ATTACHMENT 1
Recommendations from the Accessible Housing Working Group (AHWG) on Increasing the City's Supply of Accessible Affordable Housing

Table 1: The following is a set of recommendations, based on universal design principles, that increase accessibility and adaptability within residential units. The recommendations in Column C are intended to be included in the City of Toronto's Affordable Housing Design Guidelines and applied to 100% of City-supported and City-led affordable residential units. The report recommendations exceed minimum Ontario Building Code requirements and have been developed in alignment with existing industry standards and AHWG's lived experience. The AHWG recommends, in Column D, an additional tier of accessibility to be considered in order to achieve a higher level of practical accessibility and future adaptability of all residential units.

A	B	**C**	D	ABE Factors Inc. Samantha Ryan, Chair CSA B652
ID #	Areas within a **Residential Unit**	Recommendations for Updates to the City of Toronto's Affordable Housing Design Guidelines	Further **Recommendations** from the Accessible Housing Working Group (AHWG)	
1	ALL DOORS: WIDTHS	All doors and doorways to provide a clear width of a minimum 865 mm, but ideally 920 mm. (SAFERhome Standards, 2017/ CMHC Universal Design Guide, 2023)	All doors and doorways to provide a clear width of 1067 mm. Every unit entry door to have a kickplate on both sides of the unit entry door with height of 762mm. (TCHC Accessibility Build Standards, 2019)	*The clear door width should be standardized at 860 mm to align with CSA B651 and B652. Pursuant to building code harmonization, the current clear width for a door in an accessible path of travel is 850 mm.*
2	ALL DOORS: HARDWARE	All doors excluding closet doors to provide lever-style and colour contrasted hardware. (CMHC Universal Design Guide, 2023)	All doors, excluding closet and bathroom doors, to provide lever- style and colour contrasted hardware. (TCHC Accessibility Build Standards, 2019)	*Why exempt closet and bathroom doors? Accessible hardware standards should apply uniformly to all door types.*
3	ALL DOORS: COLOUR-CONTRAST	All doors and/or door frames to be colour-contrasted with the surrounding wall. (CMHC Universal Design Guide, 2023/ TCHC Accessibility Build Standards, 2019)	AHWG agrees with report recommendation.	*This is a requirement reflected in CSA B652, but note that olour-contrast (be it through colour-contrasting applications or paint) can be changed by the owner or tenant to suit the needs of the individual quite easily. This is a residential space not a commercial space.*

4	UNIT ENTRY DOORS: HARDWARE	Unit entry doors to have keyless entry with controls that do not require tight grasping or twisting, e.g. key fobs. Add an additional feature of adding remote control access to all automatic door openers where provided. (AHWG Lived Experience)	AHWG agrees with report recommendation.	*No comment.*
5	CLOSET DOORS: TYPE	Closet doors to be designed to be accordion-, barn-, or swing doors dependent on available space. No pocket doors to be provided. (TCHC Accessibility Build Standards, 2019 (excluding pocket doors))	Only accordion doors to be provided. (TCHC Accessibility Build Standards, 2019)	*Disagree. All styles of doors should be permitted provided they have accessible, graspable, exposed door hardware. Pocket doors can be nice because it also allows someone to keep their closet open at all times without the nuisance of the door.*
6	BATHROOM DOORS: TYPE AND FRAMING REINFORCEMENT	Ensure door swing does not prevent a person in a wheelchair from getting into the bathroom and closing or opening the door. Include the framing reinforcement above the bathroom door to allow for the future installation of barndoors. If barndoors are installed, the width of the barndoor to be min. 26mm wider than the clear open on either side of the door. (CMHC Universal Design Guide, 2023/ AHWG lived experience)	Barndoors to be provided only. (TCHC Accessibility Build Standards, 2019)	*Consider the use of sliding doors, as they can provide enhanced security, privacy, sound attenuation compared to barn doors. It is important to maintain flexibility in design options for residential living spaces.*
7	UNIT HALLWAYS: WIDTHS	All unit hallways are a minimum of 1020 mm but ideally 1070 mm wide. Unit hallways less than 1070mm wide will need corners that are beveled/chamfered. (SAFERhome Standards, 2017/ AHWG Lived experience)	Unit hallways need to be 1070 mm. (AHWG Lived Experience)	*Please consider aligning with CSA B652 at 1200 mm, or minimum 1100 mm per the OBC.*
8	A LL WINDOWS: WINDOW MOUNTING HEIGHTS AND HARDWARE	All window hardware to be mounted at a height between 400 mm to 1100 mm above the finished floor. Windows to be installed with lower edge not higher than 750 mm above the finished floor. D- or lever-style locks generally considered accessible. Crank type operators preferred.	AHWG agrees with report recommendation.	*Note that in OBC Sentence 3.7.2.1(2)(b)(iii) (b)in a residents' sleeping room [for a long term care facility], one or more windows that (iii)are installed with the bottom edge of the glass of every window not more than 660 mm above the floor. Should similar sill heights be carried over, or if 750 mm acceptable for residential?*

