ACCOMMODATING HOME

BUILDERS' GUIDE AND CHECKLIST

"A" FEATURES

A dwelling must incorporate all mandatory items listed in the "A" Features section of this document to qualify for certification as an Accommodating Home.

A.1 A Wide Parking Space

Where there is to be on-site parking, an Accommodating Home provides at least one outdoor parking space with generous dimensions for loading people and equipment into vehicles.

A.1.1 The **outdoor parking space**:

- ☑ has a minimum clear width of 13 feet (3900 mm) and length of 24 feet (7200 mm)*
- ☑ is level or gently sloped, with a maximum run-to-rise of 20 to 1

**A length of 24 feet (7200 mm) accommodates a four-foot path of travel along the front or rear of a 20-foot-long vehicle, such as an extended cab, long box truck.*

At least one parking space inside any garage or carport should also have generous dimensions. A framed-in parking space must be wider than an outdoor space to accommodate door swings between walls, as well as turning space for wheelchairs, strollers, and walkers.

A.1.2 The **framed-in parking space** has:

- ☑ a minimum clear width of 15 feet (4500 mm) and length of 24 feet (7200 mm)

A.2 Stair-free Access to an Exterior Entrance with Wide Landings

An Accommodating Home has at least one entrance accessed by a pathway without any stairs or steps. Landings on either side of the entry door have generous dimensions to promote safe handling of bulky objects, and provide turning space for mobility equipment.

A.2.1 The **pathway** to this entrance:

- ☑ begins at the same level as the parking surface(s) and, if applicable, the street approach
- ☑ is level or gently sloped along its length, with no abrupt elevation changes and a maximum run-to-rise of 16 to 1
- ☑ has a maximum length of 30 feet (9000 mm) between the outdoor parking space and the entrance landing
- ☑ has a minimum clear width of 42 inches (1060 mm)
- ☑ is made of a firm, slip resistant material*
- ☑ has a sturdy, continuous curb or barrier at least four inches (100 mm) in height along any side where there is an abrupt or steeply sloped drop in elevation**

**If the material is wood decking, spaces between individual boards should be oriented perpendicular to the direction of travel and not be wider than 1/2 inch (13 mm).*

***Curbs are not required where the downward slopes of adjacent landscaping or structures have a run-to-rise ratio of 20 to 1, or greater.*

A.2.2 The **landings** on either side of the entry door:

- ☑ are at least five feet (1500 mm) wide and five feet deep between vertical surfaces and clear of storage
- ☑ provide, on the pull side, at least 24 inches (600 mm) of clear wall space next to the handle edge of the door
- ☑ provide, on the push side, at least 12 inches (300 mm) of clear wall space next to the handle edge of the door

A.2.3 The **exterior landing** is:

- ☑ sheltered from the elements by a roof or awning, or by virtue of being located inside a garage or carport
- ☑ made of a firm material, ideally with a slip resistant surface or finish

A.3 Wide Doors, Hallways and Stairs

Doorways, hallways and stairs in an Accommodating Home are roomier than the current industry standard.

A.3.1 Minimum width dimensions for **doors and passage ways** are as follows:

- ☑ size of all exterior doors, 36 inches (900 mm)
- ☑ size of sliding patio doors,* 72 inches (1820 mm)
- ☑ size of all interior passage doors,** 34 inches (860 mm)
- ☑ hallways, 42 inches (1060 mm) between finished surfaces
- ☑ stairways, 42 inches (1060 mm) between finished surfaces

**Minimum size of a patio or deck landing is five by five feet (1500 x 1500 mm) between vertical surfaces.*

*** Interior doors providing access to shallow, no-entry storage compartments, such as broom or linen closets, need not be this wide.*

A.4 Ample Maneuvering Space in Key Rooms

An Accommodating Home provides sufficient floor space for people who use mobility equipment to access sinks, appliances, toilets, bathing facilities, and a bed.

A.4.1 In the **kitchen,** the minimum clear floor space for access and maneuvering is:

- ☑ four feet (1200 mm) between base cabinets, or between base cabinets and the wall

A.4.2 In the **laundry center**, the minimum clear floor space is:

- ☑ four feet (1200 mm) in front of two side-by-side laundry appliances (the upper unit of stacked appliances is not considered accessible)
- ☑ four feet (1200 mm) in front of any laundry sink

A.4.3 In at least **one bedroom or den* on the main floor** and in at least **one bedroom or den* on any second storey**, the minimum floor clearance is:

- ☑ a 10 by 13 foot (3000 x 3900 mm) footprint for a bed**

**If not a bedroom initially, the "den" is a room which has to the potential to serve as a private bedroom in the future. It may not be the home's living or dining room. The den ideally has an adjoining clothes closet, or additional floor space for a wardrobe cabinet.*

***This footprint provides five feet of clearance on one side a standard double bed, three feet on the other side, and three feet beyond the bed's foot. Homebuilders anticipating use of queen-size or king-size beds may want to consider additional room width.*

Feature A.4 continues on next page.

