

March 2017

This Technical bulletin provides the status of adoption by provinces/territories of the energy efficiency requirements in Part 9 of the National Building Code of Canada and the 2011 NECB as the date of this bulletin.

Table 1 – Summary of Provinces/Territories Adoption of Part 9.36 of NBC and 2011 NECB

Province/Territory	Adopted Part 9.36 Energy Efficiency	Adopted 2011 NECB
British Columbia	Yes*	Yes
Alberta	Yes	Yes
Saskatchewan	No	No
Manitoba	Yes	Yes
Ontario	No	Yes**
Quebec	No	No
New Brunswick	No	No
Nova Scotia	Yes	Yes
PEI	No	No
Newfoundland	No	No
Yukon	Yes	No
NWT	Yes	No
Nunavut	No	No

*Vancouver bylaw is stricter.

**Use with Ontario Supplementary Standard SB10

Part 9.36 of the NBC specifies the required effective thermal resistance values of opaque building assemblies based on the Heating Degree-Days of the location and whether the building has a Heat-Recovery Ventilator. The minimum effective thermal resistance values are provided in Tables 2 and 3 for Above-ground assemblies and in Tables 4 and 5 for assemblies below grade or in contact with the ground.

March 2017

Table 2 – Minimum Effective Thermal Resistance of Above-ground Opaque Assemblies for Buildings without a Heat-Recovery Ventilator

Above-ground opaque Building Assembly	Heating Degree Days of Building Location (Celsius Degree Days)					
	Zone 4 < 3000	Zone 5 3000 to 3999	Zone 6 4000 to 4999	Zone 7A 5000 to 5999	Zone 7B 6000 to 6999	Zone 8 ≥ 7000
	Minimum Effective Thermal Resistance (RSI), (m ² .K)W					
Ceilings below attics	6.91	8.67	8.67	10.43	10.43	10.43
Cathedral ceilings and flat roofs	4.67	4.67	4.67	5.02	5.02	5.02
Walls	2.78	3.08	3.08	3.08	3.08	3.08
Floors over unheated spaces	4.67	4.67	4.67	5.02	5.02	5.02

March 2017

Table 3 – Minimum Effective Thermal Resistance of Above-ground Opaque Assemblies for Buildings with a Heat-Recovery Ventilator

Above-ground opaque Building Assembly	Heating Degree Days of Building Location (Celsius Degree Days)					
	Zone 4 < 3000	Zone 5 3000 to 3999	Zone 6 4000 to 4999	Zone 7A 5000 to 5999	Zone 7B 6000 to 6999	Zone 8 ≥ 7000
	Minimum Effective Thermal Resistance (RSI), (m ² .K)W					
Ceilings below attics	6.91	8.67	8.67	8.67	10.43	10.43
Cathedral ceilings and flat roofs	4.67	4.67	4.67	5.02	5.02	5.02
Walls	2.78	2.97	2.97	2.97	3.08	3.08
Floors over unheated spaces	4.67	4.67	4.67	5.02	5.02	5.02

March 2017

Table 4 – Minimum Effective Thermal Resistance of Assemblies Below-Grade or in Contact with the Ground in Buildings without a Heat-Recovery Ventilator

Building Assembly Below-Grade or in Contact with the Ground	Heating Degree Days of Building Location (Celsius Degree Days)					
	Zone 4 < 3000	Zone 5 3000 to 3999	Zone 6 4000 to 4999	Zone 7A 5000 to 5999	Zone 7B 6000 to 6999	Zone 8 ≥ 7000
	Minimum Effective Thermal Resistance (RSI), (m ² .K)W					
Foundation Walls	1.99	2.98	2.98	3.46	3.46	3.97
Unheated floors						
Below frost line	Uninsulated	Uninsulated	Uninsulated	Uninsulated	Uninsulated	Uninsulated
Above frost line	1.96	1.96	1.96	1.96	1.96	1.96
Heated floors and unheated floors on permafrost	n/a	n/a	n/a	n/a	4.44	4.44
Heated floors	2.32	2.32	2.32	2.84	2.84	2.84
Slab-on-grade with an integral footing	1.96	1.96	1.96	3.72	3.72	4.59

March 2017

Table 5 – Minimum Effective Thermal Resistance of Assemblies Below-Grade or in Contact with the Ground in Buildings with a Heat-Recovery Ventilator

Building Assembly Below-Grade or in Contact with the Ground	Heating Degree Days of Building Location (Celsius Degree Days)					
	Zone 4 < 3000	Zone 5 3000 to 3999	Zone 6 4000 to 4999	Zone 7A 5000 to 5999	Zone 7B 6000 to 6999	Zone 8 ≥ 7000
	Minimum Effective Thermal Resistance (RSI), (m ² .K)/W					
Foundation Walls	1.99	2.98	2.98	2.98	2.98	2.98
Unheated floors						
Below frost line	Uninsulated	Uninsulated	Uninsulated	Uninsulated	Uninsulated	Uninsulated
Above frost line	1.96	1.96	1.96	1.96	1.96	1.96
Heated floors and unheated floors on permafrost	n/a	n/a	n/a	n/a	4.44	4.44
Heated floors	2.32	2.32	2.32	2.84	2.84	2.84
Slab-on-grade with an integral footing	1.96	1.96	1.96	2.84	2.84	3.72

For information on assemblies that meet the prescriptive wall requirements of Part 9.36 for specific heating degree day locations please refer to the document, [Effective Thermal Resistance of Wall Assemblies Information](#).

March 2017

For buildings that fall outside of Part 9, the 2011 National Energy Code for Buildings sets maximum limits for overall thermal transmittance requirements for opaque building assemblies. The requirements for above-ground assemblies are given in Table 6 while the building assemblies in contact with the ground are outlined in Table 7.

Table 6 – Overall Transmittance of Above-Ground Opaque Building Assemblies

Above-ground Opaque Building Assembly	Heating Degree Days of Building Location (Celsius Degree Days)					
	Zone 4 < 3000	Zone 5 3000 - 3999	Zone 6 4000 - 4999	Zone 7A 5000 - 5999	Zone 7B 6000 - 6999	Zone 8 ≥ 7000
	Maximum Overall Thermal Transmittance (W/(m ² .K))					
Walls	0.315	0.278	0.247	0.210	0.210	0.183
Roofs	0.227	0.183	0.183	0.162	0.162	0.142
Floors	0.227	0.183	0.183	0.162	0.162	0.142

Table 7 – Overall Transmittance of Building Assemblies in Contact with the Ground

Assembly in Contact with the Ground	Heating Degree Days of Building Location (Celsius Degree Days)					
	Zone 4 < 3000	Zone 5 3000 - 3999	Zone 6 4000 - 4999	Zone 7A 5000 - 5999	Zone 7B 6000 - 6999	Zone 8 ≥ 7000
	Maximum Overall Thermal Transmittance (W/(m ² .K))					
Walls	0.568	0.278	0.247	0.210	0.210	0.183
Roofs	0.227	0.183	0.183	0.162	0.162	0.142
Floors	0.227	0.183	0.183	0.162	0.162	0.142