

## TECTUM III & Tectum IIIP Structural Acoustical Roof Deck

Tectum III & Tectum IIIP are part of the Tectum Composite Roof Deck line. They are typically used in sloped applications where acoustics, insulation, a nailable surface and structural integrity are all prioritized. The components of Tectum Composite Roof Decks are bonded together using code-listed structural adhesives and the panels are topped with a slip-resistant  $\frac{7}{16}$ " OSB (Oriented Strand Board).

Tectum III & IIIP offer an R-value of up to 44.

### TECTUM III

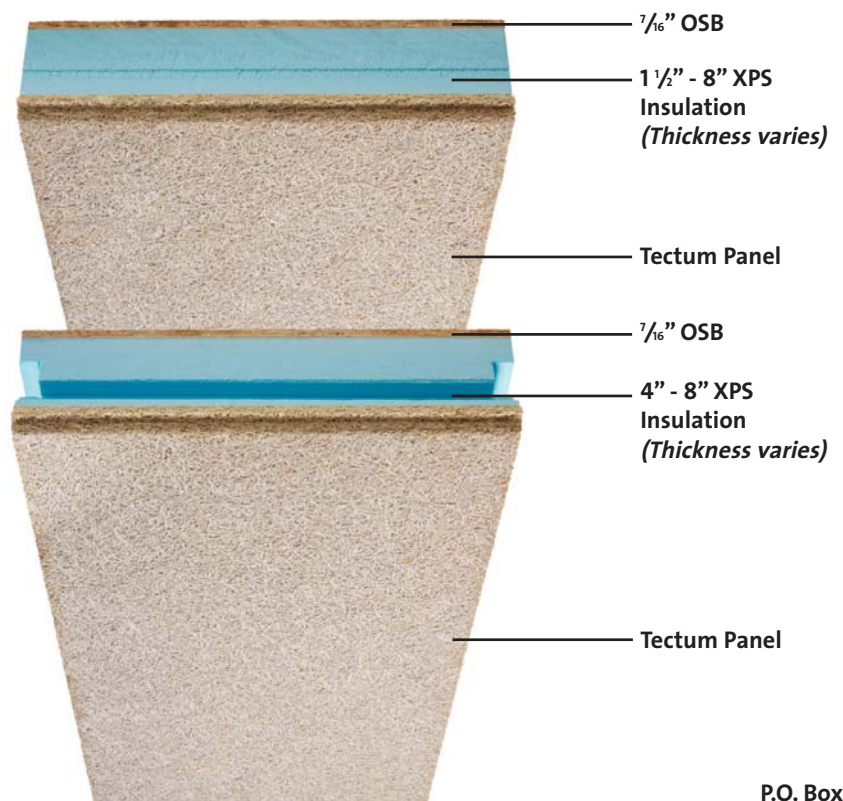
The Tectum III roof deck panel is a composite of a  $\frac{1}{2}$ " or thicker Tectum substrate, Dow Styrofoam® brand XPS (extruded polystyrene) insulation  $1\frac{1}{2}$ " to 8" thick and  $\frac{7}{16}$ " OSB (oriented strand board) sheathing with a slip-resistant surface. Tectum III panels are typically used in sloped applications where insulation, ease of installation and a nailable surface are required.

### TECTUM IIIP

Tectum IIIP roof deck is made of the same components as Tectum III, but with an edge detail specifically designed for use over high-humidity applications such as swimming pools and ice arenas. The detail, when properly sealed with urethane adhesive, provides for a continuous vapor retarder from panel to panel in all directions. Tectum IIIP provides optimal insulation and a nailable surface for high-humidity environments.



Sun-N-Fun Lifestyle Wellness Center - Sarasota, FL (Tectum IIIP Roof Deck)



See drawing on back for Tectum IIIP joint detail.

