KEY SELECTION ATTRIBUTES

- Sound absorption – NRC up to 0.80
- R-value up to 43.76
- Spans up to 8 feet
- Diaphragm shear up to 437 dsn/lf
- Nailable surface
- Low or high slope applications

TYPICAL APPLICATIONS

- Schools
- Gymnasiums
- Auditoriums

TECTUM® E

Tectum® E Roof Deck panel is a composite of 1-1/2” or thicker Tectum I panel, EPS (expanded polystyrene) insulation with the slip-resistant OSB. The EPS core exceeds the requirements of ASTM C-578 Type 1 and bears the UL classification mark.

TECTUM® E-N

Tectum® E-N roof deck panel is a composite of a 1-1/2” or thicker Tectum® I panel, NEOPOR® GPS (Graphite Enhanced Polystyrene) insulation with the slip-resistant OSB. The GPS core exceeds the requirements of ASTM C-578 Type 1 and bears the UL classification mark.
TECTUM® E & TECTUM® E-N
Structural Acoustical Roof Deck
design guidelines

TECTUM® E & TECTUM® E-N ROOF DECK DESIGN LOAD DATA
Call for assistance when designing and detailing Tectum® Roof Deck Systems

<table>
<thead>
<tr>
<th>System</th>
<th>Thickness¹</th>
<th>WL (PSF)²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plank</td>
<td>2-3/4&quot;</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>3-1/2&quot;</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>4&quot;</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>5&quot;</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>6&quot;, 7&quot;</td>
<td>4.4, 4.5</td>
</tr>
<tr>
<td></td>
<td>8&quot;, 9&quot;, 10&quot;</td>
<td>4.6, 4.7, 4.8</td>
</tr>
</tbody>
</table>

² For loads greater than 200 lbs., contact Armstrong TechLine.
¹ Thickness and weight are nominal.

TECTUM® E & TECTUM® E-N DIAPHRAGM DESIGN DATA
Call for assistance when designing and detailing Tectum® Roof Deck Systems

<table>
<thead>
<tr>
<th>Type</th>
<th>Panel Size D x W x L</th>
<th>Joist</th>
<th>Span³</th>
<th>Fasteners</th>
<th>Field Spacing</th>
<th>Perimeter</th>
<th>Adhesive²</th>
<th>Grout</th>
<th>ULT/LF</th>
<th>DSN/LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plank</td>
<td>4 x 47 x 144³</td>
<td>Wood</td>
<td>72⁴</td>
<td>6&quot; 14-Gauge Sip Scr</td>
<td>3/Joint/Panel</td>
<td>12&quot; o.c. sides + ends</td>
<td>T&amp;G + Joist</td>
<td>None</td>
<td>1042</td>
<td>346</td>
</tr>
<tr>
<td></td>
<td>5 x 47 x 168³</td>
<td>Wood</td>
<td>84⁴</td>
<td>6&quot; 14-Gauge Sip Scr</td>
<td>3/Joint/Panel</td>
<td>12&quot; o.c. sides + ends</td>
<td>T&amp;G + Joist</td>
<td>None</td>
<td>1012</td>
<td>336</td>
</tr>
<tr>
<td></td>
<td>5 x 48 x 96²</td>
<td>Wood</td>
<td>96⁴</td>
<td>6&quot; 14-Gauge Sip Scr</td>
<td>4/Joint/Panel</td>
<td>8&quot; o.c. sides + ends</td>
<td>T&amp;G + Joist</td>
<td>None</td>
<td>604</td>
<td>201</td>
</tr>
<tr>
<td>Plank/</td>
<td>5 x 47 x 96²</td>
<td>Wood</td>
<td>96⁴</td>
<td>6&quot; 14-Gauge Sip Scr</td>
<td>4/Joint/Panel</td>
<td>8&quot; o.c. sides + ends</td>
<td>T&amp;G + Joist</td>
<td>None</td>
<td>1315</td>
<td>437</td>
</tr>
<tr>
<td>Overlay</td>
<td>7/16 x 48 x 96²</td>
<td>OSB</td>
<td>2⁴ x 16-Gauge Staples</td>
<td>8”Ø@24” Centers</td>
<td>4” o.c. sides + ends</td>
<td>Per &amp; 24” o.c.</td>
<td>T&amp;G + Joist</td>
<td>None</td>
<td>1315</td>
<td>437</td>
</tr>
</tbody>
</table>

³ Values over wood joints are conservative compared to values over steel.
⁴ Adhesive is to meet the requirements of AFG-01. A 3/8” bead of adhesive is to be used. Approximately 50 linear feet of adhesive per quart tube. Specific adhesive used on test assemblies was Miracle® SFA-66 adhesive.

TECTUM® PRODUCTS – SUSTAINABLY MADE
• Made with wood fibers (excelsior) from self-propagating Wisconsin Aspen trees
• All Wisconsin Aspen used for Tectum® products is air-dried and aged naturally
• No chemicals are used to produce excelsior purchased by Armstrong Building Solutions
• All excelsior used in Tectum products comes from a single source that is Forest Stewardship Council (FSC) certified
• The magnesium sulfate binder has been manufactured on site by reclaiming waste materials since production first began in 1949
• The secondary binder is composed of sodium silicate and calcium carbonate (limestone)
• All water used in the manufacture of Tectum products is captured and recycled

TECTUM PRODUCTS AND LEED®
Armstrong® Tectum Roof Deck products may contribute to the following LEED® V4 credit areas:
Energy & Atmosphere (EA)
  – Minimum Energy Performance
  – Optimize Energy Performance
Materials & Resources (MR)
  – Construction Waste Management
  – Regional Materials
  – Building Life Cycle Reduction
  – Interiors Life Cycle Reduction
  – Building Disclosure and Optimization – Sourcing of Raw Materials
Indoor Environmental Quality (EQ)
  – Acoustic Performance

MORE INFORMATION
For more information, or for an Armstrong Building Solutions representative, call 1 877 276-7876. For complete technical information, detail drawings, CAD design assistance, installation information, and many other technical services, call TechLine customer support at 1 877 276-7876 or email techline@armstrongceilingsolutions.com. For the latest product selection and specification data, visit armstrongbuildingsolutions.com/tectum.

For LEED contribution visit armstrongbuildingsolutions.com.