Ministry of Health

Saskatchewan

DESIGN

GUIDELINES and STANDARDS

FOR

LONG TERM CARE FACILITIES

IN

SASKATCHEWAN

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Capital and Regional Services Branch

July 7, 2009

TABLE OF CONTENTS ..... **I**

USING THESE GUIDELINES AND STANDARDS

I. PURPOSE

These *Guidelines for Long Term Care (LTC) Facilities in Saskatchewan* have been developed keeping in mind the Ministry of Health's '*Patient First*' commitment to improved care and services to seniors with complex care needs and other younger adults with disabilities. They promote innovative design in the construction of new LTC facilities in Saskatchewan.

The purpose of the guidelines is to provide a common reference tool for the design of LTC environments and to assess proposals and plans for new and/or major renovated LTC facilities.

Although not an exhaustive list, the intended audience of the guidelines include: Architects, Structural Engineers, Mechanical Engineers, Electrical Engineers, Code Consultants, Food Services Consultant, resident care operators, Project Managers, developers, funding agencies and other parties involved in the development of LTC projects.

The overall goal of the Guidelines is to integrate design concepts that will facilitate the provision of quality resident care in an environment that is comfortable, aesthetically pleasing and has a home atmosphere. This means that new buildings are to be designed to be an extension of the residents' homes but with nursing support. In practical terms, a LTC facility can never be exactly like a home but the integration of the support staff with the residents will help make the "home" conducive to a resident directed environment. This means that residents direct their own lives with staff supporting them in their decision. Thus, the architect will design the building to provide spaces that allows for resident enjoyment rather than focusing only on operational efficiencies.

The Health Ministry supports designing for small groups of residents as a unit which we are calling the "Residents Home" or "Home". Two "Resident Homes" form a "Neighbourhood" within the "Community" comprised of the whole facility. The homes are connected by internal "streets" that are to be designed to provide a varied sensory environment with sites, sounds and smells. The environment should support the concept that the staff work in the home of the residents rather than the residents live in the staff's workspace.

Each LTC facility should be considered a unique project with its own community and site. Careful planning and attention to prevailing weather conditions, street access, desirable or undesirable views, topography, and other site conditions are essential for best quality of life and care.

These guidelines are intended to allow service providers flexibility to configure environments that make it possible to respond positively and appropriately to the diverse physical, psychological, social, and cultural needs of all long term care facility residents. These guidelines are intended to support home environments that recognizes minimum/maximum sized homes under staff support, and upper limits on efficiencies with small clusters of home units preferred. Safety of residents needs to be considered in the design, with special consideration for physical and mental limitations. Also, best practices for infection control must be incorporated.

These guidelines are developed based on current trends and thinking regarding the shifting resident acuity levels and future projected demographics. It also, must be remembered that these facilities are being designed to last for 30 to 40 years. As such, the buildings must not only accommodate the needs of those who are the present residents, but also the baby boom generation whose use of media, communications, bathing, eating, gaming and other aspects of life differ greatly from the present residents. Although we can only make educated guesses as to the future, we can make intelligent decisions as to the direction of change and provide for a design that can meet those changes.

Each resident will have private accommodations. A larger flexible type room that could be used to accommodate the needs of a bariatric resident, couples, resident on ventilator, residents with severe behaviour problems or other residents that may require a larger space to meet their care needs is to be included in each home. There should also be 2 rooms per home that have an inter-connecting door that can be used to accommodate couples.

The guidelines and suggested net areas are based on a typical 30-bed LTC facility. However, these guidelines can be relatively easily applied to larger facilities since the basic components will be the same. The areas shown in text are "net" areas. The total building gross area equates to 72m^2 per bed.

Recommended sizes are slightly larger than previous guidelines to account for increased sizes of equipment and program requirements. All LTC facilities must be designed and constructed in accordance with the latest edition of the National Building Code, provincial and municipal legislation. LTC facilities are deemed to be 'B2 Occupancy" however, where egress control measures are in place, provisions for 'B1 Occupancy" will have to be met.

Each Region needs to provide adequate provision for care for that portion of their population with severe behaviour problems. Complex medical care, bariatrics palliative care, etc. If the decision is to care for these persons in a LTC then the design needs to accommodate their needs.

Refer to Appendix 'A' for Gross-up Factors for an explanation of the terms net, department gross and building gross.

II. OVERVIEW

These Guidelines are based on the principles that design features of LTC facilities directly impact operational flows and ultimately resident care outcomes and quality of life for the residents.

The guidelines represent the minimum building requirements for LTC and are intended to be flexible enough to allow for a variety of "best practice' solutions that have a positive impact on service delivery and care outcomes.

The vision for the future of LTC facilities is one of a caring environment that nurtures holistic well-being of residents, support relationships and community, and encourage the growth and development of both the resident and staff.

Complex care is evolving but its definition includes the physical and service needs for the following resident descriptions:

- Difficulty in expressing needs or unable to express needs.
- Unable to adapt to visual or hearing losses.
- Require a varying amount of assistance with dressing, washing, grooming and bathing.
- Be mildly depressed or agitated.
- Have moderately impaired comprehension, ability to understand only simple instruction, short retention span.
- Demonstrate varying degrees of difficulty in orientation to time, place and persons.
- May have one or more severe behavioural problems which make the person unacceptable in the usual residential resources.
- May require a behaviour modification program on a time limited or highly structured basis.
- May be a younger adult who requires considerable supervision, training and care.

The guidelines group all of the different resident care, program and services areas of the LTC facility under the following sections:

Resident Home – there is an expectation that residents will reside in settings that are designed to support homestyle living as opposed to institutional style living. Each home will typically be equal or less than 15 resident beds in size. These clearly defined "resident homes" are designed to be largely self-contained. Most of the care services and activities of daily living are offered to the residents who live in these resident homes.

SECTION 1 – RESIDENT PERSONAL SPACE

1. **Resident Bedrooms** – the resident bedroom is the centre of the resident's personal space where most private activities take place. This space must meet each resident's need for comfort and safety, promote resident independence and dignity, and provide for resident privacy.

2. **Resident Washroom** – the resident washroom must be designed to promote resident privacy, dignity, and independence, as well as, allowing for the effective and safe delivery of care by caregivers. Consideration shall be given to the provision of a shower option in the resident washroom in place of a stand alone shower room (see 1.4 below). All functions that normally take place in a normal washroom should be provided in these washrooms.

3. **Assisted Bathing Room** – the assisted bathing room must be safe, offer privacy, and be familiar and comfortable for residents. It must also be designed so that caregivers can easily accommodate the health and safety of workers and safely assist residents in bathing. The room should provide a sense that the resident has come to a special location within the home providing a spa-like environment.

4. **Assisted Shower Room** – must be safe, offer privacy and be familiar and comfortable for residents. This room must be of a size to accommodate a shower trolley. It must also be designed to accommodate the health and safety of workers while assisting residents with showers.

SECTION 2 – FACILITY AND STAFF SUPPORT SPACE

1. **Work Space for Care Staff** – nursing and staff support space includes the required staff work areas and the service areas including some staff that may only provide occasional support to the residents. This space includes working areas for care and program staff, as well as, storage space for care supplies/equipment. The staff support space is to be designed to be integral to the common living space of the residents, wherever possible without compromising safety of residents or staff. It is important that this space blend in with the home style concept of the overall design.

3. **Storage Space for Resident Care Supplies and Equipment** – separate space is required for the storage and preparation of medications, and for the supplies and equipment required to provide care and treatment for residents. It is important that housekeeping carts, lifts, etc have designated storage spaces that are close to the location of use.

4. **Laundry** – separate space is required for resident clothing on site.

SECTION 3 – RESIDENT LOUNGE AND PROGRAM/ACTIVITY SPACE

1. **Resident Lounge and Program/Activity Space** – resident lounges should be comfortable and designed so that residents can interact in a relaxed atmosphere with other residents, family members, and visitors. Lounges should have an exterior view of landscaped area. The lounge should reflect a more intimate environment that would equate to a persons home living room. The program and activity areas should accommodate a variety of resident focused activities and a variety of group sizes and include an area, which accommodates family dining. The activity space from several homes could be combined into larger space in which large groups could gather.

SECTION 4 – DINING/KITCHEN/DIETARY AREAS

1. **Dining Area(s)** – dining areas should incorporate design features that promote a domestic ambience and that reinforce “familiar” eating experiences associated with small social gatherings. Sufficient space must be made available for wheelchairs and broda chairs. Many residents will be served food by staff that sits with the residents. Consideration must be made of how that will be accommodated in the space.

2. **Kitchen/Dietary Area(s)** – a kitchen is to be included in each house as it will provide the smells of foods cooking within the living space. However, depending on staffing and operational considerations a central kitchen for the community could be considered. If a central food services is part of the food delivery system, a steam table and an area for replating of food to be provided in the house. In smaller facilities, instead of building a central kitchen, a larger house kitchen could be provided in one home to act as the central kitchen. The storage and dishwashing areas would not be apart of the resident areas, but in a back room. A Food Services Consultant to be part of the design of kitchens.

