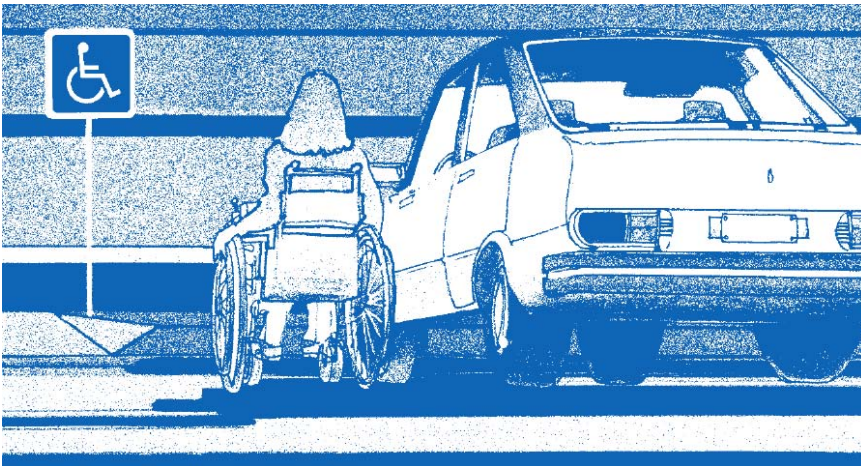


# M

# ODIFICATION

# CHECKLIST



**For Homeowners  
and Landlords**

ACCESSIBILITY  
THROUGH RRAP  
FOR PERSONS  
WITH  
DISABILITIES

Canada

CMHC SCHL  
HOME TO CANADIANS

# CMHC HOME TO CANADIANS

Canada Mortgage and Housing Corporation (CMHC) is the Government of Canada's national housing agency. We help Canadians gain access to a wide choice of quality, affordable homes.

Our mortgage loan insurance program has helped many Canadians realize their dream of owning a home. We provide financial assistance to help Canadians most in need to gain access to safe, affordable housing. Through our research, we encourage innovation in housing design and technology, community planning, housing choice and finance. We also work in partnership with industry and other Team Canada members to sell Canadian products and expertise in foreign markets, thereby creating jobs for Canadians here at home.

We offer a wide variety of information products to consumers and the housing industry to help them make informed purchasing and business decisions. With Canada's most comprehensive selection of information about housing and homes, we are Canada's largest publisher of housing information.

In everything that we do, we are helping to improve the quality of life for Canadians in communities across this country. We are helping Canadians live in safe, secure homes. CMHC is home to Canadians.

Canadians can easily access our information through retail outlets and CMHC's regional offices.

You can also reach us by phone at 1 800 668-2642  
(outside Canada call (613) 748-2003)  
By fax at 1 800 245-9274  
(outside Canada (613) 748-2016)

To reach us online, visit our home page at [www.cmhc.ca](http://www.cmhc.ca)

Canada Mortgage and Housing Corporation supports the Government of Canada policy on access to information for people with disabilities. If you wish to obtain this publication in alternative formats, call 1 800 668-2642.



## MODIFICATION CHECKLIST

### ACCESSIBILITY THROUGH RRAP FOR PERSONS WITH DISABILITIES

CMHC offers a wide range of housing-related information. For details, call 1 800 668-2642 or visit our home page at [www.cmhc.ca](http://www.cmhc.ca)

Cette publication est aussi disponible en français sous le titre Liste de modifications : *Comment rendre un logement accessible aux personnes handicapées grâce au PAREL (61219)*.

*The information contained in this publication represents current research results available to CMHC, and has been reviewed by a wide spectrum of experts in the housing industry. Readers are advised to evaluate the information, materials and techniques cautiously for themselves and to consult appropriate professional resources to determine whether information, materials and techniques are suitable in their case. The drawings and text are intended as general practice guides only. Project and site-specific factors of climate, cost, aesthetics, and so on must be taken into consideration.*

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Revised 2005

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Printed in Canada  
Produced by CMHC

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# 1. FOREWORD

People with disabilities should be able to enjoy the independence, comfort and security of living on their own. Existing houses and apartments are seldom designed to meet the particular needs of persons with disabilities. The Residential Rehabilitation Assistance Program (RRAP) for Persons with Disabilities provides loans for the alteration of dwellings to improve accessibility for occupants with disabilities. For homeowners who meet income qualifications, and for landlords who agree to enter into an operating agreement, the loan is entirely forgivable.

Within this program, a person with disabilities is “any person who, because of one or more persistent physical, psychiatric, learning or sensory disabilities, is unable to ensure by himself/herself the necessities or social life of a person without a disability.”

Accessibility modifications should allow persons with disabilities, for example, limited mobility, blindness or deafness, who are capable of living independently to remain in their own homes.

## 2. YOU MAY QUALIFY

You may qualify for RRAP for Persons with Disabilities if:

- You are a homeowner or landlord undertaking accessibility work to modify a dwelling occupied or intended to be occupied by a person with disabilities.
- The property to be modified must meet minimum standards of health and safety. Work required to meet the minimum health and safety standards may be carried out simultaneously with the accessibility modifications. For RRAP purposes, a minimum standard means a reasonable quality of structural soundness and fire safety, and a reasonable quality of heating, plumbing and electrical systems where these exist or are required by the local authority.

**Note:** *Work required for the property to meet minimum standards is not eligible under RRAP for Persons with Disabilities; however, applicants may be eligible for Homeowner RRAP assistance or RRAP for Rental and Rooming Houses. For information on these programs, see Section 5 “Other RRAP Assistance.”*

## 3. ELIGIBLE MODIFICATIONS

The following criteria are used to determine the eligibility of modifications under RRAP for Persons with Disabilities:

1. *Modifications shall be related to the disabled occupant’s disability.* If it is not evident that the modifications are related to the disability and required for accessibility, confirmation from a qualified expert, such as a physician or physiotherapist, may be required.
2. *Modifications shall be housing related, and should ensure basic accessibility to the dwelling or access to permanently installed, basic facilities* within the dwelling; facilitate independent living; and/or reduce risk for the occupant with disabilities.
3. All work shall be permanent and non-portable. Exceptions can be made for *portable equipment*, such as hydraulic bathtub lift or bathtub seat, designed specifically to permit access to permanently installed facilities.
4. *The provision of space for portable equipment*, for example, a wheelchair, walker or dialysis machine, is eligible.
5. For household appliances, *only built-in counter cook tops and wall ovens* are eligible items.
6. You are advised to check with our RRAP delivery agent on the eligibility of specific items.

## 4. INELIGIBLE MODIFICATIONS

1. The upgrading of *substandard* building components and systems, such as electrical, plumbing and heating, which are eligible for funding under Homeowner RRAP or RRAP for Rental and Rooming Houses are not eligible for funding under RRAP for Persons with Disabilities.
2. *Therapeutic or supportive care-related items*, such as whirlpool baths and swimming pools, are not eligible.
3. *Items designed to facilitate housekeeping*, such as central vacuum systems, dishwashers, washers and dryers and so on, are not eligible.
4. Except for counter cook tops and built-in wall ovens, household appliances, such as stoves and refrigerators, and household furnishings, draperies, area rugs and so on, are not eligible. *Portable air purifiers, humidifiers and window-installed air conditioners* are not eligible.
5. *Portable equipment designed for mobility purposes or care*, such as wheelchairs, walkers, dialysis equipment and so on, is not eligible.

## 5. OTHER RRAP ASSISTANCE

The loan you receive under RRAP for Persons with Disabilities is solely to modify your dwelling to make it more accessible for a person with disabilities. You should also be aware that you may qualify for a Homeowner RRAP loan if the house you own requires major repairs in one or more of the following areas: plumbing, heating, electrical, structural or fire safety, or if overcrowding in the dwelling is a problem. If you are a landlord undertaking accessibility modifications to rental accommodation, you may be eligible for assistance under RRAP for Rental and Rooming Houses to complete the required major repairs.

Before you undertake any modifications to improve accessibility for a person with disabilities, we suggest you obtain information about these RRAP programs. You will discover what type of modifications are eligible under RRAP for Persons with Disabilities, what type of repairs are eligible under Homeowner RRAP or RRAP for Rental and Rooming Houses and how much financial assistance you may be able to receive. It may save you time and money.

## 6. WHERE TO GET TECHNICAL AND FINANCIAL ADVICE

The following sources may be used for technical, planning and financial advice:

- public health nurses, doctors and occupational therapists
- service agencies for persons with disabilities, either provincial or national
- rehabilitation centres
- other people with disabilities who may have made modifications to their homes
- architects and contractors
- Canada Mortgage and Housing Corporation (CMHC), provincial and municipal housing agencies and local building authorities
- resource books (Please refer to Section 7 “Helpful Publications.”)



# 7. HELPFUL PUBLICATIONS

## **Housing for Persons with Disabilities, 61014**

This publication provides diagrams and explanations of basic design features and dimensions to improve accessibility.

## **Hiring a Contractor, 62277**

A guide to selecting a contractor, obtaining bids and estimates, supervising the work and getting satisfactory results.

## **Maintaining Seniors' Independence, 61042**

A guide to home modifications that identifies and evaluates minor home adaptations that help older people continue the routine activities of daily living with some degree of independence. This booklet is highly recommended for persons who are having difficulty carrying out their daily activities in their home.

To obtain the above publications or additional information about RRAP assistance, contact your local CMHC office or your RRAP delivery agent.

# 8. GETTING STARTED

Your first step is to establish a work plan:

1. Identify all accessibility needs on “Modification Checklist” provided with this booklet and discuss them with your RRAP delivery agent.
2. Outline proposed modifications in order of priority.
3. Discuss the proposed modifications with the technical, planning and financial resources indicated previously.
4. Determine how much money is available from RRAP for Persons with Disabilities, from other sources and how much you can afford on your own.
5. Refer to the CMHC publication *Hiring a Contractor* on how to find and deal successfully with a contractor.

# 9. HOW TO USE THIS BOOKLET

The purpose of this booklet is to identify common accessibility problems and suggest possible modifications to solve or alleviate these problems.

