1

Program and Operational Overview

Programming and operating a child care centre is complex. In order to create a successful space, the team working to bring the project to life needs to understand the operations and organization of day-to-day programming and activities, as it relates to the various age groups. It is important to consider how the design of a child care centre creates an overall experience which helps young minds grow and learn.

Some of the day-to-day programming and operational functions to be understood include:

- Drop-off and pick-up (parent/caregiver time)
- Time spent outside.
- Transitioning between inside and outside.
- Meals and snacks.
- Use of other spaces in the child care centre (e.g. multi-purpose/flex spaces).
- Toileting/diapering.
- Nap time.
- Storage of children's belongings.
- Storage of items used in classrooms.
- Structured play, free play and learning.
- How and where staff spend their breaks.
- Use of laundry facilities.
- Inclusivity and accessibility.
- Security protocols.

2.3.2

Finding Efficiencies with Effective Flow

A child care centre is made up of rooms and spaces with defined functions. How you get from one space to another and what is located next to one another requires careful consideration in the design of any child care centre, as it impacts staff's ability to do their job effectively and the quality of the child care experience. The following are considerations related to flow and adjacencies when planning a child care centre.

Entering the Building

Considerations about flow and circulation related to the experience of entering the building include:

- Is there a view of the main entrance from the parking/drop-off area to assist with wayfinding?
- Does the main entrance have a physical connection to an administrative area to help with surveillance and create a direct approach for parents/caregivers and children to connect with staff?
- Is the appearance of the entrance inviting? Is it obvious that it is the main entrance? Does it avoid confusion with alternate entrances such as a staff entrance?
- The safety of the entrance – have all efforts been made to avoid conflicts between vehicles and pedestrians? Examples include providing pedestrian walkways in front of parking areas, adding crosswalks, adding signage to reduce the speed of traffic, separating traffic from parking and entry areas with landscaping and/or curbs, and encouraging one-way traffic flow at any drop-off zones.
- The inclusivity and accessibility of the entrance — can people of all ages and abilities access the building at the same location?
- Security requirements and their impact on the entrance sequence – is there a physical security system in place and how do parents/caregivers interact with it? Does the child care centre rely on natural surveillance of the entrances by staff?

Parents and Children — Drop-Off and Pick-Up

At the beginning and end of the day, parents/caregivers and their children make their way to and from the classrooms. Considerations for how to facilitate efficiencies in this route include:

- Is wayfinding clear? Does the route or routes include signage or visual cues through circulation spaces?
- Is the route from the entrance safe and accessible?
- Does the child care centre include an area for temporary stroller, bike trolley and car seat storage?
- Is there space for information about the child care centre posted upon entry (e.g. licensing, notices)?
- Does the route have the appropriate width for circulation and fixtures within the circulation area (e.g. cubbies and clear access to cubbies)?
- Has sufficient storage been provided for children's belongings?

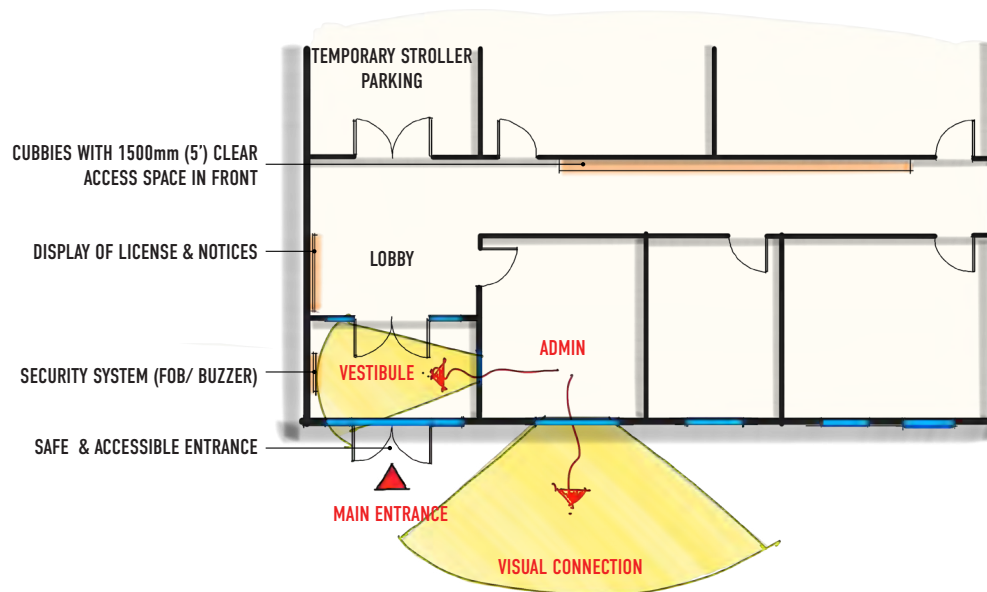


Figure O5 – Building Entry & Drop-Off Sequence

Within the Classrooms

The organization of spaces within the classrooms can facilitate efficient movement for staff and have a positive impact on the quality of care and experience for children. Some considerations for flow and circulation within the classroom include:

- Is the room right-sized? Have all areas which are excluded from the play space area been accounted for (e.g.: door/gate swings, diapering, storage, fixed furniture)?
- Is there access to natural light throughout?
- Is there direct access to the outdoor play spaces from the classroom or adjacent to the classroom?
- Can storage spaces be easily accessed from the classroom for supplies, bedding and cots?
- Is the play space broken into smaller zones to provide children with a variety of activities and experiences?
- Has the diapering area been located and oriented to be easily accessed and maintain staff supervision of the play area?
- Is the entry zone clear of conflict to avoid interrupting the flow of entering and exiting the classroom?
- Does the classroom configuration and furnishings allow ECEs to maintain sightlines throughout for ease of supervision?
- Child care centres must maintain operations during all times of the year. Is the centre air conditioned to maintain safe conditions during summer months?

➔ Classroom area dedicated for indoor play space must have at least 2.8 m² of unobstructed floor area per child occupying the classroom, and exclude areas used for or infringed upon by entryways, exits, diapering station and washroom areas, serving station, staff shelving or storage. Refer to Regulation 20(2) and 20(3)

➔ Classrooms must have a minimum glazed window area equal to at least 10% of the classroom's floor area to allow sufficient natural light throughout the classroom. Refer to Regulation 20(4)

➔ Staff-to-children ratios must be maintained at all times when children are in attendance. Refer to Regulation 34 for staff-to-children ratios in accordance with the group category.

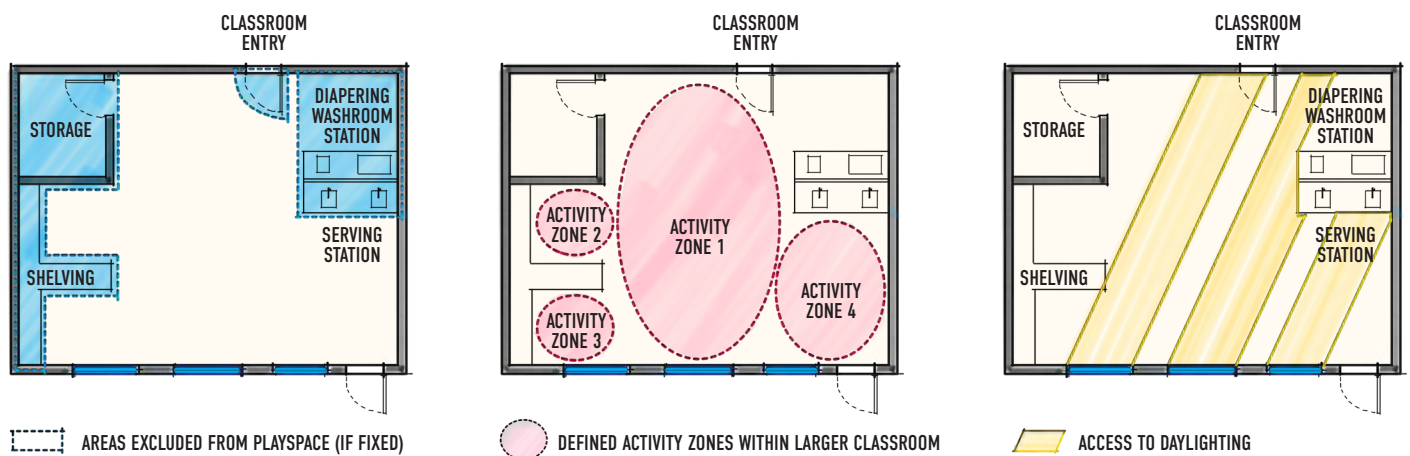


Figure O6 – Considerations for Classrooms

Transitioning between Indoor and Outdoor Program Spaces

Moving children from an indoor space to an outdoor space can be challenging, particularly with cold temperatures or damp weather that requires children to put on layers of protective clothing. Efficiently navigating this transition requires a space to respond to the complex needs of the children and ECEs. Some considerations include:

- Can direct access be provided from a classroom to the outdoor play space or do you need to travel to an exit elsewhere in the building?
- If exiting directly from the classroom, how can the movement of dirt and contaminants from outdoors be managed?
- If there is a single access point to the outdoor play area, is there access to a washroom near the exit for use during outdoor time, when required?
- How much time does it take for ECEs to help children put on and take off their outdoor clothing and footwear? Where are all the children sitting during this process? Are they secure? Is there a risk of children wandering out of sight?

➔ One or more outdoor play spaces must be provided, or available within a reasonable distance, that has at least 7m² of area per child. It must be large enough to accommodate the largest group category (e.g. toddler group or pre-school group) at one time, other than infants. Infants require a separate and enclosed area with at least 7m² of area per infant. Refer to Regulation 22

➔ A facility director or care provider must ensure that every child is accounted for at all times during operating hours. Refer to Regulation 33A

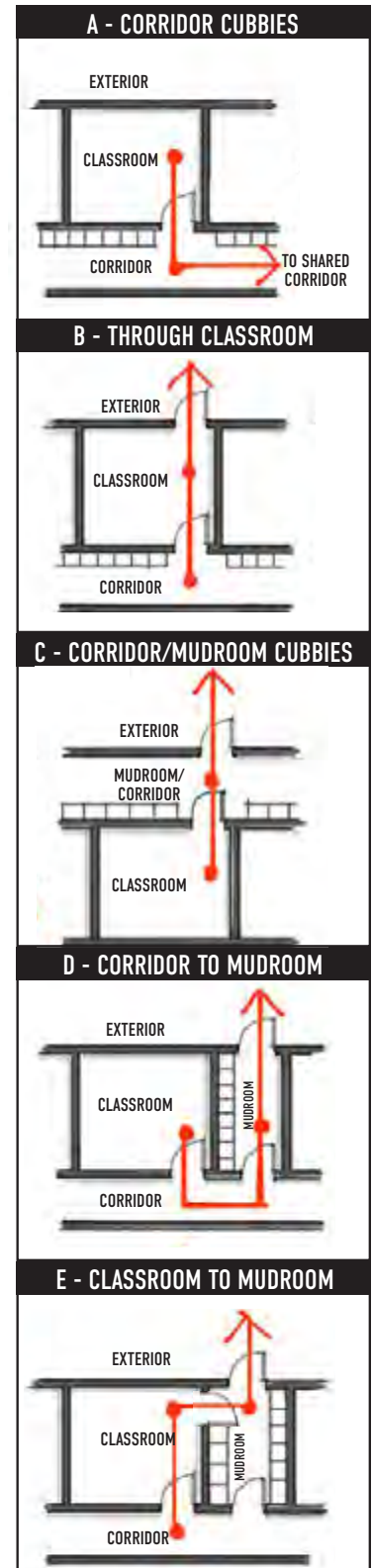


Figure 07 – Access to Outdoor Play Space

Classroom to Washroom Connection

One of the most important considerations for flow and circulation in a child care centre is how children access the washroom at the varying stages of their development. Some considerations for easing the coordination of toileting in the child care setting include:

- Can direct access be provided from the washroom to the classroom?
- What orientation provides the appropriate privacy for children while maintaining ECE visibility throughout for supervision?
- Can architectural features such as glass or mirrors help maintain views into classrooms beyond the washrooms?
- Have washroom and diapering areas been separated from any food preparation and serving areas for sanitation?

