Building Code Changes

Effective January 1, 2015

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Amendments

- O.Reg 368/13 –
 Accessibility
 enhancements,
 effective January 1,
 2015
- O.Reg 191/14 6
 storey wood frame
 construction,
 effective January 1,
 2015



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Six Storey Wood Frame Construction



Residential and Office use only C & D occupancy

- 3.2.2.43A & 3.2.2.50A
- These buildings shall not contain A1, A3,
 B, F1 or F2 major occupancies
- Group A2 & E on 1st and 2nd floors only
- The only F3 permitted is a storage garage on basement, 1st and 2nd floors only.
- Table 3.1.3.1. is amended with some increased Fire Separations between Major Occupancies in these buildings.

Additional Construction Requirements

- Non-combustible cladding if building over 4 storey's
- Exit stairs to be surrounded by a noncombustible Fire Separation with a minimum of 1.5 hrs Fire Resistance Rating
- Increased Fire blocking in combustible floors and roofs. Maximum area of 300m2 and maximum dimension of 20m



- Sprinklers are not permitted in lieu of the roof rating
- Sprinkler are required for balconies and decks with a depth greater than 610mm







No portion of the required Fire Access route to be more than 20m below the floor level of the uppermost storey.

STRUCTURAL CONCERNS

4.1.8.10, 4.1.8.11 & 4.1.8.12 amended to address timber shear walls and lateral earthquake forces

"After being lifted to a shake table and subjected to four progressively intense earthquakes, this six-story light-frame building was found to have only minimal damage to the gypsum wallboard and nail connections. (View a video of the test on YouTube.⁶)Photo courtesy John Van De Lindt, Univ. of Alabama"





Plumbing joints with pipes nested in joint to allow for vertical movement of structure. Photo courtesy of WoodWorks

Plumbing Sleeve connected to structure with foam wrap to allow vertical movement of structure. Photo courtesy of WoodWorks

"7.1.7.1 *Plumbing* shall be designed and installed to accommodate the maximum relative movement provided for in the *construction* of the *building*."

Barrier Free Living



Fire Alarm Systems

- Require the use of more visual devices with the audible devices, such as strobes.
- Current locations are public corridors, places of assembly and accessible hotel suites.
- New locations are public, accessible washrooms and living spaces of Group C apartment suites.
- Smoke alarms in houses will now require a visual signalling component.





Areas Requiring a Barrier Free Path of Travel





- Roof top, public amenity spaces
- All floors of C & D occupancy, in buildings exceeding 3 stories and 600m2 building area
- Adaptive seating in assembly occupancy. Now to have this plus wheelchair spaces.



- The entrance door to the barrier free suites requires a power door operator
- A minimum of one suite is to have an emergency power receptacle

Barrier Free Path of Travel for Hotels

Blocking for future grab bars

- Current code requires for bathtubs and toilets.
- Now blocking required for a shower grab bar.
- Grab Bars all need to be L-shaped





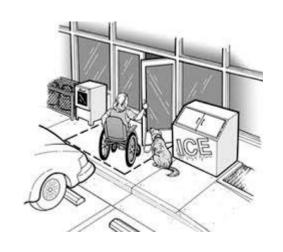
Tactile Attention Indicators

- Top of stairs
- Top of ramps
- Barrier free path stepping into a parking lot
- At edge of platforms





Level areas in a Barrier Free Path of Travel



Existing requirement is for a level area of 1670 x 1670mm (5'-6")

New requirement is for a level area of 1800 x 1800 mm (6'-0")



Operable with one hand



Operable with a closed fist



Operation of Building Services

Accessible Apartments

- 15% of units to be Barrier Free
- Access into one bedroom
- Access into one bathroom that has a minimum 1500mm turning radius
- Access into the kitchen
- Access into the living room
- These units are to be distributed amongst the storey's of the building



Barrier Free Washrooms

 Minimum number of barrier free washrooms, and stalls within washrooms, is based on the number of storeys and the occupant load of the building.