		(CMHC Universal Design Guide, 2023/ CSA/ASC B652 Accessible dwellings, 2023/ AHWG Lived Experience)		
9	ALL FLOORS	All floor surfaces, except into bathrooms, to provide a single material and finish that is non-slip, non-reflective (matte), and has low-contrast or no visual patterns. Bathroom flooring to be non-slip, have no visual pattern, and contrast with the wall. Floor design to allow adequate slope for drainage. (TCHC Accessibility Build Standards, 2019)	No visually disorienting pattern on any flooring. Bathroom floor tile to be no larger than 51mm x 51mm to allow for slope to drain. (TCHC Accessibility Build Standards, 2019)	"Floor design to allow adequate slope for drainage." ➔ *Drain to what? Does this assume there's a drain in the bathroom, because often times that's not the case unless serving a shower or bathtub.* *"No visual patterns"* ➔ *Need to be consistent with language. Visual patterning should be acceptable provided it's not busy/strong/disorienting. For example, marble flooring is appropriate, whereas complex patterns, such as 1970s floral designs, are less desirable.*
10	THERMOSTAT AND LIGHT SWITCHES	Thermostats: All thermostats to be operated manually, or using an app, with an option to modify to add a remote. Manual operation of all controls should be able to be done with one hand and require minimal force. In the case of readable displays, to be mounted at a height between 900 mm to 1100 mm above the finished floor. Light Switches: Rocker-style light switches are preferred. Add attention to contrast and size. Control features should provide tactile and/or auditory information and feedback, as applicable, to indicate function, position, and confirmation of activation. Include a three-way light switch at all unit entrances, all bedrooms and staircases. Dimmable lights to be provided in all bedrooms and living areas. In the case of light switches and other controls, to be mounted at a height of 1070 mm.	AHWG agrees with report recommendation with the additions of: all lights to be dimmable, dimmers should be usable with a closed fist. (AHWG Lived Experience)	*This should be similar to the OBC, in that thermostats should be mounted at 1200 mm, to ensure adequate temperature readings. While all other controls to be mounted between 900 mm and 1100 mm.* *Why the need to change?*

		General: Ensure a consistent style, arrangement, position, and sequence of light and thermostat controls throughout the dwelling. (CMHC Universal Design Guide, 2023 (tactile/auditory information and consistent style, arrangement, and position) / SAFERhome Standards, 2017/ AHWG lived experience)		
11	WALL OUTLETS	Wall outlets to be mounted at a height of 460mm above the finished floor to the center of the outlet. Beside the toilet, for future automated type of toilet seats and lifting technologies (GFI outlet). On front face of kitchen cabinet, provide for one easy-to-reach outlet in the kitchen area. (SAFERhome Standards, 2017)	AHWG agrees with report recommendation.	Kitchen outlets: ➔ *Ensure the installation of at least one easily accessible electrical outlet on the front face or side wall of the kitchen counter, or island, where applicable* ➔ *The term "Cabinet" may be misinterpreted.*
12	VISIBILITY OF WALL OUTLETS, THERMOSTATS AND LIGHT SWITCHES	Ensure controls are adequately lit (100 lx minimum, or 200 lx where reading is necessary). Colour contrast faceplates with wall. For example, use white-coloured light switch covers on a darker wall. (CMHC Universal Design Guide, 2023)	AHWG agrees with report recommendation.	*No Comment.*
13	CLEAR FLOOR SPACE IN FRONT OF WALL OUTLETS, THERMOSTATS, LIGHT SWITCHES	Controls should be located within an area of clear floor space (minimum 820 mm x 1390 mm) and with a clear path of travel (no furniture, counters, etc.) for access by the user. (CMHC Universal Design Guide, 2023)	AHWG agrees with report recommendation.	*No Comment.*
14	ROUGH-INS	All unit entry doors and balcony swing doors to include framing reinforcement and electrical rough-ins to allow for future power-operated doors.	AHWG agrees with report recommendation.	➔ *All balcony doors, whether swing or sliding, as well as the balcony itself, to be fully accessible.* ➔ *The feasibility of power-operated sliding balcony doors should be evaluated, as I have not encountered this feature in*

