

ABOVE GRADE:

Effective value for WALLS ABOVE GRADE	total effective assembly (RSI/R value)	studs and cavity	interior air film	1/2" drywall	6 mil poly	3/8" plywood	1/2" plywood	3/8" OSB	7/16" OSB	tyvek	3/4" vertical air space	vinyl siding	5/16" cement board	exterior air film
Req'd Minimums: Zone 6 - 3.08/2.97 Zone 7A - 3.08/2.97			0.12	0.08	0	0.083	0.109	0.093	0.108	0	0.18	0.11	0.026	0.03
2x6 at 16" oc, R-22 with HRV	2.97	2.55	0.12	0.08	0	0.083				0		0.11		0.03
2x6 at 16" oc, R-22 with HRV	2.89	2.55	0.12	0.08	0	0.083				0			0.026	0.03
2x6 at 16" oc, R-22 Requires air space on exterior	3.15	2.55	0.12	0.08	0	0.083				0	0.18	0.11		0.03
2x6 at 16" oc, R-22 Requires air space on exterior	3.18	2.55	0.12	0.08	0		0.109			0	0.18	0.11		0.03
2x6 at 16" oc, R-22 Requires air space on exterior	3.16	2.55	0.12	0.08	0			0.093		0	0.18	0.11		0.03
2x6 at 16" oc, R-22 Requires air space on exterior	3.18	2.55	0.12	0.08	0				0.108	0	0.18	0.11		0.03
2x6 at 16" oc, R-22 Requires air space on exterior	3.07	2.55	0.12	0.08	0	0.083				0	0.18		0.026	0.03
2x6 at 16" oc, R-22 Requires air space on exterior	3.10	2.55	0.12	0.08	0		0.109			0	0.18		0.026	0.03
2x6 at 16" oc, R-22 Requires air space on exterior	3.08	2.55	0.12	0.08	0			0.093		0	0.18		0.026	0.03
2x6 at 16" oc, R-22 Requires air space on exterior	3.09	2.55	0.12	0.08	0				0.108	0	0.18		0.026	0.03
2x6 at 16" oc, R-24	3.00	2.66	0.12	0.08	0					0			0.026	0.03
2x6 at 16" oc, R-22, 1" extruded polystyrene (R-5)	3.77	3.43	0.12	0.08	0	0.083				0			0.026	0.03
2x8 at 16" oc, R-28	3.72	3.38	0.12	0.08	0	0.083				0			0.026	0.03
2x6 at 24" oc, R-22	3.09	2.67	0.12	0.08	0	0.083				0		0.11		0.03
2x6 at 24" oc, R-22	3.12	2.67	0.12	0.08	0		0.109			0		0.11		0.03
2x6 at 24" oc, R-22	3.10	2.67	0.12	0.08	0			0.093		0		0.11		0.03
2x6 at 24" oc, R-22	3.12	2.67	0.12	0.08	0				0.108	0		0.11		0.03
2x6 at 24" oc, R-22 Requires air space on exterior	3.19	2.67	0.12	0.08	0	0.083				0	0.18		0.026	0.03
2x6 at 24" oc, R-22	3.01	2.67	0.12	0.08	0	0.083				0			0.026	0.03
2x6 at 24" oc, R-22 Requires air space on exterior	3.22	2.67	0.12	0.08	0		0.109			0	0.18		0.026	0.03
2x6 at 24" oc, R-22 Requires air space on exterior	3.20	2.67	0.12	0.08	0			0.093		0	0.18		0.026	0.03
2x6 at 24" oc, R-22 Requires air space on exterior	3.21	2.67	0.12	0.08	0				0.108	0	0.18		0.026	0.03
2x6 at 24" oc, R-24	3.14	2.8	0.12	0.08	0	0.083				0			0.026	0.03
6" ICF - above ground (R-20)	3.92	3.58	0.12	0.08	0					0		0.11		0.03
6" ICF - above ground (R-20)	3.84	3.58	0.12	0.08	0					0			0.026	0.03
2x4 at 16" oc, R-12, 1" extruded polystyrene (R-5)	2.79	2.37	0.12	0.08	0	0.083				0		0.11		0.03
2x4 at 16" oc, R-12, 1" extruded polystyrene (R-5)	2.89	2.37	0.12	0.08	0	0.083				0	0.18		0.026	0.03
2x4 at 16" oc, R-12, 1.5" extruded polystyrene (R-7.5)	3.15	2.81	0.12	0.08	0					0		0.11		0.03
2x4 at 16" oc, R-12, 1.5" extruded polystyrene (R-7.5)	3.25	2.81	0.12	0.08	0					0	0.18		0.026	0.03
2x6 at 16" oc, R-20 - Icenene Classic (LD-C-50)	2.90	2.45	0.12	0.08	0		0.109			0		0.11		0.03
2x6 at 16" oc, R-20 - Icenene Classic (LD-C-50)	3.00	2.45	0.12	0.08	0		0.109			0	0.18		0.026	0.03
2x6 at 16" oc, R-22.5 - Icenene Classic Plus (LD-C-70)	3.02	2.57	0.12	0.08	0		0.109			0		0.11		0.03
2x6 at 16" oc, R-22.5 - Icenene Classic Plus (LD-C-70)	3.12	2.57	0.12	0.08	0		0.109			0	0.18		0.026	0.03

