

Building Code Changes 2018

One- and Two-Family Dwellings

Overview: Summary of 2018 BC Building Code changes to pertaining to single-family dwellings, single-family dwellings with secondary suites, and duplexes only.

Section 9.23 – Wood-Frame Construction

Seismic Zone Value Change

Seismic spectral response acceleration S_a (0.2) is now 1.02 (from 1.0).

Heavy Construction

Now refers to buildings with tile roofs; floors with concrete topping; and stucco walls or walls that are clad with directly-applied heavyweight materials such as brick, natural stone veneer, or similar products (greater than 6.68 lbs. per ft²).

Equivalency to 9.23.13.7 (5)

The equivalency to increase braced wall band spacing from 25' to 34-9' by sheathing the interior side of exterior walls is no longer accepted. Braced wall panels will have to be constructed within braced wall bands as required by the code.

Anchor Bolts

Must be located within 20" of the end of the foundations with a minimum of two in each braced wall panel. Refer to the table for the required size and spacing.

	1/2"		5/8"		
	Light Construction	Heavy Construction	Light Construction	Heavy Construction	
One Floor	7' – 10' ⁽¹⁾	7' – 10' ⁽¹⁾	One Floor	7' – 10' ⁽¹⁾	7' – 10' ⁽¹⁾
Two Floors	6' – 11' ⁽¹⁾	5' – 3' ⁽¹⁾⁽²⁾	Two Floors	7' – 10' ⁽¹⁾	7' – 7' ⁽¹⁾⁽²⁾
Three Floors	4' – 7' ⁽¹⁾	N/A	Three Floors	6' – 3' ⁽¹⁾	N/A

⁽¹⁾ Includes Roof Load if applicable.

⁽²⁾ Interior walls only (crawl space or basement).

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Top Plates in Braced Wall Bands

Required nailing on each side of a splice with 3" common steel wire or spiral nails.

	Light Construction	Heavy Construction
Roof Only	3	5
One Floor	7*	11*
Two Floors	11*	N/A
<i>*Includes Roof Load if applicable</i>		

Cladding, Sheathing or Interior Finish for Braced Wall Panels

Wafer board R-1 grade and diagonal lumber are no longer permitted to be used for braced wall panels. The minimum thickness of OSB 0.1 & 0.2 grades and plywood is 7/16" for framing at 16" o.c.

Fasteners for Roof Sheathing and Sheathing in Braced Wall Panels

Nailing 3" along edges and 12" on intermediate supports. Braced wall panels require all edges to be supported on framing or blocking, except where braced wall panels only support a roof of lightweight construction, in which case, no blocking is required. Note that waferboard is only approved for use as roof sheathing.

Common and Spiral Ring Nails	
Plywood/ OSB/ Wafer Board up to 1"	2 1/2"

Orthogonal Setback

Top plate nailing on each side of splices for exterior walls perpendicular to setback wall is 14 (3" nails).

Section 9.32 – Ventilation

Venting of Laundry-Drying Equipment

Laundry-Drying Equipment exhaust ducts or vents must:

- discharge directly to the exterior;
- be independent of other exhaust ducts;
- be accessible for cleaning; and
- be constructed of a smooth corrosion-resistant material. Note that this applies to piping and ducting within the wall and not flexible ducting used to connect the appliance to the rigid duct.

Section 9.8 – Stairs, Ramps, Handrails, and Guard

Stair Run

The minimum run of stairs is now 255mm (10"); the maximum remains 355mm (14"). Note that the depth of a rectangular tread shall be not less than its run and not more than its run plus 25 mm (1").

Tapered Treads

All tapered treads within a flight shall turn in the same direction.

Tapered treads must be a minimum 6" at the narrow end and 10" to 14" measured at a point 12" from the centerline of the handrail at the narrow end of the tread.

Within a flight of stairs, they must have a uniform run with a tolerance of 5mm (3/16") between adjacent treads and 10mm (3/8") between the deepest and shallowest treads in a flight, measured at a point 12" from the centerline of the handrail.

Handrails

The maximum height of handrails is now 1,070mm (42").

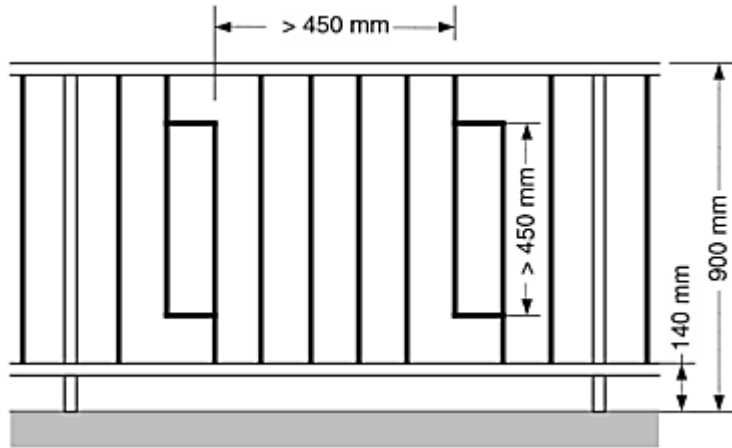
The clearance between a handrail and the surface behind it shall be not less than 50mm (2") or 60mm (2 3/8") where the surface is rough or abrasive, such as stucco, unplanned wood, stone or brick facing, etc.

The graspable portion of a handrail should allow a person to comfortably and firmly grab hold by allowing their fingers and thumb to curl under part or all of the handrail. Where the configuration or dimensions of the handrail do not allow a person's fingers and thumb to reach the bottom of it, recesses that are sufficiently wide and deep to accommodate a person's fingers and thumb must be provided on both sides of the handrail at the bottom of the graspable portion, and which must not have any sharp edges.

