

“Accessibility” Requirements for Persons with Disabilities

Overview: This guide outlines when buildings and occupancies must be accessible to persons with disabilities, and provides a number of illustrations as examples of the British Columbia Building Code 2018 (BCBC) requirements. This guide does not include an exhaustive list but is meant to highlight typical requirements. The BCBC Section 3.8 should be consulted for details and requirements for specific occupancies and situations.

“Accessibility” Required For:

All Buildings and areas of buildings where work functions can reasonably be expected to be performed by persons with disabilities. See “Exemptions Include” below.

New Buildings

The requirements for persons with disabilities apply to all storeys of buildings of new construction. See “Exemptions Include” below.

Additions

The requirements for persons with disabilities apply to vertical additions of one storey over 600m² in floor area, or two or more storeys regardless of floor area. For this situation, mezzanines are considered a storey.

The requirements for persons with disabilities apply to horizontal additions, unless the enlarged building is exempt, as described below under “Exemptions Include”.

Alterations, Renovations and Changes in Occupancy (e.g. conversion of a retail store to a restaurant)

The requirements for persons with disabilities shall apply where persons with disabilities could reasonably be expected to be employed in, or use such an occupancy or building. The Building Code permits exceptions in cases where providing access is unusually difficult.

Exemptions Include:

- The storey next above or below the accessible storey in a building with not more than one storey above the first storey (mezzanines included), and the storey next above or below the accessible storey in a suite not more than two storeys in building height (mezzanines included), provided:
 - the floor area is less than 600m²
 - it does not contain facilities integral to the principle function of the accessible storey
 - it does not contain an assembly major occupancy over 100m²; and,
 - is not served by a passenger elevating device.
- Dwelling units, row houses, boarding and lodging houses (Group C), except adaptable dwelling units described under BCBC 3.8.5., and sleeping rooms and bed spaces as described under BCBC 3.8.2.12.
- Apartment and condominium buildings (Group C), except:
 - If no elevator is provided, access is required to the principal entry, 50% of all pedestrian entrances, common areas on levels with accessible entrances and where entrance level(s) and every dwelling unit has an elevation difference < 600mm.
 - If elevators are provided, access is required to the principal entry, 50% of all pedestrian entrances, all common areas, and, if provided, parking areas and passenger loading zones.
- High-hazard industrial occupancies.
- Buildings not intended to be occupied on a daily basis, such as pump houses and substations.
- Service, elevator machine and janitor rooms; crawl, attic, roof and service spaces; areas with fixed seats in assembly occupancy if not part of the accessible path of travel to designated wheelchair use; floor levels of residential suites not at the same level as the entry; and floor areas not at the same level as the entry, provided facilities and uses are provide on the entry level.

“Accessibility” Requirements for Persons with Disabilities

Access is Required:

- From the street level to the principle entrance and not less than 50% of all pedestrian entrances.
- To exterior paths and stairs within property lines from roadways, streets, parking areas, exterior passenger loading zones (when provided), and all accessible entrances of a building.
- To facilities contained on floors that are not “accessible” (i.e. staff room).
- To storeys served by an escalator or moving walks, a marked alternative accessible path of travel within the building is required (i.e. elevator or ramp).
- Where building services and safety devices, including electrical outlets, intended to be operated by the occupant located in or adjacent to an “accessible” floor area shall be mounted between 455mm and 1,200mm above the floor, and be operable with one hand in a closed fist position.
- To power-operated doors where an accessible path of travel leads to entrances that serve a hotel or treatment occupancy or assembly, care, business, retail occupancy building, or suite $\geq 500\text{m}^2$.
- To an accessible washroom in a storey to which access is provided unless;
 - the washroom is within a suite of residential or care occupancy,
 - other accessible washrooms are provided on the same floor area within 45m along an accessible path of travel; or,
 - if occupancies of retail or business and personal service with multiple suites have an accessible washroom available to all suites or provided in each suite.
- To a universal washroom in the entrance storey in buildings and occupancies where water closets are required as per 3.7.2., unless an accessible path of travel is provided to a universal washroom elsewhere in the building.
- To assistive listening systems (described under BCBC 3.8.3.) in assembly occupancies with classrooms, meeting rooms, auditoria, or theatres greater than 100m^2 .
- To counters serving the public, and intended as a work surface for extended business transactions.
- To at least 1 in every 40, or part thereof, sleeping rooms and bed spaces in residential clubs, residential schools and colleges, dormitories, hotels, and motels.
- A designated number of wheelchair accessible spaces in assembly occupancies based on the fixed seats in the seating area, as described in BCBC Table 3.8.2.8. and 3.8.3.21.