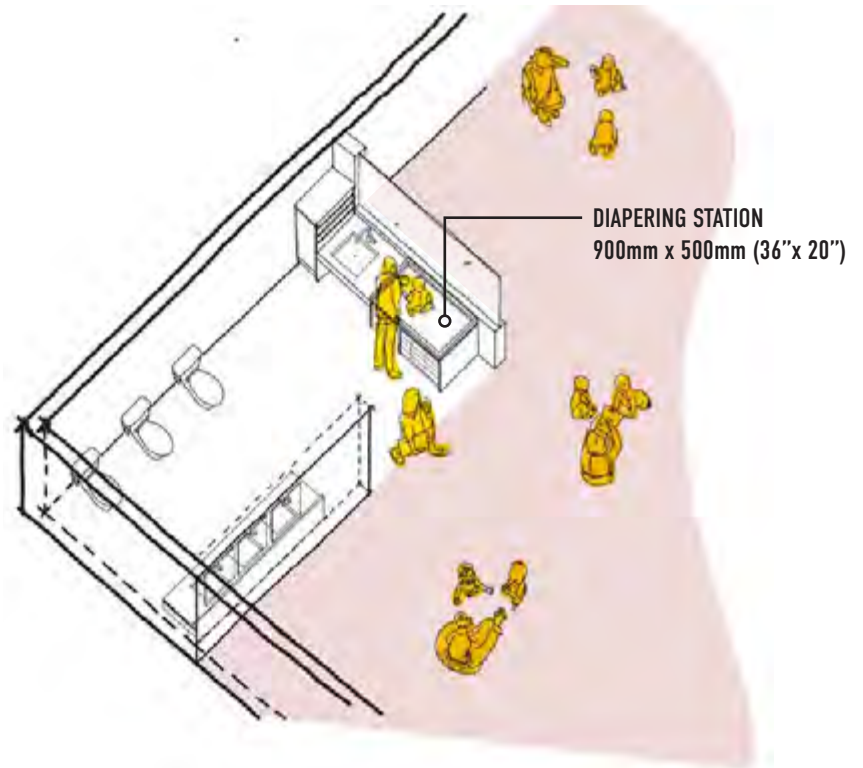


Figure 08 – Toddler Washroom to Classroom Connection

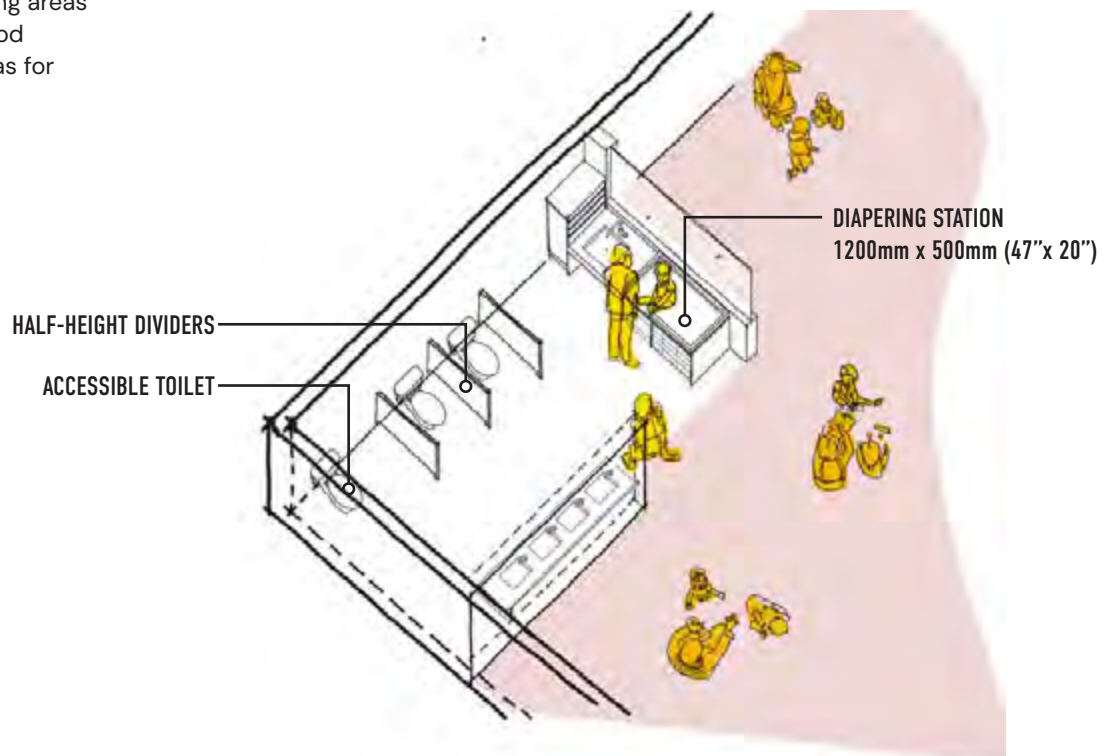


Figure 09 – Pre-School Washroom to Classroom Connection

Staff Room

Staff rooms are important support spaces to provide good working conditions for ECEs and other staff. Some considerations about designing efficient access and circulation to and within staff rooms include:

- Is the staff room afforded privacy from the remainder of the child care centre to provide a relaxing refuge from the work environment?
- Are staff rooms and spaces located close to a staff washroom?
- Is there a safe and secure space for staff belongings?
- Is the staff room inaccessible to children?
- Do staff spaces have access to natural light to promote healthy working conditions?



2.4 Accessibility

Accessible and equitable spaces create child care environments where all children can thrive and grow, and where all staff feel supported. Meaningful access can help child care centres in Nova Scotia meet diverse community needs and support inclusivity.

Various codes and standards outline requirements and recommendations for accessible design and construction. In Nova Scotia, the Nova Scotia Building Code Regulations outline accessibility requirements and is adopted and enforced by municipalities. The CSA standard, B651 [Accessible Design for the Built Environment](#), is referenced in the Building Code and provides recommendations beyond minimum requirements, as well as exterior design recommendations for accessibility. Another popular standard which takes a more holistic approach to accessibility is the [Rick Hansen Foundation Accessibility Certification](#). Although the Building Code provides a minimum requirement for accessibility, designers should strive to exceed minimums and design for meaningful access.

Considerations for children's height and abilities are not inherent in standards and codes. Providing an accessible environment for all children requires a different design lens than spaces predominantly used by adults. Fixture heights such as the railings or sinks and soap dispensers require a specific knowledge about the size and proportions of young children.

When determining minimum clearances for corridors, keep in mind the various fixtures which may be included in these spaces (e.g. cubbies or bulletin boards) and the activity or access space

occupied in front of these fixtures. Sufficient space should be provided for adults and children moving through the space in a wheeled mobility device or with other mobility tools such as walking canes, along with children walking hand-in-hand with parents/caregivers, ECEs or other children. Turning radii of wheeled mobility devices should be accommodated at every junction which may require a redirection.

Grade changes are often presented at entrances and exits of buildings. Where present, incorporating shallow ramps as the primary path to the main entrance provides an inclusive experience. Slight changes in the floor level within the building can be navigated by accessible ramps. Ramps can occupy floor space which needs to be accounted for in planning. Elevators or lifts are required for building level changes to comply with accessibility requirements.

Consideration should be given to how many doors are needed through circulation spaces as they create an extra level of coordination for individuals with a visual or physical disability to navigate.

Other areas which require special care to design inclusive environments include:

- Washrooms.
- Exterior surfaces.
- Calm/Quiet/Sensory zones — color and materials choices, and lighting and acoustic levels.

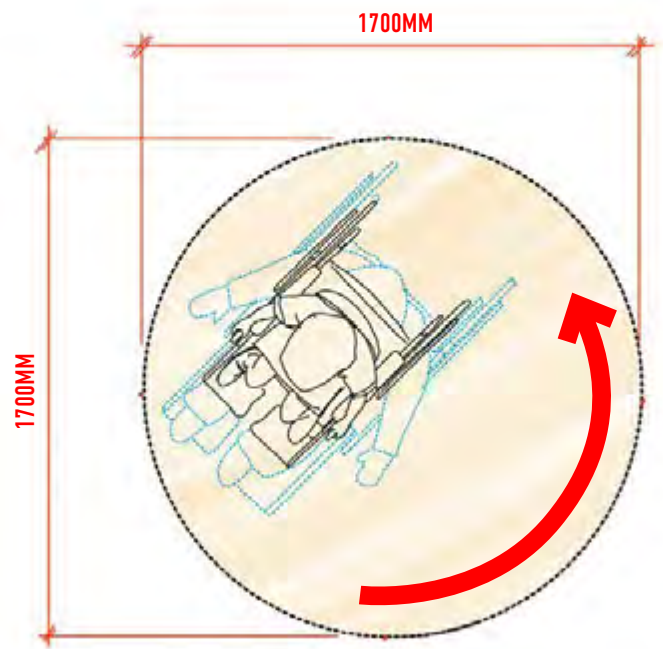


Figure 10 – Turning Radius Clearance

3.1

Why Quality and Design Matter

Good design matters.

Designing a child care centre is an exciting exercise that requires careful planning and consideration. The spaces we create can be thoughtfully crafted environments that nurture curiosity, creativity and a sense of exploration to lay the foundation for lifelong learning, and shaping children's development into confident, empathetic and adaptable individuals.

Great design enhances cognitive development through thoughtfully designed spaces that inspire curiosity, play and discovery. Research supports that play-based learning encourages essential learning and development through active play, pretend play, building play, and both independent and group play. Designers should consider how spaces and design elements such as natural spaces, spatial variety and open-ended material can provide opportunities for play-based learning by encouraging exploration, promoting social engagement, and inspiring creativity and imagination. Play unlocks essential life skills for children including physical, social, emotional, cognitive and creative skills.

Good architectural design for child care centers prioritizes safety and security, creating nurturing environments for children that feel welcoming and are secure for exploration and social bonding. Design that is informed by spatial considerations such as sightlines and effective program layouts and adjacencies can have a significant and positive impact on the safety and security of children, and improve staff's

ability to excel in their roles. In addition to actually being secure, child care centres must feel secure. We feel safe and secure in environments that are thoughtfully designed to feel welcoming, comfortable, calm, and promote a strong sense of place.

Emotional well-being can be supported with warm, natural light and a diversity of spaces and calming zones that offer moments of tranquility in a stimulating environment. Creating adaptable learning environments and connections to nature further enrich children's holistic growth and development.

Consideration for accessible and equitable design that provides meaningful access forms the basis for an environment where all children can thrive and grow. These spaces should include aesthetics that promote the values of the child care centre. The use of colours, textures, patterns and shapes can create interest and encourage play-based learning.

Design considerations for sustainability and efficiency can reduce the environmental impacts and the overall operational costs of a child care center.

The EECD document titled [Quality Matters Centre Templates](#) outlines additional considerations for quality spaces.

3.2 Detailed Room and Space Descriptions

3.2.1

Overview of Child Care Rooms and Spaces

The purpose of this section is to state the intended function and goals of each space in a child care centre, and illustrate considerations and design recommendations related to the room size, functional and important relationships between spaces, equipment, and the overall performance of the space.

When designing these spaces, it is important to consider the size, scale, and abilities of the users. Figure 11 shows the approximate sizes of children and adults in a child care centre:

Every design project has unique drivers which guide the design and influence the end result. The site, the service provider's programming philosophy, and the local context are key factors influencing an architectural design project. Designers will work to develop architectural forms which best achieve the goals for a child care centre.

Some building design considerations include:

- Use natural light to your advantage. Where possible, position the glazing on the building to bring natural light deep into rooms, considering time of day and how it will impact times when light is not desirable (e.g. nap time).
- Consider how to go beyond codes and standards which outline accessibility requirements to make a truly inclusive facility where experiences are shared amongst all children. Refer to section 2.4.
- Adopt a biophilic design approach. Biophilic design is the practice of creating connections to nature within our built environment. Research shows several psychological and health benefits to spaces that incorporate biophilic design including enhanced learning, creativity and overall healthier development in children, as well as increased attentiveness and lower levels of stress and anxiety in adults for an improved work environment. The principles of biophilic design are illustrated in Figure 12 of this document.

Some interior design considerations include:

- Creating a warm and welcoming atmosphere can make a child care centre feel less institutional and more human-centric. This can be done in a variety of ways such as layering textiles and textures with varying heights, incorporating soft and dimmable lighting, absorptive materials, and calming color schemes, and opting for comfortable, home-like furniture rather than standardized, clinical pieces.
- The introduction of natural materials such as wood, adding plants and greenery and maximizing natural daylight can introduce comfort to a design.
- Personalized spaces with artwork and decorative elements that reflect the centre's values can generate an engaging and energizing environment while making it feel like a unique and cared-for space.

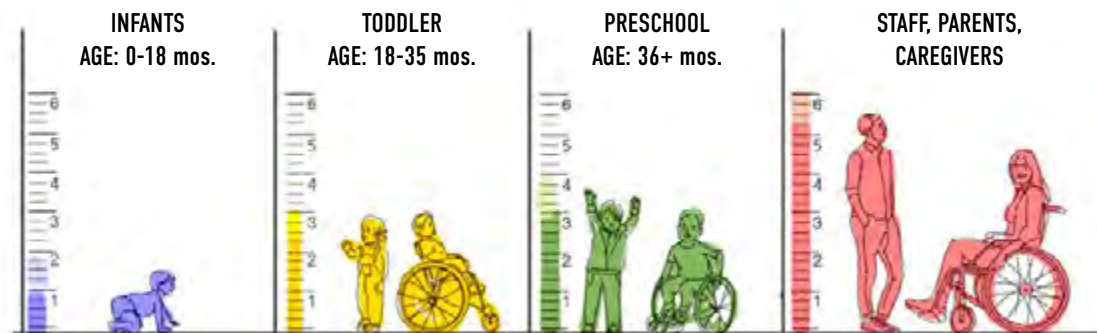


Figure 11 – User Groups & Average Heights

6 PRINCIPLES OF BIOPHILIC DESIGN



01

ENVIRONMENTAL FEATURES

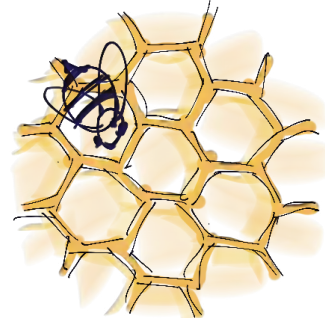
Using well-recognized natural world characteristics



02

NATURAL SHAPES & FORMS

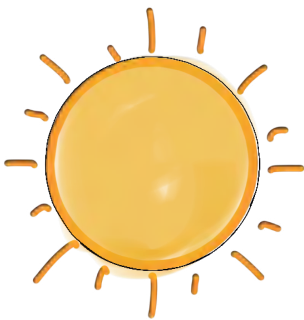
Resisting straight lines and right angles



03

NATURAL PATTERNS & PROCESSES

Varying the sensory experience with transitions and complimentary contrasts



04

LIGHT & SPACE

Use light and space to evoke desired human reaction



05

PLACE-BASED RELATIONSHIPS

Designing with cultural, spiritual, ecological, or historical relationship in mind



06

EVOLVED HUMAN-NATURE RELATIONSHIPS

Designing to maintain strong reactions/connections to our deep history with nature

Figure 12 – Principles of Biophilic Design

3.2.2

Exterior Building Entrance

Function and Goals

The exterior building entrance should generate a welcoming first impression and establish an identity for the child care centre. It should be designed to be clearly visible and easily identified with an approach that is safe, accommodating and convenient.

Functional Space Requirements

- Provide paved, marked parking spaces for short-term parking near the entry for drop-off/pick-up.
- Provide full-time parking for staff. Consideration should also be given to where service or delivery vehicles will park.
- Locate accessible parking closest to the entry.
- Provide accessible walkways leading from the street and parking areas to the entry.
- Locate walkway in front of parking spaces to reduce pedestrian traffic behind vehicles.
- Separate traffic from parking and entry areas with curbs or landscaping for increased safety.
- Include applicable signage to reduce the speed of traffic for increased safety.
- If the child care centre is within a larger building with other program spaces, the child care centre should be entered directly from the outdoors and separated from the main building entrance, if possible.
- Fire lanes must be provided per the Nova Scotia Building Code Regulations.