While reviewing accessibility needs keep in mind that:

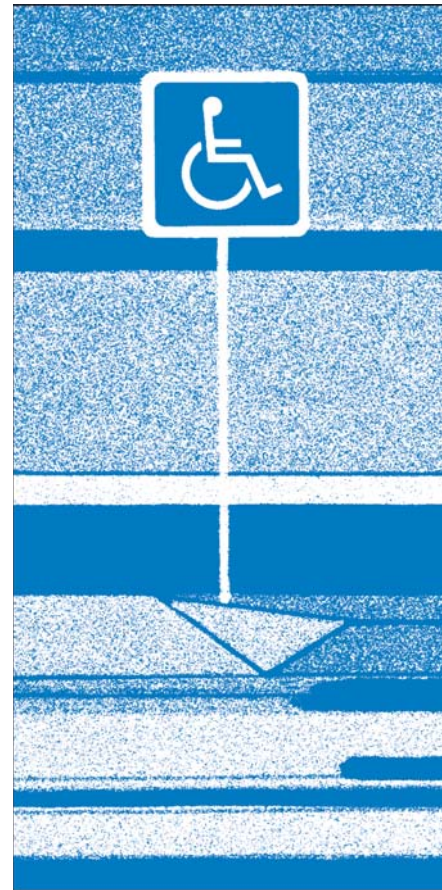
- Needs may change over the years.
- Other members of the family may not always be able to help the person with disabilities live independently.
- Modifications are usually beneficial, but sometimes cause problems to other occupants. Compromise may be required.
- Existing dwellings may present constraints and ideal changes may not be possible. You may have to settle for improvements that fall short of the ideal changes or you may have to consider other options.

At the end of this booklet you will find Section 13 “Modification Checklist” that will assist you in identifying modifications that are essential or that are desirable but less important.

Read through the following pages, study the illustrations carefully and indicate on the checklist all those modifications you wish to undertake. If necessary, make changes or additions to the list to better reflect your particular needs.

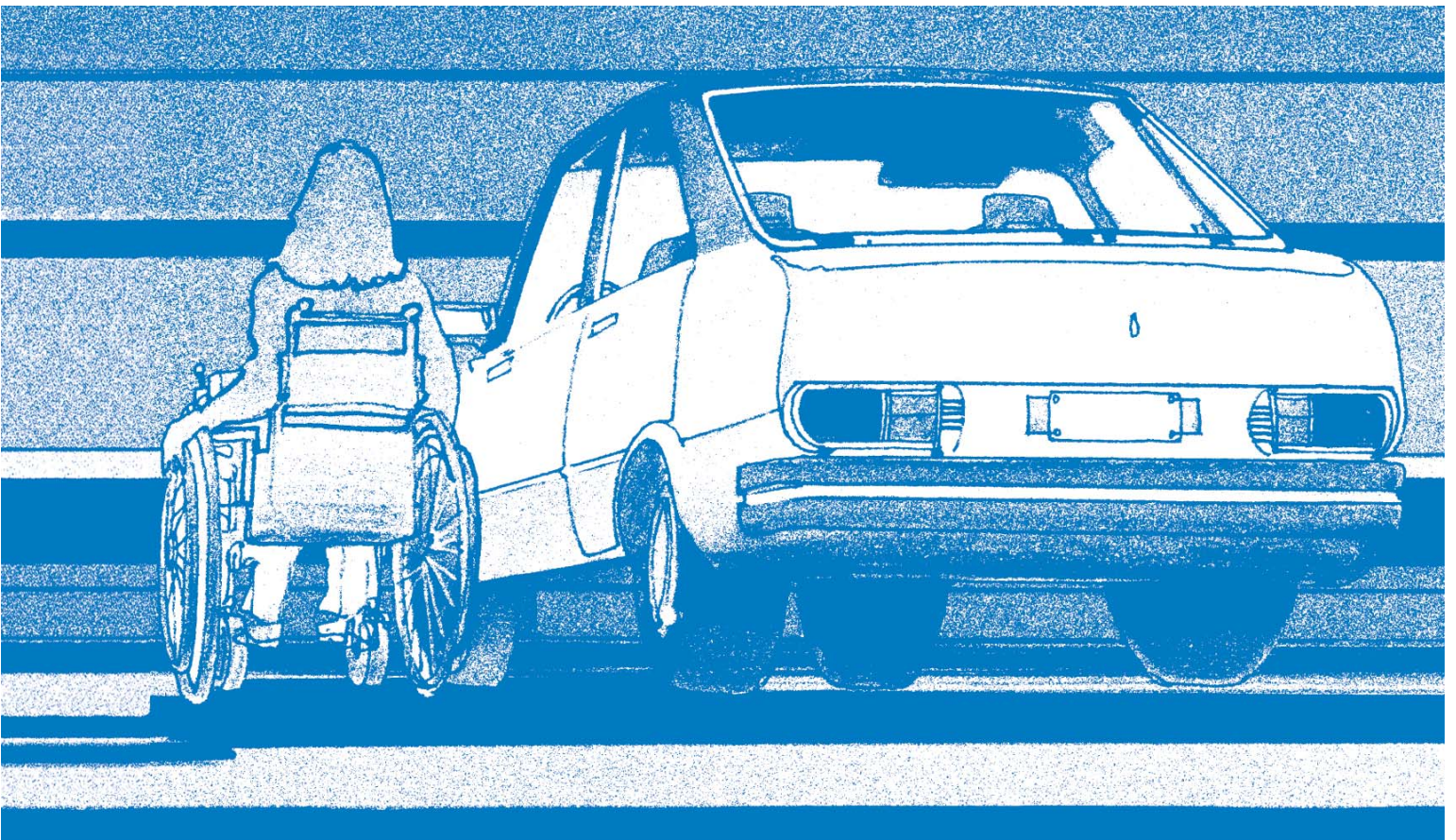
When you have made your final choices, use the checklist to discuss the modifications you would like to make with an inspector or contractor.

**The following pages will allow you to assess your needs; they lead you through the entire dwelling by starting with the outside and then moving through the inside, room by room.**

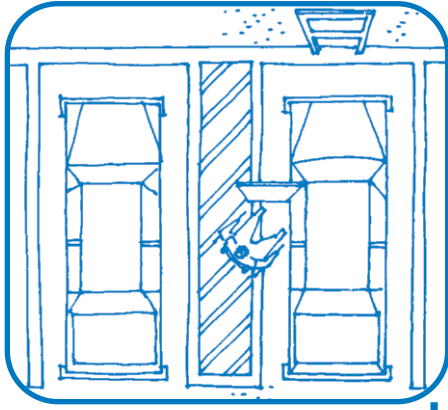


## 10. APPROACHING AND ENTERING THE HOUSE OR APARTMENT

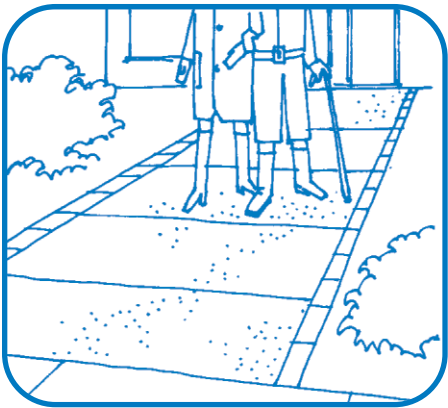
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## AT THE SITE



**Parking** space close to the most convenient entrance is necessary. A wider parking space will allow the complete opening of a vehicle door, while transferring a wheelchair or a person with disabilities into and out of the vehicle.

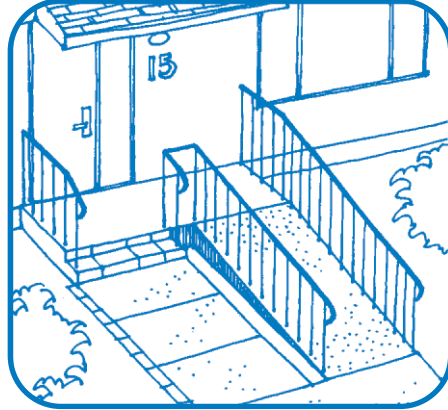


**2** Wide **walkways** with slip-resistant surfaces and no abrupt changes in level, provide access to the street, entrances and other outside areas, such as those used for recreation and household chores.

**3** **Lighting** for walkways is essential for safety.

**Note:** Walkways that are to be used as fire escape routes and are parallel to the building should be situated away from the building.

## EXTERIOR RAMPS AND CHAIR LIFTS



**4** A **ramp** may be needed to gain entry depending on the disability and on the features of the site and dwelling.

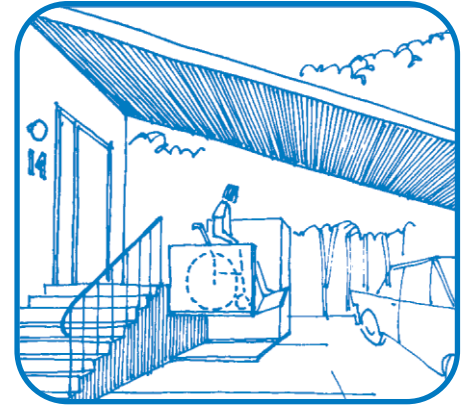
Access to the main entrance is most desirable, but sometimes access to a side or rear door is easier to achieve. The location of the ramp will depend mostly on available space. Making *more than one* existing entrance accessible could be considered if required to give full access to a dwelling.

Before deciding that a ramp is the best solution, consider whether:

- there is enough space for a ramp with a slope that is not too steep;
- the ramp could be kept free of snow and ice; and
- the ramp could be designed so that it blends in with the house or apartment building.

A ramp should be equipped with *handrails and edge guards* and should have a *slip-resistant surface*. It should not be too long, too steep or have sharp corners. Since the design of a ramp depends on the specific needs of the person with disabilities, the details should be worked out with a knowledgeable professional.

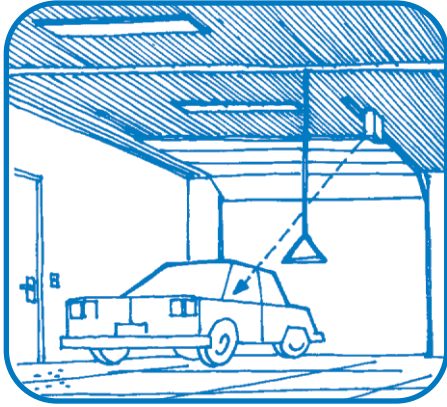
**5** The *construction or installation of a canopy* designed to shelter the ramp could be considered.



