## Thermal Characteristics of Building Assemblies (9.36.2.6. to 9.36.2.8.)

*Effective* thermal resistance values to achieve the requirements of Section 9.36. in the 2014 Alberta Building Code are shown in *Table 1* below. Wall assembly requirements are relaxed where a heat recovery ventilator (HRV) is utilized.

### Table 1: Insulation levels by assembly to achieve effective thermal resistance requirements

<table>
<thead>
<tr>
<th></th>
<th>Zone 6</th>
<th>Zone 7A</th>
<th>Zone 7B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No HRV</td>
<td>HRV</td>
<td>No HRV</td>
</tr>
<tr>
<td>Ceiling below attics</td>
<td>8.67 (49.2)</td>
<td>8.67 (49.2)</td>
<td>10.43 (59.2)</td>
</tr>
<tr>
<td>Cathedral ceilings and flat roofs</td>
<td>4.67 (26.5)</td>
<td>4.67 (26.5)</td>
<td>5.02 (28.5)</td>
</tr>
<tr>
<td>Above grade walls</td>
<td>3.08 (17.5)</td>
<td>2.97 (16.9)</td>
<td>3.08 (17.5)</td>
</tr>
<tr>
<td>Floors over unheated spaces</td>
<td>4.67 (26.5)</td>
<td>4.67 (26.5)</td>
<td>5.02 (28.5)</td>
</tr>
<tr>
<td>Rim joists</td>
<td>3.08 (17.5)</td>
<td>2.97 (16.9)</td>
<td>3.08 (17.5)</td>
</tr>
<tr>
<td>Below grade foundation walls</td>
<td>2.98 (16.2)</td>
<td>2.98 (16.2)</td>
<td>3.46 (19.7)</td>
</tr>
<tr>
<td>Un heated floors below frost line</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exterior walls of a heated attached garage</td>
<td>3.08 (17.5)</td>
<td>2.97 (16.9)</td>
<td>3.08 (17.5)</td>
</tr>
<tr>
<td>Walls adjacent to an unconditioned garage</td>
<td>2.92 (16.6)</td>
<td>2.81 (16.0)</td>
<td>2.92 (16.6)</td>
</tr>
<tr>
<td>Un heated floors above frost line</td>
<td>1.96 (11.1)</td>
<td>1.96 (11.1)</td>
<td>1.96 (11.1)</td>
</tr>
<tr>
<td>Slabs on grade with an integral footing</td>
<td>1.96 (11.1)</td>
<td>1.96 (11.1)</td>
<td>3.72 (21.1)</td>
</tr>
<tr>
<td>Heated floors</td>
<td>2.32 (13.2)</td>
<td>2.32 (13.2)</td>
<td>2.84 (16.1)</td>
</tr>
<tr>
<td>Windows and doors</td>
<td>1.60 (9.1)</td>
<td>1.60 (9.1)</td>
<td>1.60 (9.1)</td>
</tr>
<tr>
<td>Skylights</td>
<td>2.70 (15.3)</td>
<td>2.70 (15.3)</td>
<td>2.70 (15.3)</td>
</tr>
<tr>
<td>Skylight shafts</td>
<td>3.08 (17.5)</td>
<td>2.97 (16.9)</td>
<td>3.08 (17.5)</td>
</tr>
</tbody>
</table>

**Note #2** | 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 enclosed verandas, sun porches, floors over garages, or walls between an attached garage and a house. This does not include vented spaces such as an attic, roof and crawl spaces.

**Note #3** | See the exception for site-glazed or site-assembled, factory made products in 9.36.2.7.(3).
Urban Centres in Climate Zones 6, 7A and 7B

**Zone 6**
- Brooks
- Cardston
- Claresholm
- High River
- Lethbridge
- Medicine Hat
- Okotoks
- Pincher Creek
- Taber

**Zone 7A**
- Airdrie
- Banff
- Beaumont
- Calgary
- Camrose
- Canmore
- Cochrane
- Cold Lake
- Drumheller
- Edmonton
- Edson
- Fairview
- Fort Saskatchewan
- Grand Prairie
- Hinton
- Jasper
- Leduc
- Lloydminster
- Pincher Creek
- Red Deer
- Rocky Mountain House
- Sherwood Park
- Slave Lake
- Spruce Grove
- Stettler
- Stony Plain
- Sylvan Lake
- Valleyview
- Vegreville
- Wetaskiwin
- Whitecourt

**Zone 7B**
- Athabasca
- Fort McMurray
- Fort Vermilion
- Lac la Biche
- Manning
- Peace River

Note #1 | Always check with your local authority to confirm the climate zone.