

2006 BUILDING CODE CHANGES

The BC Building Code 2006 Edition came into effect on December 15, 2006. This Summary Sheet touches on some Code changes relating to stair detailing which design professionals may be interested in reviewing (refer to accompanying diagram). Please refer to the actual wording in the 2006 BC Building Code for complete stair design requirements.

- Headroom for stairs measured vertically above nosing edge, and landings, minimum **2100mm** (6'-11") - an increase of 50mm (2") from previous requirements.
- Leading edge of stair treads must have radius or bevel **6mm** ($\frac{1}{4}$ "") to **10mm** ($\frac{3}{8}$ "") measured horizontally. This can be reduced to 3mm ($\frac{1}{8}$ "") if resilient material is used for the leading edge.
- Handrails must have a circular cross-section diameter **30mm** ($\frac{3}{16}$ "") to **43mm** ($1\frac{5}{8}$ "") - a decrease of 7mm ($\frac{1}{4}$ "") from previous. Alternatively, a non-circular cross-section permitted with perimeter **100mm** (4") to **125** (5") and with largest cross section dimension maximum 45mm ($1\frac{3}{4}$ "").
- Handrails and their mounting brackets must be positioned with a grasping clearance of **50mm** from the adjacent wall surface - 10mm ($\frac{3}{8}$ "") increase from previous (60mm if wall surface is rough or abrasive).
- Floor tactile warning treatment normally provided at the top of stairs is no longer required for exit stairs not normally used for access purposes.

Exceptions to the above:

- Stairways used occasionally for servicing equipment / machinery in service rooms, service spaces and industrial occupancies.
- Fire escapes - these often exist in older buildings and are not normally used in new buildings.
- Steps in aisles in assembly occupancies such as theaters (refer to Subsection 3.3.2 for specific requirements).
- Stairs within a dwelling unit (refer to Section 9.8).
- Stairs used by the public in Part 9 buildings (3 storeys or less and not exceeding 600mm² building area, all occupancies other than Groups A, B, F-1) (refer to Section 9.8). Note: open risers are now permitted in buildings designed under Part 9.

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- GHL Consultants Ltd provides expertise in stair safety consulting, provisions for persons with disabilities, Building Code consulting and Fire Sciences Engineering.
 - GHL Consultants Ltd has recently moved to new and larger premises at 409 Granville Street in Vancouver.
 - Saffire Safety Consultants Inc. has recently reorganized to have offices focused in Vancouver and Toronto and will no longer have a presence in Fredericton.

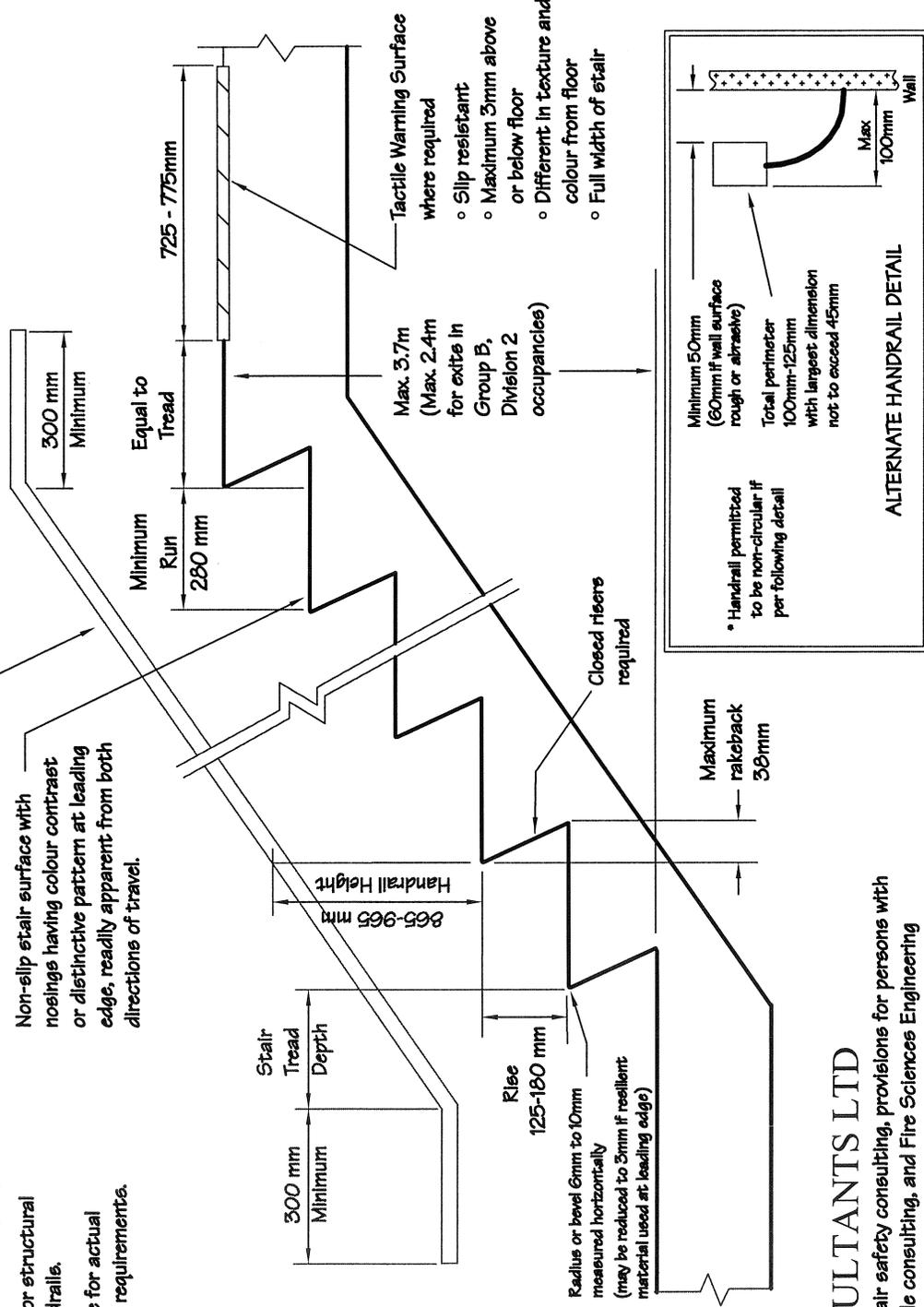
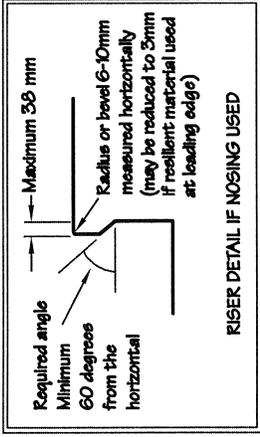
Typical Stair & Handrail Details (2006 BCBC)

Notes:

- Treads & risers should be uniform in a flight.
- Maximum variation between largest and smallest rise or run should be 6mm.
- Minimum headroom at stairs is 2100mm measured vertically from nosing edge.
- Refer to 3.4.6.4.(9) for structural requirements for handrails.
- Refer to Building Code for actual wording and complete requirements.
- Drawing not to scale.

Handrail 30-43mm diameter* minimum 50mm clear of wall, 60mm if wall surface rough or abrasive (maximum encroachment into required exit width 100 mm).

Non-slip stair surface with nosings having colour contrast or distinctive pattern at leading edge, readily apparent from both directions of travel.



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