SECTION 5 – RESIDENT COMMUNITY SPACE

Resident community space includes the areas that are used by all residents of the long term care facility. This section addresses requirements for:

1. **Outdoor Space** – provision of an easily self-accessible, safe environment for residents to enjoy the out-of-doors. Area should be visible to staff inside. A variety of outdoor experiences should be available.

2. **Beauty Parlour/Barber Shop** – provision of a area that is designed to provide this service to all residents. The flexibility for provision of additional esthetic and therapeutic amenities is desirable. Salon sinks to be adjustable to fit a variety of residents. This space should be designed to be a part of the social scene and placed on community street.

3. **Place of Worship** – provision of a space to enable residents to meet their spiritual needs. This space should be designed in conjunction with larger space and placed on community street.

4. **Resident Quiet Room** – a space to enable family to gather with some privacy. This space can be used for other purposes when not being used a quiet room.

5. **Family Dining** – a space that families can book for special occasions such as "birthdays and holiday gatherings".

6. **Therapies and other Visiting Professionals** – a space to provide rehabilitation and other services to residents. This space will contain specialized equipment to aid in services provided.

SECTION 6 –COMMUNITY, ADMINISTRATION, and SUPPORT SPACES

Other features addresses the remaining design expectations for the staff and "public" areas of the building, including the design features for resident dedicated storage space, staff room(s), the reception and entrance ways, and public washrooms.

SECTION 7 – SAFETY FEATURES

1. **Resident/Staff Communications and Response System** – provision of a system to give staff and residents the ability to alert other staff members when assistance is required. Communication to be direct to nurses rather than through speaker system. Speaker system for emergency response only. It is important that the environment be kept free from bells, buzzers and overhead pages.

2. **Door Access Control System** – to assist in ensuring a safe and secure environment is provided. Controls must be provided at all doors that exit from the resident areas.

3. **Fire Safety System** – provision of a fire safety system that enables prompt response to emergency situations.

4. **Water Temperature Control System** – resident water supply must be controlled at the point of use where residents have access ensuring resident safety and comfort.

5. **Administration or Reception** is to be provided with a space that emanates a professional quality. It needs to be designed at the entrance of the building aside from the resident component.

SECTION 8 – BUILDING SYSTEMS

This section describes the building systems design expectations for lighting, heating, ventilation and air conditioning. These systems must also comply with relevant sections of the National Building Code, Public Health and Infection Control Standards and any related regulatory or generally accepted standards for lighting, heating, ventilation, and air conditioning systems. Other regulations include CSA standards such as Z317.2, Special Requirements for Heating, Ventilation, and Air Conditioning Systems in Health Care Facilities.

SECTION 9 – ARCHITECTURAL CONSIDERATIONS

This section provides guidance and direction on design and building features that best support and respond to the nursing and personal care needs of residents in long-term care facilities. Architectural considerations are suggestions on features which assist residents who may have special needs which result, as example, from cognitive impairments, varying degrees of dementia, vision impairments, hearing impairments and/or physical disabilities. It is strongly suggested that these recommendations be considered and incorporated accordingly.

Consideration should be given to using "best practice" LEED principles and sustainable design with a silver level as a suggested design criteria. At present, Ministry Policy is to follow LEED and sustainability principles without certification.

The design must meet all mandatory provisions in the Model National Energy Code of Canada for buildings (MNECB) and must have an energy performance rating that is at least 25% more efficient than a building built to the minimum MNECB requirements.

Designing using LEAN principles in functionality of design is encouraged. The process will engage the staff and residents in improving the new residents centred facility.

The design should be a contemporary building that reflects bringing a home environment to the structure instead of an institutional building. At the same time light, openness, views and interest in design should be a part of the concept.

III. DESIGN OBJECTIVES, DESIGN STANDARDS AND FUNCTIONAL CONSIDERATIONS/RECOMMENDATIONS

Each of the sections of the Guidelines which are listed above, with the exception of the section on "Architectural Considerations," has the following format:

Design Objective:

The ***Design Objective*** describes the purpose and design expectations for each area addressed, including how the space is to be used and what the resident focus should be to achieve the optimal care outcomes.

Design Standards:

These are the minimum requirements that must be attained. ***Design Standards*** are the mandatory requirements that must be incorporated into the design of a long-term care facility.

Requirements, which are considered as highly important but not mandatory, are listed in this section as being desirable or as features that should be incorporated.

Functional Considerations/Recommendations:

Functional considerations and recommendations are considered to be features that further promote quality facility design and quality care outcomes. These features have been included to provide helpful guidance for operators during the design process where they might not otherwise have been considered.

IV. APPROVALS

Compliance with the National Building Code, the Saskatchewan Fire Code and any relevant municipal building requirements (includes meeting zoning and other relevant municipal by-laws) to carry out the development of a project remains the responsibility of the long-term care facility owner/operator.

SECTION 1 – RESIDENTIAL PERSONAL SPACE

1. RESIDENT HOME LIVING AREAS

Design Objective

The design of resident home living areas will provide for self contained home setting which are largely self-contained. Most of the care services and activities of daily living are offered to residents who live in these areas. The objective is to provide an environment that is small enough to be perceived as "home' by residents, while being of sufficient size to permit reasonable operational efficiency.

Design Standards

- Each resident home unit shall be clearly defined and distinct. Typically, these homes will accommodate a maximum of **15 residents**, although design configurations may allow for these numbers to be altered. Each resident home living area will include: resident bedrooms and washrooms, lounge areas, program/activity space, dining area(s), resident storage space, and staff work space and support service areas dedicated for use by the residents living in the specific area. The area shall be completely separate and distinct from space that is used for other purposes. The space shall also provide easy access to resident assisted bathing space. Utilization of interior design features that provide a residential, non-institutional appearance (i.e. wall colours, floor coverings, millwork etc.) should be considered in common and personal areas.

- Assisted bath and shower rooms, dining area(s), lounge area(s) and program/activity space shall be located in close proximity to the resident bedrooms. Each of these rooms shall have a hands free washing sink.

- The resident home living area shall be self-contained and must not allow for transitory passage through the area when traveling from one part of the facility to another.

- Staff workspace shall have separate hand washing sink.

***Functional Considerations/Recommendations*:**

If the resident home is 10 or less, then a resident bathing space may be shared with two homes although one unit per home is preferred.

A resident home living area should not exceed 15 residents, however, this does not preclude designing a home area that provides accommodation for less than 15 residents. The number of residents in each home should be based on the resident care requirements and/or program requirements and does not have to be the same throughout the facility.

A view from the neighbourhood into the streetscape should be considered.

2. RESIDENT BEDROOMS

Design Objective:

The resident bedroom is the centre of the resident's personal space where most private activities take place - sleeping, grooming and dressing. Other activities include talking on the telephone, TV watching, contemplating, reading, private visits, watching activities or nature outside the facility. It must meet each resident's need for comfort and safety, promote resident independence and dignity, and provide for resident privacy. Each bedroom should be designed in a manner that maximizes a sense of familiarity for residents (easily decorated) and supports direct care staff in the safe delivery of quality resident care. The resident room should be of sufficient size to enable a caregiver access to the bed from three sides, and enable the resident to have a few pieces of familiar furniture in the room (i.e. dresser, easy chair, small entertainment unit or desk). Provision to hang pictures in room and hallway.

A private resident's room must accommodate one resident and must have a separate "barrier-free" en suite washroom and a separate entrance to the corridor. Each private room will be provided with an X-Y gantry patient lift system that will transport the resident into the washroom.

Each home will contain a large Flex Room, which could be used for a variety of needs. First, it will be designed to permit a bariatric resident to live in the facility, if part of regional plan and staff can support the needs of bariatric patients safety. It will be adjacent to a bariatric washroom which will contain an appropriate shower. Other uses for this room include residents with specialized equipment, needs, palliative care, couples, etc.

Design Standards:

- A minimum of 18.0 m^2 of floor space excluding the space for the vestibule, the washroom and the clothes closet, is expected for a one-bedroom unit.

- The flex room will be designed to 27.0 m^2.

- Each bedroom shall have a clothes closet or alternative clothes storage device for each resident. Each clothes closet shall have at least 0.74 m^2 of floor space, at least 1200mm of lineal hanging space that is not less than 610 mm in depth.

- The entrance into each bedroom area shall be wheel chair accessible (i.e. doorway width shall be at least 1100 mm of clear space).

- Each room shall have three (3) distinctive zones: resident zone, clinical zone and family zone.

- In each bedroom, there shall be sufficient space to provide access by caregivers to three sides of the bed, that is, to both sides of the bed and the foot of the bed. The intent of this standard is to ensure that adequate space is provided in each bedroom to effectively and safely care for a resident while in bed. For some residents, a secondary position for the bed location is to have one long side against the wall. The bed location should permit an easy view to the exterior, the TV and persons entering the room. A direct view of the resident from the hallway is to be avoided.