A.4 Maneuvering Space (continued)

A.4.4 In at least **one washroom/bathroom* on the main floor** and in at least **one washroom/bathroom* on any second storey**, the minimum floor clearance is:

- ☑ a five-foot (1500 mm) diameter circle measured from the front or side rim of the toilet bowl,** prior to installation of the sink or vanity cabinet
- ☑ a separate or overlapping five-foot (1500 mm) diameter circle measured from any point along the center line of the sink fixture
- ☑ a three by four foot (900 x 1200 mm) rectangle, oriented either way, along the face of any tub or shower unit

**In a single-storey home, at least one water closet facility shall be a three-piece bathroom with the floor space clearances specified above. In a multiple storey home, at least one water closet facility on the main floor must have the potential to become a three-piece bathroom with the required maneuvering space. See A.13 for further details.*

***The toilet is located adjacent to a side wall – for proximity to future grab bar locations. The center line of the toilet fixture is positioned 18 inches (450 mm) from the side wall.*

Homebuilders wishing to meet a "barrier free" standard should ensure all key rooms have a clear turning space of five feet (1500 mm) in diameter. Further details are specified in the Barrier Free Design section of the National Building Code of Canada.

A.5 All Rooms on Each Storey at the Same Elevation

The floor plan of an Accommodating Home promotes ease of access throughout the interior and reduces potential tripping hazards.

A.5.1 Accordingly, **the floor plan** of the entire home has:

- ☑ no split-level or bi-level storeys
- ☑ no entries or individual rooms offset in elevation from the main living areas of each storey

A.6 Flush or Low-profile Thresholds and Flooring Transitions

In an Accommodating Home, door thresholds and transitions between floor finishes are easily negotiated by feet and wheels, and do not pose a hazard for tripping or stubbing toes.

A.6.1 At **thresholds of exterior doors** accessing the stair-free pathway (see A.2) and any outdoor living spaces such as patios or decks, abrupt changes in surface levels:

☑ do not exceed 5/8 inch (16 mm)

✓ are ideally bridged by means of beveled sills or edging material

A.6.2 Abrupt changes in surface levels at **interior door thresholds** and **flooring transitions**:

☑ do not exceed 3/8 inch (10 mm)

✓ are ideally avoided through the use of underlay beneath shallow floor finishes, or bridged by means of beveled sills or edging material

A.7 Wall Reinforcement in Washrooms, Bathrooms and Stairwells ☎

An Accommodating Home has sturdy wall reinforcement in areas where weight-bearing and safety fixtures might one day be needed.

☎ *Call before it's covered. A YHC Technical Officer must view the installation of Features A.7, B.1 and B.7 before the wall and floor cavities in question are covered.*

A.7.1 In **all washrooms and bathrooms**, wall reinforcement* is installed:

☑ in grab bar locations in the vicinity of toilets, tubs and showers

☑ behind vanity sinks – to facilitate future installation of wall-hung units

**Diagrams specifying appropriate heights and widths of the reinforcement material are provided in the appendices of this checklist.*

See Diagram A.7.1.

Feature A.7 continues on next page.

A.7 Wall Reinforcement (continued)

A.7.2 **Pre-fabricated tub and shower surrounds** often have flanges that cause their sides to stand away from the wall. When such units are installed:

☑ grab bars are either:

- already attached or built-in by the manufacturer
- attached in appropriate locations by the installer before the surround is put in place, using adequate backing material and hardware
- anticipated in appropriate locations through custom reinforcement of the wall or the surround, with the reinforcement material abutting tightly against the contours of the surround

A.7.3 The **minimum thickness** of the wall reinforcement material used in bathrooms is:

☑ 3/4 inch (19 mm) if plywood*

☑ 1-1/2 inches (38 mm) if dimensional lumber** (2x10 or 2x12 material is recommended)

**Plywood may only be used behind vanity sinks if doubled in thickness to 1-1/2 inches (38 mm).*

***Where "toe-nailing" of dimensional lumber blocking is necessary, care must be taken to avoid splitting the block. Passing the nail first through the stud and then into the end grain of the block is advised.*

A.7.4 In **stairwells,** 1-1/2 inch (38 mm) thick wood blocking is installed:

☑ at strategic locations for attachment of safety gates at both the top and bottom landings

☑ at regular intervals within any wall where an immediate or future handrail* cannot be readily attached to vertical framing members (such as a wall with horizontal strapping installed between the studs and interior sheeting)

✓ in walls adjacent to potential stair lift locations

**A second handrail on stairs is often required by people with low vision or with diminished strength in one leg, arm or hand. In the latter case, the second rail provides support for the stronger side of the body in either direction of travel.*

See Diagram A.7.4.