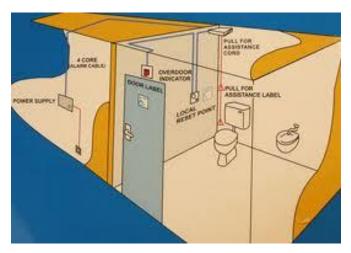
	Number of Storeys in Building	Minimum Number of Universal Washrooms per Building
1.	1 to 3	1
2.	4 to 6	2
3.	Over 6	3, plus 1 for each additional increment of 3 storeys in excess of 6 storeys

Item	Column 1 Number of Water Closets per Washroom	Column 2 Minimum Number of <i>Barrier-Free</i> Water Closet Stalls per Washroom
1.	1 to 3	0, where a universal washroom is provided on the same floor level within 45 m of the washroom, or
		1, where a universal washroom is not provided on the same floor level within 45 m of the washroom
2.	4 to 9	1
3.	10 to 16	2
4.	17 to 20	3
5.	21 to 30	4
6.	Over 30	5, plus 1 for each additional increment of 10 water closets per washroom in excess of 30 water closets per washroom

Universal Washroom

- 1700mm (5'-7") open space turning radius required
- The lighting is to be controlled by a motion sensor
- An emergency call system is to be installed inside the washroom with proper signage
- Provide space for installation of an adult change table of minimum 810 x 1830mm (32" x 72")









New height for toilet seat L-Shaped grab bar is require on side wall, not angled Hinged grab bars are now acceptable

Water Closet Changes



Barrier Free Urinal Required



- A least one required if 2 or more urinals in the washroom
- Privacy screen (when installed) to be minimum 460mm from centerline of urinal and maintain a 50 mm clearance to the grab bar.
- 2 vertical grab bars minimum 300mm long, mounted between 380mm and 450mm from centerline of the urinal
- Manual flush control must be operable by a closed fist.

Lavatories



- Width beneath lavatory increased from 760mm to 920mm (36")
- From 230mm clearance at a point 280mm from front edge to 350mm clearance at a point 300mm back from front edge.
- Have a minimum approach space of 920 wide x 1370mm deep (500mm may be under the lavatory)
- Accessible soap and hand drying equipment.

Toilet Stalls

- Now require a 1500mm turning radius
- Must be capable of being latched with a closed fist
- Stall door minimum width increased to 860mm (33.5") was 810mm
- L-shaped grab bar required on side wall
- Fold down grab is an option
- Doors require a door pull on both sides
- Provide a transfer space of 900 x 1500mm beside the water closet.





Showers



 The hinged seat must be a maximum of 500mm from the shower controls

Washrooms in areas not required to have a Barrier Free path of travel

MUST STILL CONFORM TO:

Water closet requirements in 3.8.3.9.

Height of seat, flushing operation, back support

Barrier free urinal

Lavatory

Lever type faucets, location of soap dispenser, location of hand drying equipment

At least one stall to comply with 3.8.3.8.(10)

1500mm x 890-940mm, door latching, 810mm door, gravity hinges, door pull on both sides, side grab bar.

Doors in a Barrier Free Path of Travel

- Clear width increase to 860mm
- Closed fist operation of handle
- Entrance to A, B2, B3, C, D and E occupancy buildings to have power door operators (no longer a size exception)
- Vestibules now require 1500mm between a door swing and the next door (was 1200mm)
- Power door operator to be installed on latch side of the door
- Power door operator to be minimum 150mm in diameter or 50 x 100mm
- Power door operator to be located a minimum of 600mm and maximum of 1500mm beyond the swing of a door that opens toward the button.

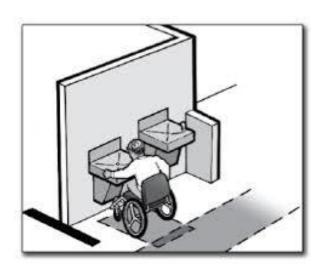
Doors not in a Barrier Free path of travel

- All public corridor doorways require clear opening of 860mm
- Door handles to be operable with a closed fist
- All vision panels to comply with barrier free requirements
- All sheet glass doors to have a continuous opaque strip
- If a power door operator is installed it must comply





Barrier free drinking fountain



- If cantilevered, then many clearances are required underneath similar to lavatories
- Provide a clear floor space of 810 x 1370mm in front.
- Project water a minimum of 100mm high
- 30 or 15 degree water stream depending on distance from front of fountain
- Be detectable by a cane below 680mm



Barrier free requirements for Pools



- Pool decks require tactile attention indicators
- Provide barrier free access to pools by a ramp or a lift.
- Provide a barrier free path of travel to outdoor pools
- Provide a barrier free access to spas.



Thanks for listening!!