- Specialized program equipment, must be able to get around the two sides of the bed and the foot of the bed. Each room shall be provided with an equivalent of an X-Y gantry lift system with a minimum of 450-500 lbs patient lift. The flex room will be equipped with a minimum 1000 lbs patient lift.

- The ability to install a sask-a-pole or other transferring assistive device shall be provided in all resident bedrooms.

- Each resident bedroom shall have controls for temperature and lighting.

- There shall be a device for each resident in each bedroom that will activate the *Resident/Staff Communication and Response System* of the LTC facility. The device to activate the *Resident/Staff Communication and Response System* shall be located within easy reach of the resident, including when the resident is lying or sitting up in bed.

- Each bedroom area will have at least one operable window that provides a direct view to the outdoors or to other naturally lit spaces from both a sitting and lying-in-bed position. The window shall be equal to or greater than 10% of the floor area of the bedroom to ensure that sufficient natural lighting is available for the bedroom. The window ledge should be large enough to accommodate small plants or other small resident item such as pictures/etc. In resident rooms where accessed by Dementia residents, window openings shall be limited to no greater than 4-6 inches. The window ledge should be large enough to accommodate small plants.

- Windows that open to the outdoors shall have screens in the spring, summer and fall seasons.

- There shall be no direct view of the toilet in the en suite washroom from the outside corridor when the washroom door is open.

- Each bedroom shall have "cueing" features, (for example, a room number, the resident(s) name(s), and/or pictures), outside each bedroom door to assist residents in finding their way to and easily identifying their bedrooms. A Memory Box is to be located exterior to the room at the entry. In a memory care environment, provide a non-breakable or tempered glass window to the memory box.

- Normally, bedroom flooring shall be a non-glare, non-slip, homogeneous sheet type flooring. Consideration should be given to carefully select colours and patterns that will not have negative impacts on residents with dementia or poor eye sight. Consideration to consult with a professional that specializes in management as to the most appropriate colors and patterns.

- Wiring for a phone jack, cable television service and internet shall be provided for each resident in each bedroom area. Each Bedroom area shall also provide additional power outlets for other electrical equipment (e.g. computer, stereo, TV, Internet). Wall area should be made available to allow for a big screen TV.

- Where a bedroom has a vestibule, the vestibule should be large enough to permit the unobstructed passage of a wheelchair, a walker or any specialized program equipment.

- If freestanding wardrobes are used instead of built-in closets in bedrooms, these closets should be securely fastened to the wall and the floor to ensure resident and staff safety.

- A reading light switchable from the bed is to be provided. The lighting fixtures should be chosen to facilitate a home environment.

***Functional Considerations/Recommendations*:**

- In order to create variety in the appearance of the bedrooms, a variety of interior design features, such as wall colours, should be considered.

- The bedroom design should include space for items such as dressers, easy chair, shelving, bookcases, and tack boards to allow residents to display and store personal items. Residents should be given every reasonable opportunity to personalize their bedrooms.

- When the bedroom door is closed, there should be a minimum width of two feet (600 mm) between the door handle and the bedroom wall, which is adjacent to the door.

3. RESIDENT WASHROOM

Design Objective:

Each washroom must be "barrier- free" and designed to promote resident privacy, dignity and independence. In addition, the washroom space must also allow for the effective and safe delivery of care by caregivers. Washrooms must be designed so that caregivers can easily and safely assist residents. The entrance to the washroom must be from within the bedroom.

***Design Standard*s:**

- All residents shall be provided with a barrier-free 2 or 3 (including shower) piece washroom that is accessed from within their room.
- Each washroom shall have sufficient space to enable independent and/or assisted transfer from the front and both sides of the toilet. Minimum space to each side is 600m.
- Each toilet will be designed so that transfers from wheelchairs can be accommodated.
- In order to allow for sufficient space for a wheelchair or a walker, and for staff to assist a resident, there shall be a 1500 mm turning circle within the bathroom.
- The washroom area shall be designed to provide the following minimum clearance:
    - 860 mm from centre of the bowl to one side wall. (Handicapped requirements but staff need to access each side for double assist).
    - 1150 mm from centre of the bowl to opposite wall.
    - 914 mm from front edge of the bowl to opposite wall.
    - Toilet bowl rim shall be 420 mm in height.
- The washroom door shall swing outwards and shall be sufficient in width to provide 1060 mm clear opening.
- The washroom shall be equipped with folding arm supports approximately 650 mm in length. The supports to be installed 610 mm apart and 686 mm from the floor to the top of the support.
- A securely fastened grab bar shall be located beside and behind the toilet. They also need to be within easy reach of the resident. Each grab bar shall be of sufficient size and design to support the full weight of a resident.
- Walls where grab bars are mounted shall be appropriately reinforced with backing to ensure that they are capable of sustaining loads imposed on them.
- Washroom door hardware shall be non lockable.
- An appropriate non-slip flooring must be installed.
- There shall be a device within easy reach of the resident that will activate the *Resident/Staff Communication and Response Syste*m**.**
- When open, a washroom door shall not block the bedroom entranceway and shall not swing into another door in the bedroom, such as the bedroom door itself or a clothes closet door.

- There shall be no direct view of the toilet from the corridor outside of each *Resident Washroom.*
- Each washroom shall have counter space, soap dispenser and a paper towel dispenser.
- The exhaust and air exchange rates in washrooms shall exceed the requirements of the National Building Code regulations to ensure appropriate ventilation in washrooms and to keep odors to a minimum.
- There shall be space in each washroom for individual storage of a resident's personal toiletry items.
- The sink in each washroom shall be hands-free and positioned so that it meets the needs of the resident using the washroom, (for example, those residents in wheelchairs).
- All washroom surfaces shall be easily cleaned. In addition, all floor coverings shall be slip-resistant.
- Each washroom should have a mirror, which is preferably located over the sink and of a sufficient size to accommodate residents of differing height (angled down for people in wheelchairs). When determining the need and location of mirrors in washrooms, consideration should be given to the disorientation that mirrors may cause for residents with severe dementia. For some residents, depending on their care requirements, mirrors may be inappropriate.
- Sharp edges on counters, cabinets and corners in washrooms should be avoided.
- Flex Room Washroom to be designed to accommodate Bariatric Residents but needs to be capable of accommodating typical residents.

Functional Considerations/Recommendations:

- A night-light outlet should be provided in the bedroom near the door way to the washroom in a location where, if a night-light is used, the light is visible from each bedroom area.
- There should be an illuminated light-switch for the washroom located in the bedroom on the wall by the washroom entrance.
- In order to assist a resident to easily identify and locate the washroom, consideration should be given to painting the washroom door and the door frame a paint hue that contrasts with the colour of the bedroom wall. Consideration shall be given to consultation with a professional that specialized in geriatric mental health special/therapist to determine the appropriate colouring.
- Recommended net area: 4.5/6.0 m^2 (larger size where showers are added to washroom.

4. ASSISTED BATHING ROOM

Design Objective:

Assisted bathing rooms must be safe, private and comfortable for residents. The room should provide a sense that the resident has come to a special location within the home providing a spa-like environment. They must also be designed so that caregivers can easily and safely assist residents to bathe or shower in a manner that protects dignity and promotes resident independence as much as possible. If resident showers are not provided in each room, then separate assisted shower rooms are to be included in each house.

Design Standards:

- One raised standing jetted or ultrasonic therapeutic tub with lift, or side entrance tub shall be provided per resident area (one per home preferred).
- One separate shower room with a shower (the showering area must have sufficient space to accommodate a shower chair so that a resident can be showered in the sitting position) and a shower trolley.
- The water outlet to bathtubs and showers shall be equipped with conveniently located non- slip grab bars.
- A ceiling mounting lift device equivalent to an X-Y gantry system shall be installed in each room.
- Bathtub and shower water supply shall be thermostatically controlled at point of use with an upper limit of 39.5 deg. C.
- Assisted bathing rooms shall provide an accessible washroom with a toilet and sink, within the area.
- The bathtub in each assisted bathing room shall be located so that there is access to three (3) sides of the bathtub.
- All surfaces in the assisted bathing room shall be easily cleaned.
- Space to be non-institutional and spa-like. Consideration must be given to non-institutional lighting options.

Functional Considerations/Recommendations:

- Tub design should be easy to clean and maintain.
- In the interest of resident comfort, privacy and dignity, there should be separate areas in the assisted bathing/shower room where residents can be dressed and groomed after their bath or shower.
- If a side-entrance bathtub is installed, it should be a “quick-filling” model to ensure resident comfort.
- Where showers are provided in resident washrooms and assisted bathing rooms such rooms should have moisture-resistant light fixtures.

- Assisted bathing/shower rooms should be equipped with device(s)/system(s) to maintain the room temperature at a comfortable level for residents while bathing.

- Assisted bathing/shower rooms should have sufficient space to store towels, washcloths, soap, shampoo and other bathing accessories in a non institutional manner. Shelving and storage to accommodate supplies. All cabinetry should be water repellent.

- Shelving and hooks shall be available to accommodate towels, toiletries and clothing.