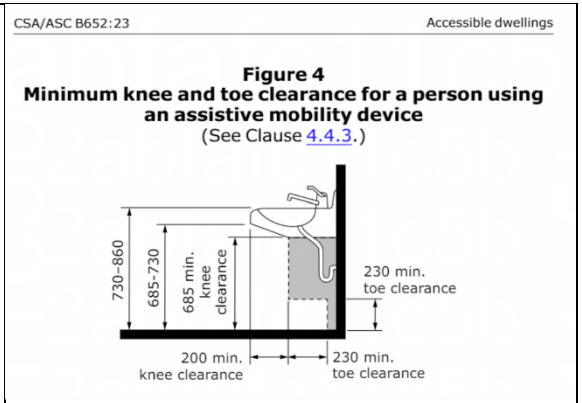
		Electrical rough-ins for unit doors to be connected to the emergency power system. All rough-ins to be connected to dedicated circuit rather than outlet. (SAFERhome Standards, 2017 (except emergency power and dedicated circuit)/ AHWG Lived Experience)		*practice.* *Emergency power system* ➔ *I am not fully convinced of the overall impact and cost-benefit of this feature. Additionally, consideration must be given to whether its implementation will effect or require increased emergency power capacity for the entire building, depending on the number of units that adopt this feature. (out of area of expertise).*
15	KITCHEN: COOKTOP AND OVEN OPERATING CONTROLS	Operating controls (cooktop, oven, microwave, etc.) to be located at the front face of the appliance or counter and be high-contrast to neighbouring surfaces. (CMHC Universal Design Guide, 2023)	AHWG agrees with report recommendation.	*No Comment.*
16	KITCHEN: CABINETS	Counter height to be max.860 mm above the finished floor. Clear height from top countertop to underside of light valance below upper cabinets, shall be maximized but never less than 400 mm. Cabinets above the stove can remain at a higher level as needed. (TCHC Accessibility Build Standards, 2019)	AHWG agrees with Report recommendation with the addition to: implement TCHC Standard for applicable standard for millwork construction (this is important to allow modifications for future pull-down cabinets). (TCHC Accessibility Build Standards, 2019)	*No Comment.*
17	KITCHEN: CABINET HARDWARE	Provide colour-contrast T- or D-style hardware at all cabinets. (TCHC Accessibility Build Standards, 2019)	AHWG agrees with report recommendation.	*No Comment.*
18	KITCHEN: COUNTERTOPS	Provide continuous countertops that can also accommodate storing key appliances. Countertop to be minimal finish with no visual patterning; avoid dark coloured countertops. (CMHC Universal Design Guide, 2023 (continuous)/ TCHC Accessibility Build Standards, 2019)	AHWG agrees with report recommendation.	*Same comment as 9. Some level of visual patterning should be permitted.*