Design Standards:

- The design standards under BCBC 3.8.3. permit the option to use this subsection or the provisions of CSA B651 “Accessible Design for the Built Environment.”
- If a section of the CSA B651 is used (i.e. ramps under CSA B651 5.3 & 5.5 rather than ramps under BCBC 3.8.3.5.), it must be used in its entirety.
- If the proposed design standard to be used is CSA B651, this must be clearly identified on the code review and plans submitted.

Substantial changes to the Design Standards have been incorporated in the 2018 BCBC for the accessible path of travel, door size, washroom clearances, fixture installation, and configuration.

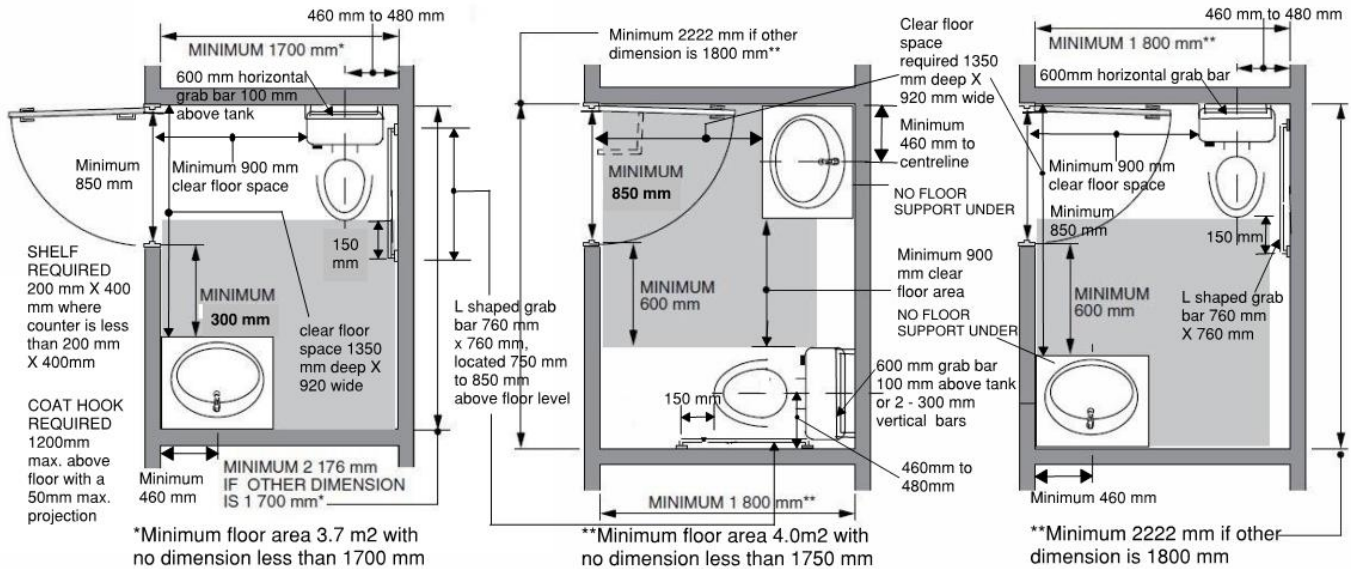
- **Accessible Path of Travel** - Where access is required, an accessible path of travel shall have an unobstructed width of 1,500mm, except the width can be reduced to;
 - 1100mm between structures in public aisles in merchandising and exhibition facilities,
 - 920mm for permanent food service lines, and,
 - 810mm through turnstiles, and controlled checkout lanes.
 - 850mm for doorways.
 - As permitted under CSA B651.