- Sufficient space shall be provided to accommodate a laundry hamper.

- Bathing/shower facilities shall be arranged to ensure privacy.

- Assisted bathing rooms should have secure areas to store cleaning supplies for the cleaning and sanitizing of bathtubs, showers, toilets and hand wash basins.

- Assisted bathing rooms should have space to store wheelchairs, the shower chair and any other devices that are used to assist caregivers to maneuver residents on and off toilets, and into and out of showers and bathtubs.

- Utilization of sound attenuation features within the room to minimize noise.

- Consideration should be given to providing a suitable method of towel warming and heat lamps for resident comfort.

- The resident bathing area must include non-slip flooring.

- An emergency signal system that registers at the nursing station and in the corridor directly outside of the bathing area shall be conveniently installed within the bathing area.

- Recommended net area:

Tub area @	13.5 m^2
Shower area @	4.5 m^2
Toilet area @	2.5 m^2
Storage area @	1.5 m^2
TOTAL:	21.5 m^2

SECTION 2 – FACILITY AND STAFF SUPPORT SPACE

1. WORK SPACE FOR NURSING AND PROGRAM STAFF

Design Objective

The provision of resident care involves planning, assessing, communication, must be designed to support a well-coordinated, multi-disciplinary care system that will allow staff to meet residents care and treatment needs in an efficient and effective manner.

***Design Standards*:**

- Preferably each home or neighbourhood within a facility shall have ***Work Space for Nursing and Program/Therapy Staff*** to allow staff to carry out their administrative duties. The space shall accommodate:
    - Secure storage of resident care records (includes nursing care plans and medical histories).
    - Multidisciplinary team activities.
    - A work area to complete documentation (non traditional nursing station) include computer network station.
    - Storage cabinet for clerical supplies.
- A hand washing area shall be conveniently located in proximity to the *work space for nursing and program/therapy staff*.
- Space shall be provided in each Community (*Facility)*, to support the delivery of therapeutic programs such as podiatry, dental, ophthalmology, social and psychiatric services, as well as required medical and physician services that cannot be provided at the bedside.
- A staff training room shall be provided in each facility or provision made within the operator's organization for a training room. In a smaller facility this should be combined with other functions such as staff dining and/or quiet room.
- In areas where therapeutic programs are delivered, there shall be convenient access for residents to a "barrier-free" two (2) piece washroom (toilet and sink) that is separate from resident bedroom washrooms.
- A staff washroom for each home or at minimum the number as required by the Occupational Health and Safety Regulations.
- The care staff station should be designed so that a single caregiver can have a view and access to both homes in the neighbourhood for night supervision.

Functional Considerations/Recommendations:

- The use of sound-absorptive materials for walls, floors and ceilings should be considered for all administrative and meeting areas where privacy is required.

- Providing a room where resident family members can meet in private. This can be a room used for other functions.
- Nighttime electronic control of the main entrance is required. It will be required to release visitors during periods of non-office staff and can be operated from the caregiver station.

2. STORAGE SPACE FOR RESIDENT CARE SUPPLIES AND EQUIPMENT

Design Objective:

Separate space is required for the storage of medications, and for the supplies and equipment required to provide care and treatment for residents. Medications and nursing care supplies/equipment must be stored in a place where they are readily accessible to caregivers, but must not intrude on the resident's personal space. The space and/or storage units must be kept secure. A layout space for preparing medications is required.

***Design Standards*:**

- The ***Storage Space*** for resident care supplies and equipment shall be convenient and accessible to the staff working in each home.

- Clean supplies shall **not** be stored in areas utilized for the storage of soiled supplies or equipment, and should have access from both sides of hallway if in central hallway, or in the same location where equipment is being cleaned. Hand wash sinks shall be located at the entrance into the space in both clean and soiled areas.

- Clean Utility/Linen Room – the clean utility room shall contain a single compartment sink, work counter, and cupboards. Most supplies can be kept on open shelves. Each home shall have a linen storage room equipped with open shelving and designed in such a manner that 1 or 2 linen carts can be accommodated.
  - Recommended net area - 14 m^2

- Soiled Utility Room – the soiled utility room shall contain the following:
  - Two compartment sink.
  - Space for wasted receptacle and soiled hampers.
  - Bedpan sanitizer.
  - Storage cupboards and work counter.

  - Recommended net area - 11.0 m^2

- Med Room - resident medications shall be stored in a secured space either in each home or shared between neighborhoods and preferably away from the main entrance of the facility:
  - Secure space with lockable cupboards shall be provided for the storage of stock medications related to the pharmacy services. Storage space shall also be provided for all supplies and equipment related to care delivery. This space shall be convenient and accessible to the staff. Should group all relevant topics together.

- This space to include a computer station attached to the network.

- Recommended net area - 6.0 m^2

- Equipment Storage - conveniently located storage space shall be provided for large emergency equipment such as gomco suction or defibrillators:

  - Each home shall have an equipment storage room to accommodate such items as wheelchairs, bed rails etc. when not in use.

  - Recommended net area - 15 m^2

- Oxygen therapy may be offered through piped in equipment or through portable oxygen. Where portable oxygen is planned there must be a dedicated space for storage of oxygen in a location that is convenient and accessible to staff serving those residents. The storage of oxygen shall comply with the fire safety requirements set out in the Saskatchewan Fire Code and related provincial regulations.

Functional Considerations/Recommendations:

- The shelving in storage rooms should be adjustable, rust proof and easily maintained/cleaned.

- Consideration should be given to providing a well-ventilated and separate area for the recharging of batteries on wheelchairs and other equipment such as lifts. Wheelchair batteries should not be recharged in resident bedrooms because of potential explosive dangers and release of noxious fumes.

- Provision of adequate storage space for bulky items such as incontinent products, laundry equipment, and equipment not in use (e.g. lifts, stretchers, laundry carts).

3. LAUNDRY/LINEN

Design Objective:

Every long-term care home shall provide laundry services for personal resident clothing. Linen will be laundered in a regional laundry service.

***Design Standard*s:**

- The ***Laundry area*** shall include separate:

  - Refrigerated storage area for soiled linen.
  - Sorting and processing areas for soiled linen.
  - Storage areas for clean linen.

- The linen area shall be designed in such a manner that the workflow will maintain a proper separation of soiled and clean items and prevent the mingling or crossing over of items in any of the various stages of processing.

- The laundry and soiled linen storage shall be isolated from areas used for residents, kitchen, dining, and clean storage functions.

- A refrigerated store room for soiled laundry waiting for pick-up to regional laundry.
- Recommended net area: 16.0 m^2

Functional Considerations/Recommendations:

- Provided a separate cold storage for soiled linen (refrigerated room).

SECTION 3 – RESIDENTIAL LOUNGE/ACTIVITY SPACE

1. RESIDENT LOUNGE AND PROGRAM/ACTIVITY SPACE

***Design Objectiv*e:**

Residents' lounges should be comfortable and designed so that residents can interact in a relaxed atmosphere with other residents, family members and visitors. The lounges should be designed for conversation, reading, and other social activities. The lounge should also allow for a contemplative view of the natural world. Either the Lounge or the Dining area must have a scenic view. (not to an atrium or courtyard).

To assist in providing a comfortable temperature in the resident seating areas that are near the windows the cold air vents must not blow near where the residents are sitting.

Program and activity areas should accommodate a variety of resident focused activities, including hobbies and crafts, exercise and social and recreation activities, and should support social functions that promote resident quality of life.

Design Standards:

- The minimum total recommended space for ***Resident Lounge and Program/Activity Space*** is 5.0 m^2 per resident. There shall be at least one resident lounge area provided in each resident home that is a minimum size of 22.0 m^2. The size of the resident lounge space shall reflect resident characteristics, significant numbers of clients in wheelchairs, broad chairs, or electric wheelchairs may require a larger space. At least 70% of the total required space per resident for lounge, program/activity space shall be located within each residential neighbourhood. ***Note:*** Design standards, which specify the recommended minimum space allocation for Resident Lounge and Program/Activity Space, are based upon dedicated use. However, it is recognized that this space in combination with ***Resident Dining Areas*** may be multi-purpose. In such circumstances the recommended minimums for each may be adjusted accordingly subject to the needs of the residents being met.

- Each ***Resident Lounge*** shall have a device, which will activate the Resident/Staff Communication and Response System, and each ***Resident Program/Activity*** area shall have a device that will activate the ***Resident/Staff Communication and Response System.*** Where the lounge and the program activity space are integrated, it is required to have only one device which will activate the ***Resident/Staff Communication and Response System*** located in that area.

- At least one ***Resident Lounge*** within each resident home area shall have a window with a direct view to the exterior. In ***Resident Lounge's*** where windows are openable and where accessed by Dementia residents, the window openings shall be limited to no greater than 4-6 inches.

- Provision for a quiet space for family and residents.

- ***Resident Program/Activity Areas*** shall have convenient access to a barrier-free washroom (toilet and sink) that is separate from and not located in a resident room. The location of the washroom shall be within 6 meters of the resident program/activity area. Access to the washroom to be from hallway.