19	KITCHEN: ALL SURFACES	All surfaces to have low glare, no sharp edges. Colour contrasts to be maintained between walls and counters. (CMHC Universal Design Guide, 2023 (low glare, no sharp edges contrast)/ TCHC Accessibility Build Standards, 2019 (contrast))	AHWG agrees with report recommendation.	
20	KITCHEN AND BATHROOM: SINKS	Sinks to provide knee and toe clearance with continuous flooring and pipe protection. (SAFERhome Standards, 2017/ CMHC Universal Design Guide, 2023)	Specify knee clearance dimensions as referred to in TCHC standard. Kitchen sinks to include 737mm clearance under the apron. (TCHC Accessibility Build Standards, 2019)	*Consider requiring flooring to extend continuously beneath all cabinetry to accommodate potential future adaptable modifications.*
21	KITCHEN AND BATHROOM: WASTE PIPES	All waste pipes are brought no higher than 360 mm to the center of the pipe from floor level. (SAFERhome Standards, 2017)	AHWG agrees to report recommendation.	*In the Vancouver By Law permits this number to be lowered to 305 mm. Curious if there's a standard height that can be applied across Canada.* "3) All waste pipes running from under-sink "P" traps to drain stacks shall be installed no higher than 305 mm above the finished floor."
22	BATHROOM: WATERPROOFING	Assume three walls in the wet area surrounding the shower or bathtub have a waterproof membrane. Consider the addition of a waterproof membrane throughout entire bathroom. (n/a)	Install a waterproof membrane behind the wall tiles (up to ceiling) and floor tiles of the entire bathroom area. (AHWG Lived Experience)	*No Comment.*
23	BATHROOM: ADAPTABILITY OF BATHTUB	Ensure the bathtub can be easily replaced with a roll-in shower in the future. (CMHC Universal Design Guide, 2023)	Minimum size of roll-in shower to be accommodated for: 915mm x 1829mm. (TCHC Accessibility Build Standards, 2019)	*No Comment.*

24	BATHROOM: STRUCTURAL REINFORCEMENT AROUND BATHTUB	Provide appropriate structural support for grab bars in walls around bathtub. All bathrooms to have reinforcement installed in the wall to permit the future installation: an L-shaped grab-bar located at a central location along the long wall of the shower/tub, a short vertical grab bars on each short wall near the shower curtain, and bench locations on both short walls. Wall reinforcement for benches to accommodate the weight of 550lbs.Recommend 5/8 inch or 3/4 inch plywood between wood or metal studs. Ensure the grab bar locations are reachable and do not interfere with other bathroom fixtures. (CMHC Universal Design Guide, 2023 (structural support) / SAFERhome Standards, 2017 (structural support)/ AHWG Lived Experience)	AHWG agrees with report recommendation.	*Structural support required in both bathtubs **and** showers.*
25	BATHROOM – STRUCTURAL REINFORCEMENT AROUND TOILET	Provide appropriate structural support for grab bars on both sides of the toilet. Reinforcement to support up to 500lb. (CMHC Universal Design Guide, 2023/ SAFERhome Standards, 2017/ AHWG Lived Experience)	AHWG agrees with report recommendation.	*Where addressed, building codes only require reinforcing up to 1.3 kN. What are the cost and construction impacts for doubling this?* OBC 3.7.4.13. Grab Bar Installation(1)Grab bars that are installed shall resist a minimum load of 1.3 kN applied vertically or horizontally OBC 3.8.3.8(7)A grab bar described in Clause (3)(a) or (c) or (4)(b) shall(a)be installed to resist a load of at least 1.3 kN applied vertically or horizontally.
26	BATHROOM - TRANSFER AREA AROUND BATHTUB	Provide transfer area in front of the bathtub at 1500 mm by 1500 mm or, at minimum, an area 900 mm deep. There should be enough room for a safe approach and transfer into the bath, and room for caregivers. (CMHC Universal Design Guide, 2023)	AHWG agrees with report recommendation.	*No Comment.*