A.8 Adequate Lighting in Traffic and Work Areas

An Accommodating Home provides ample lighting in key areas of the home, allowing residents with either regular or low vision to go about their daily affairs with greater confidence and safety.

A.8.1 **Traffic areas** requiring ample, well-placed lighting include:

- ☑ interior stairways – with at least one light fixture installed over each landing, including the top and bottom landings
- ☑ hallways – with at least one light fixture installed per 10 horizontal feet (3000 mm)
- ☑ exterior entrances – with lighting positioned to illuminate ground conditions, the key hole and visitors' faces
- ☑ parking areas – with motion-activated lighting positioned to illuminate ground conditions and vehicle doors on both sides of the vehicle
- ✓ pathways leading to the home

An Accommodating Home also provides task lighting in areas where residents regularly work with sharp objects and heat sources. Task lighting refers to light fixtures positioned *directly* above work surfaces. Illumination from these lights is not dimmed by distance or shadows, including any shadow cast by the worker.

A.8.2 **Work surfaces** requiring dedicated task lighting include:

- ☑ kitchen, washroom, bathroom and laundry sinks
- ☑ stove or cook tops
- ☑ workboards installed into kitchen cabinetry
- ✓ other work centers along kitchen counter tops
- ✓ work centers in utility and project rooms

Other suggestions for improved household lighting are:

- ✓ recessed "wet location" light fixtures in shower and tub enclosures
- ✓ at least one ceiling light fixture in each room of the dwelling, including bedrooms and living rooms (which are sometimes lit exclusively with wall fixtures and plug-in lamps)
- ✓ a light fixture in each closet and storage area – positioned to avoid contact between the bulb and stored items

A.9 Specific Heights and Locations for Electrical Controls and Outlets

In an Accommodating Home, electrical controls and receptacles are located at heights more easily reached by all household members – be they short or tall, seated or standing, agile or stiff. In addition, some electrical controls and receptacles are placed in specific locations to promote greater ease and range of use.

A.9.1 Accessible heights above the floor for electrical **switches and receptacles** are:

- ☑ on/off switches and counter-height receptacles,* not higher than 42 inches (1060 mm)
- ☑ control switches and consoles that require reading (speed, timer, humidity, temperature and security controls), at 48 to 52 inches (1200 - 1300 mm)
- ☑ wall receptacles and outlets for telephones, modems and audio-visual equipment, not lower than 18 inches (450 mm)

**Switches and receptacles along kitchen counter tops may be slightly higher to accommodate installation of counters with integral backsplashes.*

A.9.2 **Specific wiring locations and circuitry routes** include:

- ☑ telephone/modem and coaxial outlets installed in each bedroom, the kitchen and all common living areas, with:
  - an electrical receptacle located within 24 inches (600 mm) of all outlets
  - home runs from each telephone/modem and coaxial outlet returning to a common location ("low-voltage center" as further described in B.7)
- ☑ an electrical receptacle installed in storage rooms other than clothes closets
- ☑ at least one electrical receptacle* installed on the front face of the millwork below a kitchen counter which is at least 24 inches (600 mm) wide
- ☑ three-way switches located at both ends of stairways and hallways
- ☑ in the bedrooms/dens described in A.4.3:
  - a double duplex receptacle and telephone outlet positioned to one side of (not behind) the probable location of the bed headboard
  - three-way switches controlling a ceiling light and one-half of a duplex receptacle located at the door and to one side of the probable location of the bed headboard

**Each receptacle located at the front of kitchen counters shall be on a 15-amp split-circuit or a 20-amp single circuit, and may be one device in addition to the number of devices normally permitted on kitchen circuits. Such receptacles should be located at least six inches (150 mm) to the side of the kitchen sink.*

Feature A.9.2 continues on next page.

A.9.2 **Specific wiring locations and circuitry routes** (continued):

☑ in the washrooms/bathrooms described in A.4 and B.3, electrical receptacles and switches located to the side or edge of (not directly above) any cabinetry

☑ the main electrical panel, or a sub-panel controlling specific circuits, located on the main floor (see A.13)

A.9.3 **Preferred electrical products** include:

☑ high quality cable for low-voltage wiring runs (Category 5E for telephone cable, RG-6 for coaxial cable) – to improve signal quality for potential future applications in home automation

✓ wide, rocker-type (decora) wall switches which are more easily manipulated by people with stiff fingers and limited reach

✓ temperature, timer, speed, humidity and security controls with large, colour-contrasting letters which are easier to read

A.10 Lower Waste Pipes under Sinks

Throughout an Accommodating Home, waste pipes below sinks that penetrate the wall do so at a lower-than-standard height. This no-cost detail allows any sink basin to be readily lowered, if necessary. Options for providing future knee space under each sink are also considered at the outset.