- Stand alone hand washing sink shall be provided in or adjacent to lounge/activity area.

Functional Considerations/Recommendations:

- When decorating ***Resident Lounges and Resident Program/ActivitySpace***, consideration should be given to using decorating products that minimize (deadens) sound and glare, and that create a home atmosphere. Scale of room will also contribute to the sense of home: for example, blinds, curtains and wallpaper and other decorative features.

- Task lighting for activities such as reading should be provided in all ***Resident Lounge and Resident Program/Activity Space.***

- Different sizes and designs of ***Resident Lounge*** areas - from private nooks for intimate conversation to larger common areas for groups - should be provided.

- ***Resident Lounges*** areas should be designed for clustered seating rather than linear seating to allow resident conversations and activities to take place.

- ***Resident Lounges*** should include display space.

- ***Resident Program/Activity Area(s)*** may be located adjacent to ***Resident Lounge*** areas or ***Dining Area(s)*** to provide:

  - A resident kitchen combined with a lounge where residents may entertain visitors or;
  - An overall common area subdivided into dining, kitchen, activity, and lounge to encourage a domestic ambience.

- Where resident-accessible electrical appliances are provided, a method of deactivating the appliances should be in place to ensure resident and staff safety.
- Storage shall be provided for craft and occupational activities.

- An office shall be provided for an activity worker, and associated storage space. Recommended net area: 13 m^2.

- Resident Program/Activity recommended net area: 150 m^2.

SECTION 4 – DINING/KITCHEN/DIETARY AREA(S)

1. RESIDENT DINING AREA(S)

Design Objective:

All ***Dining Area(s)*** for use by residents shall incorporate design features that promote a "home-like" ambience and that reinforce "familiar" eating patterns associated with smaller social gatherings. Efforts shall be made to minimize noise in ***Dining Area(s)*** through the provision of finishes that reduce reflected noise and increase sound absorption. The design of the ***Dining Area(s)*** must also reflect and respond to the changing physical needs of residents.

Design Standards:

- The minimum recommended space for ***Dining Area(s)*** for a long-term care facility is calculated based on 3.0 m^2 of floor area per resident, excluding servery space.

  Note: Design standards that specify the recommended minimum space allocation for Dining Areas are based upon dedicated use. However it is recognized that this space in combination with Resident Lounge and Program Activity Space may be multi-purpose. In such circumstances the recommended minimums for each may be adjusted accordingly subject to the needs of the residents being met. Some of the space for manoeuvring wheelchairs and broda chairs can be spill out through space that overlaps with functions that are not being used at eating times.

- Each ***Dining Area*** shall have a device that will activate the ***Resident/Staff Communication and Response System.***

- Each ***Dining Area*** shall have convenient access to a separate "barrier-free" two-piece washroom (toilet and sink), that is not located in a resident bedroom and that does not open directly into food preparation or dining areas. The location of the washroom shall be within 6 meters of the dining area. The washroom will not be viewable from occupied areas.

- Each ***Dining Area*** shall incorporate storage space for equipment/supplies as necessary.

- Each ***Dining Area*** shall have a hand wash sink either in the ***Dining Area*** or immediately adjacent to the ***Dining Area*** for use by staff and not to be used for food preparation.

- Each ***Dining Area*** shall provide a direct view to the outdoors or other naturally lit space. Each ***Dining Area*** shall provide a servery area as part of a kitchen for assembling and serving meals.
- A mechanical system to cool air temperatures in each Dining Area is required. The system shall not blow cool air directly on the residents while seated in the dining area.

Functional Considerations/Recommendations:

- When decorating the ***Dining Area(s***), wall decorations, window treatments (that is, blinds and curtains) and room finishes (for example, wallpaper, trim, and wainscoting) that create a "home" environment should be used. All decorating should be done in consultation with a professional that specializes in behavior management.

- Consideration should be given to providing additional space for visitors to stay and have a meal with a resident or a group of residents in a (private dining room).

- ***Dining Area*** tables should accommodate no more than four (4) persons to encourage socialization and interaction between residents at meal times. The space requirements should reflect the possibility of all four residents being in wheelchairs. A number of residents will be in Broda Chairs which take up additional room.

- To provide resident comfort and security while eating, ***Dining Area*** chairs should have arms.

- ***Dining Area(s)*** should have finishes and features which reduce reflected noise and glare and increase sound absorption, for example, window curtains, wood finishes, wall, ceiling and floor finishes.

- ***Dining Area(s)*** should include architectural, electrical and equipment features which permit the area to be subdivided for special occasions.

- All surfaces in ***Dining Areas*** should be smooth, easily cleaned and moisture resistant.

- A separate housekeeping/janitor's closet (with a sink) to store the supplies and equipment used to clean each ***Dining Area*** should be provided near each ***Dining Area.***

- Recommended net area: 90 m^2

2. RESIDENT KITCHEN/DIETARY AREA(S)

Design Objective:

There are two approaches that can be used in the preparation of food for the residents. In a larger facility a central, commercial kitchen can be considered for food preparation and distribution to the resident home kitchen. At this location, a smaller home kitchen with serving will provide a server for replating of the meals. The home kitchen will, also be set up to provide meals, as required, and as part of resident program activities.

Alternatively a facility may be organized so that all meals are produced in a home kitchen. Supplies and storage will be designed to accommodate this arrangement. This kitchen will also be part of resident program activities. In a small facility, if centralized cooking is to be used, one of the home kitchens can be enlarged to provide the kitchen rather than a separate centralized kitchen.

Design Standards:

- With a centralized kitchen, the minimum recommended space for Kitchen/Dietary area for the long term care center is 55 m^2. These areas will be capable of preparing food if required. They should include stove, fridge, microwave, sink and counterspace for other equipment. These areas are also used for involving the residents in the preparation of food and should provide counter space for wheelchair residents to access a lowered counter area.

- All kitchen construction and equipment shall conform to the latest edition of the Public Eating Establishment Regulations.

- The following storage areas are recommended:

    - A minimum of .338 m^3 per resident of refrigerated storage maintained at a temperature of 4 degrees Celsius or less for perishable foods such as dairy products, meats and vegetables.
    - A minimum of .281 m^3 per resident of frozen food storage maintained at a temperature of -18 degrees Celsius.
    - Storage space for non-perishable foods in close proximity to the kitchen and receiving area.
    - A janitor's closet complete with slop sink and exhaust fan, for storage of cleaning supplies and equipment which are used exclusively in the kitchen and dining areas.

- Surfaces which come in contact with food shall be constructed of non corrosive material and be maintained free of cracks, crevices, and similar separations that could collect food and other matter.

- Walls, ceilings, and floors shall have impervious, smooth surfaces that can be easily cleaned.

- Floor surfaces shall be of non-slip material that can be easily cleaned and supports the ease of movement of resident equipment such as wheelchairs, walkers etc. The floor surface shall also support the health and safety requirements of staff.

- Adequate facilities for the collection and disposal of garbage shall be provided.

- The kitchen and dishwashing area shall be provided with air-conditioning and make-up air systems designed in accordance with the latest edition of American Society of Heating, Refrigeration and Air Conditioning Engineers Handbooks, Standards and Regulations.

- A hand washing sink shall be installed in the kitchen.

Functional Considerations/Recommendations:

- All surfaces in ***Kitchen Areas*** should be smooth, easily cleaned and moisture resistant.

- A separate housekeeping/janitor's closet (with a sink) to store the supplies and equipment used to clean each ***Kitchen Area*** should be provided**.**

SECTION 5 – RESIDENT COMMUNITY SPACE

1. OUTDOOR SPACE

Design Objective:

The ***Outdoor Space*** shall be designed to provide an easily accessible, safe environment for residents in which they can enjoy the outdoors. ***Outdoor Space*** for use by residents shall be landscaped and provide walkways, shaded areas and seating areas.

Design Standards:

- The distance measured from the entrance of the ***Outdoor Space*** to the farthest resident bedroom shall be no more than 60 m and is to be on same level as resident room.

- In a multi-story facility, **Outdoor Space** on floors above ground level can be a balcony or a roof terrace. Multi story facilities should only be considered in extreme situations where no other site alternatives are available. In these cases exterior roof top or balcony space is to be provided at $3m^2$ minimum per resident using that space.

- For all long-term care facilities, there shall be ***Outdoor Space*** accessible at grade level.

- ***An Outdoor Area*** shall be enclosed to prevent wandering/egress of residents.

- There shall be at least one ***Outdoor Area*** that is directly accessible from a ***Dining Are***a, a ***Lounge*** or ***Program/Activity Are*****a.**

- The landscaping and design of ***Outdoor Space*** shall consider the safety needs of residents.

- Each ***Outdoor Area*** shall have a separate area that provides shade and is protected from wind and other harsh weather elements.

- Part of the outdoor area to be set up as activity area.

Functional Considerations/Recommendations:

- Rough surfaces such as brick pavers in any walking areas should be avoided because they can cause tripping.

