

Minimum Insulation Values per Building Assembly

Zone 6 (4000-4999 Heating Degree-Days Below 18°C)

The minimum **effective** thermal resistance values to achieve the requirements of Section 9.36 in the 2015 National Building Code are shown in Table 1. Wall assembly requirements are relaxed where a heat recovery ventilator (HRV) is utilized.

Insulation levels by assembly to achieve effective thermal resistance requirements

	No HRV RSI (R)	HRV RSI (R)
Below Grade Walls (Foundations)	2.98 (16.9)	2.98 (16.9)
Unheated Floors below Frost Line	Uninsulated	
Unheated Floors above Frost Line	1.96 (11.1)	1.96 (11.1)
Heated Floors (In-Floor Heating System)	2.32 (13.2)	2.32 (13.2)
Slabs-on-Grade with Integral Footing	1.96 (11.1)	1.96 (11.1)
Floors over Unheated Spaces	4.67 (26.5)	4.67 (26.5)
Rim Joists	3.08 (17.5)	2.97 (16.9)
Above Grade Walls	3.08 (17.5)	2.97 (16.9)
Exterior Walls of an Attached Garage	3.08 (17.5)	2.97 (16.9)
Walls Adjacent to an Unconditioned Garage	2.92 (16.6)	2.81 (16.0)
Ceilings below Attics	8.67 (49.2)	8.67 (49.2)
Cathedral Ceilings	4.67 (26.5)	4.67 (26.5)
Flat Roofs	4.67 (26.5)	4.67 (26.5)
Skylight Shafts	3.08 (17.5)	2.97 (16.9)
Attic Hatch	2.60 (14.8)	2.60 (14.8)

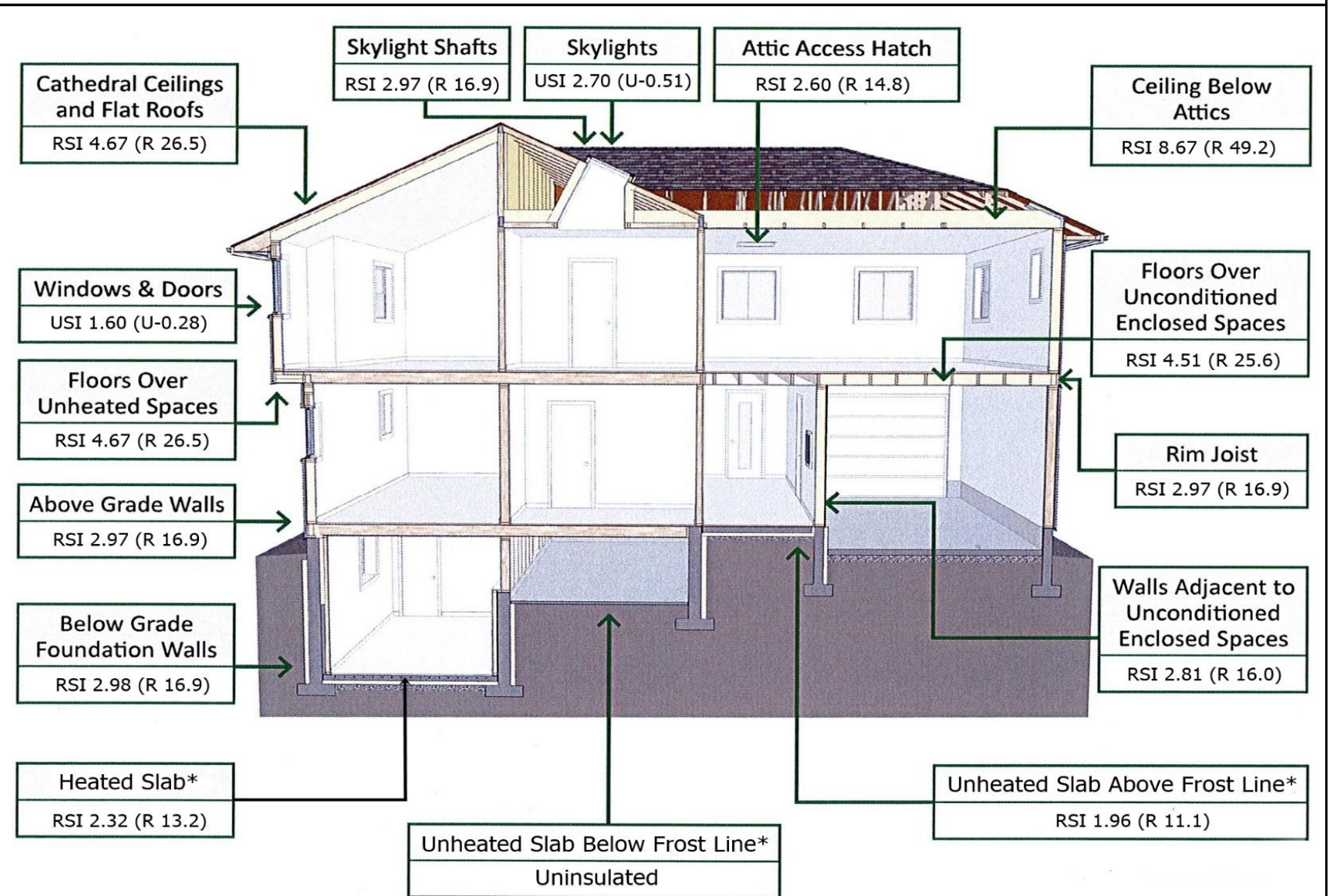
Section 9.36.2.4.(4) of the Code allows for a relaxation of RSI 0.16 for building envelope assemblies adjacent to unconditioned enclosed spaces such as verandas, sun porches, vestibules, floor over a garage or walls between an attached garage and a house. This does not include vented spaces such as an attic, roof or crawl spaces.

Required Insulation Values for Windows, Doors and Skylights

	Maximum U-Value	Min. Energy rating
Windows	1.60	25
Doors*	1.60	25
Skylights	2.70	
Glass Block (Max Aggregate Area is 1.85m ² (9.36.2.7.(4))	2.90	
Vehicle Access (Garage) Doors	1.10	

* One entrance door may have a rating of USI-2.60

Refer to 9.36.2.7.(3) for exception for site-glazed or site-assembled, factory made products



Graphic Credit: Illustrated Guide-Energy Efficiency Requirements for Houses in British Columbia

Values stated above include insulation adjustments permitted with an HRV installed.

*A heated slab is a concrete slab with an in-floor heating system (electric or hydronic).

This pamphlet has no legal status and cannot be used as an official interpretation of the various codes and regulations currently in effect.