Forms and guides specific to Building Inspections can be printed from the City of Nanaimo website www.nanaimo.ca by typing your search word in the Search Bar or visiting the [Building Permits](#) pages under Property & Development, or can be picked up at our office at 411 Dunsmuir Street. Bylaws can be found on our website under [City Bylaws](#) on the main page.

This guideline should not be used as a substitute for existing building codes and other regulations. The building owner is responsible for compliance with all codes, bylaws, and other regulations whether or not described in this guideline.

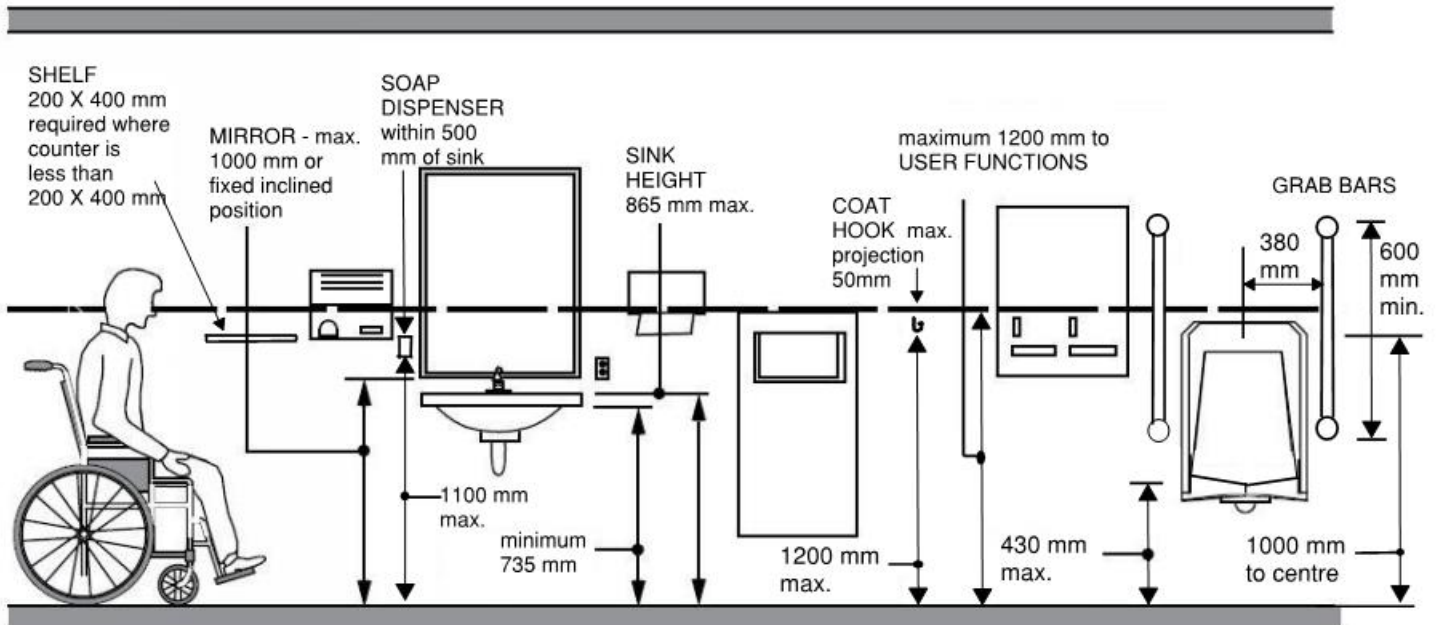
Guide to Building Code Parameters for “Accessible” Washroom Design

This guide provides visual references only. Refer to the 2018 BC Building Code and Building Accessibility Handbook 2020 for complete written requirements.