A.10.1 **Plumbing details** conducive to sink height adjustment and provision of knee space are:

☑ waste pipe penetration of walls at a height of 14 inches (350 mm) above the floor

☑ installation of any sink cabinets *on top* of the room's floor finish – so that cabinets may be modified or removed without need of flooring replacement

✓ installation of shallow sinks with rear-mounted drain outlets

✓ waste traps offset toward, and aligned parallel to, the back wall (except in the case pedestal sinks)

✓ visually attractive materials and pipe work under any sink installed to provide knee space* from the outset or through the future removal of cabinet components**

**Knee space dimensions are 31 inches (780 mm) wide, 27 inches (680 mm) high and 10 inches (250 mm) deep.*

***An accommodating vanity cabinet may have removable panels and storage components attached to a wall-hung counter, which remains in place.*

A.11 Some Lower Windows

An Accommodating Home has some lower windows which provide views to the outdoors for children, adults of short stature, and those who spend a good portion of their time in a seated position.

A.11.1 **Rooms requiring one or more lower windows,** with sills not higher than 30 inches (750 mm) from the floor, include:

- ☑ living and recreation rooms, other than those located below grade
- ☑ the main floor bedroom or den with the large bed footprint (see A.4.3)
- ☑ the second storey bedroom or den with the large bed footprint (see A.4.3), unless the second/alternate storey is below grade
- ☑ the main entry or another room on the main floor which affords a view of the exterior landing at the main entrance
- ✓ children's bedrooms
- ✓ the dining room
- ✓ any room which offers an important scenic or strategic view not readily visible from elsewhere in the home.

A.11.2 Any **opening mechanisms and at least one lock** on lower windows should be:

- ☑ at least 12 horizontal inches (300 mm) away from an intersecting wall
- ☑ not higher than 42 inches (1160 mm)

A.12 Easy to Operate Hardware and Fixtures

An Accommodating Home is outfitted with hardware and fixtures which can be operated without the need for tight grasping, pinching or significant twisting of the wrist.

A.12.1 Such **hardware** includes:

- ☑ door locks and window mechanisms which can be operated with a closed fist
- ☑ lever handles on all faucets serving sinks, tubs and showers
- ☑ lever handles on all hinged passage doors
- ☑ d-pulls or c-pulls, with minimum finger space of one inch (25 mm), on cabinetry doors and pocket doors

Feature A.12 is continued on next page.

A.12 Easy to Operate Hardware and Fixtures (continued)

A.12.2 To be of use to someone in a seated position, **locks and other door and window mechanisms** are located:

☑ at least 12 inches (300 mm) from an intersecting wall.

✓ at heights not exceeding 42 inches (1060 mm) from the floor, except for door deadbolts which may be located at a height not exceeding 46 inches (1160 mm)

A.13 Provisions for Self-sufficiency on the Main Floor

(applies only to homes with an upper storey or basement)

An Accommodating Home is intended to be a home for everyone – today and tomorrow. Any resident should have the option to live independently on the main floor, should an injury or disability prevent them from using stairs.

A.13.1 A floor plan conducive to self-sufficiency locates the following **rooms and utilities on the dwelling's main floor**:

☑ kitchen

☑ living room

☑ bedroom or den convertible to a bedroom (see A.4.3)

☑ three-piece bathroom with a 36 by 60 inch** (900 x 1500 mm) alcove or footprint for a tub/shower, or a two-piece washroom* convertible to a such a bathroom

☑ laundry center or closet/space* convertible to a laundry center

☑ the main electrical panel, or a sub-panel controlling all main floor circuits as well as all circuits delivering power to alarms (eg. smoke and carbon monoxide alarms) and space heating appliances throughout the home

☑ a shut-off valve for the main water supply

**Wiring, plumbing and ductwork components of convertible spaces are pre-planned and roughed-in. Minimum floor clearances described in A.4 apply, except the floor clearance in front of laundry appliances to be installed in a hallway closet may be 42 inches (1060 mm).*

Any closet intended to serve as a future laundry center shall have a minimum clear finished width of 62 inches (1560 mm), to provide room for a full-size washer and dryer. The closet door opening is sized to accommodate installation of the appliances, and closet doors are designed to permit the swing of front-loading appliance doors.

***The extra width of 36 inches (900 mm) facilitates future installation of a wheel-in shower unit.*

"B" FEATURES

A dwelling must incorporate all mandatory items listed in both the "A" Features and "B" Features sections of this document for its purchaser to qualify for an additional reduction in the mortgage interest rate.

B.1 Provisions for Installation of a Residential Elevator in a Multiple-Storey Home ☎

Single-storey design is the best way to provide full access to the home for any resident who is unable to use stairs. The alternative is a lift, either one that glides along a stairway or one that moves a platform straight up and down like a elevator. From the standpoint of user comfort and convenience, a home elevator or "vertical platform lift" is the preferred option.