27	BATHROOM - TRANSFER AREA AROUND SHOWER	Provide transfer area in front of the shower at 1500 mm by 1500 mm or, at minimum, a clear floor area of 900 mm by 1500 mm. There should be enough room to ensure a chair commode or shower seat can easily be rolled into the shower. (CMHC Universal Design Guide, 2023)	AHWG agrees with report recommendation.	*No Comment.*
28	BATHROOM - TRANSFER AREA AROUND TOILET	Minimum of 914mm transfer space to be provided beside the toilet on one side and in front of the toilet. (AHWG Lived Experience)	AHWG agrees with report recommendation.	*Should be 900mm wide. (Maintain consistency of values across other regulated codes (OBC, CSA B651, NBC)*
29	BATHROOM - TYPE OF BATHTUB	Install a tub that is flat-bottomed with a non-slip bottom. Ensure the floor area around the tub is stable and firm, flat, slip-resistant, non-glare, and without strong visual patterning. (CMHC Universal Design Guide, 2023)	AHWG agrees with report recommendation.	*Flooring requirements addressed in item (9)* - *Except here there is wording that supports "no strong visual patterning" but permits some level of patterning.* - *Keep consisting with language throughout.*
30	BATHROOM - TYPE OF SHOWER	Provide a 1500 mm x 900 mm curbless shower area (within the shower) that gives enough space for care workers to assist. Low-height, pre-manufactured, shower base units can be used if curbless showers are not possible. If roll-in shower is provided, provide a collapsible water dam. (CMHC Universal Design Guide, 2023/ CSA/ASC B651 Accessible design for the built environment, 2023)	Size should be 900 mm x 1800 mm. (TCHC Accessibility Build Standards, 2019/ AHWG Lived Experience)	*No Comment.*

31	BATHROOM: RECESSED WALL SHELF IN SHOWER AND BATHTUB	Add a recessed storage for soap, shampoo etc. to provide more room and less chance of injury. Set installation height of recessed wall shelf at 50mm above the top lip of tub 860mm from the floor of a shower. Recommend size of recessed wall shelf is 310 mm tall x 100 mm deep x 200 mm wide. (CMHC Universal Design Guide, 2023 (recessed storage))	AHWG agrees with report recommendation.	- *Take into consideration that within the shower; recessed storage should be within reaching distance & adjacent to the shower seat.* - *Ensure that this requirement does not conflict with the wall reinforcement locations, or exceptions/other permissions may need to apply.*
32	BATHROOM: SHOWER FLOORING	Ensure the shower is floored with non-glare, slip-resistant tiles or other safety flooring that does not have strong visual patterning. Provide adequate floor slopes allowing a positive water flow toward the drain. Drains can have either a central collection location or a long strip at the lowest portion of the shower flooring, or both. (CMHC Universal Design Guide, 2023)	AHWG agrees with Report recommendation, with the addition that: the shower flooring is to contrast in colour to shower walls and must not be dark in colour. (AHWG Lived Experience)	*Recommend trench or channel drains, refer to CSA B652 for shower criteria.* *General Comment:* - *It would be hopeful (not assumed) that CMHC would soon update their accessible housing criteria to align with CSA B652, as all of CSA B651:18 housing requirements were moved and updated within CSA B652.* - *Propose more alignment with CSA B652.*
33	BATHROOM: CONTROL TYPE AND POSITION IN BATHTUB AND SHOWER	Locate controls centered on the rear (long) wall. Ensure the hand-held shower wand is adjustable to various heights. (TCHC Accessibility Build Standards, 2019 (centre of back wall, height adjustable)/ CSA/ASC B651 Accessible design for the built environment, 2023 (height adjustable))	AHWG agrees with Report recommendation, with the addition that: all showers and tubs are to include rain shower heads. (AHWG Lived Experience)	*No Comment.*
34	BATHROOM: TYPE OF TOILET	Select a toilet that is easy to operate and has an appropriate height. Toilet flusher must be lever handled. (CMHC Universal Design Guide, 2023 (except lever))	AHWG agrees with report recommendation.	*Clearly define "appropriate height" as this is subjective. Note, accessible toilets options are fairly limited on the market for residential homes, accessible toilets are those labelled as "ADA accessible", consider referring to those heights and contrasting against OBC.*
35	BATHROOM: TYPE AND HEIGHT OF SINK	Consider minimizing the size of any cabinetry and other supporting structures under the sink/vanity to free up leg room and maneuvering room under the fixture. Plumbing of drains and water supply pipes	AHWG agrees with report recommendation, with the addition of: install sink so that the center of the sink is no less than 900mm from the adjacent wall. Provide knee clearances of the bathroom	*Align knee clearances with CSA B652 or OBC.*