**6** A **chair lift** could be considered if a ramp is not practical or desirable. If a chair lift is chosen, contact a local dealer for advice and estimates. Although *porch lifts* are generally weatherproof, they should be covered or fully enclosed so that they are operable in winter conditions.

Whatever the choice, remember that the means of access to a house or apartment building are also the way out in emergencies and must be usable under any conditions.

## CARPORTS AND GARAGES



- 7** **Direct access** from the vehicle to the dwelling and adequate parking space should be available. The route from the vehicle to the dwelling unit should have a hard, level surface.
- 8** A new **carport**, designed to provide a sheltered direct access area from the parked vehicle to the dwelling, may be considered.
- 9** An **existing garage or carport** may be modified (for example, to increase the height or width) to accommodate the transportation vehicle used by the occupant with disabilities.

**10** A **transfer aid**, such as a trapeze hung from the ceiling of the garage, is often used to transfer a person with disabilities from a wheelchair or other ambulatory aid to a car. A permanent eyebolt suitably located and securely fixed to a beam or other structural member could be provided.

**11** **Electrically operated garage doors** should be controllable from inside the garage and from the exterior by radio control or by a touch system that can be reached by a seated driver.

**12** A **three-way switch** should be installed to allow the garage light to be controlled from inside the house or from the garage.

**Note:** *The construction of a new garage is not eligible.*

## EXTERIOR SIGNS



**13** Appropriate **exterior signs** may be required for multiple unit residential buildings to provide the address and to indicate that the interior is accessible to a person with disabilities. Large simple lettering on a high contrast background is easiest to read.

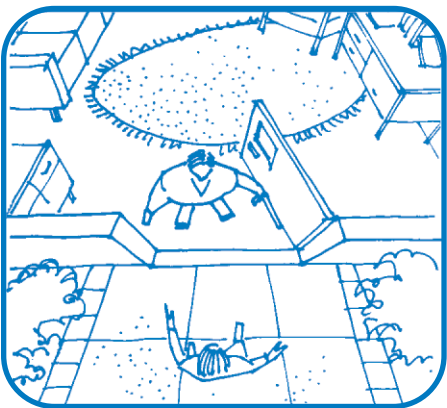
# ENTRANCES



**14** A permanent **shelter**, such as a canopy over the entrance, provides protection from the elements for the person opening the door.

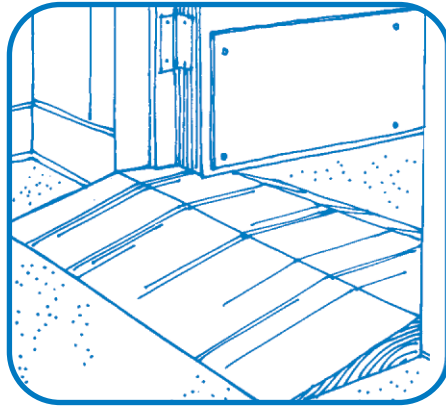
**15** Good **lighting** allows residents and visitors to identify the right door, unlock it and enter safely.

**16** The **main entrance** to the dwelling may be relocated for accessibility purposes.

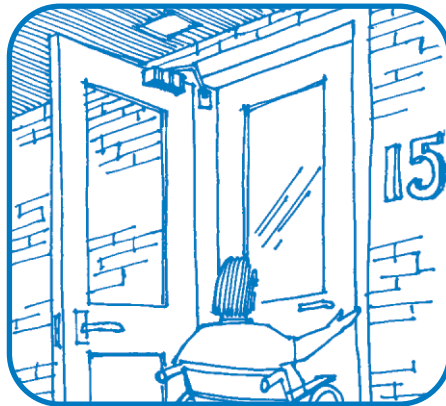


**17** A **level entrance area** on either side of the door and sufficient space to permit the door to swing open makes it easier to approach, open and close the door and allows for wheelchair access or access for persons with other types of disabilities, who require walkers or guide dogs.

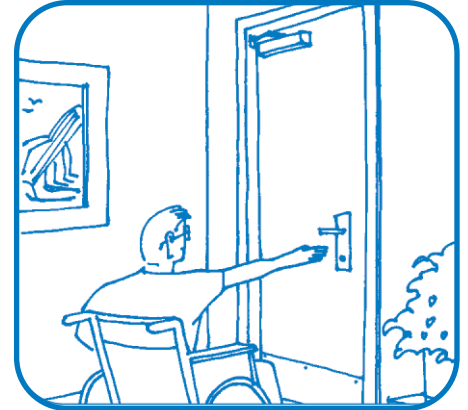
**18** The **main door** may be widened, or removed and replaced with a more suitable type as required by the person with disabilities.



**19** A **threshold** that is too high can be fitted with beveled strips.



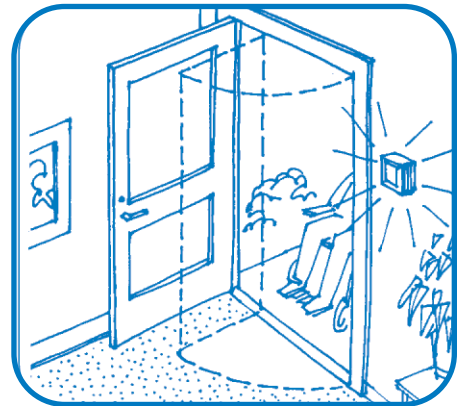
**20** **Storm doors** are not recommended since they may create a problem to the user who would have to manage two doors at the same time. Storm doors can be removed or at least equipped with equalizers and adjustable low-pressure door closers. They should remain only if an enclosed porch or vestibule cannot be provided.



**21** A light-assisted **call/doorbell** may be installed for deaf occupants.

**22** A large **entrance door lever-type** handle is easier to operate for persons with physical or sight problems, and it should be within reach of a person in a wheelchair.

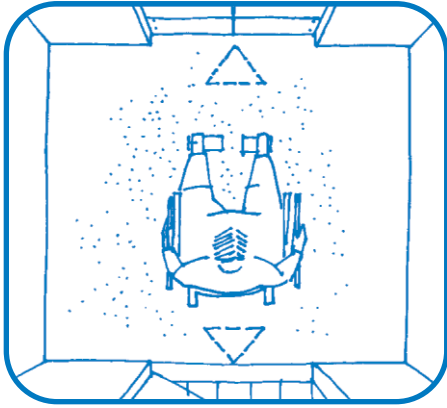
**23** **Locks** should be easy to use, well-lit and should provide adequate security to the occupants.



**24** The **door closer** should be set to provide enough time for slow-moving persons. The door should not require a great deal of strength to operate.

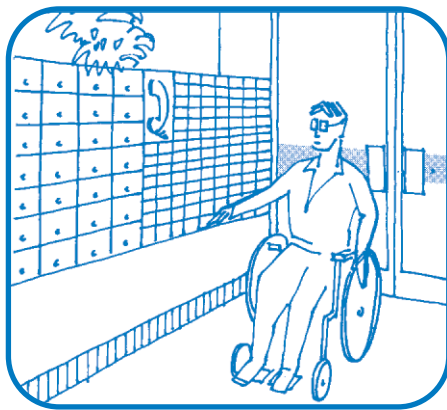
**25** A **kickplate** on the lower part of the door prevents damage by wheelchairs.

# VESTIBULE



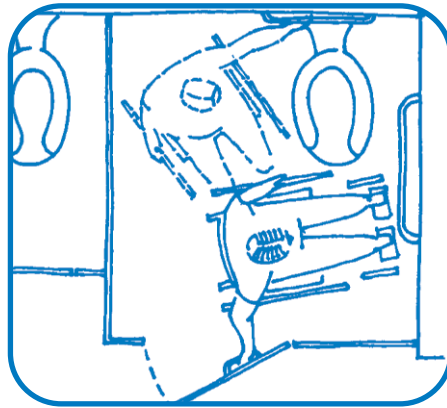
**26** Distance between two sets of automatically opening doors at the vestibule of a building should allow proper wheelchair access.

**27** Large glass or mirrored surfaces may need to be modified to reduce glare or marked with coloured strips at eye level for safety, particularly for visually impaired persons.

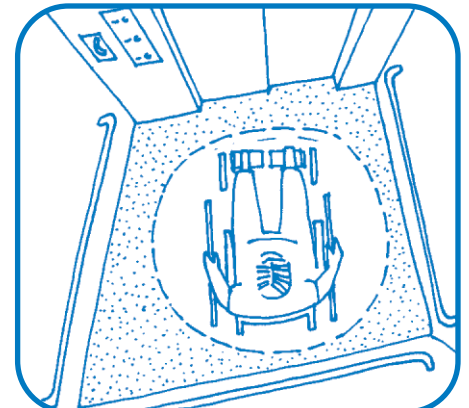


**28** Lowered mailboxes with appropriate signage and a package shelf should be made accessible to persons with disabilities.

**29** An intercom system with the microphone at an appropriate height should be accessible to persons with disabilities in the entrance of a multiple unit building.



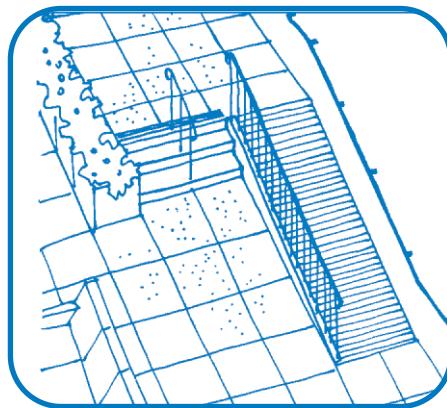
**30** A public washroom can be enlarged to accommodate a wheelchair. Knee space with insulated pipes under the sink and thermostatic faucets can be provided. Space beside the toilet will allow wheelchair users to make a sideways transfer.



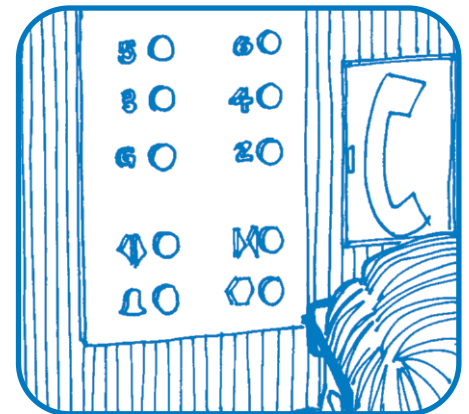
**32** Elevators are best for large differences in levels.