☎ *Call before it's covered. A YHC Technical Officer must view the installation of Features A.7, B.1 and B.7 before the wall and floor cavities in question are covered.*

B.1.1 A **residential elevator** can be readily installed in a home which has:

☑ "vertically aligned spaces (ideally closets) on each storey, with minimum interior dimensions of 60 by 60 inches (1500 x 1500 mm) – to provide a chase for a variety of home elevator models

- On the **main floor**, the space/closet must be dedicated (framed-in on four sides), accessed from a corridor or common living area, and free of any essential household utilities.
- On **upper and lower storeys**, the space/closet may also be dedicated (framed-in), but at minimum must be located either in a room corner or alongside a partition or perimeter wall – without encroaching on utilities, control switches, hallway widths, windows, or the bed footprint of the bedroom/den described in A.4.

☑ framing rough-in of a minimum 60 by 60 inch (1500 x 1500 mm) floor opening between each pair of "vertically aligned spaces," and absence of any wiring, ducting or plumbing in the rough opening(s)

✓ doors/access points of the closets/spaces also vertically aligned, and wall switches for ambient lighting positioned near the doors/access points

✓ a telephone outlet and a dedicated electrical receptacle provided in the lowest closet/wall

✓ a device box with a blank cover plate, wired with 10/2 cable on a dedicated run to the main floor electrical panel, also provided in the lowest closet/wall

B.2 An Accommodating Kitchen

The kitchen is not only the heart of the home, but its most demanding work center. An accommodating kitchen has cabinetry and floor plan features designed to anticipate the needs of cooks with limited ability to stand, lift, reach up high, or bend down low.

B.2.1 **Cabinetry and floor plan features** which promote ease of use and affordable adaptations include:

☑ at least 36 inches (900 mm) of width for a refrigerator – so that a side-by-side freezer/fridge model is an option

☑ a modular sink cabinet at least 32 inches (800 mm) in width* which:

- sits on flooring continuous with that of the room
- is readily removed, or built to have a removable bottom shelf or no bottom at all

☑ a continuous counter between the sink and stove/cook top

☑ where the original cooking/baking appliance is to be a range:

- cabinetry, wiring and possibly gas line provisions for future installation of a wall oven in a deep, vertical cabinet
- flooring under the range continuous with that of the room, so that replacement of the range with a cook top will not require flooring renovation

☑ a sturdy pull-out work board at least 24 inches (600 mm) wide and 18 inches (450 mm) deep, positioned below or directly beside the wall oven location** and located 28 to 32 inches (700 - 800 mm) above the floor

☑ at least 15 cubic feet (0.4 cubic meters) of pull-out storage not higher than 48 inches (1200 mm) from the floor

☑ rotating shelves (lazy Susan) in at least one corner base cabinet

☑ some height-adjustable shelves in both upper and lower cabinets

☑ rounded or beveled corners on counter tops, with a minimum one-inch (25 mm) radius or 135-degree angle

✓ a lower height (32 inch/800 mm) or height-adjustable work surface other than the
pull-out work board, located near the sink

**The knee space to be created under the sink is at least 31 inches (780 mm) wide, 27 inches (680 mm) high and 10 inches (250 mm) deep. Sink cabinets outfitted with retracting doors will need to be at least 36 inches (900 mm) wide, so that door and hinge thicknesses do not encroach on the knee space.*

***The work board is positioned* below *a wall oven with a side-opening door, and* beside *a wall oven with a swing-down door.*

B.3 An Accommodating Bathroom

An accommodating bathroom is specially designed for ease of access and use. It has ample maneuvering space, a sink installation that provides immediate or future knee space, and specific plumbing fixtures. The accommodating bathroom is ideally located on the main floor of the home.

B.3.1 The **dimensions and layout** of an accommodating bathroom provide:

- ☑ access from a corridor or common living space
- ☑ a minimum five-foot (1500 mm) diameter circle of clear floor space, measured from the front or side rim of the toilet bowl prior to installation of the sink or vanity cabinet
- ☑ a separate or overlapping five-foot (1500 mm) diameter circle of clear floor space, measured from any point along the center line of the sink fixture
- ☑ a three by four foot (900 x 1200 mm) rectangle, oriented either way, along the face of the tub/shower unit*
- ☑ a minimum three by five foot (900 x 1500 mm) enclosure or space for the tub/shower unit**
- ☑ a door which either swings out into the hallway, swings in without crossing over the five-foot turning space(s), or slides into the partition wall
- ☑ a toilet with the center line of the fixture positioned 18 inches (450 mm) from a side wall – for proximity to grab bar locations
- ✓ three feet (900 mm) of clear floor space on the other side of the toilet
- ✓ additional floor/wall space for a storage unit other than a vanity cabinet (as the latter may be removed or modified in the future to provide knee space under the sink)