Equipment Requirements

- Consider incorporating digital surveillance for increased security, along with designing for passive surveillance through visual connections from staff offices to the exterior entry area.
- The exterior entrance and approach should be well lit to provide a safe environment during months of shorter days, and for staff arriving early or leaving late.

Important Adjacencies

- Parking areas should be near the exterior building entrance for a safe and convenient approach.
- The exterior building entrance should lead to the interior lobby via a secure vestibule.
- Staff offices should be located near the entry zone with exterior windows to be able to survey the area.
- Consider loading requirements and approach for kitchen deliveries.

3.2.3 Interior Lobby

Function and Goals

The interior lobby should provide a comfortable transition space for children to feel welcomed into the child care centre and for parents to feel well-informed. The design should consider adult and child-height elements that encourage socializing.

Right-Sizing Considerations

- Ensure the lobby is appropriately sized to provide space for strollers and transition/handover process during peak traffic times.

Functional Space Requirements

- Separate the exterior entrance and interior lobby with a vestibule to enhance security and energy conservation.
- The vestibule should be glazed for increased surveillance and to provide natural light within the lobby area.
- Provide an accessible path of travel through the building entrance and lobby, while maintaining adequate space for gathering and strollers.
- Designate an area to display licensing information and a communication board for parent notices.
- Consider including a display area to showcase children's art, activities, or accomplishments.
- Consider providing adult seating in waiting areas.
- Designate an area or room to store parent/caregiver's strollers and bike trollies.

Equipment Requirements

- Incorporate a security system in the vestibule to monitor and control access such as a buzzer or fob system.
- Allocate space for a first aid kit and other required health and safety equipment.

Important Adjacencies

- Staff offices should be located off the interior lobby to facilitate transitions and information exchange with parents/caregivers, and to maximize surveillance of the entrance area.
- Situate the staff office to provide interior glazing between the office and vestibule for increased surveillance.
- The design should consider sightlines throughout the facility from the lobby area.

3.2.4

Infant Classrooms

(<18 Months)

Function and Goals

Infant classrooms should offer a warm and engaging atmosphere which encourages exploration in a safe environment for both crawling and walking stages. A high level of visibility is required throughout the space for supervision.

Functional Space Considerations

- Provide one cubby per child for children's personal belongings and outerwear.
- Include an area adjacent to the room entrance for shoe removal or for shoe covers to reduce debris and contaminants on infant room floors.
- Include a small station at the room entrance to accommodate information sharing and secure storage for ECEs to store their belongings.
- Include a storage room with direct access from the infant room.
- Provide a serving station, separated from the diapering station, which includes adequate countertop space, a serving sink, and a small refrigerator. Refer to Figure 20.
- Plan for a clear circulation path between activity areas and stations.
- Provide adequate floor space in the nap room for ease of circulation and to accommodate an adult chair or rocking chair. This space may also serve as a nursing area, when required. Consider storage area for linens within the nap room.

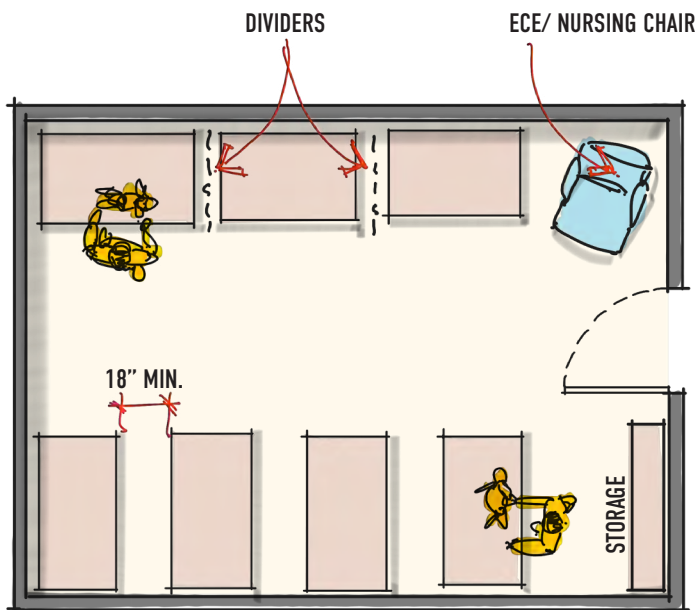


Figure 13 – Nap Room

➔ A nap room is required and must be sized to accommodate one crib per child, with an 18" space or a divider between each crib. Refer to Regulation 20(5). Refer to Figure 13.

➔ Infant rooms must contain a diapering area with a counter and hand-washing sink. Refer to Regulation 20(6). Refer to Figure 14.

➔ Refer to additional Regulation references applicable to classrooms in section 2.3.2 of this Design Guide.

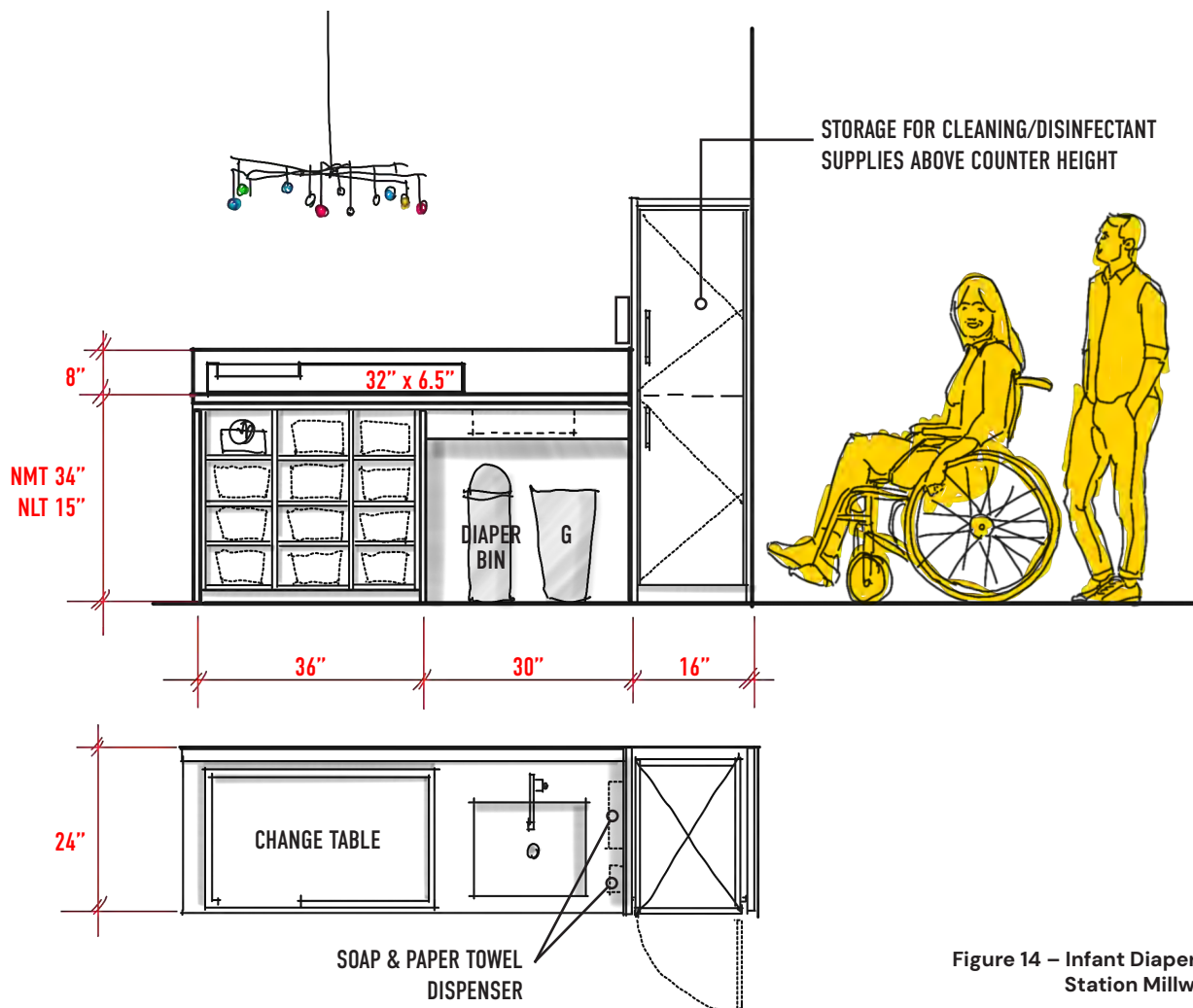


Figure 14 – Infant Diapering Station Millwork

Washroom/Diapering

- Allow space for a diapering station that includes a change table, diapering sink and adequate storage for changing materials. Refer to Figure 14. Ensure adequate space for ECEs to maneuver within this station.
- Maintain sightlines by situating the change table so the ECE can face the play space when changing diapers.
- Position and orient the diapering station to obscure views of the change table from visitors entering the classroom.

Furnishing Considerations

- Movable elements and furnishings allow for flexibility and encourage periodic reorganization of the room to reduce child and ECE fatigue of the space.
- Include low open storage or shelving for toy storage that is accessible to children.
- If upper storage is incorporated for items that are to be out of children's reach, consider their location and enclosure to avoid items falling into activity areas for safety.
- If exterior windows are present in the nap room, provide window coverings to offer a restful environment.

Important Adjacencies

- Cubbies should be provided within the entry area of the classroom or in the corridor or mudroom near the entrance to the classroom.
- The infant classroom must have direct access to the nap room and be visually connected through the use of a glass lite in the door or clear glazing in the partition wall for monitoring. Include window coverings to control light in the nap room.
- The location of the nap room should be carefully considered to reduce external noise.
- Provide direct access to the outdoor play space from the infant classroom, if possible.
- If direct access to the outdoor play space is not possible, the infant classroom is best located near the access to outdoor play space.
- Locate infant stroller storage near the infant classroom for ease of access.
- Locate laundry facilities near the infant classroom, as this room typically generates the most laundry.
- Consider providing a direct connection between adjacent classrooms to allow easier communication between rooms while maintaining staff ratios, and as alternative circulation in the event of an emergency.

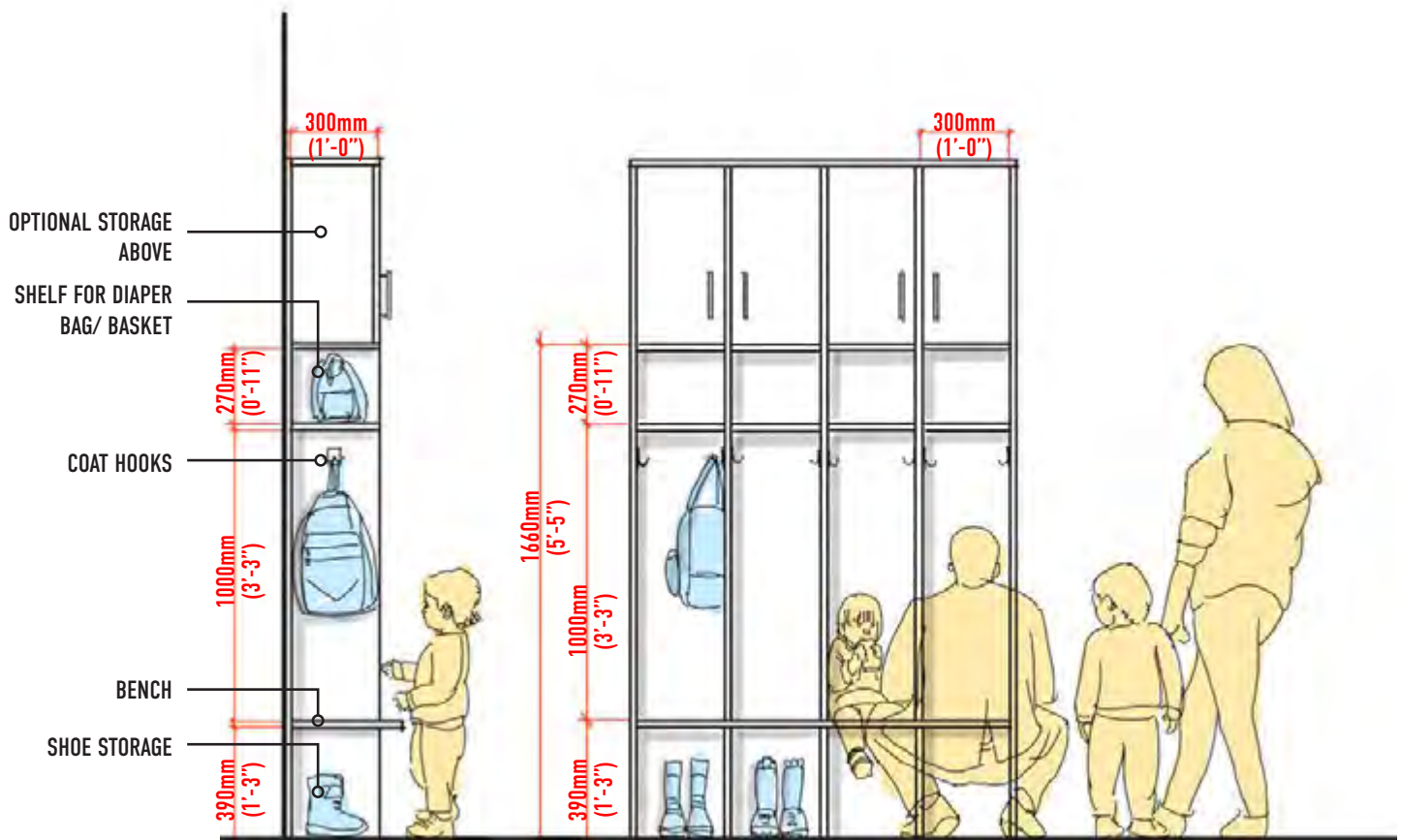
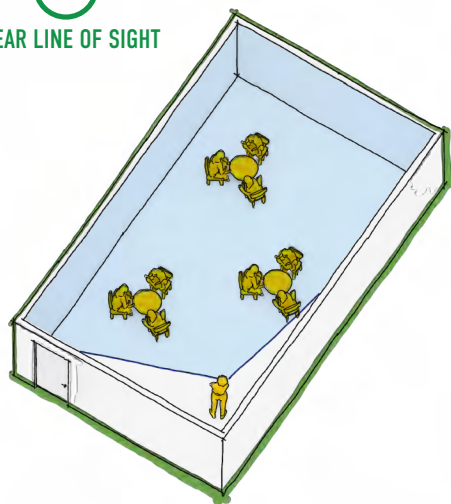


Figure 15 – Infant Cubby Millwork

+
CLEAR LINE OF SIGHT



VS.