- Steep inclines and steps in any circulation areas should be avoided.

- Provision of automatic door opener to allow for independent access to of outdoor space can be considered dependent on care centre requirements.
- Consideration should be given to incorporating a ***Resident/Staff Communications/Response System*** in at least one ***Outdoor Area.***
- When decorating and landscaping ***Outdoor Space***, consideration should be given to such residential features as fencing, outdoor furniture and raised flower beds.
- In designing the outdoor space, consideration should be given to a location that is easily monitored from within the building, enabling facility staff to easily observe resident activities occurring within the outdoor space.
- Design of the outdoor space for dementia clients should ensure that it is able to accommodate the unique needs of this population (e.g. single entrance, circular pathway, easily accessed by residents, security features that blend into the environment) and a safe environment.

2. BEAUTY PARLOUR/BARBER SHOP

Design Objective:

The long-term care facility shall have a ***Beauty Parlour/Barber Shop*** that is available to all residents.

Design Standards:

- The ***Beauty Parlour/Barber Shop*** shall have a device, which will activate the ***Resident/Staff Communications and Response System.***
- There shall be sufficient space to include hairdressing chairs, work and storage counters, secured storage space for chemicals and a hair drying area. This space should be considered as part of the social area where residents can sit, watch and chat about the proceedings.

Functional Considerations/Recommendations:

- A shampoo chair shall be provided that allows residents to have their hair washed either leaning forward over the basin, or leaning back. An adjustable sink that allows for access from a wheelchair.
- A drying chair (chair equipped with a hooded dryer) shall be provided.
- An adequate number of conveniently located electrical outlets shall be provided.
- There shall be additional exhaust ventilation to control odours from the hairdressing process. This space is to be located away from the eating area.
- Seating for 2 waiting residents.
- Recommended net area : 14 m^2.

3. PLACE OF WORSHIP

Design Objective

Each long term care facility needs to support and assist residents in maintaining their spiritual beliefs, religious observances, practices and affiliations. Space for a Place of Worship gives residents space for individual private thought and spiritual comfort.

Design Standards

Each facility shall provide space for the purposes of worship. The space should be designed so that it can be opened up into the larger space of the activity area or lounge when required.

Functional Considerations/Recommendations

The place of worship should be designed to respond to the multi-denominational aspects of a facility's resident population.

Recommended net area: 15 m^2.

4. RESIDENT QUIET SPACE

Design Objective

Each long term care facility needs areas in which residents can escape the noise and activity of the common living spaces when outside their room. This space would also be used for visitor to meet with residents outside their room. Other functions could be combined with this space.

Design Standards

Each home unit should have a space that is acoustically separate from the other common areas. It should be designed to provide a home atmosphere environment. It should provide for a view to an exterior area.

Functional Considerations/Recommendations

The space should be located close to the entrance to the home unit. It should be visually linked to the exterior.

Recommended net area: 16 m^2 (to be combined with family dining and overnight guest room).

5. FAMILY DINING

Design Objective

A space is required to permit families to gather and eat together in a private setting. It should be combined with a space that has other functions.

Design Standards

Each neighbourhood unit should have a space that is visually separate from the other common areas. It should be designed to provide a home atmosphere environment. It should provide for a view to an exterior area.

Functional Considerations/Recommendations

The space should be located close to the entrance to the home unit. It should be visually linked to the exterior.

Recommended net area: (to be combined with quiet and overnight guest room).

6. THERAPY AND VISITING PROFESSIONALS

Design Objective

To provide space to allow residents maintain their strength, mobility and balance using specialized equipment and to access therapies and other professional services such a podiatry, dentistry, etc.

Design Standards

The facility needs adequate room to house large equipment such as physio bed, parallel bars, weight training equipment, etc. The facility needs adequate room to house equipment to accommodate therapies, or other services planned to be offered on the site.

Functional Considerations/Recommendations

The space should be centrally located in the facility. An office for the specialist is to be adjacent to the Program room. A large storage area is part of this function. In a small facility part of the activity area could be used for program uses.

Recommended net area: 20 m^2.

SECTION 6: COMMUNITY, ADMINISTRATION, and SUPPORT SPACES

1. RESIDENT DEDICATED STORAGE SPACE

***Design Objectiv*e:**

Storage space must be considered for the storage of goods received and with additional and conveniently located storage space for frequently used personal equipment, clothing in season and personal and/or cherished items.

Design Standards:

- ***General Storage Space*** shall be provided for the receiving and storage of goods and materials.

- ***Resident Dedicated Storage Space,*** in addition to clothes closets in bedrooms, shall be provided in the long-term care facility so that residents can store their belongings. Other than the space requirements for residents' clothes closets, there are no minimum space requirements for the storage space for resident personal belongings.

- The ***Resident Dedicated Storage Space*** shall provide security for resident belongings.

***Functional Considerations/Recommendations*:**

The amount of space allocated for the storage of resident belongings should be reasonable and based on the needs of residents. It is not expected that the long-term care facility provide space for belongings that will not be used by residents during their stay at the facility.

2. FACILITY STAFF SPACE

Design Objective:

The design of a long-term care facility must include "non-resident" space for use by all staff. The design must make adequate provision for features and amenities that enhance the quality of work life for employees. This space, exclusive to the use of staff, is for the purpose of administrative functions and staff rest periods, as well as storing personal belongings, changing clothes and staff-specific activities.

Design Standards:

- A secured storage area(s) shall be provided for staff to store personal belongings.

- Administrative space, for example, offices for the key staff such as the Administrator, Director of Care and supervisory staff, shall be provided.

- Administrative space for functions such as banking, sorting mail and clerical/secretarial activities shall be provided.

- An area, separate from resident care and common areas, shall be provided for staff "break" periods.

- Separate change areas shall be provided for both male and female staff.

Functional Considerations/Recommendations:

- Sufficient toilets and hand washing basins should be provided for all male and female staff.

- Provision of individual shower room(s) for staff.
- A office for physician consultation/examination.
- Recommended areas:
  - Administrator's office – Recommended 14.0m^2.
  - General/reception – recommended 20.0 m^2.

- Director of care – recommended 12.0 m^2.

3. RECEPTION/ENTRANCE SPACE

Design Objective:

The entrance to the long-term care facility should be designed to be a welcoming introduction to the long-term care facility. A seating area for residents could be part of the entrance to encourage residents to view outside activities.

Design Standard:

- The ***Reception/Entrance Space*** shall be designed to allow facility staff to monitor all entering and exiting from the facility.

- The ***Reception/Entrance Space*** shall be in proximity to an outside vehicle drop-off area for residents. An entrance should be considered in each home or neighbourhood so that the transfer of residents that have expired can be done in a non discreet way.

- The ***Reception/Entrance Space*** shall be designed to support its function as the "welcoming" area to the facility for residents and the public.

Functional Considerations/Recommendations:

- The Reception/Entrance can accomplish through the use of electronic or mechanical devices or by strategically locating the office or reception desk the monitoring of the Reception/Entrance Space**.**

- The outside doors to the ***Reception/Entrance Space*** should be designed so that they do not create drafts, for example, by providing double doors with an enclosed vestibule.

- To increase the safety for staff and residents, the outside doors should be lockable to prevent unmonitored egress or access to the facility, particularly during off-hours.
-

- The ***Reception/Entrance Space*** should include a lounge area for residents to sit and rest and observe "comings and goings" of the facility and visitors.

- A hand washing area should be conveniently located in close proximity to ***Reception/Entrance Space*** for visitors.

- The outside vehicle drop-off area at the entrance to the building should have a covered canopy to protect residents from inclement weather.

- A rear entrance that is able to accommodate stretchers from a discrete final egress should be incorporated.

- Recommended net area: 10 m^2.

4. MAINTENANCE/HOUSEKEEPING SERVICES

Design Objective:

- Provide at least one housekeeping room per home for the storage of cleaning supplies and equipment, equipped with a slop sink, exhaust fan, shelving, mop rack, autoscrubber (per facility) and housekeeping cart.
- This space is to be locked.
- Recommended net area: 11 m^2
- Provide a space for a maintenance workshop and storage of outdoor maintenance equipment. This may be in the form of an exterior multi-purpose building and may also house the stand-by generator.

5. PARKING

Design Objective:

Adequate, accessible and flexible parking with close proximity to facility and main entrance is desired. Number of parking spaces to meet Municipal Codes. Parking area is to be well illuminated. Parking spaces for staff should be electrified to accommodate block heaters.

At least one covered drop off/pickup entrance should be provided. Height to meet access requirements for emergency vehicles.

6. PUBLIC WASHROOMS

Design Objective:

All ***Public Washrooms*** for common use by residents and visitors must be "barrier-free". Residents and visitors must have washrooms conveniently located to commonly used areas, to avoid unnecessary travel back to resident bedrooms. Each ***Public Washroom*** must have at least one wheelchair accessible toilet and one wheelchair accessible handwashing sink.

