ROCKWOOL Safe’n’Sound®

Fire and Soundproofing Insulation for Interior Partition Walls, Floors and Ceilings
Sound control and fire safety from one batt insulation

ROCKWOOL Safe’n’Sound® is a stone wool insulation for use in interior partitions and ceilings between floors of residential construction where superior fire resistance and acoustical performance are required.

Designed for interior applications, Safe’n’Sound® has not been engineered as a thermal insulation but as sound proofing and as a fire barrier. Withstanding temperatures up to 2150°F (1177°C), Safe’n’Sound® is non-combustible and will not produce toxic smoke or promote flames spreading, even when directly exposed to fire. This adds valuable extra time for people to reach safety and for fire services personnel to arrive.

ROCKWOOL Safe’n’Sound® has excellent acoustical dampening properties and provides an easy friction fit into walls, ceiling and floor applications. Its high density and unique fiber structure absorbs sound and reduces noise traveling from one room to another, improving occupant comfort.
Fire resistance enhances home safety
- Combination of natural stone and recycled content makes ROCKWOOL stone wool insulation an excellent fire barrier
- Works effectively to help contain the fire and prevent its spread even when directly exposed to fire
- Inherently non-combustible, ROCKWOOL Safe’n’Sound® can resist temperatures up to 2150°F (1177°C)

Water repellent & won’t sustain mold
- ROCKWOOL Safe’n’Sound® is resistant to water, rot, mold, mildew and bacterial growth
- Contributes to a safer and healthier indoor environment
- GREENGUARD certified, receiving the highest designation for indoor air quality

Higher density means a better fit
- ROCKWOOL Safe’n’Sound® batts are simple to cut with a serrated knife (such as a bread knife)
- Clean, straight cuts provide optimal fit around electrical boxes, wiring, and pipes – minimizing air flow
- Superior friction fit between studs completely fills the wall cavity preventing insulation from sagging

ROCKWOOL Safe’n’Sound® is an excellent acoustic barrier that effectively absorbs sound, making it the choice of professional recording studios.
Typical Assemblies for ROCKWOOL Safe’n’Sound®

Top View

Single stud interior wall
(Wood Studs – 16” On Center)

Using ROCKWOOL Safe’n’Sound®,
5/8” drywall (type x) and resilient channels at 16” provides:
• Fire Rating: 1 hour
• Sound Transmission Class (STC): 45

ROCKWOOL Safe’n’Sound®
Wall Components
(shown from outside to inside)
1. 5/8” Type X Gypsum
2. 3” Safe’n’Sound®
3. Resilient Channel
4. 5/8” Type X Gypsum Board

Interior ceiling/floor
(2 x 10 Joists – 16” On Center)

Using ROCKWOOL Safe’n’Sound®,
5/8” drywall (type x) and resilient channels at 24” provides:
• Fire Rating: 30 minutes
• Sound Transmission Class (STC): 50

ROCKWOOL Safe’n’Sound®
Ceiling/Floor Components
(shown from top to bottom)
1. Plywood Floor
2. Air Space
3. 6” Safe’n’Sound®
4. Resilient Channel
5. Gypsum Board

Because it doesn’t burn, Safe’n’Sound® can delay the spread of fire for added safety.
Sound control delivers peace and quiet

- Install Safe’n’Sound® in interior walls between rooms and in ceilings between floors
- Higher-density batts more effectively reduce airflow – thereby decreasing sound transmission
- Provides higher sound absorption against low-frequency (bass) ranges, which are most difficult to block
- Typical household applications include home theater, basements (ceilings), home office, laundry room, bathroom and furnace room

The Safe’n’Sound® interior partition wall and floor system is ideal for residential renovation activity such as home theaters.
Maintain a healthy living environment

Home life has changed, and sound dampening is more important than ever
Life is getting louder around the home. Televisions, home theaters, computers and video games blare from almost every room. Family cell phones constantly ring. More people work from home offices and entertainment rooms are the norm.

More and more, sound dampening is a must-have requirement for any modern family home. And unlike other insulation, ROCKWOOL Safe’n’Sound® provides higher sound absorption against low frequency (bass) ranges helping to provide a quieter, safer and more comfortable.

Fact
The cognitive performance of both children and adults is reduced by noise. Their ability to learn is impaired in noisy environments.

A GREENGUARD Gold certified product to help improve quality of life
ROCKWOOL Safe’n’Sound® products are GREENGUARD Gold certified and are recognized by the United States Green Building Council (USGBC) and Canada Green Building Council’s (CaGBC) LEED programs. The GREENGUARD Environmental Institute (GEI) is a non-profit organization that oversees the GREENGUARD Gold standards. The GEI’s mission is to protect human health and quality of life through programs that improve the indoor air that people breathe.

What this means is when Safe’n’Sound® stone wool insulation is installed into a home’s interior partition walls and ceilings between floors it provides piece of mind knowing the product has been designed for indoor spaces in such a way that it meets a strict certification criteria. GEI’s certification criteria is put in place to help reduce indoor air pollution while aiding in the creation of healthier indoor environments. It considers safety factors that account for sensitive individuals (such as children and the elderly), with the GREENGUARD Gold certified specifically ensuring the product is acceptable for use in environments such as schools and healthcare facilities where indoor air quality is of the utmost importance.
### Compliance and performance

<table>
<thead>
<tr>
<th>System Description</th>
<th>Sound Transmission Class (STC)</th>
<th>Fire Resistance</th>
</tr>
</thead>
</table>
| 5/8" gypsum boards  
3 5/8" steel studs spaced  
24" centers  
ROCKWOOL Safe’n’Sound® | 52 | 1 Hour |

Above results are based upon testing using Type X gypsum board. For additional designs, please contact ROCKWOOL Technical Services.