-
NO VISUAL CONNECTION!

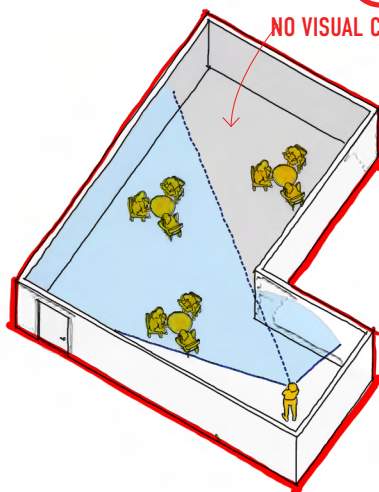
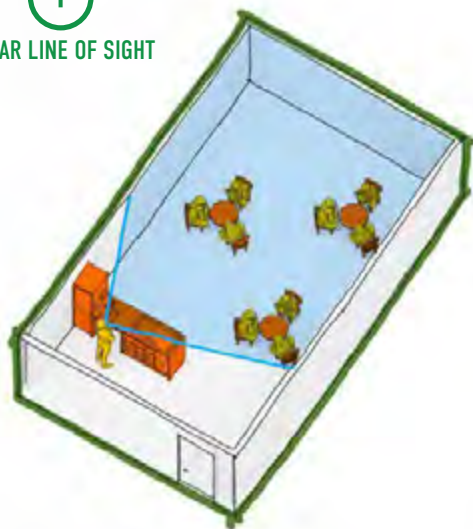


Figure 16 – Classroom Configurations for Sightlines

+
CLEAR LINE OF SIGHT



VS.

-
NO VISUAL CONNECTION!

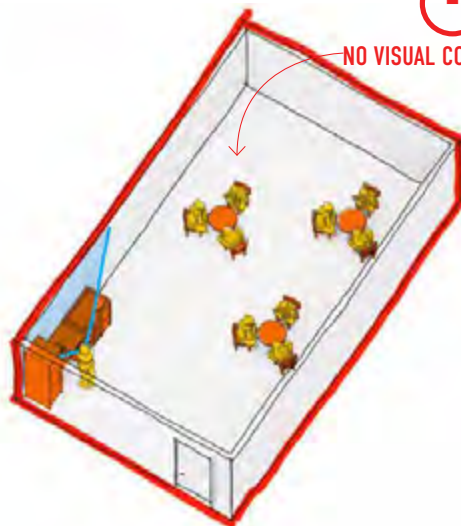


Figure 17 – Sightlines from Diapering Station

Other Considerations

- Avoid L-shaped rooms and tall fixed elements, where possible, to permit easy supervision from all angles of the room and facilitate natural light throughout.
- Allow children to have visual contact with the exterior by incorporating low exterior windows. A height of 18" from the floor is recommended.
- Provide diversity in materials and textures to promote sensory variation and exploration.
- As part of a fire safety plan, an evacuation crib may be required.
- Consider accommodations for music in the nap room, such as outlets and space for electronics.

3.2.5

Toddler Classrooms

(18 Months – 35 months)

Function and Goals

Toddler classrooms should provide an atmosphere that is comfortable yet interesting to support play-based learning, and foster creativity. The design should encourage the development of both independence and relationships.

Functional Space Considerations

- Provide one cubby per child for children's personal belongings and outerwear.
- Include a small station at the room entrance to accommodate information sharing and secure storage for ECEs to store their personal belongings.
- Provide large, unrestricted play spaces as well as more intimate, quiet zones that facilitate independent play or the gathering of small groups. Consider using design strategies such as lowered ceilings and material changes to create the perception of smaller activity zones within the space.
- Include wall space to display children's activities.
- Include a storage room with direct access from the toddler room.
- Cots require a storage area when not in use during nap times. The storage area should be sized to suit the maximum number and dimensions of cots. Consider clearances in the storage area to provide ease of access.
- Provide a serving station, separated from the diapering station, which includes adequate countertop space and a serving sink. Refer to Figure 20.
- A portion of the serving counter should be child-height with a child sink to encourage independent learning. Child sinks should have reduced hot water temperature supply.
- Plan for a clear circulation path between activity areas and stations

Washroom/Diapering

- Allow space for a diapering station that includes a change table, diapering sink and adequate storage for changing materials. Refer to Figure 18. Ensure adequate space for ECEs to maneuver within this station.
- Maintain sightlines by situating the change table so the ECE can face the play space when changing diapers.
- Position and orient the diapering station to obscure views of the change table from visitors entering the classroom.
- The washroom should contain toilets, sinks and soap dispensing fixtures that are reachable and easily accessible for the age group to encourage independence. Consider available options when selecting toilet sizes.
- Stalls with doors should be omitted to accommodate monitoring.
- Provide an accessible toilet, sink, and circulation space.

➡ A ratio of 1 toilet and 1 sink per 10 toddlers is required. Refer to Regulation 20(8).

➡ Refer to additional Regulation references applicable to classrooms in section 2.3.2 of this Design Guide.

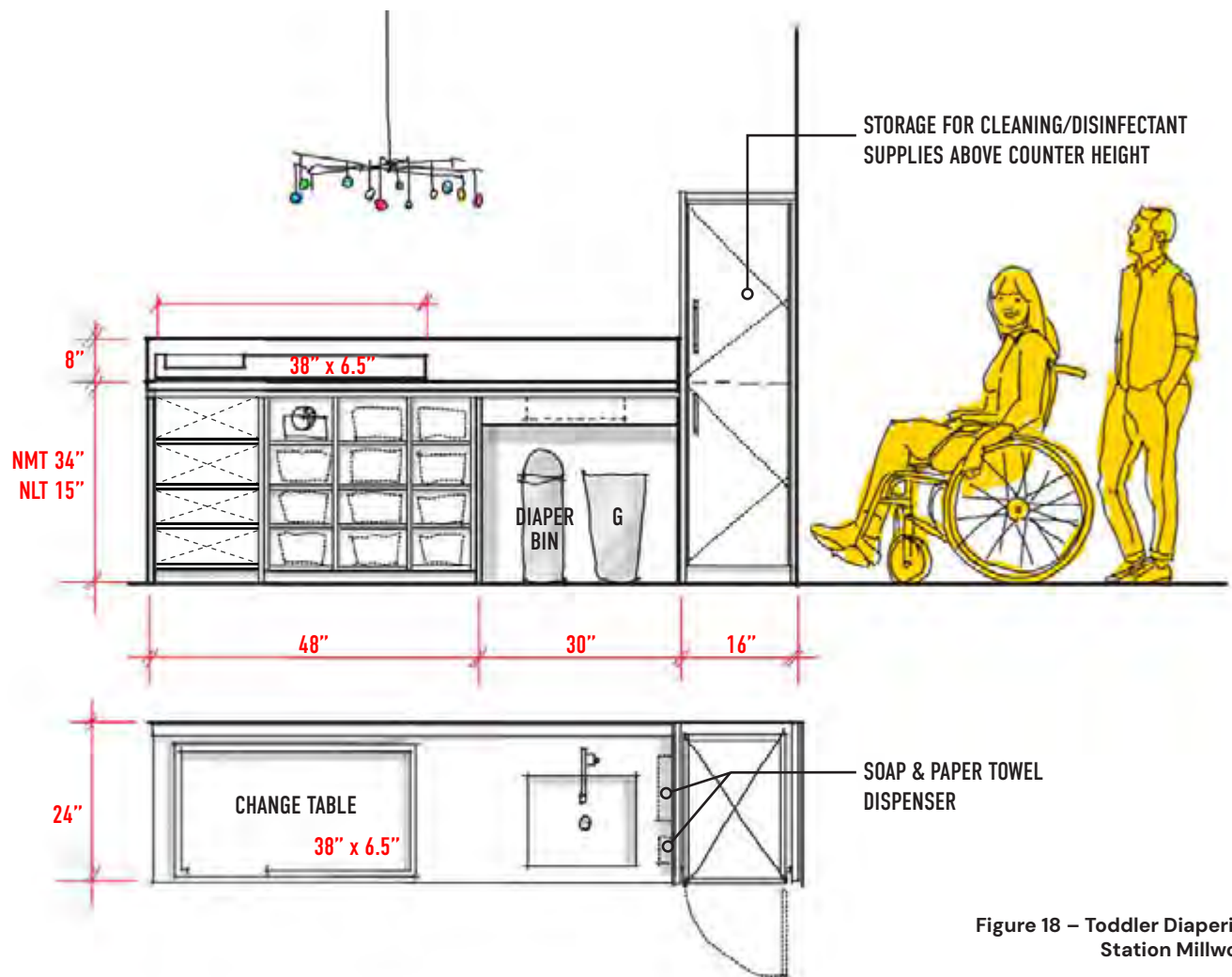


Figure 18 – Toddler Diapering Station Millwork

Furnishing Considerations

- Movable elements and furnishings allow for flexibility and encourage periodic reorganization of the room to reduce child and ECE fatigue of the space.
- Include low open storage or shelving for toy storage that is accessible to children.
- If upper storage is incorporated for items that are to be out of children's reach, consider their location and enclosure to avoid items falling into activity areas for safety.
- Consider window coverings to offer a restful environment during nap times.

Important Adjacencies

- Cubbies should be located in the corridor or mudroom near the entrance to the classroom.
- The washroom should be located adjacent to and with direct access from the classroom to allow the ECE's to maintain a visual and auditory connection to the classroom while monitoring toileting activities. The washroom area may be separated from the classroom by a half-wall with glazing above to afford some privacy and sanitary separation, while maintaining open access to the classroom, without a door, for an auditory connection and to encourage independent use. Refer to Figure 08.
- If the diapering station is located within the toddler washroom, situate the diapering area to face the classroom with a visual connection into the classroom.
- Provide direct access to the outdoor play space from the classroom, if possible.
- Provide direct access to cot storage from the toddler classroom.
- Consider providing a direct connection between adjacent classrooms to allow easier communication between rooms while maintaining staff ratios, and as alternative circulation in the event of an emergency.