**Clear floor space alongside a wheel-chair accessible shower unit ideally has the same minimum dimensions as the unit itself – three by five feet (900 x 1500 mm).*

***Wheelchair accessible shower units, which can be installed in the tub location at a later date, are wider than the standard bath tub width of 32 inches (800 mm).*

B.3.2 The **vanity sink** is either of the following:

☑
- a pedestal unit
- a wall-hung or counter top unit* with a rear-mounted drain outlet and a waste trap offset toward, and parallel to, the back wall

**Knee space provided under wall-hung fixtures and counters must be 27 inches (680 mm) high, 31 inches (780 mm) wide and 10 inches (250 mm) deep. Free-standing cabinets are installed on top the room's floor finish – to promote ease of replacement or modification. An accommodating vanity cabinet may have removable panels and storage components attached to a wall-hung counter, which remains in place.*

Feature B.3 continues on next page.

B.3 An Accommodating Bathroom (continued)

B.3.3 The **shower head** installed in any tub or shower enclosure:

- ☑ is mounted on a height-adjustable bracket
- ☑ is removable from the bracket for hand-held showering from a seated position
- ✓ has an on/off switch on the hand-held unit
- ✓ has a second, fixed bracket location on the side wall within easy reach of a seated bather

B.3.4 The **control valve** of the shower head and/or tub faucet:

- ☑ has a single lever handle
- ☑ is a temperature-regulated, anti-scald unit
- ☑ is offset horizontally toward the entrance of the enclosure,* with any shower head remaining in the central position

**In a wheelchair accessible shower enclosure, the control valve may be positioned on the side wall, within easy reach of a seated bather.*

Other suggested features of an accommodating bathroom are lower heights for:

- ✓ linen storage
- ✓ the bottom edge of mirrors
- ✓ the bottom shelf of medicine chests

B.4 Colour Contrast at Doorways and Stair Treads

In an Accommodating Home, colour contrast is employed in important traffic zones for the benefit of people with diminished vision or depth perception. Visual cues indicating the location of doorways and the nosing edge of stair treads help residents and visitors with impaired vision to move around the home with greater confidence and safety.

B.4.1 **Visual contrast at doorways** is achieved by use of:

- ☑ door trim material or finishes that contrast significantly with the hue or tone of adjacent walls

Feature B.4 continues on next page.

B.4 Colour Contrast (continued)

B.4.2 **Visual contrast at stair treads** is achieved by use of either of the following:

☑ • stair tread material or finishes* that contrast significantly with the hue or tone of the vertical surfaces abutting the stair treads (stringers, balusters, walls)

• alternate materials or finishes at the nosing of stair treads that contrast significantly with the hue or tone of the rest of the tread

**Patterned carpets are not recommended as tread coverings, as the pattern obscures the definition of nosing edges.*

B.5 Slip Resistant and Low-gloss Flooring in Key Rooms

An Accommodating Home averts falls through the installation of slip resistant flooring in rooms most likely to have wet surfaces from water spillage and melted snow. High-gloss floor finishes, which cause vision problems, are avoided in the kitchen if not throughout the home.

B.5.1 The rooms or areas in which **slip resistant flooring** is installed include:

☑ the exterior entrance with stair-free access described in A.2

☑ any other principal entrance where winter boot removal and storage are likely to occur

☑ bathrooms (rooms equipped with a tub or shower)

✓ any other room with a sink or wash center

✓ stair treads

Floor finishes recognized for slip resistance *when wet* include:

- ceramic tiles* that are unglazed, have a rough or gritty surface texture, or have a carborundum finish
- carpet
- specialty, non-slip vinyl products (such as "safety floor")
- any other flooring product with a slip resistance rating for wet conditions

*Some tile manufacturers provide slip resistance data on tile sample boards.

B.5.2 As a measure to reduce glare and depth perception problems, **flooring with a low-gloss or matte finish** is installed in:

☑ the kitchen

✓ any room not finished with carpeting

B.6 Low Pile Carpet and Shallow Underlay in Traffic and Living Areas

(where carpet is the chosen floor finish)

Carpeting and underlay in an Accommodating Home are kept to a thickness easily managed by shuffling feet, unsteady legs, wheelchairs and walkers.

B.6.1 The **combined thickness** of the carpeting material and any backing or underpad* is:

☑ not greater than 5/8 inches (16 mm)

**Commercial grade underlays provide dense cushioning with less depth than residential grade products.*

B.6.2 The **traffic and living areas** in which the specified limit on carpet/underpad thickness applies are:

☑ hallways, foyers and stairs

☑ living and recreation rooms on the main floor

☑ the main floor bedroom or den with the large bed footprint (A.4.3)

☑ the second storey bedroom or den with the large bed footprint (see A.4.3)

B.7 Pre-wiring for Future Home Adaptation ☎

An Accommodating Home features a modest amount of pre-wiring for potential home automation and use of technological aids. Much of this wiring could be dormant indefinitely, or it may gradually come into use as the needs of household members evolve. All dormant wiring is labeled at each end with an indication of its intended use and the location of the cable's other end. The location of dormant wiring and future devices is documented on "as-built" house drawings.

