

Energy Code Compliance

Summary – 9.36 Prescriptive

PROJECT INFORMATION					
PID			PERMIT NUMBER		
CIVIC ADDRESS					
LOT		SUBDIVISION			
INSTRUCTIONS					
Complete the table below based on your building plans and equipment specification. - RSI values for ceilings, walls, and floors are typically located on your building plans. - Window, door, and skylight U values and ER values are located on the supplier quote sheet. - HRV and heating/cooling equipment efficiency are typically located on the contractor's equipment specifications. Points are generated for specific systems based on their performance. See the explanatory material section of this form for more explanation.					
PRESCRIPTIVE PATH					
		Proposed RSI	Minimum RSI		
			Zone 6	Zone 7A	
Ceiling Below Attic			8.67	10.43	
Ceiling Without Attic			4.67	5.02	
Above Grade Walls Section 1.1			2.97	3.08	Points
Below Grade Walls Section 1.2			2.98	3.46	Points
Slab Above Frost Line			1.96	1.96	
Heated Slab			2.32	2.84	
Exposed Floors			4.67	5.02	
Windows and Doors Section 1.3			1.6U or 25ER		Points
Skylights			2.75U		
HRV Section 1.4	Make:	Model:			
	Efficiency at 0°C	60% Min.			Points
	Efficiency at -25°C	55% Min.			
Heating and Cooling	Make:	Model:			
	Efficiency:				
	☐ Oil	☐ Gas	☐ Pellet	☐ Electric	
	☐ Furnace	☐ Boiler	☐ Air Source Heat Pump		
	☐ Ground Source Heat Pump		☐ Electric Baseboard		
Water Heater Section 1.5	Make:	Model:			
	Efficiency:	☐ NB Power Rental			Points
	☐ Conserver	☐ Condensing			
	☐ Instantaneous	☐ Solar			
	☐ Indirect Fired	☐ Desuperheater			
Building Volume Section 1.6					Points
Air Tightness Section 1.7					Points
Total					10 Minimum

Explanatory Material for Prescriptive Path

This section provides details on how points can be achieved in the prescriptive path. Please note that improved building components must have a minimum of 10 points in total. These 10 points can be from a single area or can be a total from 2 or more areas. Before proceeding further, it is important to know what climactic zone your property is in. New Brunswick consists of both Zone 6 and 7A with the Southern portion of the province located in Zone 6 and the Northern portion of the province located in Zone 7A. Contact your local building department if you need clarification on what climate zone your project site falls in.

1.1 Above Grade Walls

The RSI values for above grade walls is the effective value of the insulation of the wall. This includes the impact of thermal bridging of repetitive framing members and contributions of other non-insulation products. This information is likely located on your plans. Common assemblies have been pre-calculated for convenience and is attached at the end of this document.

Effective RSI Value	Zone 6	Zone 7A
3.08	1.6	2.1
3.69	6.2	6.7
3.85	6.9	7.4
3.96	7.7	8.2
4.29	9.2	9.7
4.40	9.9	10.3
4.57	10.6	11.1
4.73	11.1	11.5
4.84	11.6	12.1
5.01	12.2	12.7
5.45	13.6	14.0

1.2 Below Grade Walls

The RSI values for below grade walls is the effective value of the insulation of the wall. This includes the impact of thermal bridging of repetitive framing members (if any) and contributions of other non-insulation products. This information is likely located on your plans.

Effective RSI Value	Zone 6	Zone 7A
3.09	0.2	0.2
3.46	0.8	0.6
3.90	1.4	1.1

1.3 Windows and Doors

Windows and doors are eligible for points based on the following table. In the event that you have units that perform at different levels, the worst performing unit will dictate the points achieved. NOTE: specifications from the supplier are required to verify the energy efficiency.

Maximum USI Value	OR	Minimum Energy Rating (ER)	Zone 6	Zone 7A
1.44		29	1.6	1.8
1.22		34	4.6	5.5
1.05		40	8.8	8.9
0.94		42	10.5	10.7
0.82		44	12.4	12.6

1.4 HRVs

Points may be awarded for higher performing heat recover ventilators in accordance with the following table.

HRV Sensible Recovery Efficiency	Zone 6	Zone 7A
60%	3.6	3.7
70%	4.2	4.2
80%	4.8	4.8
85%	5.1	5.0

1.5 Water Heaters

Points for water heaters are available for high performing oil, gas, and heat pump water heaters as follows:

Type of Equipment	Efficiency	Zone 6	Zone 7A
Oil or Gas Tankless	EF $\geq$ 0.95 or UEF $\geq$ 0.92	4.9	3.1
Oil or Gas Storage	EF $\geq$ 0.80 or UEF $\geq$ 0.83	4.9	3.1
Heat Pump Water Heater	EF $\geq$ 2.35	3.8	3.0

1.6 Building Volume

Building volume is a measure of the conditioned space of the building. Areas that are not normally conditioned, like an attached garage, are not included in the calculation. Smaller buildings and units are also awarded points simply due to their smaller size. Multiple dwelling unit buildings with no suite exceeding 230 m² are awarded 10 points. Building volume is calculated based on all heated/cooled space in the building, regardless of if it is “finished” or not, and measured to the interior surface of exterior walls, ceilings, and floors. Single dwelling unit buildings are awarded points based on the following table:

Building Volume m ³	All Zones
$\leq$ 390 (1721 ft ² for 8' ceiling)	1
$\leq$ 380 (1677 ft ² for 8' ceiling)	2
$\leq$ 370 (1633 ft ² for 8' ceiling)	3
$\leq$ 360 (1589 ft ² for 8' ceiling)	4
$\leq$ 350 (1545 ft ² for 8' ceiling)	5
$\leq$ 340 (1501 ft ² for 8' ceiling)	6
$\leq$ 330 (1457 ft ² for 8' ceiling)	7
$\leq$ 320 (1412 ft ² for 8' ceiling)	8
$\leq$ 310 (1368 ft ² for 8' ceiling)	9
$\leq$ 300 (1324 ft ² for 8' ceiling)	10

1.7 Air Tightness

Note of Caution: air tightness can only be tested and confirmed at the end of the project, after the installation of almost all the items listed above. It is extremely risky to rely on achieving points in this category since missing the air tightness target would mean you need to add points another way. Adding points at this stage of the project in other categories likely involves substantial costs. For this reason, it should only be used by experienced builders who regularly have their projects air tested.

To achieve points in this category, a blower door test must be completed by a qualified technician at the end of construction and points are awarded based on the air tightness level achieved.

Guarded ACH	Zone 6	Zone 7A
2.0	3.5	4.6
1.5	7.0	9.3
1.0	10.5	13.9
0.6	13.4	17.8