**33** Turning space in the elevator must be sufficient to allow a person in a wheelchair to turn around.

# INTERIOR RAMPS AND ELEVATORS



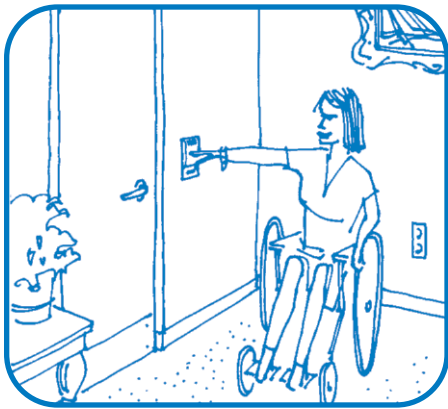
**31** Ramps may be used to overcome small differences in levels to common areas, such as lobbies, games rooms, public toilets, laundry rooms and storage rooms in apartment buildings.



**34** Controls and signaling devices in the elevator should be low enough to reach from a wheelchair and designed to provide information to the eyes, ears and hands.

# 11. BUILDING SYSTEMS

## ELECTRICAL



**35** **Electrical switches and thermostatic controls** should be lowered. Light switches should be easy to operate (push pad or rocker types may be most appropriate) and could have locator lights on them. Wall plug outlets should be conveniently located throughout the dwelling.

**36** **Magnifying strips** to the wall thermostat could be added for a person with limited vision.

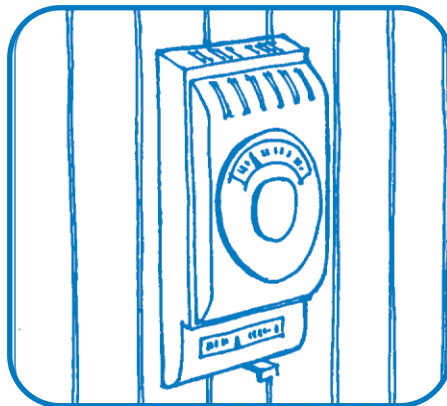
**37** The **main electrical panel** in an apartment may be lowered if permitted by the electrical authority or, in a house, it may be relocated on the ground floor within reach of a person in a wheelchair.

**38** Additional **wiring and electrical outlets** may be required for special aids and equipment, for example, battery chargers for an electric wheelchair.

**39** Replacing or adding **light fixtures** to increase lighting in task areas at stairs, ramps and so on should be considered.

**40** Upgrading **existing electrical panels** to accommodate increased loads as a result of accessibility modifications may be required.

## HEATING, COOLING AND VENTILATION



**41** **Heating, cooling and ventilation systems** are important to persons with disabilities who may have varying needs and may spend a considerable amount of time in their homes. Consequently, it is important for them to be able to control the temperature, ventilation and humidity levels.

For persons with severe allergies, the air quality in the home might be controllable by the installation of air conditioning, humidity control and air filter systems.

**42** It may be necessary to replace a **solid fuel heating system** with an electric, oil or gas-fired/forced air system where the occupant with disabilities is unable to maintain the fuel supply to the solid fuel burning system.

**43** It is advisable to enclose or insulate the **radiators and other heating pipes or ducts** to protect the occupant with disabilities from burns.

**Note:** Except as permitted in 42 above, the repair or replacement of a heating system is **not** eligible.

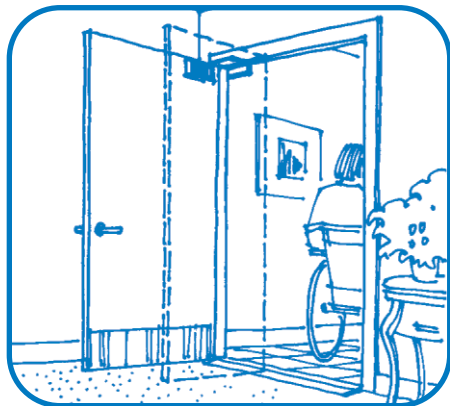
## PLUMBING

**44** An **existing plumbing system** may have to be modified. For example, the piping may have to be rerouted to the kitchen, bathroom or laundry room to accommodate accessibility modifications.

**45** The installation of a **pressurized piped water supply and sewage disposal systems** where none exists or where the person with disabilities is unable to maintain or use the current systems should be considered.

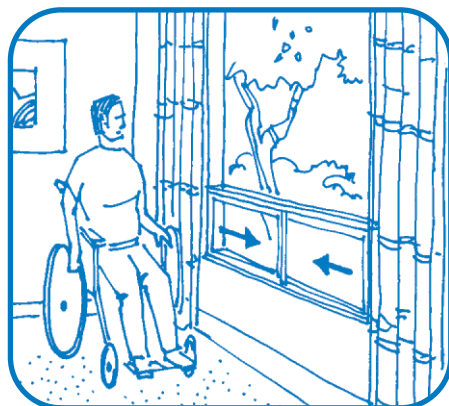


## DOORS



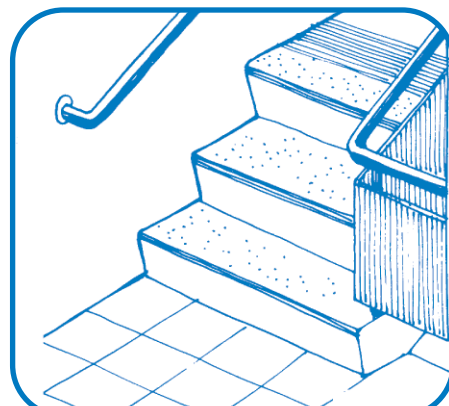
- 46** The relocation, replacement or modification of **door openings, doors or door hardware** should be related to the accessibility needs of the person with disabilities. Consider the functional purpose of the door. A door to the bedroom or bathroom is required for privacy, while a kitchen door may serve no purpose. Bifolding, accordion or sliding pocket doors are more appropriate in certain areas. Door hardware should be adapted for use by the person with disabilities.

## WINDOWS



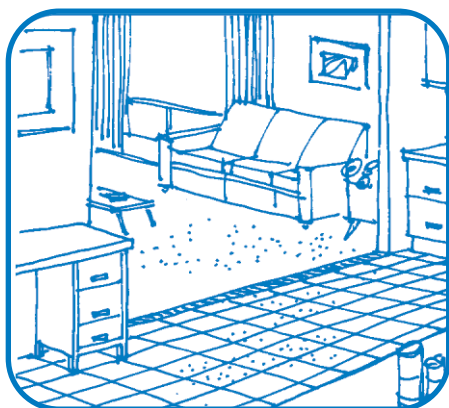
- 47** **Lowered window sills** in frequently occupied rooms, such as the living room or bedroom, will allow a person with disabilities to see outside from a sitting position. Windows should be easy to open, close and lock. Hardware for curtains should make them easy to open and draw.

## STAIRS



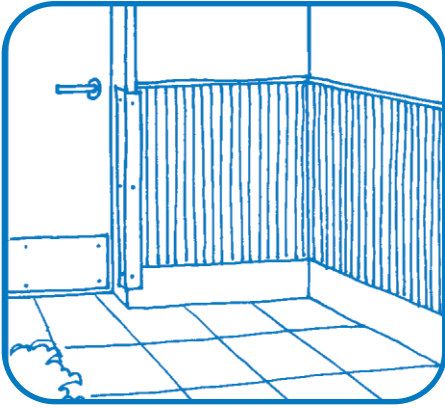
- 49** **Finishes on stair treads** should be slip-resistant. Visual aids, such as strips on stairs or treads and risers in contrasting colours, may be necessary for a person with a seeing disability.
- 50** **Handrails** can be installed on both sides of corridors and stairs, but minimum widths for fire safety must be respected. When handrails end, they should curve into the wall or have some other design feature, such as notch edging, which indicates to the touch that they are ending.

## FLOOR FINISHES



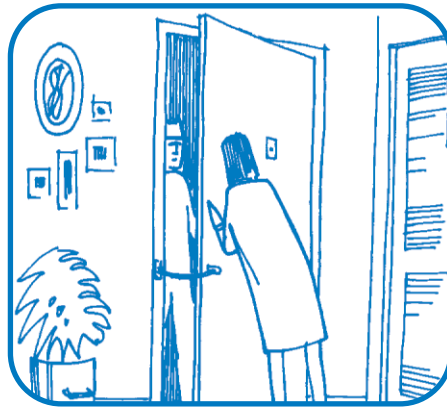
- 48** It may be necessary to replace **existing flooring** in order to make it suitable for wheelchair use, to reduce severe allergy conditions, to reduce perceptual problems or to remove slippery floor surfaces. In all cases, the type of disability should govern the choice of the floor covering.

## WALLS



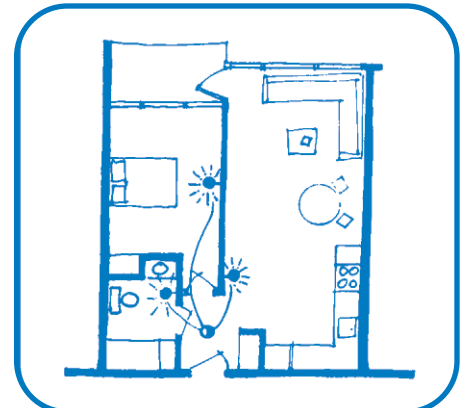
- 51** **Wainscoting** for walls and **protective moldings** of plastic, metal or carpeting for corners to minimize damage from wheelchairs may be provided.
- 52** **Circulation areas** should be clear of wall-mounted fixtures that could pose a danger to persons with a visual impairment.

## SECURITY



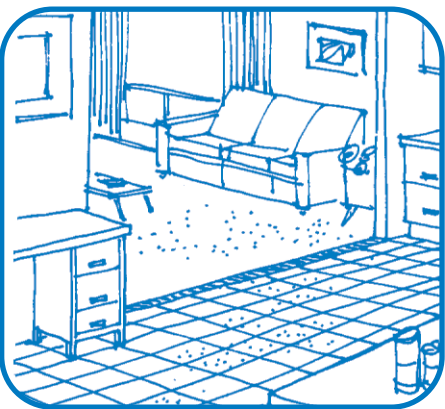
- 54** Security can be improved by providing a **security lock and chain, door interviewer or optical peephole** on the door.
- 55** An **intercom system** might be the answer in an apartment.

