## TECTUM® I ROOF DECK
### LEED® v4 OVERVIEW

<table>
<thead>
<tr>
<th>Theme</th>
<th>Credit</th>
<th>LEED Credit</th>
<th>Points</th>
<th>Armstrong Ceilings Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy Credits</strong></td>
<td>EA Prerequisite</td>
<td>Minimum Energy Performance</td>
<td>Required</td>
<td>Incorporate Tectum® roof panels in your building design to provide thermal performance with R values ranging from 3.68 to 6.43 (depending on thickness).</td>
</tr>
<tr>
<td></td>
<td>EA Credit</td>
<td>Optimize Energy Performance</td>
<td>Dependent on reduction</td>
<td><strong>Option 1:</strong> Whole-building energy simulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Option 2:</strong> Prescriptive compliance: ASHRAE 50% Advanced Energy Design Guide</td>
</tr>
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<td></td>
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<td></td>
<td></td>
<td><strong>TECUM® I THERMAL PERFORMANCE</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Panel Thickness</strong></td>
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<td></td>
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<td></td>
<td>PSF</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2-1/2”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3”</td>
</tr>
<tr>
<td><strong>Recycling Program</strong></td>
<td>MR Prereq</td>
<td>Construction &amp; Demolition Waste</td>
<td>MRp Required</td>
<td>MRp2: Add Tectum® Products to Waste Management plan to increase diversion %.</td>
</tr>
<tr>
<td></td>
<td>MR Credit</td>
<td>Management Planning</td>
<td>MRc up to 2 pts</td>
<td><strong>MRc6, Option 1:</strong> Tectum products are biodegradable and can be upcycled into soil amendment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Now a Prerequisite – ID at least 5</td>
<td></td>
<td><strong>MRc6, Option 2:</strong> Reduction in Total Waste: Tectum products are manufactured and cut to size at the factory, reducing or eliminating field cuts and waste at the site. Tectum products are shipped without the need for boxing and minimal, if any, crating, reducing packaging for minimal site waste.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Regional Materials</strong></td>
<td>MR Credits</td>
<td>Regional Materials</td>
<td>200% base contributing</td>
<td>ARMSTRONG CEILING MANUFACTURING LOCATIONS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Extracted, manufactured and</td>
<td>cost</td>
<td>Tectum products contribute if manufactured in a radius of 100 miles. Tectum products are manufactured in Newark, OH.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>purchased within 100 miles)</td>
<td></td>
<td>Extraction locations. Obtain % by raw material in the Armstrong Ceilings LEED Calculator.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Use Armstrong Ceilings LEED calculator to calculate mileage for manufacture and extraction locations; Product meeting 100 mile criteria is valued at 200% of base cost.</td>
</tr>
<tr>
<td><strong>Life Cycle Impacts</strong></td>
<td>MR Credit</td>
<td>Building Life Cycle Reduction</td>
<td>BD&amp;C – 1-2</td>
<td>ARMSTRONG® PRODUCT EPDs</td>
</tr>
<tr>
<td>&amp; Environmental</td>
<td></td>
<td>Interiors Life Cycle Impact</td>
<td>ID&amp;C – 1-2</td>
<td><strong>BD&amp;C, Option 4:</strong> Provide EPD or Embodied Energy (EE) for Whole Building LCA calculations.</td>
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<td><strong>Product Declarations</strong></td>
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<p>| Inspiring Great Spaces®       |                                       |                                      |                            |                                                                                                                                                               |</p>
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| Life Cycle Impacts & Environmental Product Declarations | MR Credit | Building Disclosure and Optimization – Environmental Product Declaration | BD&C – 1-2  
ID&C – 1-2 | ARMSTRONG™ PRODUCT EPDs  
**Option 1:** Tectum Third-Party Certified, TYPE III EPDs; www.armstrongbuildingsolutions.com/tectum. |
| Corporate Sustainability and Raw Material Sourcing | MR Credit | Building Disclosure and Optimization – Sourcing of Raw Materials | BD&C – 1-2  
ID&C – 1-2 | ARMSTRONG COMMITMENT TO SUSTAINABILITY  
**Option 1:** Armstrong self-declared sustainability report (1/2 value) www.armstrongceilings.com/sustainability  
**Option 2:** Leadership Extraction Practices: Tectum products contribute to these areas: Biobased content; Certified Wood. Tectum products are made from Wisconsin aspen wood fibers, harvested by Johnson Timber Corporation and shredded by American Excelsior Company. 44% of Tectum panels are wood excelsior and are considered FSC® Mix Credit.  
Tectum Inc. Chain-of-Custody #: RA-COC-007078  
American Excelsior Chain-of-Custody #: RA-COC-007186  
Johnson Timber Chain-of-Custody #: SW-COC-002249 |
| Material Ingredient Disclosure             | MR Credit | Building Disclosure and Optimization – Material Ingredients | BD&C – 1-2  
ID&C – 1-2 | HEALTH PRODUCT DECLARATIONS & DECLARE™  
**Option 1:** Material Ingredient Reporting; Tectum Health Product Declaration or Declare label qualifies for Mfr Inventory (1 Pt) |
| Acoustics                                  | EQc     | Acoustic Performance (now all Rating Systems)    | BD&C – 2  
ID&C – 2 | Reverberation time – Tectum™ panels contribute to reduction in reverb time by adding absorption.  
Schools must meet ANSI Std. S12-60. Tectum roof deck panels provide an NRC 0.55 to 0.80 (thickness dependent). Tectum panels help to meet ANSI S12.60 Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools. |