Floor area minimums may need to be increased to accommodate clear space required for fixtures

Suggested Washroom Layouts

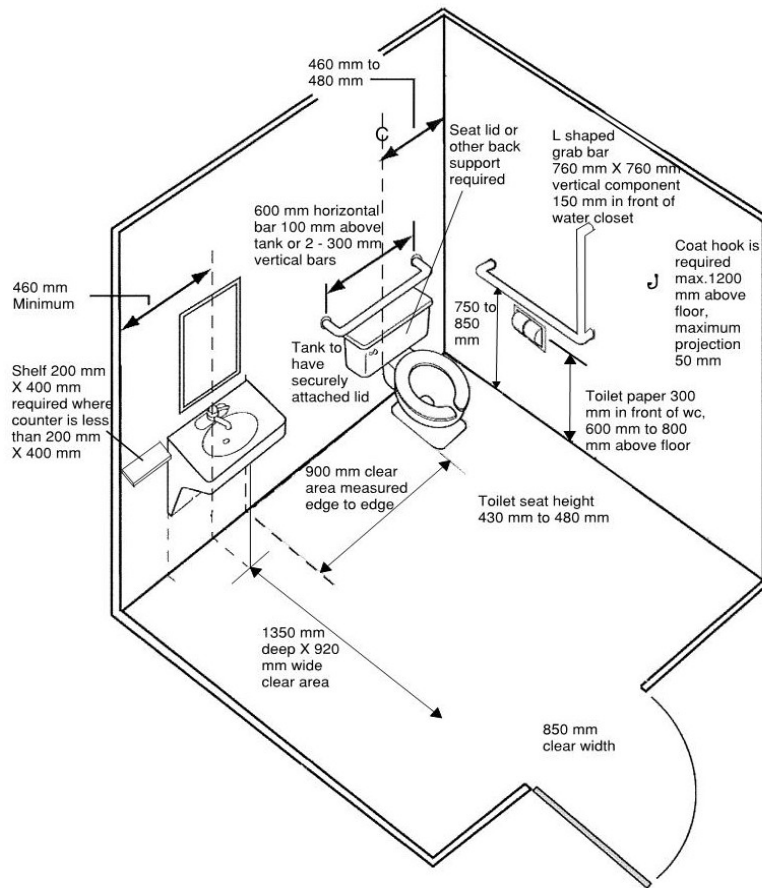


Washroom Accessories

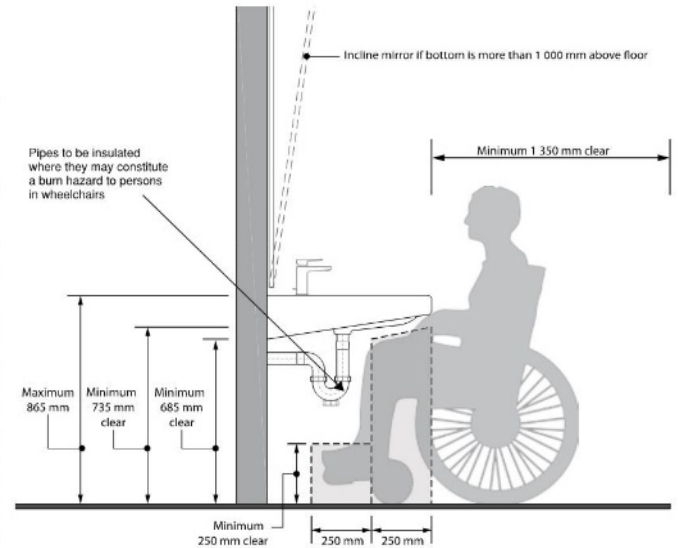
Not to scale

Guide to Building Code Parameters for “Accessible” Washroom Design and Door Access & Width