☎ *Call before it's covered. A YHC Technical Officer must view the installation of Features A.7, B.1 and B.7 before the wall and floor cavities in question are covered.*

B.7.1 **Addition of strobe lights to the smoke alarm system** requires:

☑ a run of 14/3 wire from any smoke alarm to a junction box* at the "low-voltage center" (see A.9.2 for a previous reference to a low-voltage center)

☑ a run of 18/2 wire from the same junction box to a series of visible locations above a door** in each room of the home (excluding storage and furnace rooms)

**The junction box will house a transformer and contact module, connected to line voltage.*

***The wire ends at each strobe light location are concealed behind the wall finish. Exact locations of the wire ends are documented for future reference.*

See Diagram B.7.1. Feature B.7 continues on next three pages.

B.7 Pre-wiring for Home Adaptation (continued)

B.7.2 **Lowering of range hood controls** requires:

☑ two runs of 14/2 wire between the range hood and a junction box* located at the rear of a lower kitchen cabinet

**The junction box location must be accessible for future addition of switch loops to lower on/off controls of the range hood light and fan.*

See Diagram B.7.2.

B.7.3 **Remote control switches and home automation devices** require:

☑ deep device boxes at all switch locations, single and multi-ganged – to provide space for insertion of future devices

☑ neutral conductors running to all single-pole switches and to one switch* in any three-way or four-way switch loop – to provide for connection of future devices

**In bedrooms with three-way switches, the neutral conductor is located at the switch adjacent to the entry door.*

B.7.4 An **intercom system** requires:

☑ a run of 22/4 wire between the low-voltage center and a flush-mount device box* installed on the exterior wall, on the latch side of the main door (and other doors if desired)

☑ a run of 22/4 wire between the low-voltage center and an accessible, central location** for a call station on the main floor (and on other floors if desired)

**The height of the device box above the landing does not exceed 48 inches (1200 mm).The device box may have a blank cover plate, or may serve for the present time as the door bell location with a custom cover plate.*

***Wiring to the interior call station(s) is concealed behind the wall finish, with the wire end positioned at a height not greater than 48 inches (1200 mm). Exact location of the wire end is documented for future reference.*

See Diagram B.7.3.

Feature B.7 continues on next two pages.

B.7 Pre-wiring for Home Adaptation (continued)

B.7.5 **Electric door openers at key entrances** require:

☑ device boxes* with blank cover plates, located above the entrance door described in A.2 and any hinged, exterior door leading onto a patio or deck (plus other doors if desired)

☑ separate runs of 14/2 wire between each device box and a common junction box** located at the low-voltage center

☑ separate runs of 22/4 wire between the common junction box and control switch locations[†] on the interior and exterior walls adjacent to each door

**Device boxes are located indoors, on the hinge-side of the door framing, with the box center positioned 8 inches (200 mm) higher than the top of the door.*

***The common junction box contains one dedicated line-voltage circuit for the door opener system, and possibly other line-voltage cables delivering power to other systems.*

[†]The switches are located on the latch side of the door, at a height not exceeding 42 inches (1060 mm) from the floor or landing. The wiring is concealed behind wall and siding finishes, near framing onto which switch boxes can be mounted. Switch locations accommodate the path of the door swing. Exact locations of the wire ends are documented for future reference.

See Diagram B.7.4.

B.7.6 **Electric door lock and release mechanisms** require:

☑ separate runs of 18/2 wire* between the low-voltage center and the door strike plates of the main entry door and all doors pre-wired for electric door openers

**The coiled wire end is concealed behind the door frame, below any probable locations where latches or deadbolts may be installed. The lock/release mechanisms are potentially controlled by intercom and/or the control switches for the electric door openers.*

See Diagram B.7.5.

Feature B.7 continues on next page.

B.7 Pre-wiring for Home Adaptation (continued)

B.7.7 **A home security system** requires:

☑ separate runs of 22/4 wire* leading from the low-voltage center to the latch side of exterior door frames** and to motion sensor locations[ᵠ]

☑ a bundle of paired 22-gauge wire* between the low-voltage center and an accessible, interior location for a security system console

**All wiring for home security purposes is to be Station Z – FT 4 rated wire. The number of pairs in the wire bundle running to the console location must equal the number of devices to be used (door sensors and motion detectors), and provide some capacity for expansion (one or more extra wire pairs).*

***Wiring for door sensors is embedded between the door jamb and wall framing on the latch side or top of the door. If located on the side of the door frame, wiring should be no lower than 6 inches (150 mm) from the floor and kept clear of possible damage from installation of door latches or deadbolts. If positioned above the door, wiring should be located between the horizontal midpoint of the door lintel and the corner directly above the latch. Exact locations of the wire ends are documented for future reference.*

[ᵠ]Motion sensors are generally located in the entry areas and passage ways of a dwelling. Exact locations are best determined in consultation with a security system installer.