		should be kept as close to the wall as possible to free up under-sink space and prevent injury; water supply pipes should be insulated against contact to prevent burns and other injuries. (CMHC Universal Design Guide, 2023/ OBC section 3.8 for barrier-free sink/lavatory requirements)	sink at min. 737mm to the underside of the sink. (TCHC Accessibility Build Standards, 2019)	
36	BATHROOM: TYPE OF FAUCET FOR SINK	Install a single-lever faucet or motion sensor faucet with a pull-out hose for cleanups. Install mixing valves that will limit the water temperature to 49°C. (CMHC Universal Design Guide, 2023)	AHWG agrees with Report recommendation.	*What about insulation?*
37	BATHROOM: COLOUR CONTRAST OF BATHROOM SINK	Ensure the sink and counter unit are colour contrasted from the floor. (CMHC Universal Design Guide, 2023)	AHWG agrees with Report recommendation.	*Reword: Ensure the sink and counter are colour-contrasted to their surroundings.* *You could have a white floor and white sink but have the cabinets or vanity be the colour-contrasting component.*
38	BEDROOMS: FOUR-PLEX OUTLETS	Place four-plex outlets in all bedrooms. Two four-plex outlets per wall. One four-plex outlet on dedicated circuit with emergency power to ensure usage during an outage. Mounting height of 460 mm to centreline. (SAFERhome Standards, 2017 (placed in primary bedroom only)/ AHWG Lived Experience)	AHWG agrees with Report recommendation.	*No Comment.*
39	BEDROOMS: CLOSETS	Adjustable shelving units should be available in the bedroom. Include double rod (higher and lower). (CMHC Universal Design Guide, 2023 (adjustable shelving) TCHC Accessibility	AHWG agrees with Report recommendation.	*Clearly define "adjustable shelving units". Note that not all bedrooms require closets, therefore, this should start with "if provided…".*

		Build Standards, 2019 (double rod))		
40	BEDROOMS: SIZE	All bedrooms should be accessible to those using mobility devices. At least one side of bed should be accessible. Bedrooms should be designed for ease of movement and logical task execution. (CMHC Universal Design Guide, 2023/ AHWG Lived Experience)	AHWG agrees with Report recommendation.	*Recommend a minimum turning radius or specify the required pathway width adjacent to the bed to ensure adequate clearance for maneuverability. Refer to CSA B652.*
41	BEDROOMS: SIGHTLINES	A straightforward bedroom layout will enable people with limited hearing to have clear and open sight lines. (CMHC Universal Design Guide, 2023)	AHWG agrees with Report recommendation.	*Provide a precise definition for 'straightforward,' as contractors are generally not responsible for designing furniture layouts. In instances where they are, the bedroom furniture should conform to standard spatial configurations.* *This seems to be more of a "note" or "explanatory material" than it does a provision.*
42	LIVING SPACES: LAYOUT	Design the space for flexible use and allow for a range of activities, such as watching television, reading, doing homework, entertaining, playing table games and dining. Allow for flexible furniture layouts. Maximize natural light in all living spaces. (CMHC Universal Design Guide, 2023 (flexible use))	AHWG agrees with report recommendation.	Move to item 43 below. "*Maximize natural light in all living spaces." Should be moved to a note or explanatory material regarding a provision related to lighting.*
43	LIVING SPACES: LIGHTING	Ensure that all living area lighting is even, minimizing glare. At least one overhead light should be provided in each living space. For example, in the living room, dining room, bedroom, and kitchen even when these are part of one living space. Unit hallways are also to be provided with dedicated ceiling lights.	AHWG agrees with report recommendation.	*No comment.*