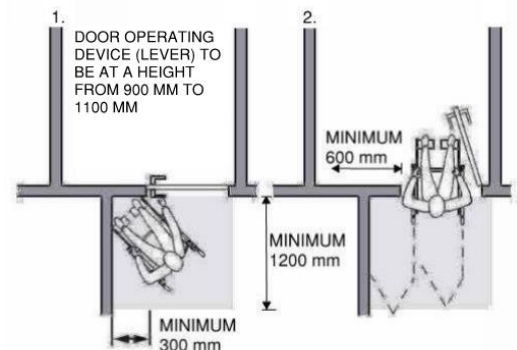
This guide provides visual references only. Refer to the 2018 BC Building Code and Building Accessibility Handbook 2020 for complete written requirements.



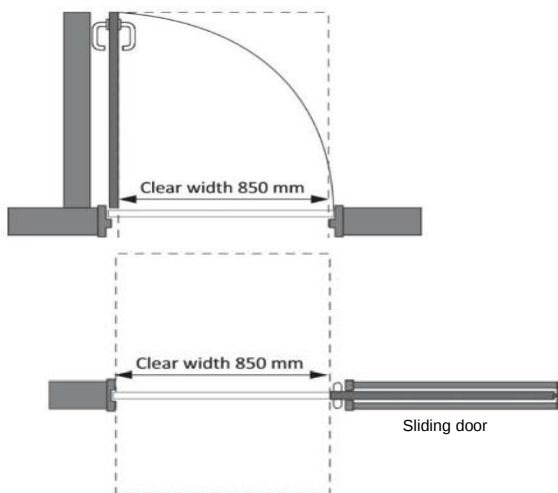
Universal Washroom



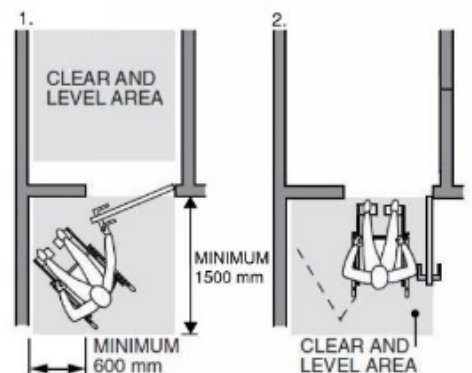
Clearance Under Wash Basin



Door Swing Away From Wheelchair



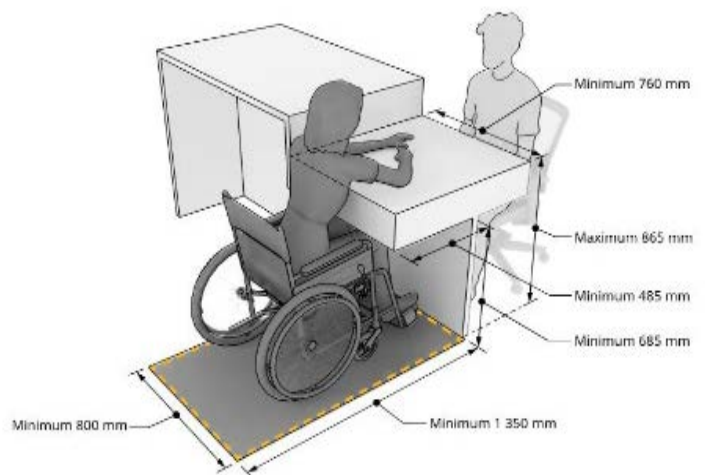
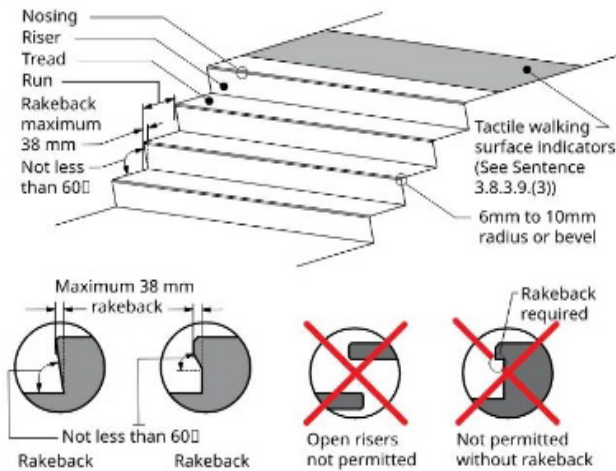
Clear Doorway Width



