NOTABLE CODE REQUIREMENTS – ***the following list represents important code requirements that shall be implemented into construction while still maintaining full compliance with all other requirements within the 2018 BCBC.***

Attic Access Hatch to have an area not less than 0.32m²/3.4ft² and no dimension less than 500mm with a min R-15 insulation value **Crawlspace Access Hatch** to be fitted with a door or hatch not less than 500mm x 700mm

Backfill height not to exceed the values listed for wall type in Tables 9.15.42.A, 9.15.4.2.B, 9.15.4.5.A, 9.15.4.5.B & 9.15.4.5.C in the 2018 BC Building Code. Note: ICF concrete foundation walls must be full height walls that are laterally supported along the top unless a Professional Structural Engineers report is submitted for a stepped foundation ICF wall. Conventional concrete foundation walls may be stepped provided backfill heights do not exceed 4ft above top of basement slab.

Required **Bathroom Exhaust Fan** min 50cfm (intermittent) or 20cfm (continuous) exhaust capacity. An HRV system may serve as the bathroom exhaust fan provided compliance with noted "cfm" capacity requirements above. All joints in duct to be sealed against air leakage. Exhaust outlet to be shielded from weather, birds and rodents with corrosion resistant material with openings no greater than 6 to 12mm. All ducts passing through unconditioned space to be insulated to no less than R-4 with an effective vapour barrier.

Bedroom Egress Window(s) & Window Wells *Subsection 9.9.10. 2018 BCBC* all **bedroom windows** must be openable from the inside without special keys, tools or knowledge with an unobstructed opening of not less than 0.35m²(3.77ft²) with no dimension less than 380mm(15") unless the bdrm is sprinklered or has an exterior door. Where a window opens into a **window well** a clearance of 760mm(30") is required in front of the window. Where the sash of a window swings towards the window well then the operation of the sash shall not reduce the clearance in a manner that would restrict escape in an emergency. Every window well shall be drained to the footing level or other suitable location (9.14.6.3.).

All **Columns** to comply with Section *9.17* of *2018 BCBC* and to be secured at top and bottom with approved metal fasteners. Width of column to be no less than width of supported member.

Continuous fresh air supply required in every bedroom and on each floor level without a bedroom – HRV and/or Ducted Forced Air Heating System to have circulating fan set to run continuously. If HRV only is used for the ventilation fan then one HRV return air inlet located 2m/6.5ft above the uppermost floor level is required.

Decks, Balconies, Exterior Walkways & similar ext walking surfaces that also serve as a roof and these platforms do not permit the drainage of free water through the deck then, an approved walk-able/roofing membrane is required and must meet CAN/CGSB 37.54 and additional CCMC evaluation listings that verify the membrane suitable for pedestrian traffic -min 60 mils thickness. If heated and/or habitable space is below then provisions for cross ventilation required – min 2 ½" air space above the insulation unless an approved spray applied polyurethane foam product is used.

Doors between an attached or built-in garage and a dwelling unit shall be tight fitting and weather-stripped c/w a self-closing device. A bedroom or a room intended for sleeping shall not be directly attached to a built-in garage by a door or a window.

Exterior Flashing(s) are required at every horizontal junction between cladding elements, at every horizontal offset in cladding, at every horizontal line where cladding substrates change and over all windows/doors where the vertical distance from the bottom of the eave to the top of the trim is more than ¼ the horizontal overhang of the eave – also required at deck ledgers.

Floor Drain – required serving service water heater such that the floor surface to be adequately sloped to the floor drain so that no water can accumulate. If service water heater is located in a ceiling area, roof space or over a wood floor then, a drain pan shall be required.

Foundations (footings/walls) - concrete block, solid concrete & insulating concrete units & reinforcing shall comply with the min requirements listed in Section 9.15 of the 2018 BC Building Code unless the design parameters of an ICF system supersede that of the 2018 BC Building Code.

Glazing (windows) installed over stairs, ramps and landings that extend less than 36" above the level of the landing shall be protected by a guard or to be non- openable and the glazing shall be designed to meet 0.75kN/m or concentrated load of 1kN applied at any point.

Required **Kitchen Rangehood Exhaust Fan** to be ducted directly outdoors at min 100cfm capacity. If the fan is within 1.2m(4ft) from cook-top then, all ductwork to be non-combustible, corrosion resistant, and cleanable and be equipped with a grease filter at the intake end. All joints in duct to be sealed against air leakage. All ducts passing through unconditioned space to be insulated to no less than R-4 with an effective vapour barrier.