Other pre-wiring options include:

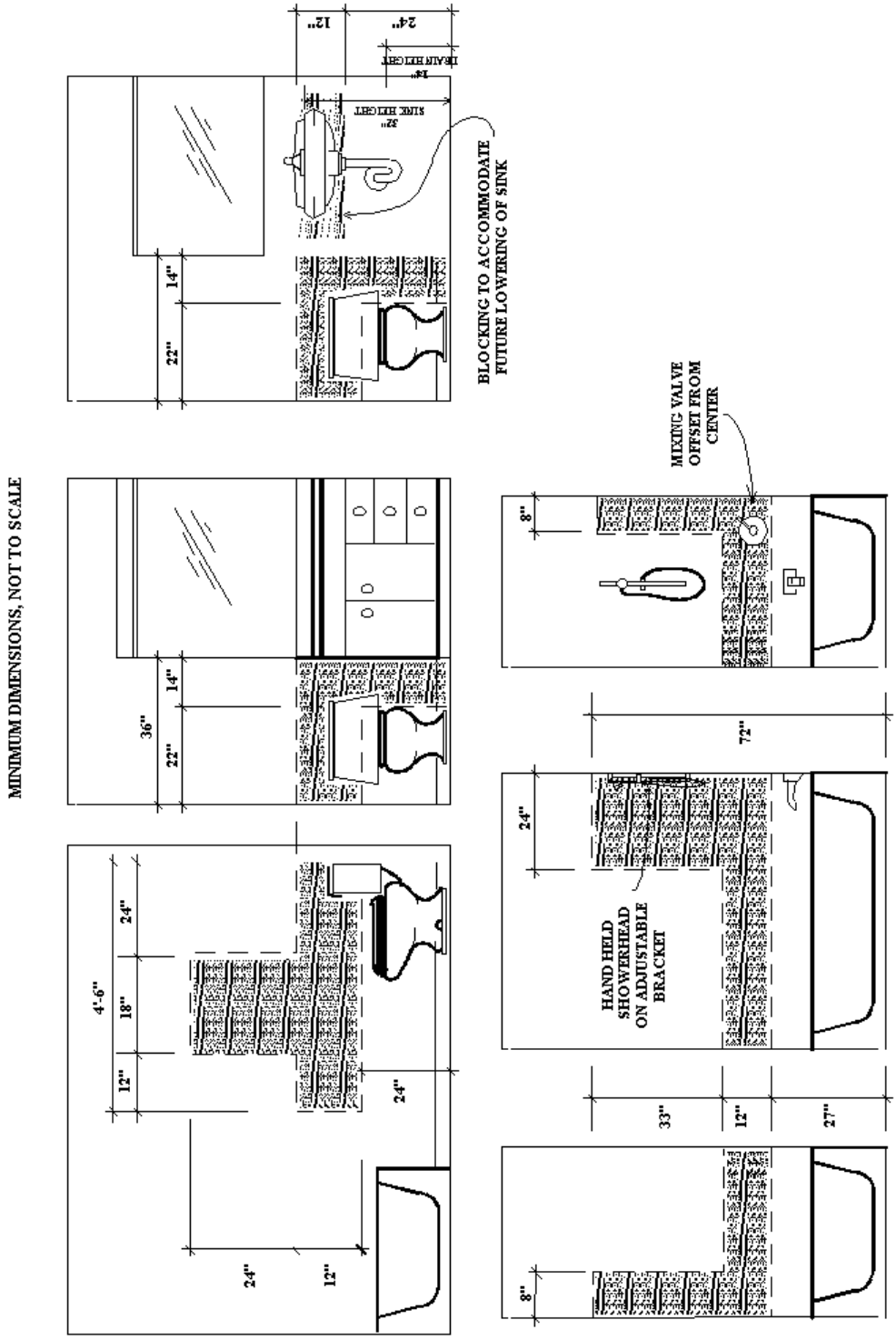
✓ a GFI-protected electrical receptacle located beside the toilet in the Accommodating Bathroom and in the washrooms/bathrooms described in A.4 – for powering assistive devices related to toilet use

✓ a dedicated electrical receptacle, wired with 10/2 cable, installed within 18 horizontal inches (450 mm) of either the top or bottom stair tread of an interior stair case – for powering a future stair lift

✓ deep device boxes for all receptacles – to provide space for insertion of home automation devices

Diagrams

Diagram A.7.1 – Wall reinforcement in washrooms:



Diagrams (continued)

Diagram A.7.4 – Wall reinforcement for attachment of safety gates at stair landings