TECTUM® IIIW
Structural Acoustical Roof Deck

Middlebridge School – Narragansett, RI  (Tectum IIIW Roof Deck)

Ideal for hurricane prone areas that require Miami-Dade NOA approval, these 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**
- Miami-Dade NOA Approved (18-0619.03)
- Sound absorption – NRC up to 0.60
- R-value up to 44
- Spans up to 60”
- 50-pound design load
- Diaphragm shear up to 786 dsn/lf
- Nailable surface
- Low or high slope applications
- Wind uplift resistance up to 321 lbs/sq ft.

**TECTUM® IIIW**
The Tectum® III roof deck panel is a composite of a 1-1/2” or thicker Tectum substrate, Styrofoam™ brand XPS (extruded polystyrene) insulation 3” to 8” thick and 19/32” plywood sheathing with a slip-resistant surface. Tectum IIIW panels are typically used in hurricane prone sloped applications where insulation, ease of installation, and a nailable surface and high wind resistance are required.

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

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

TECTUM® IIW ROOF DECK DESIGN LOAD DATA¹

<table>
<thead>
<tr>
<th>System</th>
<th>Thickness</th>
<th>Wt. (PSF)²</th>
<th>Product</th>
<th>24&quot;</th>
<th>30&quot;</th>
<th>36&quot;</th>
<th>38&quot;</th>
<th>40&quot;</th>
<th>42&quot;</th>
<th>44&quot;</th>
<th>48&quot;</th>
<th>50&quot;</th>
<th>52&quot;</th>
<th>54&quot;</th>
<th>60&quot;</th>
<th>66&quot;</th>
<th>72&quot;</th>
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<tbody>
<tr>
<td>Comp. Plank</td>
<td>5&quot;</td>
<td>5.0</td>
<td>IIW</td>
<td>200</td>
<td>175</td>
<td>135</td>
<td>125</td>
<td>115</td>
<td>105</td>
<td>85</td>
<td>70</td>
<td>60</td>
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<tr>
<td>T-IIW</td>
<td>6&quot;, 7&quot;</td>
<td>5.2</td>
<td>IIW</td>
<td>200</td>
<td>180</td>
<td>170</td>
<td>160</td>
<td>150</td>
<td>125</td>
<td>105</td>
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</tr>
<tr>
<td>8&quot;, 9&quot;, 10&quot;</td>
<td>5.5</td>
<td>IIW</td>
<td></td>
<td>200</td>
<td>165</td>
<td>136</td>
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²All published design loads are based on a minimum safety factor of four. For example, 50 psf design load has an ultimate load of 200 psf.

TECTUM® IIW THERMAL PERFORMANCE

(Based on 1-1/2" Tectum Substrate)

<table>
<thead>
<tr>
<th>Insulating</th>
<th>Foam Thickness</th>
<th>Total³</th>
<th>R-Value²</th>
<th>Weight PSF</th>
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<tr>
<td>3&quot;</td>
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<td>19.36</td>
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<td>4&quot;</td>
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<td>24.36</td>
<td>4.8</td>
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<td>7&quot;</td>
<td>29.36</td>
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<td>6&quot;</td>
<td>8&quot;</td>
<td>34.36</td>
<td>5.4</td>
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<tr>
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<td>9&quot;</td>
<td>39.36</td>
<td>5.8</td>
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<tr>
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<td>10&quot;</td>
<td>44.36</td>
<td>6.2</td>
<td>6.2</td>
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</table>

¹Total thickness includes 19/32" Plywood nailable top surface.
²R-values include air films and built-up roofing.
³All panels were installed with staggered ends except Tectum I tile with 168 bulb tees and Tectum III tile on truss tees.

TECTUM® PRODUCTS AND LEED®

Armstrong® Tectum® Roof Deck products may contribute to the following LEED® V4 credit areas:

- Energy & Atmosphere (EA)
- Acoustic Performance
- Optimizing Energy Performance
- Regional Materials
- 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)
- Regional Materials

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

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