Principal Ventilation System Exhaust Fan – every dwelling unit needs to have one fan that:

▪runs continuously (24hr/day) at the minimum exhaust rates outlined in Table 9.32.3.5. (see below);

▪controlled by a dedicated switch▪dedicated switch to have 2 settings marked "on & off";

▪switch to be clearly marked "PRINCIPAL VENTILATION EXHAUST FAN";

▪switch to be located where it may not be turned off inadvertently (mech room);

▪sound rating of principal ventilation exhaust fan not to exceed 1.0;

▪if bathroom fan will also be used in conjunction with the PVEF then ventilation rates for the bathroom-use fan must be no less than that of the PVEF;

▪all joints in duct to be sealed against air leakage & be insulated to min R-4 with an effective vapour barrier through unconditioned space;

▪exhaust outlet to be shielded from weather, birds, rodents with corrosion

Floor Area m^2 (ft^2)	Minimum Air-flow Rate, L/s (cfm)				
	Number of Bedrooms				
	0-1	2-3	4-5	6-7	>7
< 140 (1500)	14 (30)	21 (45)	28 (60)	35 (75)	42 (90)
140 – 280 (1500 – 3000)	21 (45)	28 (60)	35 (75)	42 (90)	49 (105)
281 – 420 (3000 – 4500)	28 (60)	35 (75)	42 (90)	49 (105)	56 (120)
421 – 560 (4500 – 6000)	35 (75)	42 (90)	49 (105)	56 (120)	64 (135)
561 – 700 (6000 – 7500)	42 (90)	49(100)	56 (120)	64 (135)	71 (150)
> 700 (7500)	49(105)	56(120)	64 (135)	71 (150)	78 (165)

resistant material with openings no greater than 6 to 12mm

Protection of Foamed Plastics to conform to article 9.10.17.10 of the 2018 BC Building Code & shall be covered with a finish listed under 9.29.4 to 9.29.9 (1/2″ drywall). Spray foam box joist cavities to be protected with a layer of R-12 Rockwool Batt Insulation.

Roof Ventilation *Section 9.19* to be min *1/300* unobstructed vent area of the insulated ceiling area. Roof slopes less than 1 in 6 or in roofs constructed of roof joists then min unobstructed vent area *1/150* of insulated ceiling area. Not less than 25% of ventilation required at both the top and bottom of the roof space.

Soil (RADON) Gas Control *Subsection 9.13.4 2012 BCBC* required beneath basement and crawlspace slabs serving SFD's. ▪concrete slab sealed at transition of perimeter walls and penetrations with flexible caulking, over ▪6 mil (CAN/CGSB-51.34-M) Vapour Barrier sealed at all penetrations and perimeter, over ▪4" clean gas- permeable granular layer ▪4" extraction pipe in granular layer contiguous to entire area▪ RADON extraction pipe to terminate not <1m above & not <3.5m in any other direction from openable window or air inlet, not <2m above & not <3.5m in any other direction from a roof that supports an occupancy, not<1.8m from a property line, shielded from weather, protected from frost closure by insulating the pipe or by some other manner, if subject to frost closure, sloped backwards to prevent moisture in pipe and labelled "RADON VENT PIPE" @ 1.2m intervals and changes in direction.

Service Water Heating. The first 2m of both inlet and outlet (hot/cold) piping from a storage tank or heating vessel shall be covered with piping insulation at least 12mm thick.

Shower Valves shall be pressure-balanced or thermostatic mixing valves conforming to *CSA B125* unless hot water supply for showers is controlled by a master thermostatic mixing valve conforming to *CSA B125*

SPRAY FOAM INSTALLATION – Spray applied rigid polyurethane foam insulation to meet ULC S705.1 product standard. Product installation to meet ULC S705.2. Installer shall provide specification/data sheets, detail work sheets and post "Job Site Label" (identify job site, address, product name, CCMC number, licensed contractor name, certified installer name, PFC number, daily worksheet number and date) on site.

Temperature control of water discharging into a Bathtub shall not exceed 49C/120f. Master thermostatic mixing valves shall conform to CAN/ULC-B125.3 "Plumbing Fittings".

Water Efficiency requires compliance with the following: 4.8ℓ max flush cycle for a water closet(toilet). NOTE: wc's with dual flush cycle of 4.1ℓ or less and 6ℓ complies with this requirement. Max flow rates for supply fittings not to exceed the following: 8.3 litres/min - bthrm & kitchen faucets & 9.5 litres/min - shower head.

Water-proof wall finishes required per *9.29.2* of the *2018 BCBC; 1.8m* above the floor in shower stalls: *1.2m* above the rims of bathtubs equipped with showers: *400mm* above the rims of bathtubs not equipped with showers.

Windows & Doors and their components in a building of no more than 10 m in height, measured from grade, may conform to the design pressure, performance grade and water resistance values in TABLE C-5 of Appendix C instead of the values calculated in the Canadian Supplement. *Max 1.6 U-Value*

Location	Climatic Data		Specified Loads			NAFS		
	1/5 DRWP	1/50 HWP	DRWP	WIND LOAD		Required Fenestration Performance		
	Pa	kPa	Pa	Pa	psf	DP	PG	Water Resist.
Cranbrook	100	0.33	100	668	13.96	720	15	140
Elko	100	0.40	100	810	16.92	960	20	150
Fernie	100	0.40	100	810	16.92	960	20	150
Kimberley	100	0.33	100	668	13.96	720	15	140