Design Standards:

- Areas commonly used by residents and visitors shall have convenient access to a barrier free washroom (toilet and sink) that is separate from and not located in a ***Resident Bedroom***.
- There shall be clear and easily understood signage identifying all ***Public Washrooms***.
- Each ***Public Washroom*** shall have a lock that is readily releasable and easily openable to ensure that a person is not accidentally locked into the washroom.
- Each ***Public Washroom*** shall have a device, which will activate the electronic ***Staff/Resident Communication and Response System.***

7. STREETS

Design Objective:

Streets (hallways) provide the means for travel throughout the facility for residents, staff and visitors. They should be designed to provide a variety of visual and other sensory sensations along the street path. The entrance to the Resident Home should stand out distinctly from the remainder of the street. The length of streets should be minimized to reduce travel distance within the facility for residents and staff. The streets will connect the different home units to the community facilities and the Main Entrance. Corridors will be used within a home unit, administration or support areas.

Design Standard:

- The width of all corridors in resident areas shall be a minimum of 2438mm where the necessity of moving patients in beds or stretchers in an emergency may occur.
- Streets and resident corridors shall be equipped with handrails securely mounted, approximately 812mm in height, along both sides.
- Streets and corridors shall be equipped to provide overhead illumination to an average level of at least 200 lux at floor level.
- Emergency and night lighting shall be provided in all streets and corridors.
- Flooring and walls must be in contrasting values.
- Flooring should be a non-glare with a simple or no pattern.
- Windows at the end of streets corridors must not create glare.

Functional Considerations/Recommendations:

The provision of seating areas along corridors offers opportunities for residents to rest, as well as providing a more home-like appearance along corridors. Seating areas should not extend into the corridor to the extent they impede the movement of residents. Streets and corridors should have picture rails along blank walls to provide for resident pictures or artwork.

SECTION 7 – SAFETY FEATURES

1. RESIDENT/STAFF COMMUNICATIONS AND RESPONSE SYSTEM

Design Objective:

A cell phone-based ***Resident/Staff Communication and Response System*** must be provided in the long-term care facility to give staff and residents the ability to alert other staff members when assistance is required. This system must be designed to work in all

residential areas of the facility to facilitate prompt response to a resident or staff request. The system must not be intrusive.

Design Standards

The ***Resident/Staff Communication and Response System*** shall be an electronically-designed system, which is equipped with activation devices that are easily accessible, simple and easy to use by all residents and staff.

- The ***Resident/Staff Communication and Response System*** shall be "ON" at all times and be connected to the back-up generator.
- The ***Resident/Staff Communication and Response System*** shall be available to access by residents at no extra cost (i.e. it is part of the normal room and board charges of the facility).
- When any activation device for the ***Resident/Staff Communication and Response System*** is activated, it shall clearly indicate where the signal is coming from so that staff can promptly respond.
- Overhead paging systems should **not** be considered.

Functional Considerations/Recommendations:

If the ***Resident/Staff Communication and Response System*** uses sound to alert staff, the level of sound should be controlled so that it is not excessive and disruptive, and is equally distributed in the areas that it covers.

- Before installing the ***Resident/Staff Communication and Response System***, all areas where the activation devices will be located should be checked to ensure that the activation devices are located at the point of need.
- A ***Resident/Staff Communication and Response System*** that requires a voice response when activated is not recommended for residents who have cognitive and sensory impairments.

2. DOOR ACCESS CONTROL SYSTEM

Design Objective:

A safe and secure environment must be provided for all residents and staff of the long-term care facility. Controls must be provided at all doors, which exit from the resident areas of the long-term care facility so that access into the building can be controlled when necessary.

Design Standards:

- The ***Door Access Control System*** shall conform to all relevant provincial and municipal codes and regulations.
- The ***Door Access Control System*** shall be "ON" at all times.

- The ***Door Access Control System*** for all exits from resident areas shall prevent unauthorized entering or exiting from the long-term care facility.
- Electro-magnetic locking devices (or alternative means of achieving the same result) shall be on all doors leading to stairways, secured areas and to the outdoors, subject to compliance with the Saskatchewan Fire and National Building Code.

- Electro-magnetic "hold-open" devices shall be on doors that are required under the Saskatchewan Fire Code to be equipped with self-closing hardware. (Consultation with the city fire department may be required).

Functional Considerations/Recommendations:

- Doors in non-resident areas, for example the kitchen and laundry, should be equipped with electro-magnetic "hold-open" devices to facilitate the provision of services to resident care areas.

- All doors leading to the outside of the special care home and to which residents have access shall be equipped with electrically operated door alarms connected with an audio connection to the nurses' station and a visual indicator by the door.

- A manual reset switch may be located at each door equipped with such an alarm.

- An alarm-silencing switch may be used for those doors mentioned above which are under constant staff supervision.

3. FIRE SAFETY SYSTEM

Design Objective:

- A safe and secure environment must be provided for all residents and staff of the long-term care facility. The environment must include a ***Fire Safety System*** that enables prompt response to emergency situations. A fire alarm system capable of attracting the attention of all persons within the home, at all times, must be installed.

Design Standards:

- The ***Fire Safety System*** shall conform to all relevant provincial and municipal codes and regulations.

- Installations shall include:

    - Sprinkler system.
    - Heat and smoke detectors.
    - Standpipe and hose system.
    - Fire extinguishers.

Functional Considerations/Recommendations:

- All fire safety installations shall be in accordance with the current National Building Code of Canada and current National Fire Code of Canada and shall be approved by the Authorities-having-Jurisdiction.

- During the initial planning stages of the project, the Provincial Fire Commissioner and local authorities should be consulted regarding fire safety precautions/requirements and development of fire safety policies and procedures.

4. WATER TEMPERATURE CONTROL SYSTEM

Design Objective:

Water temperatures in areas used by residents must be maintained at levels that support resident safety and comfort.

Design Standards:

- The ***Water Temperature Control System*** shall be designed to ensure hot water provided to resident care areas (i.e. resident bathroom, public washrooms, assisted bathing rooms, lounges, dining areas) is at a safe and comfortable temperature for residents (maximum 3 - 40° Celsius) or based on best practices.

5. WHEELCHAIR AND EQUIPMENT WASHING

Design Objective:

To provide adequate wash bay in an equipment room to accommodate wheelchair, walker, commode washing, etc. or wheelchair washing machine.

6. EMERGENCY GENERATOR

Design Objective:

Provision of an emergency power generation system, capable of supplying power to essential life-safety systems, and resident care systems, in the event of a temporary interruption in the facilities power supply.

Design Standards:

- The provision of emergency power supply that will be able to provide for the operation of the following building operations:

  • Life-safety systems (e.g. fire alarm, sprinklers, hood suppression units).
  • Emergency lighting in critical areas of the building including corridors, exits and assembly areas.
  • Emergency power outlets for vital medical equipment.
  • Communication systems (internal and telephone system).
  • Access control systems (door openers, parking garage).
  • At least one elevator and other elevators as required by subsection 3.2.6 of the latest authorized edition of the National Building Code of Canada.

- Exit signs.
- Sprinkler pumps and fire pumps.
- Heating plant boilers, heating pumps and glycol auto fill pump.
- And electro-magnetic holders for resident room doors and other such services designated under subsection 3.2.6 of the latest authorized edition of the National Building Code of Canada.

- The power supplied to Electro-magnetic holders on ward doors shall be such that the doors will not close on a power outage during the transfer to the standby.

    - Standby power plants using flammable liquids as fuel shall not be installed in special care homes.
    - Where such units are employed they shall be installed in fire resistive buildings located not less than 7 m from the special care home.

- A 150 mm non-combustible sill bonded to the floor shall be installed to protect the entrance to any rooms accommodating power plants using combustible liquids as fuel and having integral tanks or power plants fuelled by propane.

- Power plant exhaust systems shall be protected and installed as approved by the Authorities-having-Jurisdiction.

Functional Considerations/Recommendations:

- Consideration of a fuel supply that is of sufficient size to operate the generator for an extended period of time (up to two days).

SECTION 8 –BUILDING SYSTEMS

1. LIGHTING SYSTEMS/ELECTRICAL

Design Objective:

Adequate lighting must be provided for residents, staff and visitors so that they can carry out their activities in comfort and safety. Lighting design must address age-related vision loss and diminished visual acuity (sharpness). Lighting must be designed and located in a manner that meets residents' needs as sensory orientation diminishes.

- Light distribution must be kept even in hallways to prevent falls.

- Various combinations of fixtures should be utilized to supply the total light level, with flexibility to switch levels to allow for the tailoring of light levels to suit various lighting needs.

Design Standards:

- Lighting levels in various areas of the Facility shall be appropriate to the purpose and use of the space, and adequate to ensure the safety of residents while reflecting a residential environment. General lighting levels in the facility shall be a minimum of 210 luxes. With lighting levels of 320 luxes in enclosed stairways.

- Lighting must meet the standards for Lighting and the Visual Environment for Senior Living" by Illuminating Engineering Society of North America.
- At least one (1) patient receptacle per resident must be provided in each resident room at the head of the bed for use of medical electrical equipment (CAN/CSA Z32-99 Electrical Safety and Essential Electrical System In Health Care Facilities).