## FIRE SAFETY



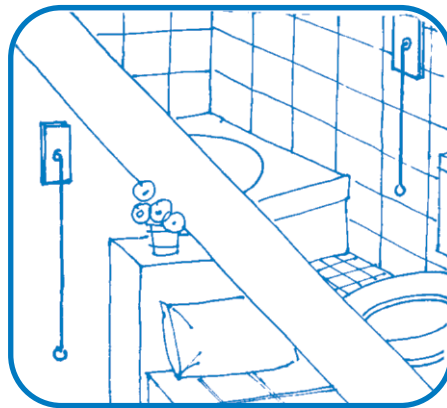
- 57** **Sound and sight fire alarms** can provide additional security and may be installed. Fire safety needs should be discussed thoroughly with your local fire department and your RRAP inspector.

## SOUND INSULATION



- 53** **Sound-absorbing materials** may have to be provided if a room or dwelling is occupied by someone who is hard of hearing or who is intellectually impaired. Carpeting for floors and fiberglass insulation in some wall areas could be appropriate.

## ASSISTANCE ALARMS



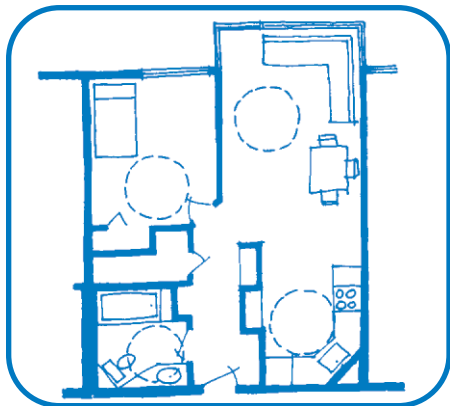
- 56** A **fixed alarm** located in the bathroom and another in the bedroom could be considered a safety feature. A person with disabilities might fall or become ill and require assistance. It is necessary to explore the different alarm systems that are presently available. The most important aspect of any alarm is that it should provide a quick response to the call for assistance.

## 12. ACCESSIBLE SPACE

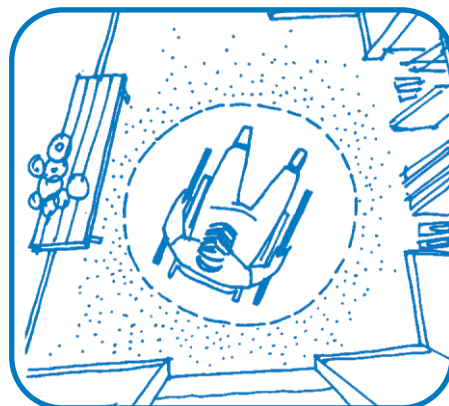
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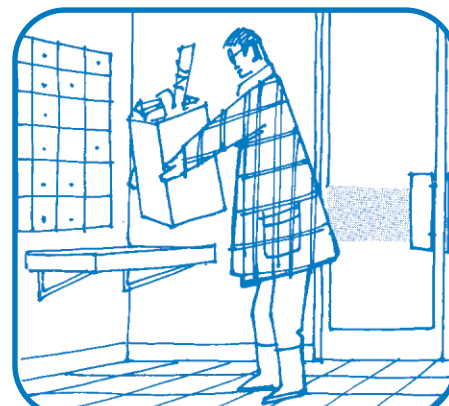
## ENTRANCE HALLWAY



**58** **Space needs** will depend on the type and degree of the disability. Ideally, a wheelchair user should be able to turn a complete circle in every room of the house or apartment. In some cases, it will be sufficient to have space for a wheelchair to manoeuvre back and forth. In most rooms, simply rearranging the furniture will be enough to provide adequate turning or maneuvering space. The objective is to ensure that the person with disabilities has full use of the room.



**60** **Turning space**, clear of door swings, should be provided just inside the main entrance door to allow a complete turn in a wheelchair and to permit removal of outdoor clothing. Since relocating walls can be expensive, a closet could be removed without major disruption.

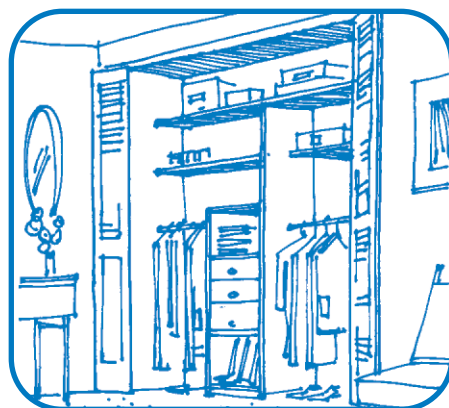


**63** A **package shelf** may be installed beside the door to allow a person to put down packages while opening the inner door or removing outdoor clothing.

## EXTENSIONS

**59** Construction of additional floor space by building a new **extension or finishing an unfinished area** for an accessible bedroom, laundry room, bathroom and storage space or by increasing the size of an existing kitchen, dining and living area could be considered if required by the person with disabilities.

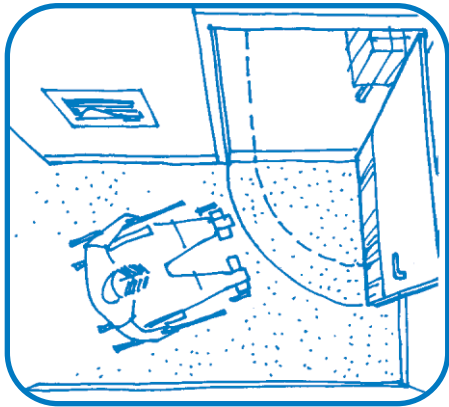
**Note:** Extensions for any other purposes, such as recreational or hobby activities, self-employment or other paid work and so on, are not eligible.



**61** **Clothes closets** with small doors are virtually unusable by wheelchair-bound persons. The open space could be enlarged or the doors removed and replaced with accordion or bifolding doors. The clothing rod could be lowered or removed to allow two clothing rods to be installed at different heights or to provide extra shelving.

**62** A **lowered mailbox** or a mail opening in the door with a catch basket on the inside at the appropriate level may be the easiest to use.

## CORRIDORS (HALLWAYS)

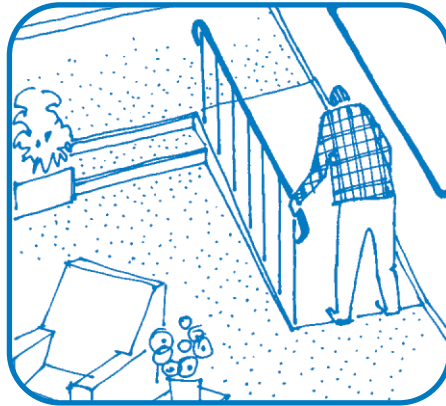


**64** **Manoeuvring space** is required for a wheelchair user to make sharp turns from corridors into rooms; although, most corridors are wide enough to accommodate a wheelchair.

**65** Some **archways or doorways** may have to be widened or removed to permit passage of a wheelchair, if they are not part of a required fire separation.

**66** On **corridor doors** within a dwelling unit, butt hinges can be replaced with those that swing clear. Doors can also be rehung to open in another direction if their present swing is in the way; or they can be replaced with sliding pocket doors, accordion-type or bifolding doors.

## LEVEL CHANGES



**67** In areas with minor level changes (only a few steps), an **interior ramp** with a slope no steeper than 1:8 may be appropriate for wheelchair users or other persons with limiting disabilities.



**68** There are many options for **remodeling a multiple-storey dwelling** that has common activity rooms on one floor and bedrooms on another: remodel the rooms on the main level to create an accessible bedroom and bathroom or laundry room; or build a main floor addition to the house to add a bedroom, bathroom and so on.



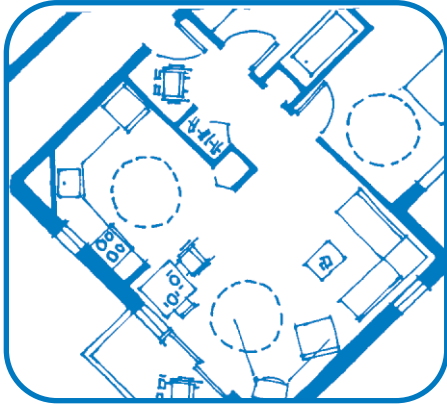
**69** There are several **interior elevating devices** on the market:

- (a) wheelchair lifts that run up the staircase.
- (b) stair glides that provide a seat for one use and run up the staircase. This device may be practical for a person with a cane or walker but impractical for a wheelchair user; it requires transferring twice each time the lift is used, and having another wheelchair in position at the next level.
- (c) a vertical home lift that requires an elevator shaft.

Each of these options involves a major undertaking and expense. Before you decide to install one of them, discuss the matter in detail with a RRAP inspector, a designer and a person who sells stair lifts and elevators.

**Note:** See *Extensions*, 59 “*Extension or finishing an unfinished area.*”

## LIVING AND DINING AREAS



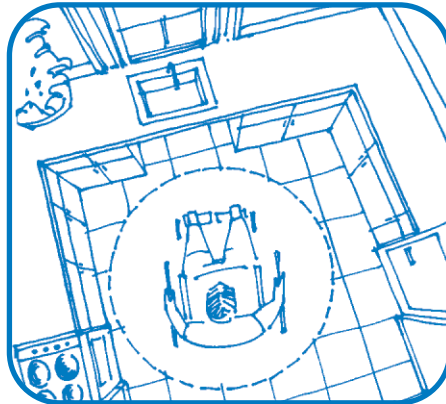
- 70** **Modifications to living and dining areas** are sometimes required. In a few cases, one or both areas may be too small for use by a person with disabilities, particularly a person in a wheelchair, and alterations may be necessary. It is important to consider the location of doors and windows and to ensure circulation space. A layout that accommodates a television, a well-lit reading space and a simple entertainment area may be considered.

The dining area may be located in the kitchen; if separate, it should be directly accessible from the kitchen. A pass-through linking the kitchen counter to the dining table or trolley for serving meals may be helpful. The space at the table should be large enough to get in and out with ease, and comfortable enough to dine in comfort.

