



# Compare Quik-Therm Solar Dry to Exterior Mineral Wool

|  | Solar Dry (SDI)  | Mineral Wool (MW)   |
|--|--|---|
| <b>Moisture Management Breathability</b> |  <ul style="list-style-type: none"> <li>Breathable: Perforated and vented</li> <li>Perforations manage vapor diffusion</li> <li>Drains bulk water</li> <li>Second line of defence behind cladding</li> <li>No loss of R-Value</li> </ul> <p><b>LEARN MORE:</b> <a href="http://quiktherm.com">quiktherm.com</a></p> |  <ul style="list-style-type: none"> <li>Breathable: Absorbs moisture. May dry over time</li> <li>Drains much slower than Solar Dry. May Increase sheathing moisture</li> <li>Mold potential</li> <li>Significant R-Value loss with minimal moisture</li> </ul> <p><b>LEARN MORE:</b> <a href="#">Tech Solutions 520.0-Dow</a><br/><b>LEARN MORE:</b> <a href="#">Convective Heat Loss through Mineral Wool in a Rainscreen Facade</a></p> |
| <b>Fire Code Compliance</b>              | <ul style="list-style-type: none"> <li>Compliant up to 6 stories - wood frame construction</li> <li>Fire rated cladding required over 3 stories</li> <li>Meets CAN/ULC S101</li> </ul>   | <ul style="list-style-type: none"> <li>Non-combustible</li> <li>Fire compliant with most walls</li> <li>Engineering concerns regarding some fasteners</li> </ul>  |
| <b>Effective R-Value Performance</b>     | <ul style="list-style-type: none"> <li>Tested to ASTM C1363, real world conditions: +21°C inside/-18°C outside with 22 kph wind</li> <li>Up to 20% better R-value performance</li> <li>R-value not affected by moisture or wind</li> </ul>   | <ul style="list-style-type: none"> <li>Product R-value tested only</li> <li>Reduced R-value: Thermal bridging, moisture and wind</li> <li>Cannot tape (seal) connection points</li> </ul>   |
| <b>Cost Effectiveness</b>                | <ul style="list-style-type: none"> <li>30-40 percent lower cost; material and labor</li> <li>Installs in ½ the time and 7 times lighter than MW</li> <li>6" maximum thickness</li> </ul>   | <ul style="list-style-type: none"> <li>Expensive and complicated wall design</li> <li>2x4 sheets. Up to 8 sheets required to cover same area as 1 sheet of SDI</li> <li>3" maximum thickness, often requires 2 layers</li> </ul>  |
| <b>Installation</b>                      | <ul style="list-style-type: none"> <li>Rugged, durable, semi-flexible and lightweight</li> <li>4x8 sheets cover 32 ft<sup>2</sup></li> <li>Simple wall design, T&amp;G connections, easy taping</li> <li>No itch or lung irritation, no protective gear</li> </ul>   | <ul style="list-style-type: none"> <li>Brittle vitreous fibers. Non-continuous. Itchy</li> <li>2x4 sheets, requires 4 to 8 times more sheets</li> <li>Complex: Fasteners, clips, z-bars, gap problems</li> <li>Dust mask, overalls, gloves, and goggles required</li> </ul>   |
| <b>Environmental Impact</b>              | <ul style="list-style-type: none"> <li>98% air, polystyrene beads expanded with steam</li> <li>Low embodied energy requirements</li> <li>EPS received A+ rating on environmental matrices</li> </ul>   | <ul style="list-style-type: none"> <li>Environmental concerns in manufacturing process</li> <li>High embodied energy requirements</li> </ul> <p><b>LEARN MORE:</b> <a href="#">Jefferson County residents in uproar over new insulation plant</a></p>   |
| <b>Wind Washing</b>                      | <ul style="list-style-type: none"> <li>Tested to 22 kph wind, ASTM C1363</li> <li>Continuous insulation sealed with tape &amp; adhesive</li> <li>R-value not affected by wind</li> </ul>   | <ul style="list-style-type: none"> <li>Wind washing may significantly reduce R-value performance</li> <li>Gaps and edges cannot be sealed</li> <li>Moisture and wind combined further reduce R-value</li> </ul>   |
| <b>Compressive Strength</b>              | <ul style="list-style-type: none"> <li>High compressive strength 19.7 psi</li> <li>Cement board cladding compliant. No wavy cladding</li> <li>Simple cost effective fastening system</li> </ul>  | <ul style="list-style-type: none"> <li>Low compressive strength (8 - 11 psi)</li> <li>May not be cement board compliant. May cause wavy cladding</li> <li>Complex expensive fastening system</li> </ul>   |
| <b>Health &amp; Safety</b>               | <ul style="list-style-type: none"> <li>Manufactured with food grade materials</li> <li>Doesn't irritate skin and lungs</li> </ul>  | <ul style="list-style-type: none"> <li>Vitreous fibers. May contain formaldehyde</li> <li>Lung and skin irritation. Health concerns</li> </ul> <p><b>LEARN MORE:</b> <a href="#">Synthetic Vitreous Fibres - Health and Safety</a></p>  |

## The Bottom Line

Quik-Therm Solar Dry outperforms Mineral Wool. Lower overall cost. Faster and easier to install. The manufacturing process has minimal environmental impact and there are no significant health risks.