TECHNICAL LETTER – LEED INFORMATION

LEED 2009 Green Building Rating System™

The following guideline can be used to help determine the potential contribution(s) Protecto Wrap Company products may help in attaining points according to the LEED 2009 Green Building Rating System for New Construction & Major Renovations.

MR Credit 2.1: Construction Waste Management: Divert 50% from Disposal – 1 Point
MR Credit 2.2: Construction Waste Management: Divert 75% from Disposal – 1 Point in addition to MR Credit 2.1

A construction waste management plan must be used to divert materials from disposal. To achieve the goal, recyclable materials need to be tracked throughout the construction process. When suitable recycle facilities or locations are available Protecto Wrap Company packaging materials are recyclable and may help to contribute in earning points in this section.

<table>
<thead>
<tr>
<th>Item</th>
<th>Material</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooden Pallet</td>
<td>Wood</td>
<td>30 lbs max</td>
</tr>
<tr>
<td>Core</td>
<td>Cardboard</td>
<td>.023 lbs/inch (products come in various sizes)</td>
</tr>
<tr>
<td>Box or Carton</td>
<td>Cardboard</td>
<td>2 lbs / box max</td>
</tr>
<tr>
<td>1 Gallon Pail</td>
<td>Steel</td>
<td>.5 lbs / pail</td>
</tr>
<tr>
<td>5 Gallon Pail</td>
<td>Steel</td>
<td>3 lbs / pail</td>
</tr>
<tr>
<td>1 Gallon Pail</td>
<td>HDPE</td>
<td>.75 lbs / pail</td>
</tr>
<tr>
<td>5 Gallon Pail</td>
<td>HDPE</td>
<td>2.5 lbs / pail</td>
</tr>
<tr>
<td>1 Gallon Jug</td>
<td>HDPE</td>
<td>.25 lbs / jug</td>
</tr>
</tbody>
</table>

MR Credit 4.1: Recycled Content: 10% (post-consumer + ½ pre-consumer) – 1 Point
MR Credit 4.2: Recycled Content: 20% (post-consumer + ½ pre-consumer) – 1 Point in addition to MR Credit 4.1

The recycled content of Protecto Wrap Company products may help to contribute in earning points in this section. Protecto Wrap Company products utilize several different adhesives that contain various amounts of Post-Consumer and Pre-Consumer recycled content. The following guideline gives you a general idea of the recycled content by adhesive type. Please contact your local Protecto Wrap Company Representative to identify which product/adhesive you are purchasing to determine if the product may help to contribute in earning points in this section.

<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Weight % Post Consumer</th>
<th>Weight % Pre-Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butyl</td>
<td>14 %</td>
<td>40 %</td>
</tr>
<tr>
<td>Butyl Hybrid</td>
<td>43 %</td>
<td>4 %</td>
</tr>
<tr>
<td>Asphalt</td>
<td>47 %</td>
<td>0 %</td>
</tr>
<tr>
<td>Super Stick adhesive</td>
<td>0 %</td>
<td>0 %</td>
</tr>
</tbody>
</table>

MR Credit 5.1: Regional Materials: 10% Extracted, Processed & Manufactured Regionally – 1 Point
MR Credit 5.2: Regional Materials: 20% Extracted, Processed & Manufactured Regionally – 1 Point in addition to MR Credit 5.1

In order to qualify for points under MR 5.1 and 5.2, products have to be extracted, harvested or recovered, as well as manufactured, within a 500 mile radius of the project site. The main Protecto Wrap Company manufacturing facility is located in Denver, Colorado. Protecto Wrap Company recommends contacting your local representative to request product specific/project specific information pertaining to this section.

MR Credit 6: Rapidly Renewable Materials
Protecto Wrap Company products are not made from and do not contain, any materials that are rapidly renewable.

**MR Credit 7: Certified Wood**
Protecto Wrap Company products are not made from and do not contain, any wood based materials.