Door Swing Towards Wheelchair

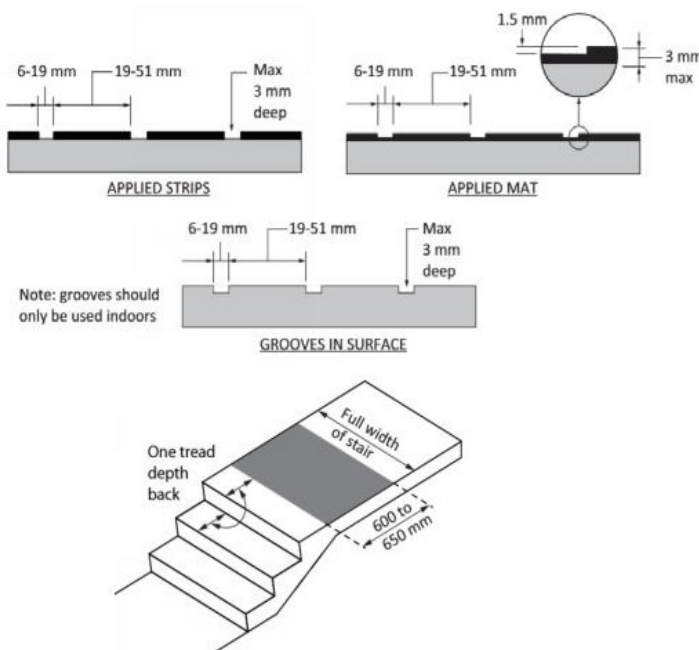
Guide to Building Code Parameters for “Accessible” Counters, Stairs, Handrails & Tactile Indicators Design

This guide provides visual references only. Refer to the 2018 BC Building Code and Building Accessibility Handbook 2020 for complete written requirements.

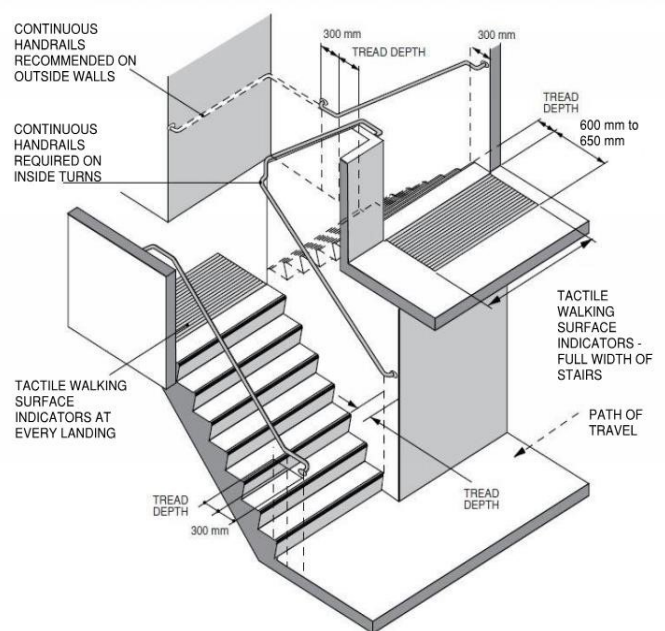


Stair Design

Counters For Extended Business Transaction



Tactile Walking Surface Indicators



Handrails and Tactile Walking Surface

Guide to Building Code Parameters for Ramp Design in an Accessible Path of Travel

This is a brief guide only; refer to the 2018 BC Building Code for the complete requirements.