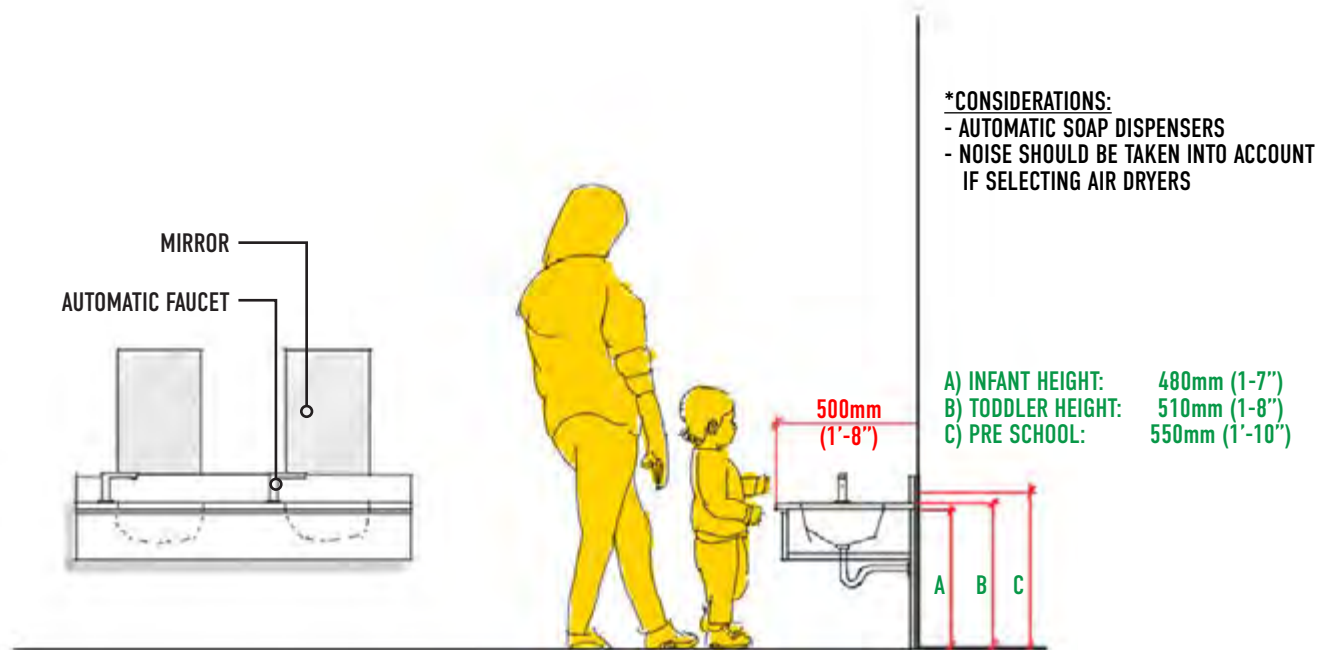


Figure 19 – Washroom Vanity Millwork

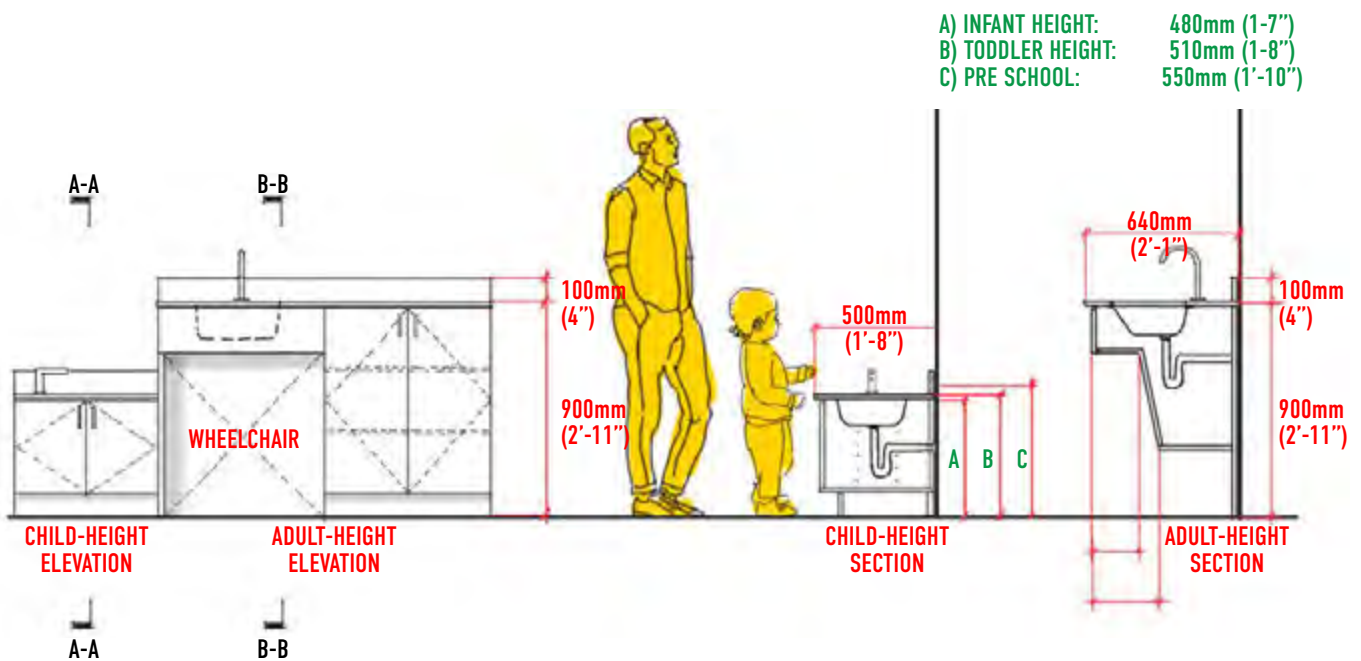


Figure 20 – Serving Station Millwork

Other Considerations

- Avoid L-shaped rooms and tall fixed elements, where possible, to permit easy supervision from all angles of the room and facilitate natural light throughout.
- Allow children to have visual contact with the exterior by incorporating low exterior windows. A height of 18" from the floor is recommended.

3.2.6

Pre-School Classrooms

(36 Months to School-Age)

Function and Goals

Pre-school classrooms should provide a rich, intriguing and challenging environment which fosters growth and development. The design should consist of durable elements that promote exploration and social interaction.

Functional Space Considerations

- Provide one cubby per child for children's personal belongings and outerwear.
- Include a small station at the room entrance to accommodate information sharing and secure storage for ECEs to store their belongings.
- Provide large, unrestricted play spaces as well as more intimate, quiet zones that facilitate independent play or the gathering of small groups. Consider using design strategies such as lowered ceilings and material changes to create the perception of smaller activity zones within the space.
- Include ample wall space to display children's activities and creations.
- Include a storage room with direct access from the toddler room.
- Cots require a storage area when not in use during nap times. The storage area should be sized to suit the maximum number and dimensions of cots. Consider clearances in the storage area to provide ease of access.
- Provide a serving station, separated from the diapering station, which includes adequate countertop space and a serving sink. Refer to Figure 20.
- A portion of the serving counter should be child-height with a child sink to encourage independent learning. Child sinks should have reduced hot water temperature supply.
- Plan for a clear circulation path between activity areas and stations.

Washroom/Diapering

- The washroom should contain toilets, sinks and soap dispensing fixtures that are reachable and easily accessible for the age group to encourage independence. Consider options for toilet sizes.
- Toilets can be separated by dividers for privacy, but stalls with doors should be omitted to accommodate monitoring. Consider half-height dividers that ECEs can see over while providing privacy between children. Refer to Figure 09.
- Provide an accessible toilet, sink, and circulation space.

➡ A ratio of 1 toilet and 1 sink per 10 children is required. Refer to Regulation 20(8).

➡ Refer to additional Regulation references applicable to classrooms in section 2.3.2 of this Design Guide.

Furnishing Considerations

- Movable elements and furnishings allow for flexibility and encourage periodic reorganization of the room to reduce child and ECE fatigue of the space.
- Include low open storage or shelving for toy storage that is accessible to children.
- If upper storage is incorporated for items that are to be out of children's reach, consider their location and enclosure to avoid items falling into activity areas for safety.
- Consider window coverings to offer a restful environment during nap times.

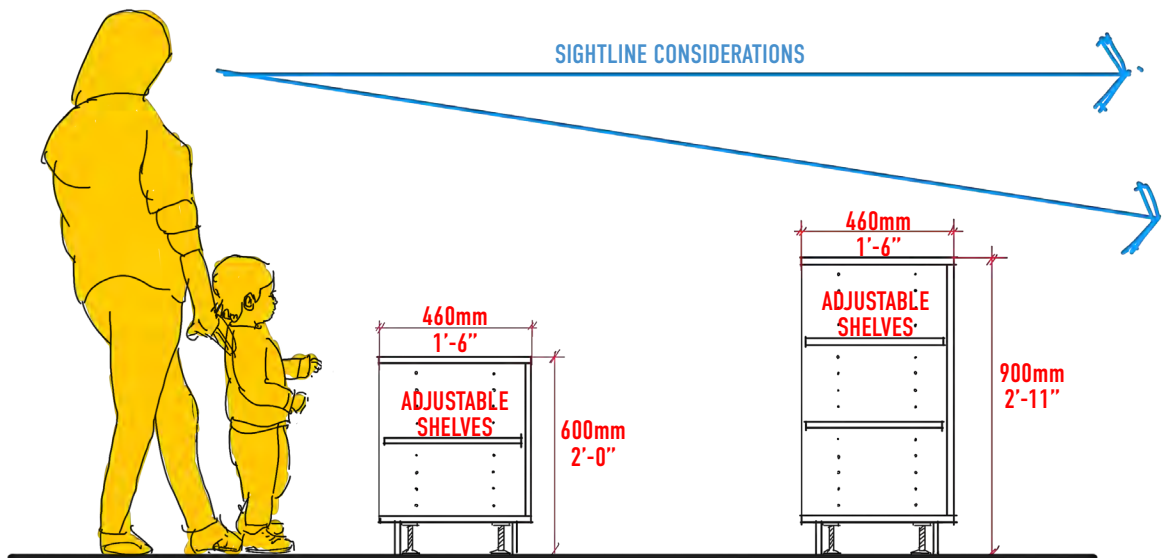


Figure 21 – Playroom Storage Millwork

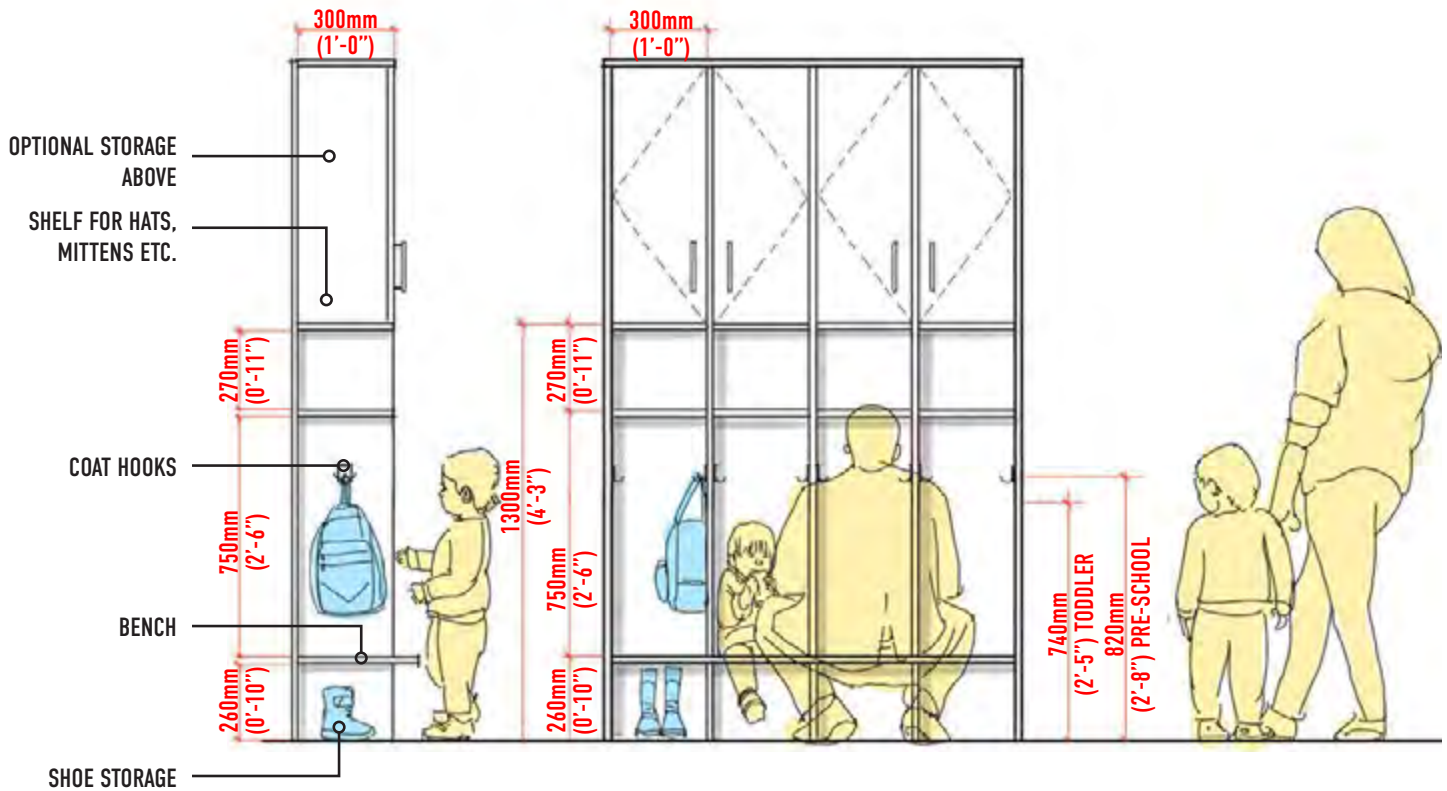


Figure 22 – Cubby Millwork

Important Adjacencies

- Cubbies should be located in the corridor or mudroom near the entrance to the classroom.
- The washroom should be located adjacent to and with direct access from the classroom to allow the ECE's to maintain a visual and auditory connection to the classroom while monitoring toileting activities. The washroom area may be separated from the classroom by a half-wall with glazing above to afford some privacy and sanitary separation, while maintaining open access to the classroom, without a door, for an auditory connection and to encourage independent use. Refer to Figure 09.
- Provide direct access to the outdoor play space from the classroom.
- Provide direct access to cot storage from the toddler classroom.
- If the Pre-School and Toddler rooms share a washroom, consider separating the washroom with half-height doors to maintain visual and acoustic connection to the rooms for monitoring, while restricting wandering into adjacent rooms.
- Consider providing a direct connection between adjacent classrooms to allow easier communication between rooms while maintaining staff ratios, and as alternative circulation in the event of an emergency.

Other Considerations

- Allow children to have visual contact with the exterior by incorporating low exterior windows. A height of 18" from the floor is recommended.

3.2.7 Kitchen

Function and Goals

The kitchen serves an important function within a child care facility to meet the nutritional needs of children for healthy development. A safe working environment with adequate preparation and storage space is essential.

Functional Space Considerations

- Provide adequate storage area for dry food, such as a pantry.
- Provide adequate counter space for food preparation and equipment.
- Ensure adequate space is provided for safe operations and circulation while kitchen equipment is in use.
- Consider space requirements for the storage of catering trays and rolling carts.

Equipment

- As a child care centre is a commercial scale operation, commercial grade appliances are recommended for efficient and effective operations.
- Commercial dishwasher.
- Double sink, or sized to meet capacity requirements. Consider also providing a dedicated food washing sink.
- Handwashing sink.
- Fridge, sized to meet capacity requirements. Consider a commercial/walk-in fridge.
- Freezer, sized to meet capacity requirements. Consider a commercial/walk-in freezer.
- Electric oven/range, sized to meet capacity requirements. Consider a commercial oven/range.
- Microwave, selected to meet capacity requirements.

Important Adjacencies

- The kitchen should be located with consideration for noise impact on adjacent rooms.
- Consider providing an exterior delivery entrance directly off the kitchen to reduce visitor traffic through the child care centre, depending on security requirements.

Other Considerations

- All surfaces must be easy to clean to maintain a sanitary environment for handling food.
- Provide a glass lite in corridor access doors for safety precautions when opening doors. Recommended height to bottom of glass lite from floor is 18" to provide visibility of children.
- Consider providing a viewing area into the kitchen which maintains an acoustic separation yet offers visual learning opportunities for children.