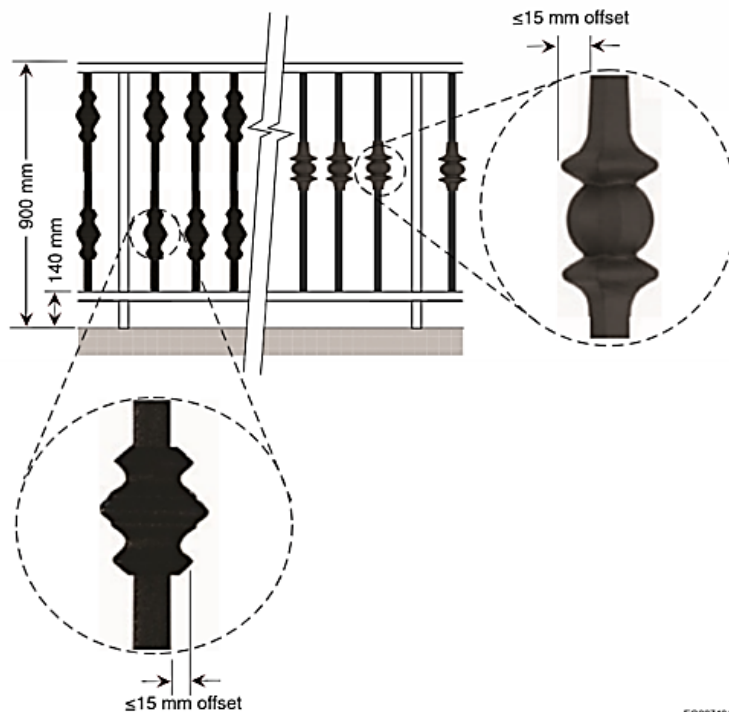
Guards

Non-climbable guards are required if protecting a level greater than 4.2m (13' – 9") above the adjacent level.

Protrusions that are greater than 450mm (18") apart horizontally and vertically are considered sufficiently far apart to reduce the likelihood that young children will be able to get a handhold or toehold on the protrusions and climb the guard.



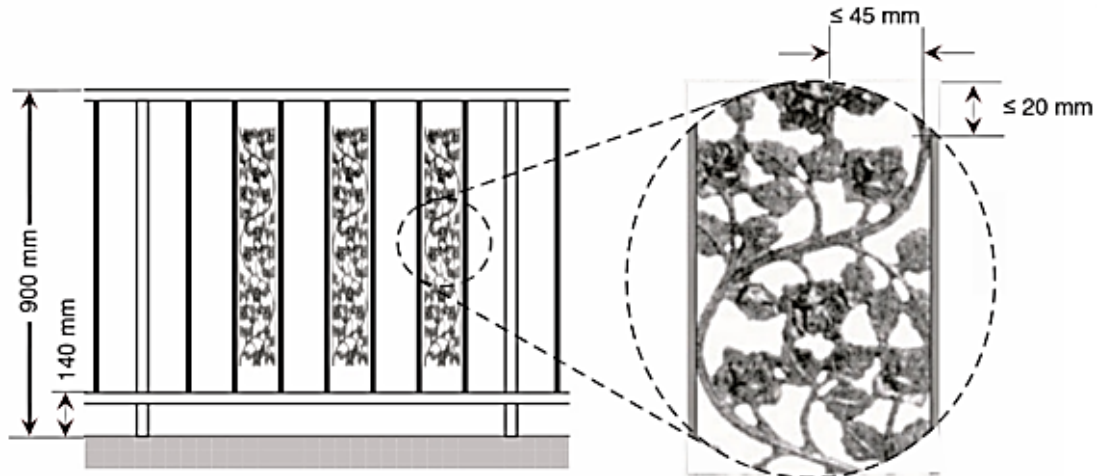
Protrusions that present a horizontal offset of 15mm (9/16") or less are considered to not provide a sufficient foot purchase to facilitate climbing.



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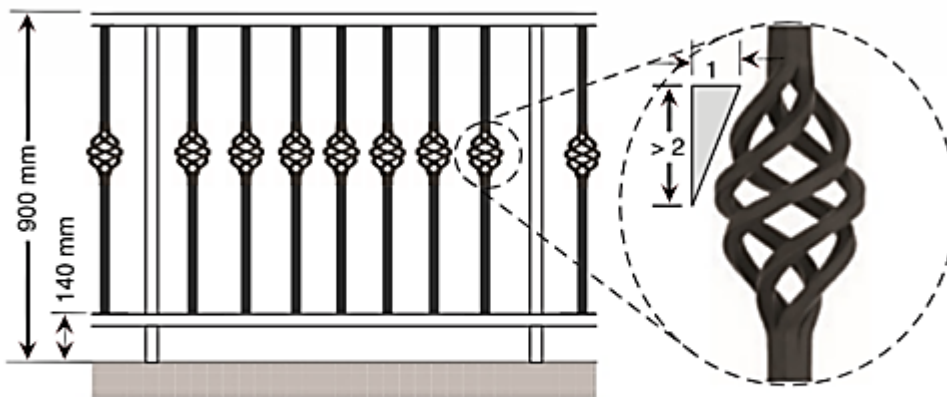
Guards, continued

A guard incorporating spaces that are not more than 45mm (1 3/4") wide by 20mm (13/16") high is considered to not facilitate climbing because the spaces are too small to provide a toehold.



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Protrusions that present more than a 2-in-1 slope on the offset are considered to not facilitate climbing because such a slope is considered too steep to provide adequate footing.



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