The design or layout of the living and dining areas should provide safety, convenience and comfort for the person with disabilities.

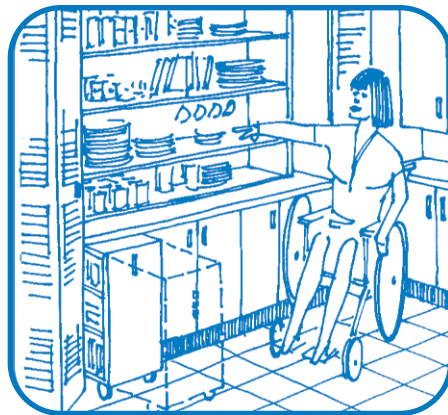
**Note:** Because a trolley is portable, it is **not** eligible.

## KITCHEN

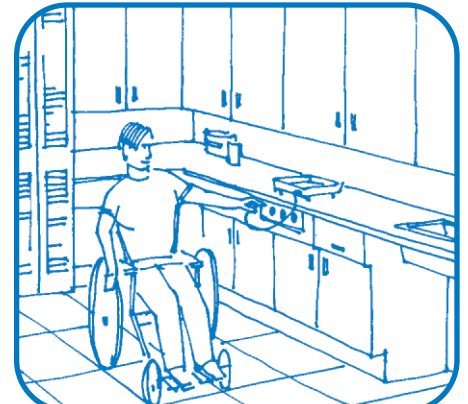


- 71** Sufficient **turning space** is needed in front and between counters particularly for a person in a wheelchair. Therefore, modifying, enlarging or redesigning the kitchen to accommodate an occupant with disabilities may be required. However, full use of the kitchen for all members of the family is important.

**Note:** See *Extensions*, 59 “*Extensions or finishing an unfinished area.*”

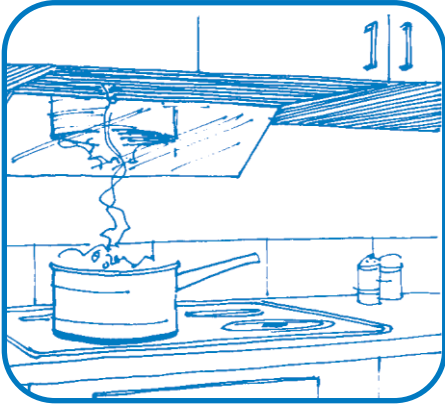


- 72** A **pantry** will provide more accessible storage, if it is not too deep, and contains stationary or roll-out shelving. A pantry entrance should have bifold or swing doors, but not sliding doors unless they are the *pocket door* type.



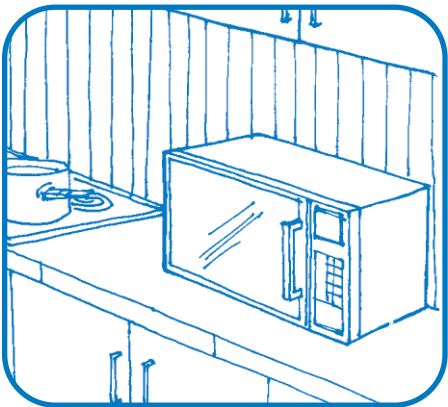
- 73** **Electrical outlets** could be relocated to within easy reach, for example, on the face of the lower cabinet.
- 74** A **counter cooktop with front or side controls** could be considered since rear controls for the stove are difficult to reach and unsafe. The range hood controls should also be lowered.
- 75** A **wall oven** with its side door and possible placement at a desired level could also be considered, if required for use by the person with disabilities.

## LAUNDRY ROOM



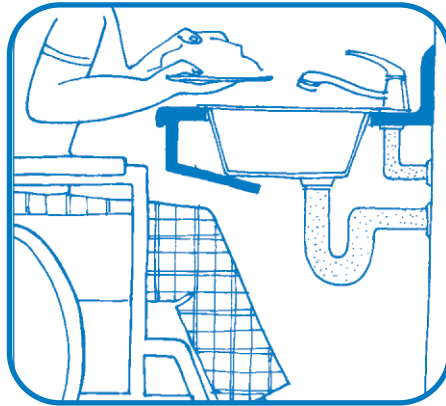
**76** An **adjustable mirror** above the cooktop will help a seated person see into cooking pots.

**77** **Heatproof accessible counter surfaces** could be considered.



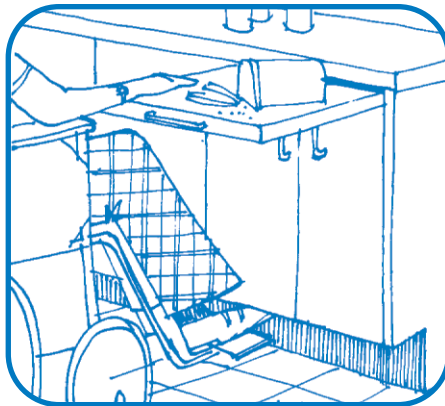
**78** The provision of **kitchen space** to accommodate appliances, such as a stove or counter cooktop, wall oven, dishwasher or microwave oven, and counter space may be considered. A microwave oven with its side door and lower temperature food containers in combination with a cooktop with front controls are widely accepted.

**Note:** Only counter cooktops and wall ovens are eligible (see Section 3 “Eligible Modifications”).

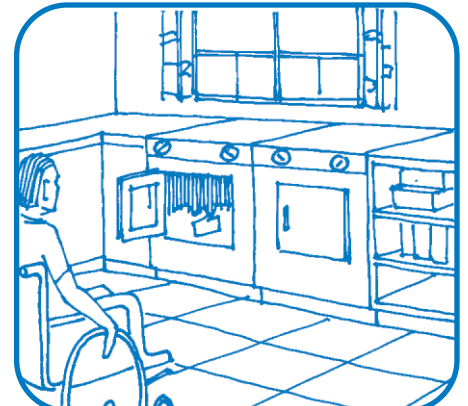


**79** The sink will be more accessible if **knee space** is provided underneath in a standard-height counter. The underside of the sink, the drain pipe and hot water supply can be insulated to protect users from burns.

**80** A **thermostatically controlled lever-type faucet** for the sink may be installed.

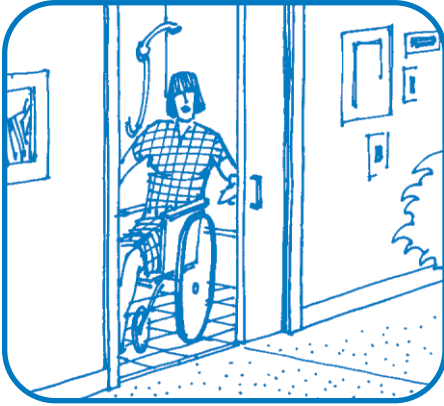


**81** A **recessed toe space** at the bottom of all floor cabinets allows the wheelchair user to work more comfortably at **kitchen counters**. Counter height may also be reduced. However, a simple modification may involve the installation of a pull-out cutting board at the appropriate height. This can double as a work surface if it is sturdy enough.



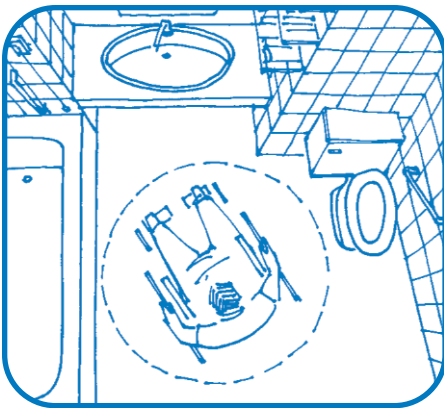
**82** The laundry room should be accessible, have sufficient space and be designed to permit independent use by a person with disabilities. Modifications may be required to provide space, at an appropriate height, for **laundry appliances**. An accessible **laundry tub** with a **thermostatically controlled faucet**, a permanently installed **drying rack** and a **sorting counter** can be provided.

# BATHROOM

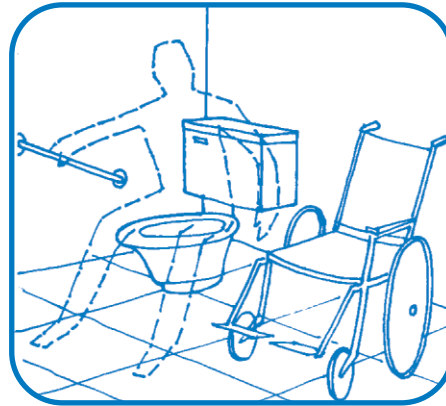


Of all the rooms in the house, the bathroom will probably present the most serious problems.

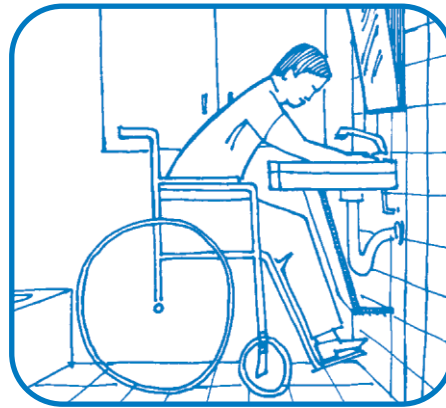
- 83** The bathroom **door** could be reinstalled to open outward, or it could be replaced with a sliding *pocket door*. This would increase the space available. The bathroom door lock should be operable from the outside.



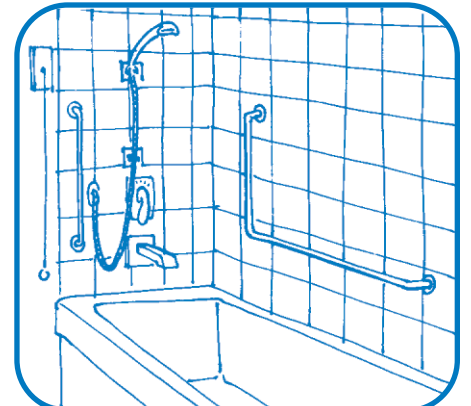
- 84** Sufficient **clear floor space** should be provided to allow easy access to each fixture. In some cases, space may be required for someone to assist the person with disabilities. Therefore, enlarging the floor space of an existing bathroom and rearranging existing fixtures or adding necessary fixtures may have to be considered.