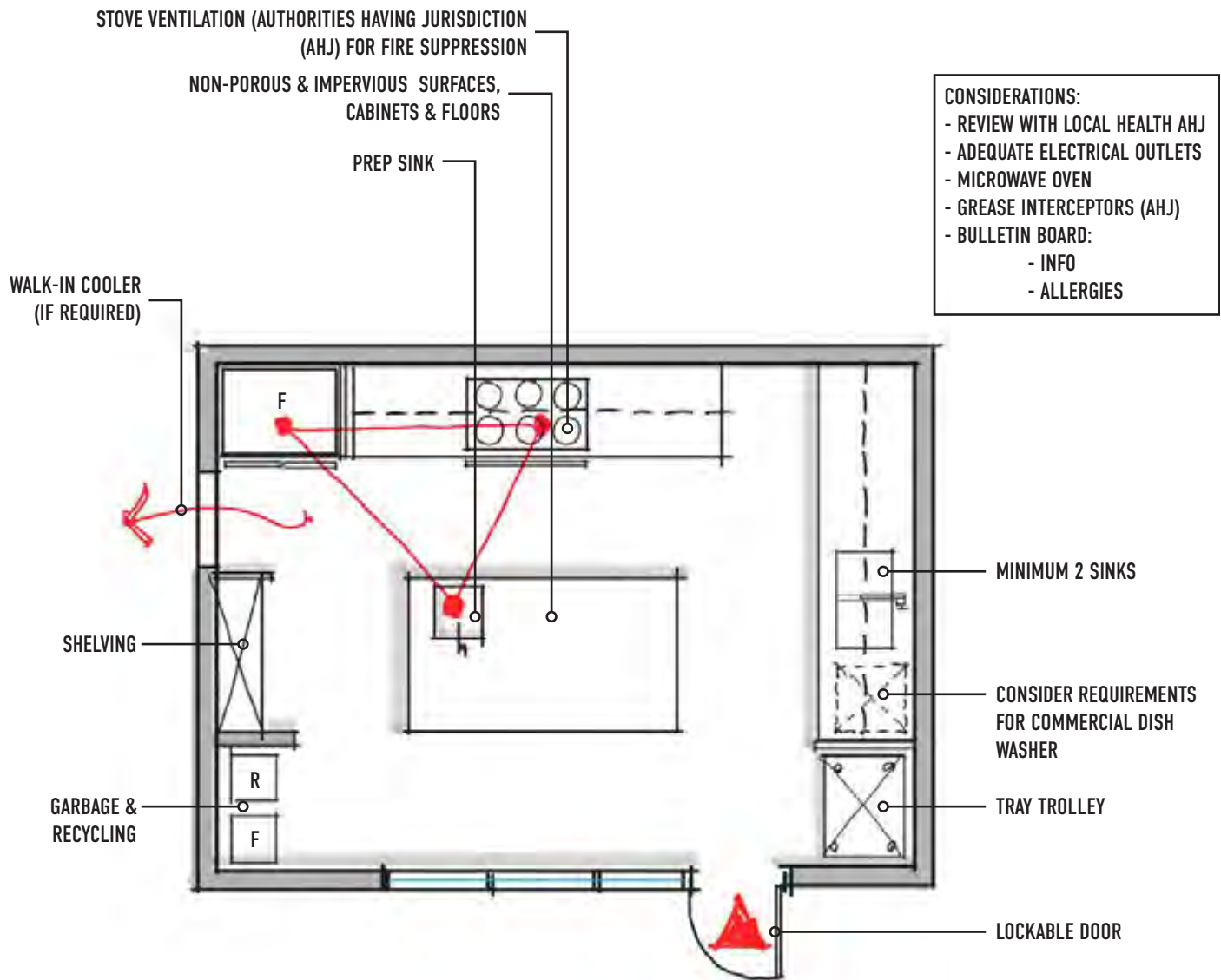


Figure 23 – Kitchen

3.2.8 Staff Offices

Function and Goals

Staff offices should provide a comfortable and healthy working environment with access to natural light. The space should be designed to accommodate private consultation between staff and parents or caregivers.

Functional Space Considerations

- Staff offices should be accessible and sized to accommodate meetings with parents/caregivers.
- Allow sufficient space for general storage and the storage of confidential documents.
- Furniture should be arranged to enable passive surveillance to outside the office space and to allow for privacy when viewing digital documents.

Furnishing Considerations

- Desk/workstation, comfortable desk chair, and minimum two guest chairs.
- Secure storage for files and records.
- Bookshelf.
- Printer/photocopier if not provided in staff room.

Important Adjacencies

- Locate a staff office with windows that allows for passive surveillance of the exterior entry area and into the vestibule.

3.2.9 Staff Room

Function and Goals

A dedicated staff room is essential toward staff feeling valued and supported in their workplace, which in turn enables them to perform most effectively in their role. The staff room should offer a comfortable yet professional area for staff to relax, learn and collaborate with the goal of attracting and retaining skilled staff. The space should promote a healthy working environment with access to natural light and facilitate opportunities for professional development.

Functional Space Considerations

- Provide adequate area to accommodate ECEs for breaks and lunch.
- Consider space to prepare large materials and learning activities.
- Provide secure storage facilities for staff to store their belongings, if not provided within classrooms.

Equipment & Furnishing Considerations

- The design should accommodate equipment for information sharing, such as bulletin or white boards.
- Provide a kitchenette with a microwave, fridge, sink, countertop, kettle and toaster.
- Allow for lounge and table seating.
- Printer/photocopier.

Important Adjacencies

- The staff room should be located to provide a retreat from the children spaces, both physically and acoustically, to offer a relaxing break area.

Other Considerations

- Provide access to natural light for a healthy and restful environment.

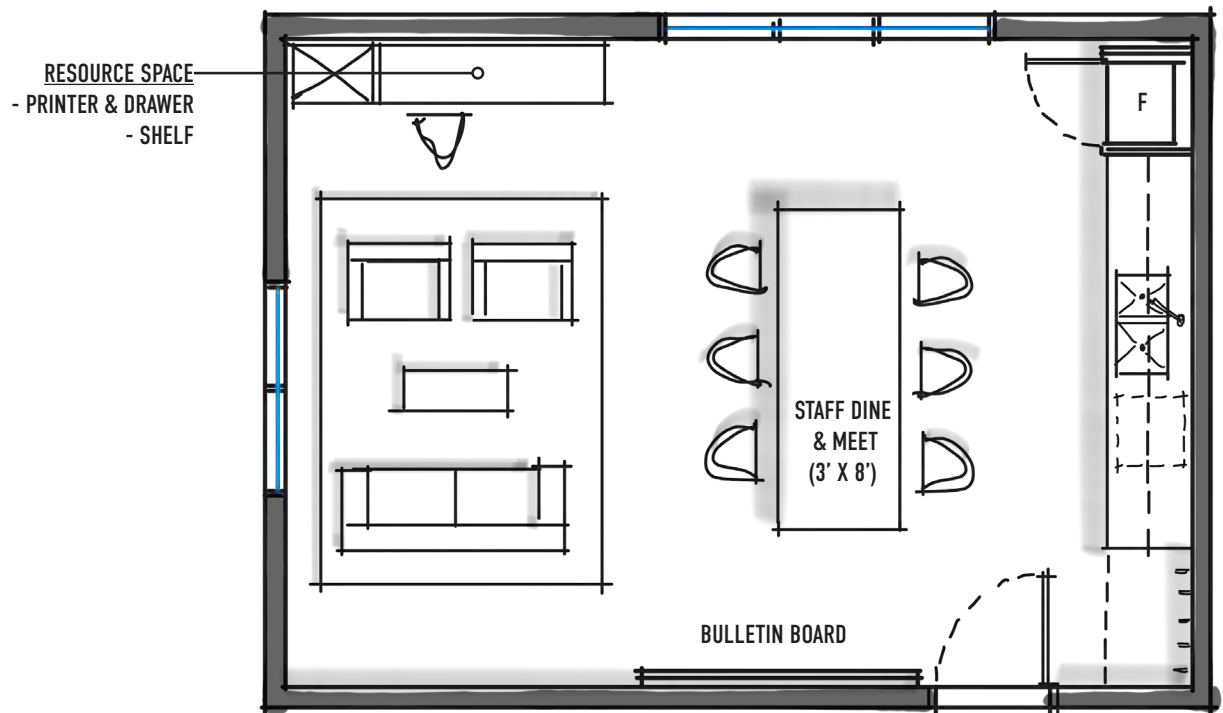


Figure 24 – Staff Room & Resource Space

3.2.10 Corridors

Function and Goals

The design of corridors should consider the scale of both children and adults and provide opportunities for connection throughout the child care centre. They must allow for accessible and comfortable circulation that is uncluttered, easy to navigate, and permits visibility.

Functional Space Considerations

- Provide a minimum clear circulation width of 5'-0", where possible.
- An overall corridor width of 7'-0" is recommended in locations with cubbies lining both sides of the corridor, or 6'-0" if cubbies are located along one side of the corridor.
- Provide opportunities for the display of information and children's art, activities or accomplishments.

- Incorporate wayfinding strategies to facilitate orientation and promote independent learning for children. Consider using graphic systems rather than textual signage to promote wayfinding at all ages, such as incorporating colour, flooring changes, or patterns.

Equipment

- While an elevator is ideal to meet the functional requirements of a two-storey child care centre, a lift for accessibility could be considered on a case-by-case basis.

Other Considerations

- Consider sightlines when locating corridors to provide visibility throughout the facility.
- Design for visual connections and interactions with adjacent program areas to enable passive surveillance and encourage passive learning for children.
- Integrate natural light and other natural elements into the design, where possible. Consider including low-level glazing to promote children's views of the exterior.

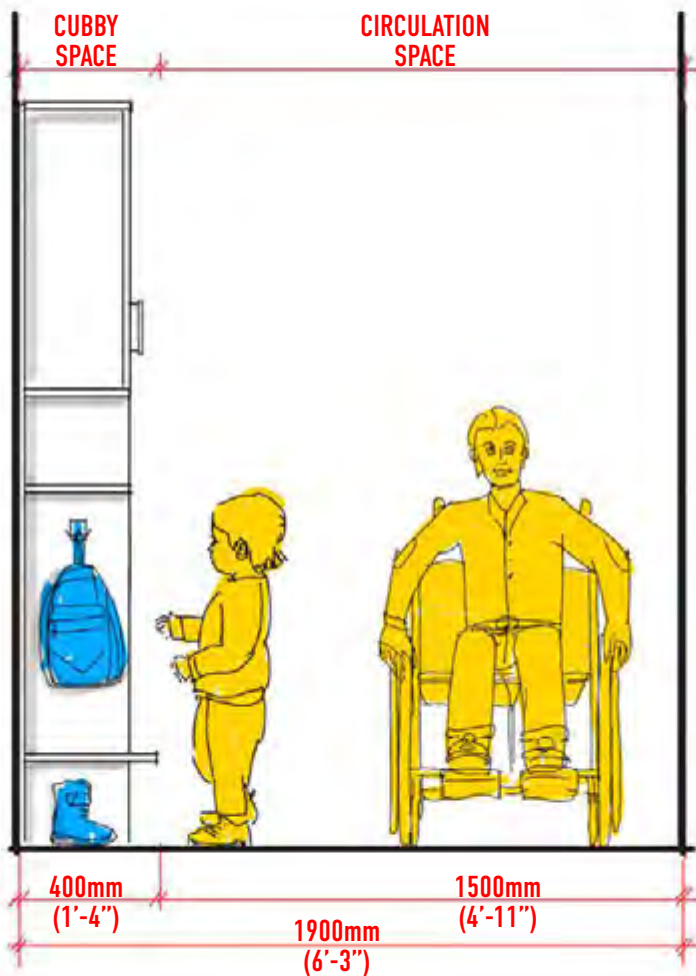


Figure 25 – Corridor Width: Best Practice

3.2.11 Stroller Storage

Function and Goals

A dedicated space for the storage of strollers which belong to the child care centre, generally consisting of multi-seat strollers used for infants.

Functional Space Considerations

- Size the room or space to suit the maximum number of strollers required based on the capacity of the child care centre.
- Locate stroller storage in an area which does not impede circulation space.
- Short-term and separate storage space may also be provided for strollers owned by parents/ caregivers, either indoors or in a covered outdoor area. Parent/ caregiver stroller storage sizes may vary based on the context and likelihood of walking as a form of commuting to the centre.

Important Adjacencies

- Infant stroller storage should be located near infant rooms.
- Parent/caregiver stroller storage should be located near the entry.

Other Considerations

- Consider providing storage for parent/caregiver owned bike trailers and car seats.

3.2.12

Outdoor Play Space

Function and Goals

The outdoor play space provides children with a direct connection to the natural environment to promote healthy development and active play. The space should encourage a variety of outdoor activities in a safe and comfortable environment. Consideration should be given to find alternative materials to chain link fencing to define and enclose outdoor play spaces in an engaging and dynamic way, with the goal of providing an improved user experience and public interface.

Functional Space Considerations

- Provide opportunities for sun and wind protection through trees, shade structures, building location or overhangs.
- Consider ease of access and storage for water bottles and sunscreen.
- The design should create different zones to promote a variety of activities including social, physical, cognitive and independent play.
- Enclose the outdoor play space with fencing for safety and security, with gate latches that are inoperable by children.
- Infants must have a dedicated play area, separated from the other age groups. Consider sun protection and surfaces appropriate for crawling.
- If the outdoor play space is shared by and open to all other age groups, ensure that the equipment, materials and grade variations are appropriate for all ages. Separation can be provided between age groups if safety is a concern.

Equipment

- Durable and frequently inspected play equipment.
- Provide adequate outdoor storage area, such as a shed, storage bins or storage room.
- Garden planters, beds and small greenhouses can introduce children to gardening practices and provide a valuable activity during the warm months.
- Consider incorporating natural elements such as trees, rocks and sand boxes (with covers) to encourage imaginative play and motor skills.
- Provide at least one hose bib per outdoor play area. If located within the play area, provide a childproof cover.

Important Adjacencies

- Provide direct access from all playrooms, if possible.
- Consider providing a washroom near the outdoor play entrance, if there is a single access point to the outdoor play area.
- Locate the outdoor play space with consideration for privacy from adjacent public areas and view from parking areas. Where applicable, provide a buffer such as landscaping or areas of opaque fencing.
- Enable easy access to outdoor storage areas.

Other Considerations

- Design for sightlines to facilitate easy supervision throughout the space at all times.
- Consider lighter coloured surfaces to avoid heat absorption during warm months.
- Consider lighting in outdoor play spaces which will be used on darker days and nearing dusk during months with shorter days.
- Consider the material of ground cover for non-toxic, child-safe materials that are not easily ingested for infant zones.
- Avoid placing exterior mechanical equipment in or adjacent to the outdoor play space.

