3M™ Thinsulate™ Insulation

**Stretch** (Type FX)

The finest in flexibility, this breathable, moisture-resistant insulation is specially designed to expand and contract in four directions, thereby helping secure warmth and comfort in any position.

**Features**
- Four-directional stretch up to 40%
- 0.6-0.9 Clo value
- 65% Fine elastomeric olefin/35% polyester

**Ideal for**
- Performance apparel
- Outerwear
- Gloves
- Accessories

**Certification**

[OEKO-TEX® Standard 100]
When you choose 3M™ Thinsulate™ Insulation, you’re choosing a world-renowned product paired with worldwide service. Partner with us and discover the power of our:

**partner benefits**

**global locations**

With a **local presence in more than 70 countries**, we can easily work with you and your mill, supporting your production needs from start to finish.

**technical expertise**

As a company driven by science, we can perform **more than 20 comprehensive tests on our insulation**, carefully evaluating all critical features such as compression, thermal resistance, water absorption, and more.

**brand**

Recognized as a world-class brand, we’ll work with you to support your marketing and sales efforts.

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### Typical Values*

<table>
<thead>
<tr>
<th>Product Designation</th>
<th>Base Weight</th>
<th>Thickness ASTM D 5736 @0.002 psi</th>
<th>Thermal Resistance (R&lt;sub&gt;c&lt;/sub&gt;) ASTM F 1868</th>
<th>Roll Width</th>
<th>Roll Length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>g/m&lt;sup&gt;2&lt;/sup&gt;</td>
<td>cm</td>
<td>inch</td>
<td>clo</td>
<td>R-value</td>
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<tr>
<td>FX40</td>
<td>43</td>
<td>1.3</td>
<td>0.32</td>
<td>0.12</td>
<td>0.6</td>
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<tr>
<td>FX70</td>
<td>74</td>
<td>2.2</td>
<td>0.50</td>
<td>0.20</td>
<td>0.8</td>
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<tr>
<td>FX100</td>
<td>105</td>
<td>3.1</td>
<td>0.55</td>
<td>0.22</td>
<td>0.9</td>
</tr>
</tbody>
</table>

*Values represent the averages of the population of lots at date of publication

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Want more protection from the elements? Ask us about the Scotchgard™ Protector that can further enhance the performance needs of your apparel.