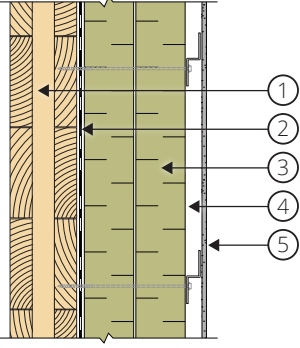
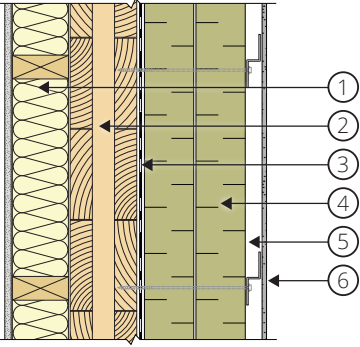
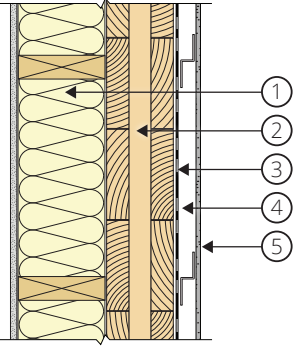


**Table 1** Wall Assembly Design Guidance for Climate Zones in the US and Canada\*

Wall Assembly (plan view)	Assembly Layers (listed interior to exterior)	Assembly Considerations
<b>EXTERIOR-INSULATED WALL ASSEMBLY</b>		
	<p><b>Legend</b></p> <ol style="list-style-type: none"> <li>1. Mass timber panel</li> <li>2. Air barrier and water-resistive barrier</li> <li>3. Exterior insulation</li> <li>4. Ventilated and drained air cavity</li> <li>5. Cladding</li> </ol>	<p><b>General Discussion</b></p> <p>Exterior insulation is one approach for mass timber wall assemblies. It allows the mass timber to be left exposed to the interior where allowed by fire code. Exterior insulation keeps the mass timber warm and dry to a near-indoor condition.</p>
<b>SPLIT-INSULATED WALL ASSEMBLY</b>		
	<p><b>Legend</b></p> <ol style="list-style-type: none"> <li>1. Interior insulation</li> <li>2. Mass timber panel</li> <li>3. Air barrier and water-resistive barrier</li> <li>4. Exterior insulation</li> <li>5. Ventilated and drained air cavity</li> <li>6. Cladding</li> </ol>	<p><b>General Discussion</b></p> <p>The use of both exterior and interior insulation may be desirable in some wall designs. This approach improves the overall effective R-value with less exterior insulation. It also benefits acoustics considerations by not leaving the mass timber exposed. This type of wall assembly should typically be assessed by a design professional.</p>
<b>INTERIOR-INSULATED WALL ASSEMBLY</b>		
	<p><b>Legend</b></p> <ol style="list-style-type: none"> <li>1. Interior insulation</li> <li>2. Mass timber panel</li> <li>3. Air barrier and water-resistive barrier</li> <li>4. Ventilated and drained air cavity</li> <li>5. Cladding</li> </ol>	<p><b>General Discussion</b></p> <p>The use of interior insulation improves the overall effective R-value of the assembly without the use of exterior insulation. This option still benefits acoustic considerations by not leaving the mass timber exposed. This type of wall assembly should typically be assessed by a design professional.</p>
<p>* This guide recommends the use of a drained and ventilated rainscreen assembly and details for all mass timber walls in all climate zones. This rainscreen will also help to dissipate inward solar-driven moisture.</p>		