Product Description

**PHYSICAL PROPERTIES**

**Function**
- Natural fibre thermal insulator

**Content**
- 95% natural wool fibres
- 5% combination recycled adhesive binder

**Origin**
- Wools unsuitable for other industries

**Structure**
- Flexible, resilient and versatile

**Application**
- Easy to cut and shape for exact fit

**Dimensions**

Rolls are ideal for use in cold lofts and suspended floor spaces as they save time during installation and there is less opportunity for ‘cold spots’ to occur.

**STANDARD ROLL SIZES AVAILABLE**

<table>
<thead>
<tr>
<th>Widths</th>
<th>Roll</th>
</tr>
</thead>
<tbody>
<tr>
<td>600mm</td>
<td>50mm, 75mm, 100mm, 125mm</td>
</tr>
<tr>
<td></td>
<td>10m, 7.5m, 5m, 4m</td>
</tr>
<tr>
<td>m² per pack</td>
<td>6, 4.5, 3, 2.4</td>
</tr>
</tbody>
</table>

Batts are recommended for use in warm loft application, partitioning wall space and timber frames to avoid potential movement and provide an easy fit.

**STANDARD BATT SIZES AVAILABLE**

<table>
<thead>
<tr>
<th>Widths</th>
<th>Batt</th>
</tr>
</thead>
<tbody>
<tr>
<td>400mm</td>
<td>400mm, 600mm</td>
</tr>
<tr>
<td>600mm</td>
<td>50mm, 75mm, 100mm, 150mm, 200mm</td>
</tr>
<tr>
<td></td>
<td>1200mm</td>
</tr>
<tr>
<td>m² per batt</td>
<td>0.48, 0.72</td>
</tr>
</tbody>
</table>

Environment

- Black Mountain only use 10% of the energy required to manufacture some competing man-made insulation products.
- At the end of the product life cycle, natural fibres such as sheep’s wool will biodegrade whereas man-made mineral fibre insulation products can only currently be disposed of properly in landfill sites.
- The product will remain efficient throughout the life of a typical building, eliminating any ‘top up’ costs.

Technical Performance

**TECHNICAL STANDARDS**

**Fire**
- Euro Class E
- EN 13501-1:2002

**Condensation**
- BS 5250:1989

**Thermal conductivity (λ)**
- 0.039 W/mK

**Thermal resistance (R) (100mm)**
- 2.50 m²K/W

**Specific heat capacity (c)**
- 1700 J/kg K

**Vapour resistivity (r)**
- 10 MNs/gm

**Moisture absorption**
- 35% w/w

**Density**
- 19kg /m³

**ODP (Ozone depletion potential)**
- Zero

**GWP (Global warming potential)**
- Zero

**Thermal Efficiency**

Black Mountain sheep’s wool insulation is an excellent thermal insulator and offers a thermal conductivity of 0.039 W/mK.

**Moisture Absorbency**

Sheep’s wool insulation has the capacity to absorb and manage over 35% moisture without having a detrimental impact on product performance.

**VOC (volatile organic compound) Absorption**

Sheep’s wool has a unique ability to absorb and lock away noxious gases that are emitted by various building products.

**Flame Resistant**

Achieving a Euro Class E fire performance rating, sheep’s wool insulation is classified as fire resistant and in the case of a fire will not exacerbate the situation.

<table>
<thead>
<tr>
<th>THERMAL PERFORMANCE</th>
<th>Thickness</th>
<th>Thermal Resistance (R)</th>
<th>U Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>50mm</td>
<td>1.28 m²K/W</td>
<td>0.78 W/m²K</td>
<td></td>
</tr>
<tr>
<td>75mm</td>
<td>1.92 m²K/W</td>
<td>0.52 W/m²K</td>
<td></td>
</tr>
<tr>
<td>100mm</td>
<td>2.56 m²K/W</td>
<td>0.39 W/m²K</td>
<td></td>
</tr>
<tr>
<td>150mm</td>
<td>3.85 m²K/W</td>
<td>0.26 W/m²K</td>
<td></td>
</tr>
<tr>
<td>200mm</td>
<td>5.13 m²K/W</td>
<td>0.20 W/m²K</td>
<td></td>
</tr>
<tr>
<td>250mm</td>
<td>6.41 m²K/W</td>
<td>0.16 W/m²K</td>
<td></td>
</tr>
</tbody>
</table>