### Acoustical performance

**ASTM C423**  
**CO-EFFICIENTS AT FREQUENCIES**

<table>
<thead>
<tr>
<th>System Description</th>
<th>Thickness</th>
<th>125 Hz</th>
<th>250 Hz</th>
<th>500 Hz</th>
<th>1000 Hz</th>
<th>2000 Hz</th>
<th>4000 Hz</th>
<th>NRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROCKWOOL</td>
<td>3&quot;</td>
<td>0.52</td>
<td>0.96</td>
<td>1.18</td>
<td>1.07</td>
<td>1.05</td>
<td>1.05</td>
<td>1.05</td>
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<tr>
<td>Safe’n’Sound®</td>
<td>6&quot;</td>
<td>1.11</td>
<td>1.28</td>
<td>1.15</td>
<td>1.06</td>
<td>1.03</td>
<td>1.01</td>
<td>1.15</td>
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### Compliance and performance

<table>
<thead>
<tr>
<th>CAN/ULC-S702-09</th>
<th>Mineral Fiber Thermal Insulation for Buildings</th>
<th>Type 1, Complies</th>
</tr>
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<tbody>
<tr>
<td>ASTM C 665</td>
<td>Mineral Fiber Blanket Thermal Insulation</td>
<td>Type 1, Complies</td>
</tr>
<tr>
<td>CAN4-S114</td>
<td>Determination of Non-Combustibility</td>
<td>Non-Combustible</td>
</tr>
<tr>
<td>ASTM E 136</td>
<td>Surface Burning Characteristics</td>
<td>Non-Combustible</td>
</tr>
</tbody>
</table>
| CAN/ULC S102    | Surface Burning Characteristics               | Flame Spread = 0  
Smoke Developed = 0 |
| ASTM E 84 (UL 723) | Surface Burning Characteristics         | Flame Spread = 0  
Smoke Developed = 0 |
| CAN/ULC S102    | Smolder Resistance                            | 0.09% |

### Dimensions

<table>
<thead>
<tr>
<th>Stud type</th>
<th>Thickness</th>
<th>Width</th>
<th>Length</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot; Wood</td>
<td>3 in. (76 mm)</td>
<td>15 1/4 in. (387 mm)</td>
<td>47 in. (1194 mm)</td>
<td>59.7 ft² (5.55 m²)</td>
</tr>
<tr>
<td>16&quot; Wood</td>
<td>6 in. (152.4 mm)</td>
<td>15 1/4 in. (387 mm)</td>
<td>47 in. (1194 mm)</td>
<td>29.87 ft² (2.78 m²)</td>
</tr>
<tr>
<td>16&quot; I-Joist</td>
<td>6 in. (152.4 mm)</td>
<td>16.25 in. (413 mm)</td>
<td>48 in. (1219 mm)</td>
<td>32.5 ft² (3.02 m²)</td>
</tr>
<tr>
<td>19.2&quot; I-Joist</td>
<td>6 in. (152.4 mm)</td>
<td>19 1/5 in. (487.7 mm)</td>
<td>47 in. (1194 mm)</td>
<td>31.33 ft² (2.91 m²)</td>
</tr>
<tr>
<td>24&quot; Wood</td>
<td>3 in. (76 mm)</td>
<td>23 in. (584 mm)</td>
<td>47 in. (1194 mm)</td>
<td>60.1 ft² (5.58 m²)</td>
</tr>
<tr>
<td>24&quot; Wood</td>
<td>6 in. (152.4 mm)</td>
<td>23 in. (584 mm)</td>
<td>47 in. (1194 mm)</td>
<td>30.03 ft² (2.79 m²)</td>
</tr>
<tr>
<td>16&quot; Steel</td>
<td>3 in. (76 mm)</td>
<td>16 1/4 in. (413 mm)</td>
<td>48 in. (1219 mm)</td>
<td>64 ft² (5.95 m²)</td>
</tr>
<tr>
<td>24&quot; Steel</td>
<td>3 in. (76 mm)</td>
<td>24 1/4 in. (616 mm)</td>
<td>48 in. (1219 mm)</td>
<td>64 ft² (5.95 m²)</td>
</tr>
</tbody>
</table>

### Density

| Density | 2.37 lbs/ft³ | 38 kg/m³ |
At the ROCKWOOL Group, we are committed to enriching the lives of everyone who comes into contact with our solutions. Our expertise is perfectly suited to tackle many of today’s biggest sustainability and development challenges, from energy consumption and noise pollution to fire resilience, water scarcity and flooding. Our range of products reflects the diversity of the world’s needs, while supporting our stakeholders in reducing their own carbon footprint.

Stone wool is a versatile material and forms the basis of all our businesses. With approx. 11,000 passionate colleagues in 39 countries, we are the world leader in stone wool solutions, from building insulation to acoustic ceilings, external cladding systems to horticultural solutions, engineered fibres for industrial use to insulation for the process industry and marine & offshore.

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