# ENERGY CONTROL II INSULATION

## MANUFACTURER’S INSULATION FACT SHEET

This is Cellulose Insulation

Important Facts Are Included — Please Read It Carefully

The Manufacturer recommends that Energy Control Cellulose be installed in accordance with each of the coverage chart minimums to provide the thermal resistances (R-Values) listed. SEE INSTALLATION INSTRUCTIONS ON BACK.

### R-Value Initial Minimum

<table>
<thead>
<tr>
<th>R-Value @ 75°</th>
<th>Initial Installed Thickness (in.)</th>
<th>Minimum Settled Thickness (in.)</th>
<th>Framing: 2 by 8 @ 16 in. OC</th>
<th>Framing: None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bags Per 1000 ft²</td>
<td>Maximum Net Coverage (ft²/bag)</td>
<td>Bags Per 1000 ft²</td>
<td>Maximum Net Coverage (ft²/bag)</td>
</tr>
<tr>
<td>13</td>
<td>4.3</td>
<td>3.9</td>
<td>12.4</td>
<td>80.6</td>
</tr>
<tr>
<td>19</td>
<td>6.0</td>
<td>5.4</td>
<td>19.8</td>
<td>50.6</td>
</tr>
<tr>
<td>22</td>
<td>6.9</td>
<td>6.2</td>
<td>23.8</td>
<td>42.0</td>
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<tr>
<td>23</td>
<td>7.2</td>
<td>6.4</td>
<td>25.1</td>
<td>39.8</td>
</tr>
<tr>
<td>27</td>
<td>8.3</td>
<td>7.5</td>
<td>30.6</td>
<td>32.7</td>
</tr>
<tr>
<td>30</td>
<td>9.2</td>
<td>8.2</td>
<td>34.7</td>
<td>28.8</td>
</tr>
<tr>
<td>35</td>
<td>10.6</td>
<td>9.5</td>
<td>41.6</td>
<td>24.0</td>
</tr>
<tr>
<td>38</td>
<td>11.4</td>
<td>10.3</td>
<td>45.7</td>
<td>21.9</td>
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<tr>
<td>40</td>
<td>12.0</td>
<td>10.8</td>
<td>48.5</td>
<td>20.6</td>
</tr>
<tr>
<td>42</td>
<td>12.6</td>
<td>11.3</td>
<td>51.3</td>
<td>19.5</td>
</tr>
<tr>
<td>46</td>
<td>13.8</td>
<td>12.4</td>
<td>56.8</td>
<td>17.6</td>
</tr>
<tr>
<td>49</td>
<td>14.6</td>
<td>13.2</td>
<td>61.0</td>
<td>16.4</td>
</tr>
<tr>
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<td>14.9</td>
<td>13.4</td>
<td>62.4</td>
<td>16.0</td>
</tr>
<tr>
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<td>14.5</td>
<td>67.9</td>
<td>14.7</td>
</tr>
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<tr>
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<td>72.1</td>
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<td>60</td>
<td>17.8</td>
<td>16.0</td>
<td>76.3</td>
<td>13.1</td>
</tr>
</tbody>
</table>

| SIDE WALL | 13.3 | 3.5 | 3.5 | This bag will cover 36.4 sq. ft. in 2x4 closed sidewall |
| SIDE WALL | 21   | 5.5 | 5.5 | This bag will cover 22.7 sq. ft. in 2x6 closed sidewall |

Initial installed thickness were determined according to ASTM C1374 using a Krendl Model 2000 machine with shredder. Settings are not adjustable.

Average Net Weight: 25 lbs.

*The proper installed thickness needed to achieve settled depth will vary with different machines, air settings, installer technique, etc. Therefore, the installed depth columns should be used only as an approximate guideline. To ensure that product is installed at its settle thickness, you must refer to the "Settled Coverage" or "Bags per 1000 sq. ft." columns.

This insulation must be installed properly to get the marked R-Value. Read and follow installation instructions carefully. If you plan to install the insulation yourself, follow the chart on this fact sheet to obtain the right thickness for the marked R-Value, then follow installation instructions carefully.

### READ THIS BEFORE YOU BUY

#### What You Should Know About R-Values

The Chart shows the R-Value of this insulation. R means resistance to heat flow. The higher the R-Value, the greater the insulating power. Compare insulation R-Values before you buy.

There are other factors to consider. The amount of insulation you need depends mainly on the climate you live in. Also, your fuel savings from insulation will depend upon the climate, the type and size of your house, the amount of insulation already in your house, and your fuel use patterns and family size. If you buy too much insulation, it will cost you more than what you'll save on fuel.

To get the marked R-Value, it is essential that this insulation be installed properly. Insulation placed too near electrical heat sources may cause fire. Follow installation instructions carefully. To avoid excess moisture build-up, proper ventilation of home is important following installation of this product.