- Lighting levels in resident communal areas shall be consistent, as uneven lighting levels between areas can create visual adjustment problems.

- Resident rooms shall have individual switches to control lighting.

- General illumination shall be provided at all entrance doors to resident accessible rooms, e.g. bedroom entrance doors.

- The back-up emergency alternate power source shall support essential lighting requirements.

Functional Considerations/Recommendations:

- The types of lighting fixtures and their location should be determined based on the activities/tasks of specific areas.

- All lighting fixtures that are capable of producing a direct glare should be shaded. Glare should be reduced to a minimum.

- Overhead windows that could create large patches of distracting light on the floor should be shaded.

- Task lighting which is adjustable in intensity, location and direction should be provided in bedrooms and common areas.

- Window coverings, such as blinds, curtains and canopies, which reduce the glare from the outdoors without eliminating views, should be provided.

- Wall-mounted light switches should not exceed 41 inches (1040mm) above the level of the floor so that the switches are at a height that can be easily reached by residents.

- Every effort should be made to optimize utilization of natural light.

- One switched reading light should be located at the head of the bed.

2. HEATING, VENTILATING AND AIR CONDITIONING (HVAC) SYSTEM

Design Objective:

Air temperatures in resident areas shall be maintained within a range that optimizes resident comfort throughout the year (25-28 C°).

Design Standards:

The ***HVAC System*** shall comply with all relevant regulations and standards set by governing authorities, including but not limited to the National Building Code, Canadian Standards Association, National Fire Protection Association, the American Society of Heating and Refrigeration and Air Conditioning Engineers (ASHRAE), and CSA Standards, principally Z317.2, Special Requirements for Heating, Ventilation, and Air Conditioning Systems in Health Care Facilities.

- A ventilation system complete with mechanical cooling for tempering air during hot weather, in resident bedrooms, lounges, dining, activity and kitchen areas. Air temperatures shall be maintained in all resident areas at (25-28C°).

- There must be a minimum of six (6) air changes per hour in resident rooms.

- Air shall not be circulated from one area to another unless appropriately sterilized or filtered. All circulating air in the facility should be exhausted through a heat exchange unit or heat recovery wheel.

- The maximum mechanical system noise level is 30 RC (N).

- Air conditioning shall be supplied to the following areas:

    - Laundry
    - Kitchen/dining
    - Corridors

- Individually zoned heating and proportionally modulated temperature control for resident bedrooms.

- In floor coil heating systems shall be the preferred method of heating with a capacity to raise temperature in all resident rooms and other resident areas to a minimum of 25°C during the coldest times of the year.

- Humidity levels should be kept between 30% and 40% throughout the heating season.

- Negative air pressurization of the resident washrooms and soiled ***Utility Space***, shall be provided to ensure odours are contained. All of these rooms shall be equipped with mechanical ventilation that exhausts air from these areas in keeping with National Building Code requirements.

- The ***HVAC System*** shall have enhanced exhaust capabilities to maintain a comfortable environment for residents with respect to humidity levels in the bath and shower areas.

Functional Considerations/Recommendations:

- The ability to enable individual air-conditioning units to be installed in some resident rooms to compensate for heat gains created by medical equipment (e.g. oxygen concentrators) that some residents may be required.

3. POTABLE WATER SUPPLY

Design Objective:

The facility must provide a minimum six (6) hour potable water supply independent of electrical power supply. That is, in the event of a major utility power outage, facility must provide sufficient potable water fro hand washing, toilet use, and drinking supply to last for a minimum of six (6) hours.

SECTION 9 –ARCHITECTURAL CONSIDERATIONS AND RECOMMENDATIONS

The choice of architectural features, fixtures and interior decorations can facilitate the provision of a safe and secure environment for the residents of a long-term care facility.

Note: This section contains a list of guidelines, considerations and suggestions to enhance quality of life and promote quality care outcomes.

- No more than 15 beds per residential home should be considered in the design. (Maximum 2 homes per neighbourhood). Also clearly defined resident home/living areas that are designed to be largely self-contained in which most of the care services and activities of daily living are offered to residents who live in these resident/home living units.
- Doors in all resident areas, such as bedrooms, washrooms, lounge areas, program/active rooms and bath/shower rooms, should have levers or handles that are easily used by residents.
- Handrails should be securely mounted on both sides of all corridor walls in all resident areas, and should be located at least 860 mm above the floor so that the handrails are at a height that is within easy reach of the residents.
- Handrail brackets should be located away from where the resident would grip a handrail so that the residents' hands can move freely along the surface of the handrail. It is suggested that the handrail brackets be mounted at least 1774 mm below the top of the handrails.
- Visual, and/or textural "cueing" should be included on signs to assist residents in identifying different rooms and finding their way in the facility. For example; a "knife and fork" sign indicating a dining room, or a picture of a tub outside of a bathing area.
- When selecting floor finishes, consideration should be given to their effect on wheelchair and walker maneuverability, as well as resident gait, to ensure that residents can move about the facility safely. For example, low sheen products should be considered. Also keep in mind dementia patients have difficulty with dark patterns etc. in flooring. Flooring should be of sufficient quality that it does not cause grooves from moving carts, beds and other equipment. It should also be easy to move on with wheelchairs and walkers and not create undue resistance for resident confined to wheelchairs or walkers.

- Service areas should be painted a different colour from areas used by residents so that residents can easily distinguish between resident areas and non-resident areas.
- Features, fixtures and interior decorations should enhance and promote a home environment. For example, furnishings should resemble, as much as possible, furniture normally found in residential settings; there should be a variety in the types of pictures on the walls; and lighting fixtures should be of a non-institutional style.
- Fixtures, for example, wall-mounted lights, light switches and washroom sinks, should contrast with the colour of the walls so that residents can clearly and easily distinguish the difference.
- High-gloss paint should not be used in any resident areas because it will create an undue glare, which in turn, may distort vision.
- All stairs should be enclosed by either rails or walls on both sides of the stairs to ensure safety of residents and staff.
- Winding stairways should be avoided in areas that are accessible to residents to ensure resident safety or have devices installed on them that prevent their use by residents not capable of safely using them.
- Public address systems in areas used by residents must be avoided to minimize the amount of noise and sound intrusion in resident's private areas.
- When considering the colour and design of signs, remember that light images or words on a dark background are more visually effective than dark images on a light background.
- Mirrors should be avoided in ***Dining Areas, Resident Lounge and Program/Activity*** areas that are used by residents with severe dementias because they can increase the level of confusion and anxiety.
- The doors and frames in non-resident areas should be painted the same colour as the walls in these areas to prevent residents from accidentally entering areas, which may be unsafe for residents.
- An approach that has been shown to be both an effective and an attractive method of discouraging residents from entering doors to non-residential areas, has been to incorporate the door into wall murals that disguise the door.
- Walls and wall corners that will be subject to continual scrapping by wheelchairs and portable equipment should have treatment or coverings that protect the wall surface, for example, corner guards and bumper rails.

- Finishes that reduce reflected noise on walls and ceilings, and that increase sound absorbency, should be used in "high" use areas of the building to keep noise to a minimum.
- Some characteristics to consider when using colour are:
  - Dark colour schemes near bright windows can make it difficult for residents to distinguish objects near the window.
  - Colour contrast between floors and walls can help to distinguish the edges of a room for residents with visual impairments.

- Colour contrast can help to distinguish different objects and surfaces within a room, for example, contrasting colours will distinguish the differences between doors and walls, or between baseboards and walls.
- Because most resident bedroom doors are left open, it is best to provide colour contrast between the frame and wall, rather than the door and frame, so that residents can clearly determine the location of the opening to the bedroom.

- Some wall-finishing characteristics to consider for the decoration of the long-term care facility (includes resident and non-resident areas) are:

  - A flat wall finish appears less *institutional*, diffuses a glare, and hides minor flaws better than a glossy surface.
  - Some textured wall coverings and acoustic panels are "home-like" in appearance, meet all relevant codes, and absorb excessive sounds.
  - Textured surfaces can assist in a resident with visual impairments in finding his or her way about the long-term care facility.

- Kickplates on the "push" side of all doors, particularly hollow-core doors, should be provided to prevent damage to the doors.

- Where door closures are used, the force required to open the door should not be excessive. This must be measured in relation to the ability of residents to open the door. In addition, all doors that are used by residents should be equipped with devices, which delay closing to ensure resident safety.

- Signs that identify room functions should be clear, understandable and located at a height where they can be easily read or touched by residents.

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Acknowledgements

There have been many individuals and organizations that have provided input including experience, expertise, ideas and passion for the care of our elderly in the preparation of these guidelines and standards. All are thanked very much.

The Capital Unit would especially like to acknowledge the following contributors:

- Community Care Branch of the Saskatchewan Ministry of Health
- Sherbrooke Community Care Centre
- The many Regional and LTC facility staff who have provided valuable input.