- 85** Extra free space on one side of the **toilet area** will allow a sideways transfer from a wheelchair. Grab-bars are needed to permit persons with disabilities to use the toilet independently. In some cases, a higher-than-standard toilet with built-in support rails or a commode chair for independent use may be an option.

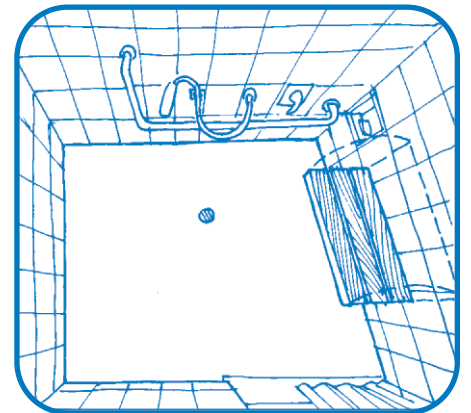


- 86** A **washbasin** with a thermostatically controlled faucet is more accessible and safer to use. Also, insulated knee space under the washbasin, extra height to improve access to the faucet and space for personal care items, should be provided.
- 87** The **medicine cabinet/tilted mirror** could be lowered. A tilted mirror would be convenient for someone seated.



- 88** A **bathtub** with a **non-slip surface** and **grab-bars**, a **hand-held shower** with flexible tubing and a **thermostatically controlled faucet** will encourage independent use.

- 89** A **hydraulic bath lift or bathtub chair**, whether portable or permanently installed, or a bathtub seat could be provided if required by a person with disabilities.

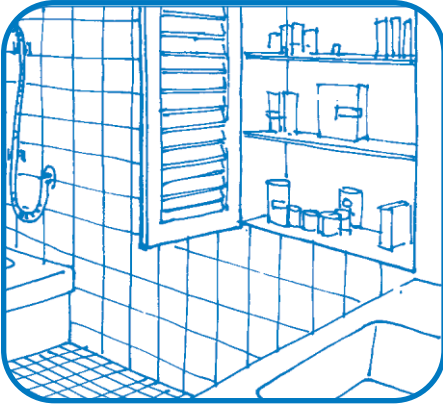


- 90** A **wheel-in shower** can be installed with a **lift-up seat** and other necessary equipment, such as **grab-bars**, a **thermostatically controlled hand-held shower** on vertical rod or high and low mounting brackets and so on.

- 91** An **alarm buzzer** should be provided.

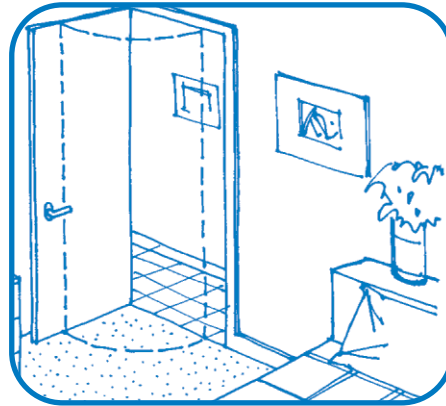


## BEDROOM

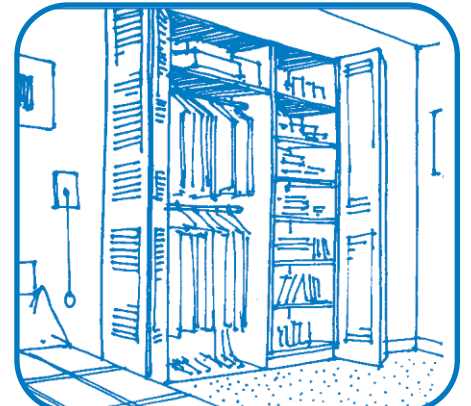


**92** Extra **storage space** or an accessible vanity in addition to a medicine cabinet for other medical or disability-related supplies could be considered.

**93** **Dimmer switch/night light** between the bathroom and bedroom may be required.



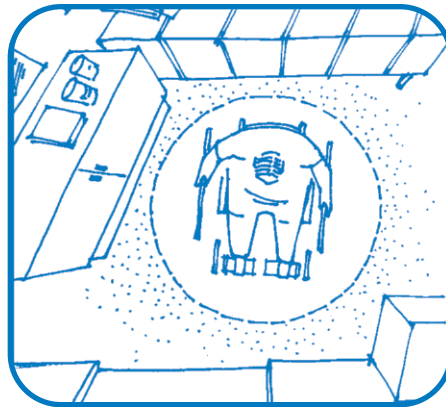
**94** **Enlarged or sliding pocket doors** will permit easier access, if space is limited.



**97** **Clothes closets** can be opened with sliding doors, accordion or bifold doors, and the clothing rod can be lowered to allow for two clothing rods or more shelving.

**98** A **light switch** at the bedroom entrance and at the bedside, including a dimmer switch/night light to prevent walking in the dark, should be considered.

**99** An **alarm switch or control** within reach of the person with disabilities at all times should be made available.



**95** Sufficient **turning space**, clear of door swings, for people who may have to use a walker or a wheelchair should be provided just inside the bedroom door, beside the bed, near a window and in front of the bedroom closet. If these areas are inaccessible to the person with disabilities, the enlarging of an existing bedroom may be necessary.

**96** Sufficient **space for medical care equipment** may be provided.

**Note:** See *Extensions, 59* “*Extensions or finishing an unfinished area.*”



# 13. MODIFICATION CHECKLIST

Use this handy checklist to identify your priorities and to discuss possible modifications with your RRAP inspector. The dimensions are required for wheelchair accessibility. They are not absolute; there is latitude for adjustments. In each case, the dimensions should be discussed with a designer or a qualified person who understands the accessibility needs of persons with disabilities.

## APPROACHING AND ENTERING THE BUILDING

|   | Dimension<br>(mm) | Essential | Desirable | N.A.  |
|---|-------------------|-----------|-----------|-------|
| <b>At the site</b>  |                   |           |           |       |
| 1. Parking (min./max. width)                              | 3,600             | _____     | _____     | _____ |
| 2. Walkway to entrance (min. ext.)                        | 900 to 1,500      | _____     | _____     | _____ |
| 3. Lighting   |                   | _____     | _____     | _____ |
| <b>Exterior Ramps and Chair Lifts</b>                     |                   |           |           |       |
| 4. Ramp - max. slope                                      | 1:20 to 1:12      | _____     | _____     | _____ |
| min./max. width   | 850 to 1,015      | _____     | _____     | _____ |
| landing (top) min.  | 1,500             | _____     | _____     | _____ |
| handrails two and   | 750 and 900       | _____     | _____     | _____ |
| tubular handrails (diameter)                              | 45                | _____     | _____     | _____ |
| 5. Canopy   |                   | _____     | _____     | _____ |
| 6. Chair lift   |                   | _____     | _____     | _____ |
| <b>Carports and Garages</b>                               |                   |           |           |       |
| 7. Direct access  |                   | _____     | _____     | _____ |
| 8. Carport  |                   | _____     | _____     | _____ |
| 9. Existing garage or carport                             |                   | _____     | _____     | _____ |
| 10. Transfer aid  |                   | _____     | _____     | _____ |
| 11. Electrically operated garage doors                    |                   | _____     | _____     | _____ |
| 12. Three-way switch                                      |                   | _____     | _____     | _____ |
| <b>Exterior Signs</b>                                     |                   |           |           |       |
| 13. Exterior signs  |                   | _____     | _____     | _____ |
| <b>Entrances</b>  |                   |           |           |       |
| 14. Shelter   |                   | _____     | _____     | _____ |
| 15. Lighting  |                   | _____     | _____     | _____ |
| 16. Main entrance   |                   | _____     | _____     | _____ |
| 17. Level entrance area                                   | 860               | _____     | _____     | _____ |
| 18. Main door   |                   | _____     | _____     | _____ |
| 19. Threshold (max. ht.)                                  | 15                | _____     | _____     | _____ |
| 20. Storm doors   |                   | _____     | _____     | _____ |
| 21. Call/doorbell   | 1,500             | _____     | _____     | _____ |
| 22. Entrance door lever-type handle<br>(min./max. height) | 750 to 900        | _____     | _____     | _____ |
| 23. Locks (min./max. height)                              | 750 to 900        | _____     | _____     | _____ |
| 24. Door closer   |                   | _____     | _____     | _____ |
| 25. Kickplate   | 600 x 1,200       | _____     | _____     | _____ |
| Other _____   |                   | _____     | _____     | _____ |
| <b>Vestibule</b>  |                   |           |           |       |
| 26. Distance between doors                                | 1,900             | _____     | _____     | _____ |
| 27. Glass or mirrored surfaces                            |                   | _____     | _____     | _____ |
| 28. Mailboxes (min./max. ht.)<br>and package shelf        | 600 to 1,400      | _____     | _____     | _____ |
| 29. Intercom system (min./max. ht.)                       | 600 to 1,400      | _____     | _____     | _____ |
| 30. Public washroom                                       |                   | _____     | _____     | _____ |
| Other _____   |                   | _____     | _____     | _____ |

|  | Dimension<br>(mm) | Essential | Desirable | N.A.  |
|--|-------------------|-----------|-----------|-------|
| <b>Interior Ramps and Elevators</b>          |                   |           |           |       |
| 31. Ramps                                    | 1/20 to 1/12      | _____     | _____     | _____ |
| 32. Elevators                                |                   | _____     | _____     | _____ |
| 33. Turning space (max.)                     | 1,500             | _____     | _____     | _____ |
| (min. depth)                                 | 1,200             | _____     | _____     | _____ |
| 34. Controls and signaling devices (max. ht) | 1,400             | _____     | _____     | _____ |

## BUILDING SYSTEMS

### Electrical

|   |              |       |       |       |
|---|--------------|-------|-------|-------|
| 35. Electrical switches and thermostatic controls (min./max. ht.) | 840 to 1,050 | _____ | _____ | _____ |
| • outlets (min. ht.)  | 530          | _____ | _____ | _____ |
| • entrance  |              | _____ | _____ | _____ |
| • corridor  |              | _____ | _____ | _____ |
| • living/dining   |              | _____ | _____ | _____ |
| • kitchen   |              | _____ | _____ | _____ |
| • bathroom  |              | _____ | _____ | _____ |
| • bedroom(s)  |              | _____ | _____ | _____ |
| 36. Magnifying strips   |              | _____ | _____ | _____ |
| 37. Main electrical panel   |              | _____ | _____ | _____ |
| 38. Wiring and electrical outlets                                 |              | _____ | _____ | _____ |
| 39. Light fixtures  |              | _____ | _____ | _____ |
| 40. Existing electrical panels                                    |              | _____ | _____ | _____ |

