

Basement Slab Assembly

Assembly # MS-02

Description: 76.2mm (3") Heated concrete slab over 63.5mm (2.5") extruded polystyrene.

Layer	Assembly Components (layer listed from exterior to interior)	RSI Value	R Value
1	63.5mm (2.5") extruded polystyrene	2.2225	10.09595
2	76.2mm (3") concrete slab	0.03048	0.173073
3	Inside Air Film	0.16	0.908522

Total **2.41** **11.2**

Note:
The thermal resistance values of each continuous layer incorporated in the assembly are from A-9.36.2.4.(1)D.

Parallel Heat Flow Calculation:

$$RSI_{parallel} = \frac{100}{\frac{\% \text{ area of framing}}{RSI_f} + \frac{\% \text{ area of cavity}}{RSI_c}}$$

% Area of Framing	N/A	Value of the area of framing member obtained from Table A-9.36.2.4.(1)A
% Area of Cavity	N/A	Values of the area of cavity obtained from Table A-9.36.2.4.(1)A
RSI Framing	N/A	
RSI Cavity	N/A	
RSI Parrallel *	N/A	

Note: The above values and references are from the 2010 National Building Code of Canada. This document is intended to be used for reference purposes. The assembly components shall be detailed in a cross section on the submitted plans.

RSI_{eff} = 2.41 (m²·K)/W	R_{eff} = 11.2 (h·ft²·°F)/Btu
eff = effective thermal resistance	