**EA Prerequisite 2: Minimum Energy Performance (required)**
The intent of this prerequisite is to establish a minimum level of energy efficiency. Protecto Wrap Company roof underlayment’s, air/vapor barriers and flashing products, used in conjunction with or solely as an air/vapor barrier, will decrease the amount of uncontrolled air infiltration / exfiltration through the building envelope. By decreasing the air leakage you reduce the energy consumption (load) of the building; therefore, increasing the energy efficiency and maximizing the energy performance.

**EA Credit 1: Optimize Energy Performance – 1 to 19 or 21 Points**
The intent of EA Credit 1 is to achieve increasing levels of energy performance. By decreasing the air leakage you reduce the energy consumption (load) of the building; therefore, increasing the energy efficiency and maximizing the energy performance. The use of Protecto Wrap Company roof underlayment’s, air/vapor barriers and flashing products, in conjunction with or solely as an air/vapor barrier, will decrease the amount of uncontrolled air infiltration / exfiltration through the building envelope and may help to contribute in earning points in this section.

**EQ Prerequisite 1: Minimum Indoor Air Quality (IAQ) Performance (required)**
The intent of IEQ Prerequisite 1 is to establish minimum indoor air quality (IAQ) performance. By decreasing the air leakage you reduce the energy consumption (load) of the building; therefore, increasing the energy efficiency and maximizing the energy performance. Uncontrolled air leakage also carries uncontrolled moisture in the form of vapor. Vapor that reaches the dew point temperature inside the wall cavity turns to unwanted moisture that can contribute to organic growth or mold which can have a negative impact on the indoor air quality of the building. The use of Protecto Wrap Company roof underlayment’s, air/vapor barriers and flashing products, in conjunction with or solely as an air/vapor barrier, will decrease the amount of uncontrolled air infiltration / exfiltration through the building envelope and may help to contribute in earning points in this section.

**EQ Credit 3.1: Construction Indoor Air Quality (IAQ) Management Plan: During Construction – 1 Point**
The intent of this section is to reduce indoor air quality problems resulting from the construction/renovation process. One of the requirements is to “Protect stored on-site or installed absorptive materials from moisture damage”. The use of Protecto Wrap Company roof underlayment’s, air/vapor barriers and flashing products on the exterior of the building, can protect installed absorptive materials such as sheathing, roof decking, insulation and interior framing and may help to contribute in earning points in this section.

**EQ Credit 4.1: Low Emitting Materials: Adhesives & Sealants – 1 Point**
The intent of this section is to reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Paints, Coatings and Primers must comply with the South Coast Air Quality Management District (SCAQMD) Rule #1168. The following Protecto Wrap Company products comply with this rule and may help to contribute in earnings points in this section.

- Universal Water Based Primer 31 g/L
- PW 6000 Primer 30 g/L
- Defenseal 31 g/L
- Protecto Sealant 25XL 0 %
- Super Stick 0 %
EQ Credit 4.2: Low Emitting Materials: Paints & Coatings – 1 Point
The intent of this section is to reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. Paints, Coatings and Primers must comply with the South Coast Air Quality Management District (SCAQMD) Rule #1113. The following Protecto Wrap Company products comply with this rule and may help to contribute in earnings points in this section.
Universal Water Based Primer 31 g/L
PW 6000 Primer 30 g/L
Defenseal 31 g/L
Protecto Sealant 25XL 0 %
Super Stick 0 %

EQ Credit 6.2: Controllability of Systems: Thermal Comfort – 1 Point
The intent of this section is to provide a high level of thermal comfort system control by individuals or by specific groups in multi-occupant spaces. Protecto Wrap Company “Peel and Heat Complete” In-floor radiant heat system can be installed in individual areas or larger sections with single or multiple thermostats for each area and may help to contribute in earning points in this section.

EQ Credit 7.1: Thermal Comfort: Design – 1 Point
The intent of this section is to provide a comfortable thermal environment that supports the productivity and well being of building occupants. Protecto Wrap Company “Peel and Heat Complete” In-floor radiant heat system can be installed in individual areas or larger sections with single or multiple thermostats for each area and may help to contribute in earning points in this section.
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