➔ *One or more outdoor play spaces must be provided, or available within a reasonable distance, that has at least 7m² of area per child and enclosed by a fence that is at least 1.2m high. It must be large enough to accommodate the largest group category (e.g. toddler group or pre-school group) at one time, other than infants. Infants require a separate and enclosed area with at least 7m² of area per infant. Refer to Regulation 22*

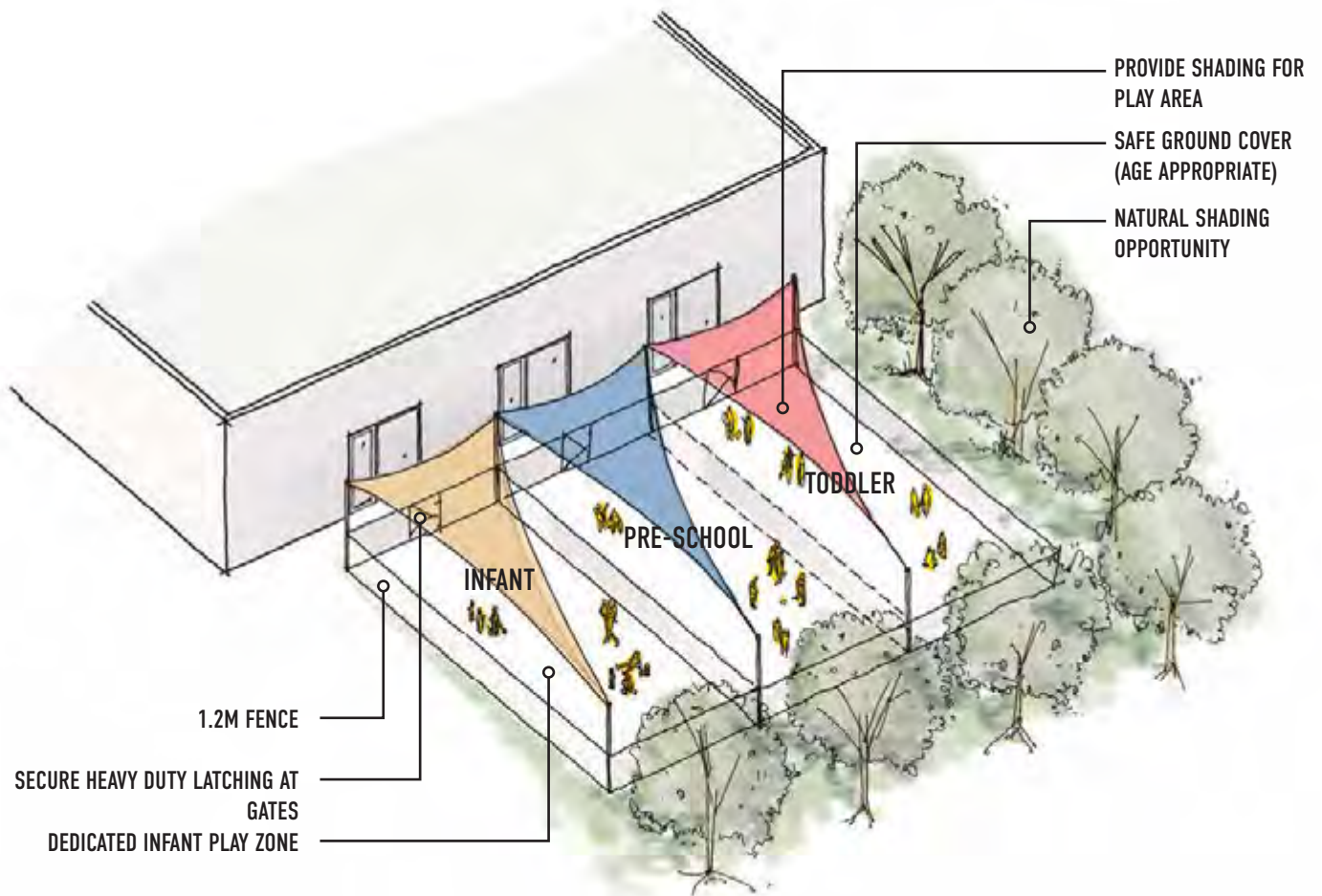


Figure 26 – Outdoor Play Space

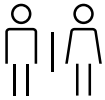
3.3 Other Rooms and Space Considerations

When designing a child care centre, several key functional areas must be considered to provide a safe, efficient and nurturing environment for both children and staff. Each area has specific considerations and best practices to accommodate the unique needs of a child care setting for a well-organized and supportive environment.



3.3.1 General Building Storage

- Provide general building storage to accommodate seasonal or rotational toys, linens, and other required equipment.
- General building storage should be a secure space.



3.3.2 Dedicated Staff Washroom

- Provide an accessible washroom with direct access to the corridor. If this is also used as a public washroom for parents/guardians, locate near the lobby.
- Depending on the size of the child care centre, multiple staff washrooms may be required to provide ease of access and comply with building code requirements.



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3.3.3 Laundry

- Provide a dedicated laundry room.
- Include an appropriately sized folding surface and area to place/store baskets or carts within the laundry room.
- Allow for secured storage of chemical supplies.
- Consider including a toy washing station with a double or triple sink.
- Provide space to hang items for drying.



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3.3.4 Waste and Recycling

- Locate the waste and recycling zone in an accessible area.
- Design the waste and recycling zone with consideration for local recycling and composting programs.
- Consider learning opportunities to teach children about recycling and composting.
- If an exterior waste storage space is required, locate the space away from the outdoor play space to avoid excessive noise, smell and pests.



3.3.5 Custodial

- Locate the custodial room in an accessible location.
- Provide secured storage for chemical supplies.

- Provide a mop sink and floor drain.
- Include adequate floor area for the storage of a broom, mop, vacuum, cart, and other cleaning equipment.



3.3.6 Mechanical Room

- Provide an adequately sized mechanical room with appropriate clearances for maintenance.
- Locate mechanical equipment requiring maintenance in a readily accessible area.



3.3.7 Electrical Room

- Provide an adequately sized electrical room with appropriate clearances for maintenance.
- Locate electrical equipment requiring maintenance in a readily accessible area.



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3.3.8 Other Rooms or Spaces

- A multipurpose or flex space provides an additional amenity space for days with very poor weather, as well as for special activities, parent meetings, staff meetings and other community events. This space could include storage for movable furniture and adult-sized seating which would aid in the flexibility of its use.

3.4

Designing for Flexibility

There are various design considerations that can make a child care centre more resilient and adaptable over time. Designing classrooms to accommodate various age groups, or to be easily modified to accommodate different age groups, can allow a child care centre to be more flexible with changing demands.

- Infant nap rooms can be designed and constructed with easily removable partitions to create a larger classroom for toddler or pre-school use. Avoid locating mechanical or electrical systems in the nap room partitions and ensure these walls are non-structural.
- Consider including a washroom area in the infant classroom with toilets and sinks to provide flexibility for the classroom to be used as a toddler or pre-school classroom.
- Consider including a second sink in pre-school classrooms to provide flexibility for the classroom to be used as an infant or toddler classroom, which would require a diapering sink along with a separate serving sink. Space for a change table will need to be accounted for.



4.0 Systems and Building Materials

4.1 General Material Considerations

The selection of materials for child care centres is one which considers multiple factors. Durability, longevity, maintenance requirements, aesthetics, cost, and performance all require consideration when selecting materials which will best support the child care program and operations.

Materials that children come into contact with require particular consideration. Materials that have low VOC and toxicity, are easy to clean, and that convey a natural and healthy aesthetic help to create healthy spaces for children. Smooth edges that are void of gaps and manipulative fixing are important for child safety. Materials must be able to withstand rigorous investigation by curious minds and remain intact and inert when subjected to the activities and elements present in child care centres.

4.2 Building Components

4.2.1 Millwork

Considerations when designing millwork and selecting materials include:

- Easy to clean, non-porous surfaces.
- Smooth, non-toxic surfaces for child safety,
- Durability through continuous materials (e.g. : integral backsplash, solid surface countertops).
- Strong and safe door and drawer hardware.
- Connections between flooring and millwork at their base.
- Easy to clean backsplash.

4.2.2 Doors and Hardware

Considerations when designing doors and door hardware include:

- Avoid pocket-doors for sanitary considerations.
- Consider height of door hinges (keep out of reach for children).
- Consider type of door knobs to mitigate flight risks.
- Provide locks to administrative areas where staff store belongings and records.
- Vision panes in solid doors should extend low enough to see children on the other side of the door where children may be gathered.

4.2.3 Windows and Window Treatment

Considerations when designing windows and window treatment include:

- Low sill height for children to see the outdoor environment rather than just the sky. Recommend height of glass is 18" above floor.
- Safety considerations for window coverings with cords not accessible to children.
- If windows are operable for natural ventilation, this should be at an unreachable height for children and with a restricted opening size (6").
- Operable windows should have screens to keep insects out of the building.
- Considerations should be made for safety glass and to verify building code regulations for glazing located below a 36" height.
- Consider solar heat gain and position of sun at nap times for window treatment and/or covering.
- Avoid horizontal mullions which children could climb.
- Glazing selection for new windows should consider low-E coatings to minimize UV and infrared light that can pass through a window.

4.3.4

Wall Finishes

Considerations when designing wall finishes and selecting materials include:

- When selecting wall finishes, consider durable finishes that will not peel when adhesive tape is removed.
- Use abuse resistant gypsum board in areas of high impact, and moisture resistant gypsum board in wet areas.
- Select appropriate sound transition class (STC) ratings between classrooms, for washrooms, and for offices.
- Wall finishes that are not gypsum must meet building code requirements for flame spread rating.
- Select low volatile organic compound (VOC) paints.
- Provide wall protection and corner guards in areas which will be subject to damage from programming or regular maintenance.

4.2.5

Floor Finishes

Considerations when designing floors and selecting floor finishes include:

- Select a non-slip finish in circulation areas such as porcelain tile or non-slip sheet flooring.
- Wet areas, such as laundry, kitchens and bathrooms should have slip-resistant flooring.
- Consider the maintenance regiment of each floor type and review with the facility owner or operations staff. Floor surfaces should be easy to maintain and clean.
- Avoid carpet, hard surfaces like concrete, and sliding rugs.

- Rugs may provide comfort and acoustic softening but should be used with underlayment pads to avoid tripping hazards. They must be washable.
- Design with a variety of activities in mind such as water and sand play zones.
- Engineered wood and tile floors are durable and low maintenance.
- Linoleum sheet flooring, welded at the seams, is made of a rapidly renewable material and is more sustainable than vinyl flooring.

4.2.6

Ceiling Finishes

Considerations when designing ceilings and selecting ceiling finishes include:

- Acoustic ceiling tile helps to absorb sound and provides easy access to systems and equipment above the ceiling.
- Gypsum wall board can provide a clean-looking finish that is smooth and durable, but does not have the same acoustic properties as acoustic ceiling tile. Consider access and acoustic needs when selecting a ceiling finish.
- Ceiling finishes that are not gypsum must meet building code requirements for flame spread rating.
- Ceilings with exposed equipment are prone to dust collection which could present a health hazard and require a cleaning regime.
- Consider sound baffling or acoustic ceiling panels for areas where sound mitigation may be required.

4.2.7

Washroom Accessories

Types of washroom accessories required for child care centres include:

- Mirrors
- Automatic faucets.
- Soap dispensers (consider automated dispensers).
- Hand dryers / paper towels (consider automated dispensers).
- Non-combustible waste bin.
- Sanitary napkin in staff W/C.
- Grab bars, shelves and hooks.

4.2.8

Signage and Wayfinding

Considerations when designing signage include:

- Bylaws may dictate requirements for building-mounted and ground-mounted exterior signage.
- Signage should aid in wayfinding from the entrance and throughout the building.
- Signage should be consistent, high contrast and incorporate tactile surfaces for accessibility.
- Signage can also be a fun way to animate spaces for children