RAMP OPTIONS FOR PERSONS WITH DISABILITIES – INTERIOR AND EXTERIOR:

Ramp Slope Height to Length Ratio	Minimum Ramp Width	Maximum Landing Intervals	Minimum Landing Size Width x Length	Handrails Required	Comments
1 in 20 to 1 in 12	1500mm	9m	1500mm x 1500mm	both sides	landings also required at abrupt changes in direction

RAMP OPTIONS FOR PERSONS WITH DISABILITIES – SERVING PASSAGEWAYS ONLY –
intended for shopping malls, theatres, stadiums and high pedestrian traffic areas:

Passageway Width	Number of ramps	Minimum Ramp Width	Minimum Landing Size Width x Length
≤6,000mm	1 ramp	915mm between handrails	at intervals - ramp width x 1500mm at top and bottom – 1500mm x 1500mm
>6,000mm	2 separate ramps	915mm between handrails	at intervals - ramp width x 1500mm at top and bottom – 1500mm x 1500mm

Diagram illustrating the recommended dimensions for a ramp section. The diagram shows a person standing on a ramp with handrails. Key dimensions include: 865mm 965mm (overall width), ≤ 100mm (gap between handrails), 76mm (gap between ramp and handrail), 1 in 20 to 1 in 12 ramp section (slope), 915mm (ramp width), and Handrail at 450mm recommended (handrail height).

CURB RAMP OPTIONS FOR PERSONS WITH DISABILITIES – EXTERIOR WALKS ONLY:

Curb Ramp Slope Height to Length Ratio	Minimum Ramp Width	Rise	Minimum Landing Size Width x Length	Handrails and guards Required	Comments
> 1 in 12 to 1 in 10	1500mm	between 75mm & 200mm	1500mm x 1500mm	not required	Tactile walking surface indicators are required 150mm to 200mm back from the lower end of the ramp or edge of platform 600mm to 650 by the full width not including flared sides of the ramp.
> 1 in 10 to 1 in 8	1500mm	less than 75mm	1500mm x 1500mm	not required	

ADDITIONAL NOTES TO ABOVE TABLES:

1. Ramps may need to be wider to accommodate minimum egress/exit widths.
2. Handrails must be mounted 865mm to 965mm above the ramp surface. Guards 1070mm high are required where the elevation difference between the walking surface and the adjacent surface is more than 600mm.
3. Where the ramp is 1500mm wide, handrails may project a maximum 100mm from each side of the ramp into this width (total width reduction 200mm).
4. At least one handrail must have 300mm horizontal extensions beyond both top and bottom of the ramp slope.
5. Ramps and landings not at grade or adjacent to a wall shall have edge protection consisting of a curb not less than 75mm high or a raised barrier or rail not more than 100mm from the ramp or landing surface.
6. Ramps and accessible paths of travel must be slip-resistant, stable, firm, and shall have no openings that permit passage of a 13mm spherical object and have a cross slope not steeper than 1 in 50. Gratings with elongated openings must have them oriented approximately perpendicular to the direction of travel.
7. Ramp must be free of obstruction to a height of 1980mm (2050mm if to be used by ambulatory persons).
8. The width of an accessible path of travel that is more than 30m long shall be increased to not less than 1800mm for a length of 1800mm at intervals not exceeding 30m.
9. The accessible path shall provide illumination to an average level not less than 50 lx at floor level.
10. Sections 5.3 and 5.5 of CSA B651 describing interior ramps are permitted to be used in lieu of BCBC Article 3.8.3.5.
11. Sections 8.2.1 to 8.2.5 and 8.2.7 of CSA B651 describing exterior accessible routes including exterior ramps are permitted to be used in lieu of Article 3.8.3.3. BCBC.