Effective value for CEILING BELOW ATTICS	Column2 total effective assembly (RSI/R value)	Ceiling Assembly	interior air film	1/2" drywall	5/8" drywall	6 mil poly	11" cellulose	14" cellulose	R-40 fiberglass batt	14" fiberglass loose filled	exterior air film
Req'd Minimums: Zone 6 - 8.67/8.67 Zone 7A - 10.43/8.67			0.11	0.08	0.097	0	6.985	8.89	7.04	6.67	0.03
2x4 bottom cord truss at 24" oc, R-12 fiberglass batt	8.97	1.76	0.11	0.08	0		6.985				0.03
2x4 bottom cord truss at 24" oc, R-12 fiberglass batt	9.04	1.76	0.11	0.097	0			7.04			0.03
2x4 bottom cord high healed truss at 24" oc, fiberglass batt	9.16	1.88	0.11	0.097	0			7.04			0.03
2x4 bottom cord truss at 24" oc, R-12 fiberglass loose	8.77	1.88	0.11	0.08	0				6.67		0.03
2x4 bottom cord truss at 24" oc, 3.5" cellulose	9.04	1.83	0.11	0.08	0		6.985				0.03
2x4 bottom cord truss at 24" oc, 3.5" cellulose	9.05	1.83	0.11	0.097	0		6.985				0.03
2x4 bottom cord truss at 24" oc, 3.5" cellulose	10.96	1.83	0.11	0.097	0			8.89			0.03

Effective value for CATHEDRAL AND FLAT ROOFS	Column2 total effective assembly (RSI/R value)	Ceiling Assembly	interior air film	1/2" drywall	5/8" drywall	6 mil poly	exterior air film
Req'd Minimums: Zone 6 - 4.67/4.67 Zone 7A - 5.02/5.02			0.11	0.08	0.097	0	0.03
2x10 roof rafter/joist at 16" oc, R-28 fiberglass batt	4.36	4.14	0.11	0.08	0		0.03
2x10 roof rafter/joist at 16" oc, R-28 fiberglass batt	4.38	4.14	0.11	0.097	0		0.03
2x10 roof rafter/joist at 24" oc, R-28 fiberglass batt	4.52	4.3	0.11	0.08	0		0.03
2x10 roof rafter/joist at 24" oc, R-28 fiberglass batt	4.54	4.3	0.11	0.097	0		0.03
2x12 roof rafter/joist at 24" oc, R-28 fiberglass batt	4.54	4.3	0.11	0.097	0		0.03
2x12 roof rafter/joist at 16" oc, R-32 fiberglass batt	5.03	4.81	0.11	0.08	0		0.03
2x12 roof rafter/joist at 16" oc, R-32 fiberglass batt	5.05	4.81	0.11	0.097	0		0.03
2x12 roof rafter/joist at 24" oc, R-32 fiberglass batt	5.20	4.98	0.11	0.08	0		0.03
2x12 roof rafter/joist at 24" oc, R-32 fiberglass batt	5.22	4.98	0.11	0.097	0		0.03
2x12 roof rafter/joist at 16" oc, R-40 fiberglass batt	5.87	5.65	0.11	0.08	0		0.03
2x12 roof rafter/joist at 24" oc, R-40 fiberglass batt	6.14	5.92	0.11	0.08	0		0.03
2x12 roof rafter/joist at 24" oc, R-40 fiberglass batt	6.16	5.92	0.11	0.097	0		0.03