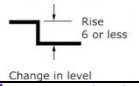
		(CMHC Universal Design Guide, 2023 (even lighting))		
44	EXTERIOR THRESHOLDS	All exterior thresholds at unit entry to be flush. (SAFERhome Standards, 2017)	All exterior thresholds are flat, flush and durable surfaces. Exterior thresholds include both balcony and entry unit thresholds. (TCHC Accessibility Build Standards, 2019/ AHWG Lived Experience)	*Ensure thresholds align with CSA B652 to align with industry standards. There will be many instances where flush thresholds can't be accommodated for, therefore proper threshold and transition variances should be available.* CSA/ASC B652:23 Accessible dwellings **Table 2** **Thresholds and transitions** (See Clauses 4.6.2 and 4.6.3.) The table outlines the changes in levels for vertical rises in mm. **Vertical rise, mm** / **Profile** 0 to 6 — May be vertical [see Figure 8 a)] 7 to 13 — Bevelled, but not steeper than the ratio 1:2 (50%) [see Figure 8 b)] 13 to 50 — Not steeper than the ratio of 1:12 (8.33%) [see Figure 8 c)] **Figure 8 a)** **Changes in level — Up to 6 mm** (See Clauses 4.6.3 and 5.7.4, and Table 2.) 
45	INTERIOR THRESHOLDS	All interior thresholds meet minimal code constraints. Prioritize keeping flooring to a standard application to avoid additional thresholds within a unit. (SAFERhome Standards, 2017)	All interior thresholds are flat, flush and durable. (TCHC Accessibility Build Standards, 2019/ AHWG Lived Experience)	*This should be a note to Item 44.*

Table 2: The following is a set of recommendations of design features recommended by the Accessible Housing Working Group (AHWG) to be included within the common areas of all residential buildings in order to increase overall accessibility:

ID #	Common Areas **within Residential Buildings**	**Recommendation from Accessible Housing Working Group (AHWG)**	
1	General: Turn circles	Minimum 2135 mm in the following common space key locations: • In front of building entrance • Between vestibule door swing • In front of mailboxes • In front of elevators • In ground floor washroom • In front of laundry machines • In recreation/community room kitchens	*Could you clarify the source of the 2135 mm measurement? It should align with CSA B651, which specifies a diameter of 2100 mm.*
2	All Doors: Widths	All doors to be 1067mm doors. Kick plates (762mm high) on all doors on both sides. All building entry doors, vestibule-to-lobby doors to include automatic door openers with remote capacity.	*The specification of 1067 mm for door widths will incur significant costs. Consider adopting widths of 860 mm or 850 mm to harmonize or align with existing regulated codes and standards to-date. This will make industry buy in that much easier.*
3	All Doors: Automatic door openers	Provide automatic door openers on doors that access the entrance, lobby, laundry, accessible garbage rooms and all other amenity areas.	*Automatic door openers under the OBC are already required for entrances, and Group A assembly spaces for apartment buildings, in which case just extend this to include condo's and other residential types including subsidiary garbage/recycling rooms.*
4	Accessible Garbage Rooms: General	Provide accessible garbage room with automatic door opener, appropriate accessible height bins, and appropriate ventilation for garbage, recycling, and organics. Accessible garbage room to be sprinklered and include motion sensored lighting.	*To be verified by a sprinkler consultant, but if the building isn't required to be sprinklered it's unlikely just the garbage room would be.* *If power door operators are required for garbage rooms under Item 3 above, it doesn't need to be repeated here.* *An accessible garbage room should be equipped with **standard** lighting. If someone requires more*

