Lemberg Children’s Center at Brandeis University – Waltham, MA (Tectum V Roof Deck)

Three-in-One Composite Roof Deck Panels provide acoustics, insulation, and a nailable surface that accepts a wide variety of roofing materials.

**KEY SELECTION ATTRIBUTES**
- Excellent noise absorption – NRC up to 0.60
- R-value up to 36
- Spans up to 12 feet
- 50-pound design load
- Diaphragm shear up to 417 dsn/lf
- Nailable surface
- Low or high slope applications

**TECTUM® V**

Tectum® V Roof Deck Panels are recognized for use in Type I and II construction where fire-retardant-treated wood is allowed in accordance with IBC Section 603.1 (1). The 1-1/2” Tectum substrate provides a 15 minute barrier for foam plastics (For ICC-ES Evaluation Report ESR-1112). During shipping, storage, installation and use, this material should not be exposed to flame or other ignition sources. NEOPOR® GPS insulation contains a flame retardant additive to inhibit accidental ignition from small fire sources.

The GPS core exceeds the requirements of ASTM C-578 Type I and bears the UL classification mark.

**TYPICAL APPLICATIONS**
- Schools
- Gymnasiums
- Arenas

TechLine 877 276-7876
armstrongbuildingsolutions.com/tectum
TECTUM® V Structural Acoustical Roof Deck design guidelines

TECTUM® V ROOF DECK DESIGN LOAD DATA

<table>
<thead>
<tr>
<th>System</th>
<th>Thickness</th>
<th>Wt. (PFS)</th>
<th>96&quot;</th>
<th>108&quot;</th>
<th>120&quot;</th>
<th>132&quot;</th>
<th>144&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comp. Plank V</td>
<td>9&quot;</td>
<td>6.0</td>
<td>112</td>
<td>88</td>
<td>72</td>
<td>59</td>
<td>50</td>
</tr>
</tbody>
</table>

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

TECTUM® V THERMAL PERFORMANCE

<table>
<thead>
<tr>
<th>Panel Thickness</th>
<th>Insulating Foam Thickness</th>
<th>Total Thickness</th>
<th>R-Value</th>
<th>Weight PSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/2&quot;</td>
<td>6-1/2&quot;</td>
<td>9&quot;</td>
<td>36.11</td>
<td>6.0</td>
</tr>
</tbody>
</table>

¹ Total thickness includes two layers of 7/16" OSB.
² R-values include air films and built-up roofing.

TECTUM® V 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 Span</th>
<th>Fasteners</th>
<th>Field Spacing</th>
<th>Perimeter</th>
<th>Adhesive</th>
<th>Grout</th>
<th>ULT/LF</th>
<th>DSN/LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plank</td>
<td>9 x 47 x 144&quot;</td>
<td>Wood 144&quot;</td>
<td>11&quot; 14-Gauge Sip Scr 7/Joist</td>
<td>6&quot; O.C. sides + ends</td>
<td>T&amp;G + Joist + Spline</td>
<td>None</td>
<td>1251</td>
<td>417</td>
<td></td>
</tr>
</tbody>
</table>

¹ Adhesive is to meet the requirements of AFG-01. A 3/8" bead of adhesive is to be used.
² Approximately 38 linear feet of adhesive per quart tube. Specific adhesive used on test assemblies was MasterWeld 948. Miracle® SFA-66 adhesive cannot be used with Tectum V.
³ Values over wood joists are conservative compared to values over steel.

TECTUM® V EDGE DETAILS

Continuous Perimeter Support by Other Required. Minimum Bearing is 3". Screw Panels @ 6" O.C. Along Perimeter.

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

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.

More information for LEED contribution visit armstrongbuildingsolutions.com.