### Heating, Cooling and Ventilation

|  |  |       |       |       |
|--|--|-------|-------|-------|
| 41. Heating, cooling and ventilation systems   |  | _____ | _____ | _____ |
| 42. Solid fuel heating system                  |  | _____ | _____ | _____ |
| 43. Radiators and other heating pipes or ducts |  | _____ | _____ | _____ |

### Plumbing

|  |  |       |       |       |
|--|--|-------|-------|-------|
| 44. Existing plumbing system                                   |  | _____ | _____ | _____ |
| 45. Pressurized piped water supply and sewage disposal systems |  | _____ | _____ | _____ |

### Doors

|  |     |       |       |       |
|--|-----|-------|-------|-------|
| 46. Door openings, doors or door hardware (min. width) | 810 | _____ | _____ | _____ |
| • entrance   |     | _____ | _____ | _____ |
| • corridor   |     | _____ | _____ | _____ |
| • living/dining  |     | _____ | _____ | _____ |
| • kitchen  |     | _____ | _____ | _____ |
| • bathroom   |     | _____ | _____ | _____ |
| • bedroom(s)   |     | _____ | _____ | _____ |

### Windows

|                                     |     |       |       |       |
|-------------------------------------|-----|-------|-------|-------|
| 47. Lowered window sills (max. ht.) | 750 | _____ | _____ | _____ |
| • living/dining                     |     | _____ | _____ | _____ |
| • bedrooms(s)                       |     | _____ | _____ | _____ |

### Floor Finishes

|                       |  |       |       |       |
|-----------------------|--|-------|-------|-------|
| 48. Existing flooring |  | _____ | _____ | _____ |
|-----------------------|--|-------|-------|-------|

### Stairs

|                               |            |       |       |       |
|-------------------------------|------------|-------|-------|-------|
| 49. Finishes on stair treads  |            | _____ | _____ | _____ |
| 50. Handrails (min./max. ht.) | 840 to 900 | _____ | _____ | _____ |

### Walls

|  |  |       |       |       |
|--|--|-------|-------|-------|
| 51. Wainscotting and protective moldings |  | _____ | _____ | _____ |
| 52. Circulation areas                    |  | _____ | _____ | _____ |

### Sound Insulation

|                               |  |       |       |       |
|-------------------------------|--|-------|-------|-------|
| 53. Sound-absorbing materials |  | _____ | _____ | _____ |
|-------------------------------|--|-------|-------|-------|

|  | Dimension<br>(mm) | Essential | Desirable | N.A.  |
|--|-------------------|-----------|-----------|-------|
| <b>Security</b>  |                   |           |           |       |
| 54. Security lock and chain, door interviewer,<br>optical peephole |                   | _____     | _____     | _____ |
| 55. Intercom system  |                   | _____     | _____     | _____ |
| <b>Assistance Alarms</b>   |                   |           |           |       |
| 56. Fixed alarm  |                   | _____     | _____     | _____ |
| <b>Fire Safety</b>   |                   |           |           |       |
| 57. Sound and sight fire alarms                                    |                   | _____     | _____     | _____ |
| • fire/smoke/alarms  |                   | _____     | _____     | _____ |
| • alarm system   |                   | _____     | _____     | _____ |
| • modifications for quick evacuation                               |                   | _____     | _____     | _____ |
| <b>Accessible Space</b>  |                   |           |           |       |
| 58. Space needs  |                   | _____     | _____     | _____ |
| <b>Extensions</b>  |                   |           |           |       |
| 59. Extension or finishing an unfinished area                      |                   | _____     | _____     | _____ |
| • vestibule  |                   | _____     | _____     | _____ |
| • corridors  |                   | _____     | _____     | _____ |
| • dining area  |                   | _____     | _____     | _____ |
| • kitchen  |                   | _____     | _____     | _____ |
| • bathroom   |                   | _____     | _____     | _____ |
| • bedroom  |                   | _____     | _____     | _____ |
| <b>Entrance Hallway</b>  |                   |           |           |       |
| 60. Turning space  | 1,500 x 1,500     | _____     | _____     | _____ |
| 61. Clothes closets  | 1,350             | _____     | _____     | _____ |
| 62. Lowered mailbox  |                   | _____     | _____     | _____ |
| 63. Package shelf  |                   | _____     | _____     | _____ |
| Other _____  |                   | _____     | _____     | _____ |
| <b>Corridors (Hallways)</b>  |                   |           |           |       |
| 64. Maneuvering space  |                   | _____     | _____     | _____ |
| 65. Archways or doorways (min./max. width)                         | 950 to 1,070      | _____     | _____     | _____ |
| 66. Doors  |                   | _____     | _____     | _____ |
| <b>Level Changes</b>   |                   |           |           |       |
| 67. Interior ramps<br>(max. slope 1:8 for 2,500 mm dist.)          |                   | _____     | _____     | _____ |
| 68. Remodeling a multiple-storey dwelling                          |                   | _____     | _____     | _____ |
| 69. Interior elevating devices                                     |                   | _____     | _____     | _____ |
| Other _____  |                   | _____     | _____     | _____ |
| <b>Living and Dining Areas</b>                                     |                   |           |           |       |
| 70. Modifications to living and dining areas                       | 750 to 1,200      | _____     | _____     | _____ |
| <b>Kitchen</b>   |                   |           |           |       |
| 71. Turning space  | 1,500 x 1,500     | _____     | _____     | _____ |
| 72. Pantry (shelves max. ht.)                                      | 1,350             | _____     | _____     | _____ |
| 73. Electrical outlets   |                   | _____     | _____     | _____ |
| 74. Counter cooktop with front or side controls                    |                   | _____     | _____     | _____ |
| 75. Wall oven  |                   | _____     | _____     | _____ |
| 76. Adjustable mirror  |                   | _____     | _____     | _____ |
| 77. Heat proof counter surfaces                                    |                   | _____     | _____     | _____ |
| 78. Kitchen space  |                   | _____     | _____     | _____ |
| 79. Knee space (insulated) (min. width)                            | 750               | _____     | _____     | _____ |
| 80. Thermostatically controlled<br>lever-type faucet (max.)        | 46°C              | _____     | _____     | _____ |
| 81. Kitchen counters (max. ht.)                                    | 840               | _____     | _____     | _____ |
| with recessed toe space (high/depth)                               | 220/150           | _____     | _____     | _____ |
| Other _____  |                   | _____     | _____     | _____ |

|                                      | Dimension<br>(mm) | Essential | Desirable | N.A.  |
|--------------------------------------|-------------------|-----------|-----------|-------|
| <b>Laundry Room</b>                  |                   |           |           |       |
| 82. Laundry appliances               |                   | _____     | _____     | _____ |
| • laundry tub                        |                   | _____     | _____     | _____ |
| • thermostatically controlled faucet |                   | _____     | _____     | _____ |
| • drying rack                        |                   | _____     | _____     | _____ |
| • sorting counter                    |                   | _____     | _____     | _____ |

|  |               |       |       |       |
|--|---------------|-------|-------|-------|
| <b>Bathroom</b>                                |               |       |       |       |
| 83. Door (min. width)                          | 810           | _____ | _____ | _____ |
| 84. Clear floor space (max.)                   | 1,500 x 1,500 | _____ | _____ | _____ |
| • door handle (min./max. ht.)                  | 750 to 900    | _____ | _____ | _____ |
| • lock (min./max. ht.)                         | 750 to 900    | _____ | _____ | _____ |
| • kickplate                                    | 750 to 900    | _____ | _____ | _____ |
| 85. Toilet area                                |               |       |       |       |
| • lateral transfer                             | 750           | _____ | _____ | _____ |
| • frontal transfer                             | 1,050         | _____ | _____ | _____ |
| 86. Washbasin (aver. ht.)                      | 815           | _____ | _____ | _____ |
| • insulated knee space (min. ht.)              | 660           | _____ | _____ | _____ |
| 87. Medicine cabinet/tilted mirror             |               | _____ | _____ | _____ |
| 88. Bathtub                                    |               |       |       |       |
| • grab-bars                                    |               | _____ | _____ | _____ |
| • hand-held shower                             |               | _____ | _____ | _____ |
| • non-slip surface                             |               | _____ | _____ | _____ |
| • thermostatically controlled faucet           |               | _____ | _____ | _____ |
| 89. Hydraulic bath lift or bathtub chair       |               | _____ | _____ | _____ |
| 90. Wheel-in shower with lift-up seat          |               | _____ | _____ | _____ |
| • grab-bars                                    |               | _____ | _____ | _____ |
| • thermostatically controlled hand-held shower |               | _____ | _____ | _____ |
| 91. Alarm buzzer (approx. ht.)                 |               | _____ | _____ | _____ |
| 92. Storage space                              |               | _____ | _____ | _____ |
| 93. Dimmer switch/night light                  |               | _____ | _____ | _____ |
| Other _____                                    |               | _____ | _____ | _____ |

|  |               |       |       |       |
|--|---------------|-------|-------|-------|
| <b>Bedroom</b>                                       |               |       |       |       |
| 94. Enlarged or sliding pocket doors<br>(min. width) | 810           | _____ | _____ | _____ |
| • door hinge   |               | _____ | _____ | _____ |
| • kickplate  |               | _____ | _____ | _____ |
| 95. Turning space                                    | 1,500 x 1,500 | _____ | _____ | _____ |
| • min. clearance for other areas                     | 750           | _____ | _____ | _____ |
| 96. Space for medical care equipment                 |               | _____ | _____ | _____ |
| 97. Clothes closets                                  |               |       |       |       |
| • rods (max. ht.)                                    | 1,350         | _____ | _____ | _____ |
| • shelves (max. ht.)                                 | 1,350         | _____ | _____ | _____ |
| 98. Light switch                                     |               | _____ | _____ | _____ |
| 99. Alarm switch or control                          |               | _____ | _____ | _____ |
| Other _____  |               | _____ | _____ | _____ |



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