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**TECTUM**<sub>INC</sub>  
The Noise Control Solution

105 S. 6th St.  
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## TECTUM ROOF DECK DESIGN GUIDELINES

### TECTUM III & TECTUM IIIP<sup>2</sup> ROOF DECK DESIGN LOAD DATA

System	Thickness <sup>1</sup>	Wt. (PFS) <sup>1</sup>	24"	30"	36"	38"	40"	42"	44"	48"	50"	52"	54"	60"	66"	72"	84"	96"
Plank	3½"	4.4	200	180	165	150	135	125	115	95	85	75	70	60	55	50		
	4"	4.4		200	195	175	155	140	120	110	100	95	85	70	60	50	55	
	5"	4.6						200	175	135	125	115	105	85	70	60	50	35
	6", 7"	4.8, 4.9								200	180	170	160	120	125	105	75	60
	8", 9", 10"	5.1, 5.3, 5.4												200	165	136	100	75

For loads greater than 200 lbs., contact Tectum Inc.

<sup>1</sup> Thickness and weight are nominal.

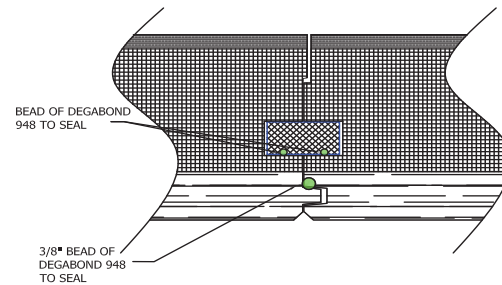
<sup>2</sup> Contact Tectum Inc. when designing high-humidity environments such as pools and ice arenas.

### TECTUM III & TECTUM IIIP THERMAL PERFORMANCE

PANEL THICKNESS	R-VALUE*	WEIGHT PSF
3½"	11.86	4.4
4"	14.36	4.4
5"	19.36	4.6
6"	24.36	4.8
7"	29.36	4.9
8"	34.36	5.1
9"	39.36	5.3
10"	44.36	5.4

\* R-Value includes air films

### TECTUM IIIP END JOINT



### ENVIRONMENTAL INFORMATION

#### TECTUM PRODUCTS' COMPOSITION

The wood fibers (excelsior) used in Tectum panels come from Wisconsin aspen trees. The Wisconsin aspen is a self-propagating tree. When cut, a new tree will begin to grow back from its root structure. In addition, all Wisconsin Aspen used for Tectum is air-dried. No drying kilns are used. The wood is stored in ranks to age naturally. No chemicals are used in the production of any excelsior purchased by Tectum Inc.

All excelsior used in Tectum products comes from a single source that is Forest Stewardship Council certified. These programs are a comprehensive system of objectives and performance measures that integrate the perpetual growing and harvesting of trees with the protection of wildlife, plants, soil and water quality. All loggers are trained to adhere to FSC principles.

Magnesium oxide is mixed with magnesium sulfate (Epsom salts) to form the primary binder. The magnesium sulfate solution has been manufactured on site by reclaiming waste materials since production began in 1949. The secondary binder is composed of sodium silicate and calcium carbonate (limestone). All of the water used in the manufacture of Tectum is captured and recycled.

#### MORE INFORMATION

For complete information about Tectum products and LEED, please see our Marketing Bulletins M-81 (Tectum Products and LEED Certification) and M-83 (Tectum Products and LEED Q & A) or our Environmental Statement. All of these materials are available online at [tectum.com/leed](http://tectum.com/leed).

#### TECTUM PRODUCTS AND LEED

Tectum Inc. fully endorses the LEED Green Building Rating System. Our products may contribute to the following LEED credit areas:

##### Energy & Atmosphere (EA)

**Prerequisite 2:** Minimum Energy Performance

**Credit 1:** Optimized Energy Performance

##### Materials & Resources (MR)

**Credit 2:** Construction Site Waste Management

**Credit 4:** Recycled Content

**Credit 5:** Regional Materials

**Credit 6:** Rapidly Renewable Resources

**Credit 7:** Certified Wood

##### Indoor Environmental Quality (EQ)

**Prerequisite 3 (LEED for Schools):**

Minimum Acoustical Performance

**Credit 3.1 & 3.2:** Construction IAQ Plans

**Credit 4.1:** Low-Emitting Materials,

Adhesives and Sealants

**Credit 4.4:** Low-Emitting Materials,

Composite Wood & Agrifiber Products

**Credit 10 (LEED for Schools):** Mold Prevention

**Credit 11 (LEED for Schools):** Low-Impact Cleaning and

Maintenance Equipment Policy

##### Innovation (ID)

**Credit 1:** Innovation in Design