

Vancouver Building Bylaw – March 1st 2018 updates

Residential - Summary Sheet (Energy related components and systems)

Component		1&2 Family	Townhomes Low-rise MURBs < 4 storeys	4-6 Storey Residential
Opaque Envelope	Above Grade Walls Foundation Walls	3.85 (R22 eff)	3.85 (R22 eff)	3.85 (R22 eff)
	Attic	8.5 (R50 eff)	6.8 (R40 eff)	6.8 (R40 eff)
	Flat and Vaulted Roof	4.3 (R28 Nom)	5.28 (R30 eff)	5.28 (R30 eff)
	Under Slab	2.5 (R14 eff)	2.5 (R14 eff)	2.5 (R14 eff)
	Exposed Floors	4.2 (R24 eff)	4.2 (R24 eff)	4.2 (R24 eff)
	Blower Door Air Tightness (ACH)	Testing + 3.5 ACH50	TH: Testing + 3.5 ACH50 MURB: Testing + 2.0 L/s/m ² @75Pa	Testing + 2.0 L/s/m ² @75Pa
	Concrete Balconies Exposed Slab Edge	N/A	0.42 (R 2.4)	0.42 (R 2.4)
	Side Hinged Doors	U 1.8 W/m ² K (0.32 Btu/h•ft ² •°F)	U 1.8 (0.32)	U 1.8 (0.32)
Non-opaque Envelope	Windows Curtainwalls	U 1.4 W/m ² K (0.25 Btu/h•ft ² •°F)	U 1.4 (0.25)	U 1.4 (0.25)
	Sliding Glass Doors	U 1.4 (0.25)	U 1.4 (0.25)	U 1.4 (0.25)
	Skylights and Sloped Glazing	U 2.4 (0.42)	U 2.4 (0.42)	U 2.4 (0.42)
	Roof Access Hatches	U 2.9 (0.51)	U 2.9 (0.51)	U 2.9 (0.51)
Mechanical	Furnace / Make-up air	92% Annual Fuel Utilization Efficiency (AFUE)	92% AFUE	92% AFUE
	Boiler	92% AFUE	92% AFUE	92% AFUE
	Fireplaces	Direct Vent Electronic Ignition	Direct Vent Electronic Ignition Must be on a fireplace timer	Direct Vent Electronic Ignition Must be on a fireplace timer
	Outdoor Fireplaces	Electronic Ignition Must be on a fireplace timer	Electronic Ignition Must be on a fireplace timer	Electronic Ignition Must be on a fireplace timer
	Heat Recovery Ventilator (HRV)	65% sensible heat recovery efficiency (SRE) at 0°C	65% SRE at 0°C	65% SRE at 0°C
	Domestic Hot Water	Energy Factor (EF) of 0.78	Energy Factor (EF) of 0.78	Energy Factor (EF) of 0.78
	Drainwater Heat Recovery (DWHR)	N/A	*42% efficiency OR DHW Heat Pump (COP≥2.9)	42% efficiency OR DHW Heat Pump (COP≥2.9)
	Solar Chase	Solar Chase 2x 2" PVC	Solar Chase - PV only	Solar Chase - PV only
EnerGuide Report	EnerGuide report Pre-Permit Checklist Pre-Drywall Checklist	EnerGuide report Pre-Permit Checklist Pre-Drywall Checklist	Air tightness testing only	

* A DWHR system is exempt in townhomes only, if the units are fully electric (including space heating and cooking)

Performance Path

MURBs 4-6 storeys can alternatively follow a performance path as outlined in the following table:

Performance Path Metrics	
GHGI (Greenhouse Gas Intensity)	5.5 kg/m ² annually
TEDI (Thermal Energy Demand Intensity)	25.0 kWh/m ² annually
TEUI (Energy Use Intensity)	110.0 kWh/m ² annually