This product has a limited warranty. The manufacturer warrants this product subject to certain conditions and exceptions. Read the warranty carefully.
ENERGY CONTROL II INSTALLATION INSTRUCTIONS

PRECAUTIONS
1. This material is recommended for pneumatic application only.
2. This material is not recommended for spray-on applications.
3. Do not install over recessed lights or in areas where temperatures exceed 180 degrees Fahrenheit.
4. Do not install material over soffit vents or other ventilation passage ways. Provide adequate ventilation.
5. Do not install material in outside wall cavities which are below ground level.
6. Furnace intakes, cold air returns, and heating ducts must be isolated from material in such a manner that it is not drawn into heating system.
7. Dust masks are recommended when installing material in confined areas.
8. Do not install in areas where extreme high moisture conditions exist.
9. External combustion air must be provided for furnaces installed within the living area.

PREPARATION FOR ATTIC INSTALLATION
A. Restrictive material should be placed around all recessed lights, chimneys, transformers, and all types of equipment that would reach a temperature of 180 degrees or more. This is done to keep insulation material away from fixtures and thus allowing heat to dissipate. Check your local codes for proper clearance. If no code is available, allow at least two inches clearance between shielding and such fixtures.
B. Back up board should be used to block off soffit areas at the end of the rafter space. This is done to keep insulation material away from soffit ventilators and allow for proper ventilation.
C. Adequate ventilation must be provided in attic areas. This can be done using soffit, gable, or roof type ventilators. Under normal conditions, there should be one square foot of free vent area for each 200 square feet of ceiling area.
D. Vapor barriers: In new construction, local FHA building codes should be followed. There are many factors which determine whether a vapor barrier may be needed, such as type of heating system, ventilation available, and present moisture in structure before insulation is installed. Please contact your local insulation contractor for advice in this area.

ATTIC INSTALLATION
A. OPEN BLOW
The key to attic blowing is proper air setting. The material flow at the end of the hose should be smooth and uniform. Be sure hose is kept 6" to 12" above the floor of the attic, as holding any higher tends to fluff material. Do not lay hose between ceiling studs and allow insulation to bubble over hose as this will trap air cavities causing unnecessary settling of insulation. Install insulation to the desired depth, following coverage chart listed on the ECI bag of insulation.
B. FLOORED ATTICS
Attics which have flooring can be insulated by removing several pieces of flooring in center of attic and pushing hose to outside walls. As the cavity fills and material flow slows, withdraw hose slowly until cavity is completely filled. Be sure insulation is packed sufficiently to force out all large air cavities. If desired, 1" or 2" holes can be drilled on 4 foot centers and blown in same manner as side walls. Wood plugs can be inserted and sanded down.
C. KNEE WALLS AND DORMERS
Care should be exercised on structures having knee walls and dormers that all areas are properly insulated and vented. It is important to observe the following points:
1. Insulate all ceilings which have cold spaces above.
2. Insulate all exterior walls.
3. Place a retaining material on outside of knee wall for insulation.
4. Where applicable place back up board as an insulation retainer to provide ventilation between knee wall attic and main attic areas. This is especially important when knee wall attic has eave vents only.
5. Insulate knee walls.
6. Insulate exterior dormer walls.
7. Install adequate louver vents at each gable end for moisture control.
8. Eave vents should be installed when cross ventilation is desired. A combination of louver and eave vents is the most effective method of ventilation.

INSULATING SIDEWALLS
Proper setting for the air control valve will depend on the machine in which you are using. You should check the manual of the machine to get the proper adjustments. The sidewall should be blown at a pressure that will pack the insulation tighter than settled density; therefore, any vibration or movement will allow insulation to expand rather than settle.
Physical conditions of the sidewalls will be a factor in determining the exact setting of air control valve. Weak areas on the walls to be insulated may have to be reinforced, filled with less pressure, or drilled with 1 extra hole. Check the coverage chart on the bag of insulation to assure you are installing proper amount of insulation.
A. HOLE SPACING
Location of the holes to be drilled for pneumatic filling should be 18" to 24" up from the bottom of each stud run, and 18" to 24" down from the top of each stud run. On a two story house, drill two holes in each stud run on the bottom floor, and two holes in each stud run on the top floor.
B. PROCEDURE
1. Check each stud run for storm braces and other types of blockage.
2. Always blow lower hole first. Some air and small material particles should come from hole directly above. If material is being blown out of upper hole, reduce air setting so that the insulation is pushed up but not out of the top hole.
3. Be sure there is no leakage in equipment from the blower along hose to end nozzle.
4. Watch for small stud runs or cavities around windows and doors. Drilling extra holes around windows and doors will assist you in doing a thorough insulation job.