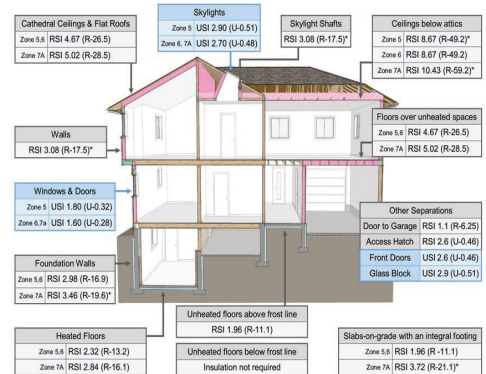
REGIONAL DISTRICT of Fraser-Fort George

2 3/8" VENTILATION AIR GAP

Effective value for FLOORS OVER UNHEATED SPACES without calculations for finished floor	Column2 total effective assembly (RSI/R value)	Ceiling Assembly	exterior air film	1/2" drywall	5/8" drywall	5/8" plywood subfloor	interior air film
Req'd Minimums: Zone 6 - 4.67/4.67 Zone 7A - 5.02/5.02			0.03	0.08	0.097	0.14	0.11
14" joist at 16" oc, R-28 fiberglass batt	4.74	4.38	0.03	0.08	0	0.14	0.11
2x10 joist at 16" oc, R-28 fiberglass batt	4.50	4.14	0.03	0.08	0	0.14	0.11
2x10 joist at 16" oc, R-32 fiberglass batt	4.92	4.56	0.03	0.08	0	0.14	0.11
2x12 joist at 16" oc, R-40 fiberglass batt	6.01	5.65	0.03	0.08	0	0.14	0.11
2x12 joist at 24" oc, R-40 fiberglass batt	6.30	5.92	0.03	0.097	0	0.14	0.11

BELOW GRADE:

Effective value for FOUNDATION WALLS BELOW GRADE	Column2 total effective assembly (RSI/R value)	concrete, studs and cavity	wall air cavity (20-90 mm)	6 mil poly	1/2" drywall	interior air film
Req'd Minimums: Zone 6 - 2.98/2.98 Zone 7A - 3.46/2.98			0.18	0	0.07625	0.12
8" concrete, 1/2" airspace, 2x6 at 24" oc, R-20 batt	2.98	2.78		0	0.07625	0.12
8" concrete, 1" rigid XPS, 2x4 at 24" oc, R-12 batt	3.40	3.2			0.07625	0.12
8" concrete, 1" rigid XPS, 2x6 at 24" oc, R-20 batt	3.96	3.76			0.07625	0.12
3" rigid (R-15), 8" concrete	3.10	2.72	0.18		0.07625	0.12
8" concrete, 1" rigid (R-5), 2x4 at 24" oc, R-12 batt	3.51	3.31			0.07625	0.12



8"ICF (assuming 2 3/4" Type 2-Polystyrene each side)	4.19	3.99				0.07625	0.12
8"ICF (assuming 2 1/2" Type 2-Polystyrene each side)	4.00	3.8				0.07625	0.12

	Column2									
Effective value for FLOORS BELOW GRADE	total effective assembly (RSI/R value)	2" rigid XPS	2 1/2" rigid XPS	3" rigid XPS	3" rigid Type 2-Polystyrene	4" rigid XPS	5" rigid Type 2-Polystyrene	6 mil poly	minimum 3" concrete	interior air film
Values		1.75	2.22	2.667	2.13	3.53	3.556	0	0.03	0.16
Req'd Minimums: Zone 6 - see picture Zone 7A - see picture										
2" XPS, concrete floor (needs 5" concrete)	1.94	1.75						0	0.03	0.16
2 1/2" XPS, concrete floor	2.41		2.22					0	0.03	0.16
3" XPS, concrete floor	2.86			2.667				0	0.03	0.16
3" rigid Type 2-Polystyrene, concrete floor	2.32				2.13			0	0.03	0.16
4" XPS, concrete floor	3.72					3.53		0	0.03	0.16
5" rigid Type 2-Polystyrene, concrete floor	3.75						3.556	0	0.03	0.16