Shaftwall Insulation

Acoustical Performance
Designed for use as an acoustical insulation in the cavity of a metal stud and gypsum board shaftwall partition system. Shaftwall Insulation reduces the amount of airborne sound transmitted through the shaftwall to the adjoining space. Depending on the construction method used, Shaftwall Insulation can reduce the amount of airborne sound transmitted through a shaftwall by as much as 5 to 7 dBs.

Fire Safety
Shaftwall Insulation complies with the requirements of ASTM E 119 for 1 hour fire rated partitions. The Surface Burning Characteristics of Shaftwall Insulation meet or exceed the code requirements for all building types as described by the International Building Code (ICC), Uniform Building Code (ICBO), National Building Code (BOCA) and Standard Building Code (SBCCI).

Easy Installation
Owens Corning Shaftwall Insulation is lightweight and easy to handle. It is pre-cut in 4’ or 8’ lengths for easy one step installation. Batts are conveniently sized 1/8 of an inch wider than standard stud spaces and can be pressed into place for friction-fit. No adhesives or fasteners are required. Shaftwall Insulation can be easily cut to fit around wires and obstructions such as outlets and junction boxes.

Lightweight Eliminates Slumping
Shaftwall Insulation is sag resistant and will not slump within the wall cavity due to building vibration. Shaftwall Insulation is also dimensionally stable. The insulation’s inorganic glass fiber construction is inert and will not rot or mildew.

Additional Thermal Control
Shaftwall Insulation also provides thermal resistance with an R-value of 5.8.

Technical Design Considerations
Maximum acoustical performance is obtained by eliminating penetrations in walls between adjoining spaces. When electrical and plumbing connections are installed in walls of adjoining spaces, precautions should be taken to stagger electrical outlet boxes and to caulk around conduit and other through-the-wall penetrations. The entire perimeter of the wall should also be caulked.

Due to the potential for skin irritation, Shaftwall Insulation should not be used for exposed applications where it will be subject to human contact.

Installation
Shaftwall Insulation may be friction-fit between metal studs until the interior finish is applied. In applications where Shaftwall Insulation does not fill the cavity depth or where insulation will be applied in continuous heights over 8 feet, supplementary support should be provided to hold the product in place. Walls with penetrations require that insulation be carefully fit around outlets, junction boxes and other irregularities.

Product should be kept dry during shipping, storage and installation.

Applicable Standards
Shaftwall Insulation complies with ASTM C 665, Type I.

The thermal resistance values for Shaftwall Insulation were tested in accordance with ASTM C 518: R-value for insulation only.

The surface burning characteristics of Shaftwall Insulation were derived from product tests per ASTM E 84 and UL 723. This standard is used solely to measure and describe properties of products in response to heat and flame under controlled laboratory conditions. These numerical ratings are not intended to reflect hazards presented by this or any other material under actual fire conditions. Values are reported to the nearest five rating.
# Shaftwall Insulation

## Shaftwall System

<table>
<thead>
<tr>
<th>STC</th>
<th>Test No.</th>
<th>Construction Description</th>
<th>Fire Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>NCC-2616*</td>
<td>Unbalanced wall. 1” shaftliner one side. 2 layers 1/2” type “x” gypsum drywall other side: 2 1/2” I-studs. 1 1/2” Shaftwall Insulation</td>
<td>2 Hr. UL U497</td>
</tr>
<tr>
<td>45</td>
<td>NCC-2617*</td>
<td>Unbalanced wall, 1” shaftliner and 1 layer 1/2” type “x” gypsum drywall one side. 1 layer 1/2” type “x” gypsum drywall other side: 2 1/2” I-studs, 1 1/2” Shaftwall Insulation</td>
<td>2 Hr. UL U498</td>
</tr>
<tr>
<td>42</td>
<td>NCC-2542*</td>
<td>Single layer wall. 1” shaftliner one side, 1/2” type “x” gypsum drywall other side: 2 1/2” I-studs. 1 1/2” Shaftwall Insulation</td>
<td>1 Hr. UL U499</td>
</tr>
</tbody>
</table>

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## Shaftwall Insulation Technical Data

<table>
<thead>
<tr>
<th>K-value</th>
<th>Width/Length</th>
<th>Thickness</th>
<th>R-Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.26</td>
<td>24” (610mm)</td>
<td>1 1/2” (38mm)</td>
<td>5.8</td>
</tr>
<tr>
<td>0.26</td>
<td>24” (610mm)</td>
<td>48” (1219mm)</td>
<td>5.8</td>
</tr>
</tbody>
</table>

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## Water Absorption

Max. by Volume: Less than 0.05%

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## Dimensional Stability

Linear Shrinkage: Less than 0.1%

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## Surface Burning Characteristics/Building Code Construction Classifications

<table>
<thead>
<tr>
<th>Surface Burning Characteristics</th>
<th>Flame Spread</th>
<th>Smoke Developed</th>
<th>ICBO</th>
<th>BOCA</th>
<th>SBCCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unfaced</td>
<td>20</td>
<td>20</td>
<td>All Types</td>
<td>All Types</td>
<td>All Types</td>
</tr>
</tbody>
</table>

Shaftwall Insulation complies with the International Building Code (ICC), Uniform Building Code (ICBO), National Building Code (BOCA) and Standard Building Code (SBCCI) model code requirements for building construction types listed above.