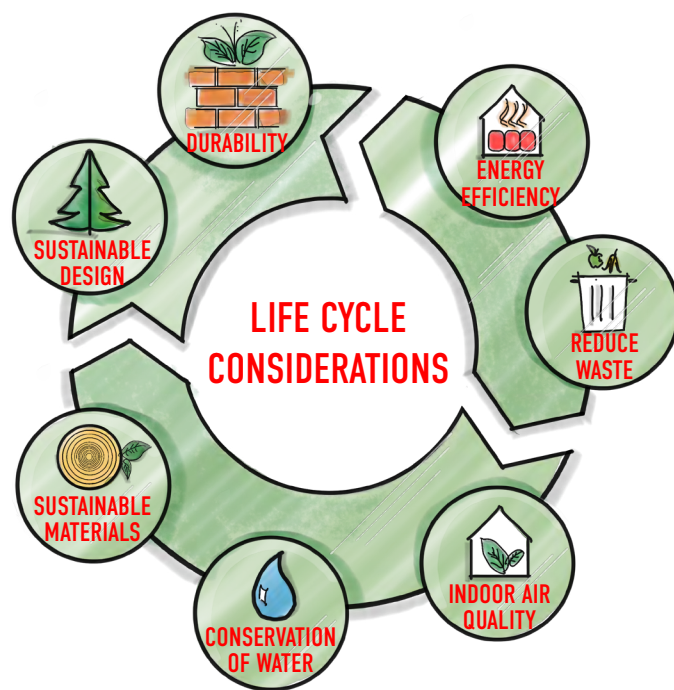


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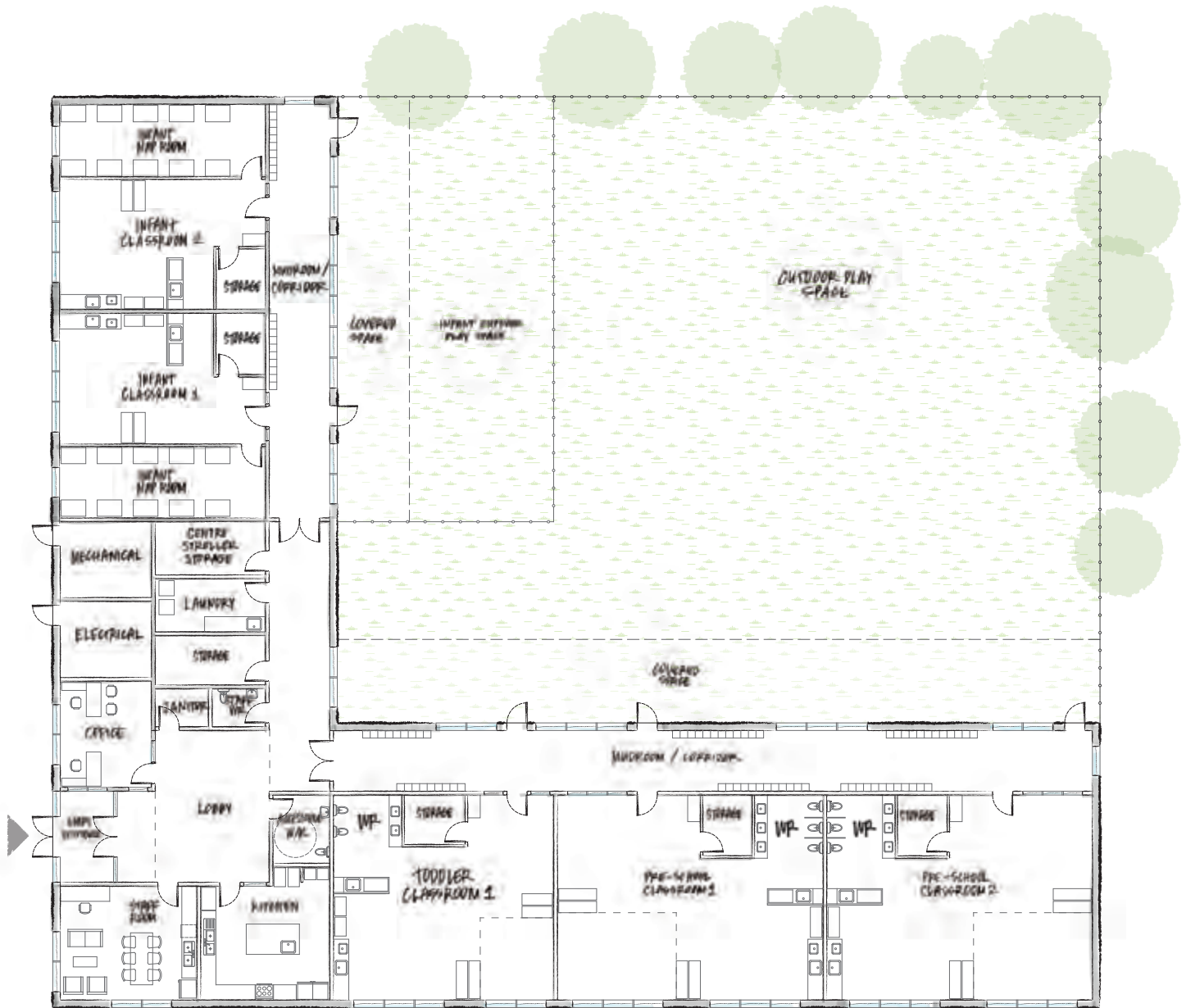
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4.0 Systems and Building Materials

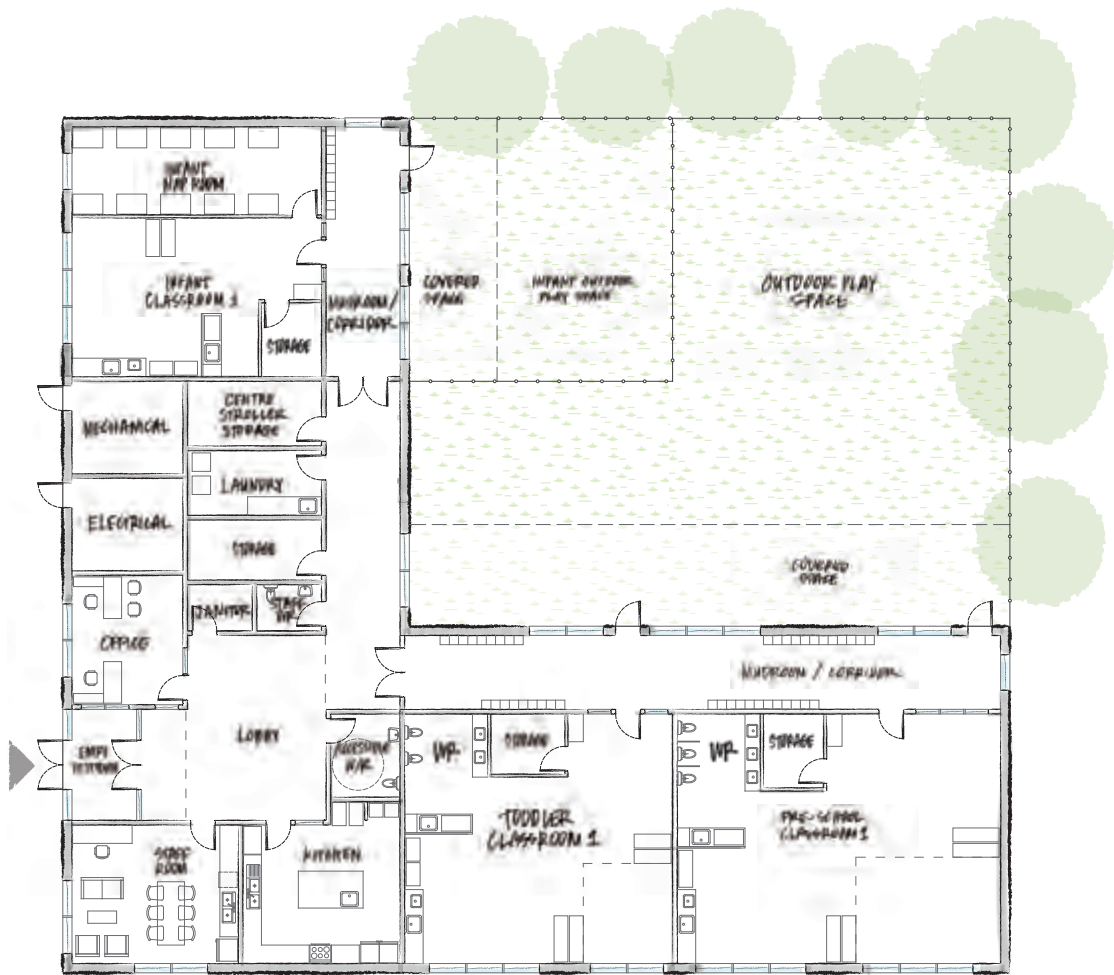
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Figure 27 – Life Cycle Diagram

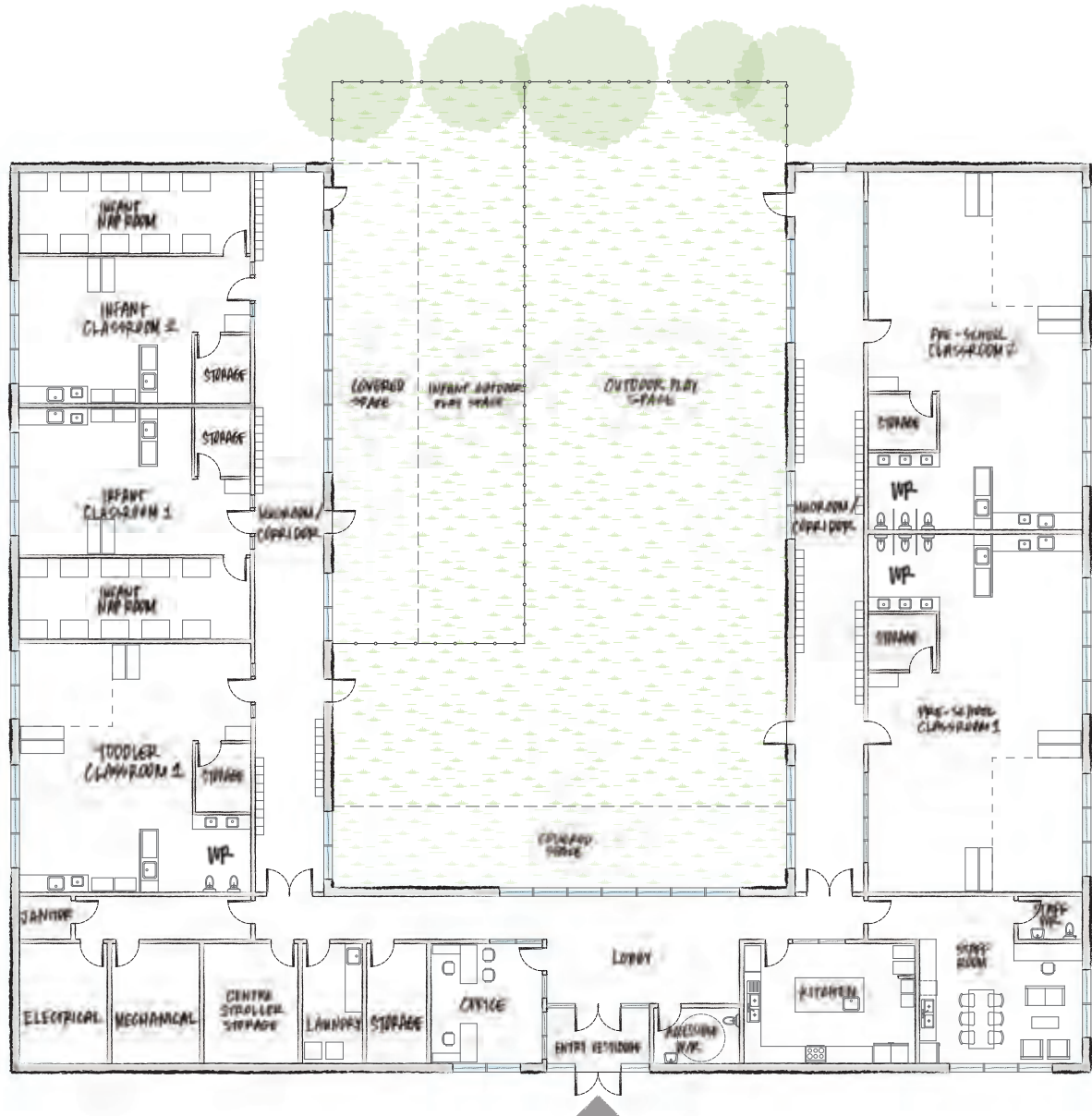


L-Shape Floor Plan Configuration for 86 Children Capacity

The above plan sketches are intended for reference only and are not to be used as a basis for construction. The plans do not account for site integration or specific program requirements of individual child care centres. Working with an architect for professional services will facilitate a better understanding of individual goals and construction method input.

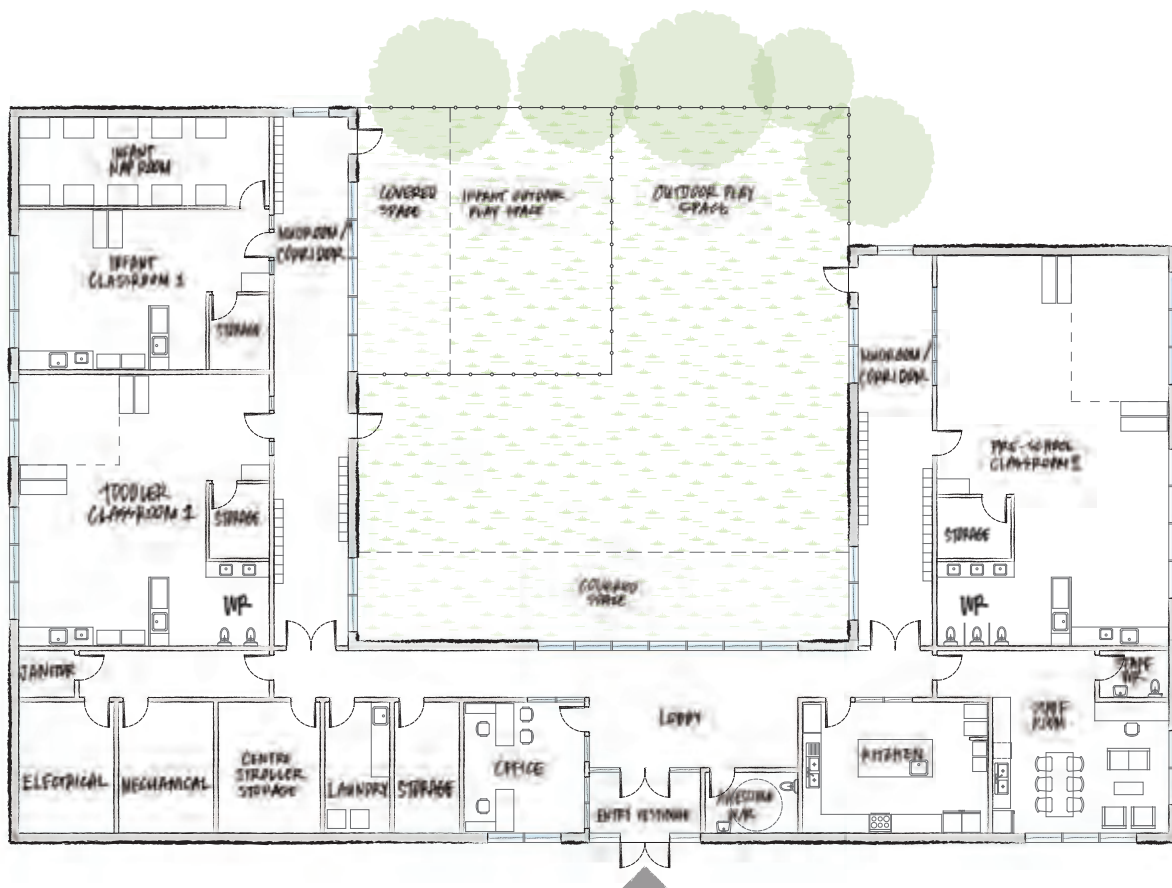


L-Shape Floor Plan Configuration for 52 Children Capacity



U-Shape Floor Plan Configuration for 86 Children Capacity

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U-Shape Floor Plan Configuration for 52 Children Capacity