			time within the room, the lights should remain on.
5	Accessible Laundry Rooms: General	Provide laundry rooms with automatic door openers with fob access. Provide turning circle of 2135mm in front of the machines. All laundry machines to have front panel controls. 50% of all washing machines to be top loading and 50% of all washing machines to be side loading. 50% of dryers to be stackable, 50% of dryers to be stand alone. Provide pay kiosk at the front of machines. Card loading kiosk to be at 1020mm high (from finished floor to centerline of screen) and have a 2135mm turning circle in front.	➔ *Same comment as above, if power door operators are covered under Item 3, it doesn't need to be repeated here, or refer back to Item 3.* ➔ *2135 mm should be 2100 mm to remain consistent with CSA B652.* ➔ *50% of all washing machines to be top loading and 50% of all washing machines to be **front** loading.* ➔ *Card loading kiosk to be between **900 & 1100mm high per control requirements** (as per my comment in Item 10 under Table 1) and have a 2100mm turning circle in front, or approach space of 820 mm by 1390 mm.*
6	Ground Floor Accessible Washroom: General requirement due to elevator breakdowns	Provide one non-gender specific washroom available 24/7 only to tenants who identify as disabled or who cannot use stairs, with the following features: • Sink with 737mm knee clearance • 915mm transfer space in front of and on one side of toilet • Grab bars for both sides of toilet, drop-down style minimum on transfer space side of toilet • Tilt mirror • Adult change table • Automatic Door Opener connected to emergency lighting and have red/green occupancy on push button • Not be confined within another space. Must have corridor access. • Must be located close to elevator	➔ *Ground Floor accessible washroom should have to comply with OBC 3.8.3.12, universal washroom requirements, if one is not already provided/required.*
7	Number of Accessible Washrooms	The number of accessible washroom to exceed OBC requirements by 1.	*No comment.*
8	Elevator Controls: General	Elevator controls to be enlarged and have an audible option. Two sets of elevator controls to be provided in each elevator cab; one horizontal set and one vertical set.	*This request may represent a significant undertaking; consult with an elevator specialist for verification.* *With regards to "controls to be enlarged" this seem subjective without providing an actual*

			dimension. Also what does "audible option" entail? For example, are yout trying to say that elevators should have verbal floor commands and audible queues upon button activation or floor arrival or both?
9	Wheel-Trans: General	• Waiting area to be in a sheltered location with clear sightlines to Wheel-trans pickup and drop off location. Seating to be provided in this waiting area. • Depress curb (min.1:15) throughout the entire length of the Wheel-trans vehicle, including ramp deployment. • Add bollards throughout depressed curb every 1524mm; bollards are not to exceed 1067mm high. • A second Wheel-Trans pickup area to be added to buildings with more than 150 residential units.	*A second Wheel-Trans pickup area is ideal if incorporated for buildings with over 150 residential units. However, some buildings may lack jurisdiction over this if the area is situated on municipal property.* *From my understanding some Wheel-trans vehicles actually deploy their lifts onto a sidewalk, therefore a depressed curb may not be as ideal. Versus accessible transportation vehicles that drop people off on the road side, requiring people to navigate up a curb ramp or depressed curb to gain access onto the sidewalk. Speak with Wheel-trans first to ensure these are ideal conditions/recommendations.*
10	Accessible Parking Spaces: General	Transfer spaces to be provided on the right side of the accessible parking space to avoid drivers reversing into parking spaces. Every accessible parking space to be 3353mm wide plus transfer space. The extra wide parking spaces are to accommodate people with walkers exiting on the driver's side. Accessible charging stations to be provided in close proximity to accessible parking spaces for access.	➔ *There should be options of right side or left side access aisles, otherwise it shouldn't matter whether someone wants to reverse park or not. Many people with disabilities retrieve their mobility devices from either the drivers side, passenger side or trunk. Therefore, I don't feel the requirement is fair.* ➔ *Delete this parking space requirement as all accessible parking spaces are to comply with AODA. This complicates standardization of legislation. In addition, use consistent terminology – by "transfer space" it is understood you mean "access aisle" when it comes to parking.* ➔ *State at least one accessible electrical vehicle station to be provided in a bank of EV charging stalls.*

11	Wayfinding: Signage throughout building	All doors to be identified with signage conforming to OBC Article 3.8.3.1 and include ~~of~~ raised lettering, directional images and braille. Lobbies to have listed amenity spaces including: • Elevator • Mailbox space • Laundry space • Super's Office • Community/recreation rooms/ amenity room • Garage • Directional unit identification each floor All lettering to have bevelled edges. Ensure contrast of lettering to background; preference for black and white signage. (TCHC Accessibility Build Standards, 2019))	*Reword such that the provision connects back to the OBC.* *Note that requirements related to accessible signage require that accessible signage be placed to the latch-side of the door, not on the door itself. Reword as suggested.* *For the second part of the sentence "lobbies to have listed amenity spaces including:.. What does this mean, are these to be also identified with tactile signage or are they to be listed on an information directory? Wording in unclear.*