

## TECTUM V Structural-Acoustical Roof Deck

The Tectum V (five) roof deck panel is a composite of a 1½" Tectum substrate, ½" NEOPOR® GPS (Graphite Enhanced Polystyrene) insulation, 7/16" OSB sheathing, 6" NEOPOR® GPS insulation topped by 7/16" OSB sheathing with a slip-resistant surface. Components are bonded with code-listed structural adhesives.

### FEATURES OF TECTUM V

- Spans up to 12 feet
- 50 pound design load
- Diaphragm shear of 417
- R-Value of 33

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

### FIRE CLASSIFICATION

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 1½" Tectum substrate provides a 15 minute barrier for foam plastics (Per 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.

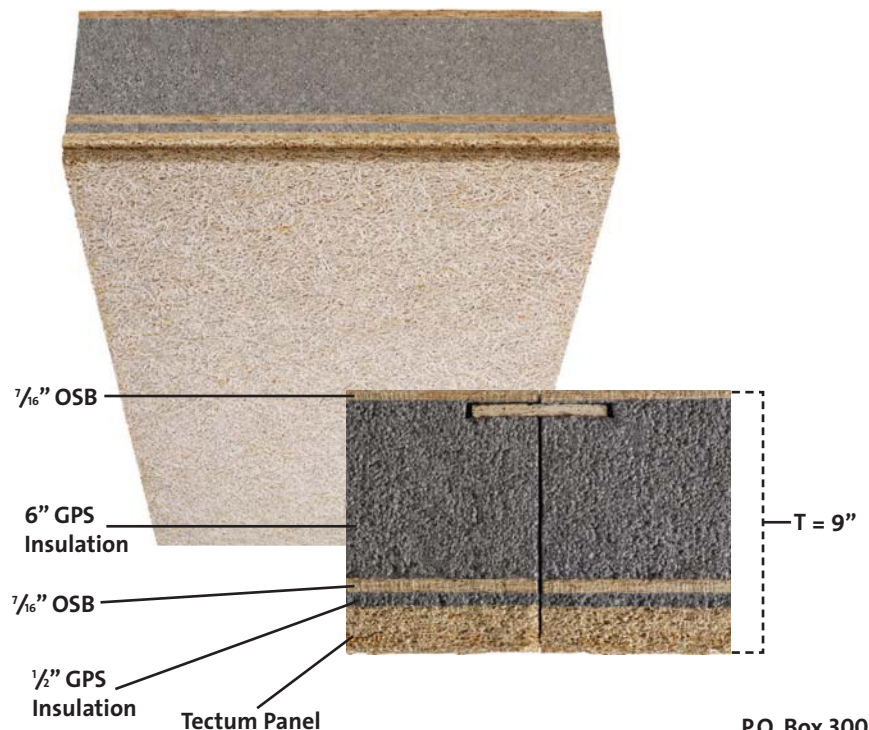
### LIMITATIONS - TECTUM V

When designing for high-humidity applications such as pools or ice arenas, please contact the Tectum Inc. technical department for assistance.

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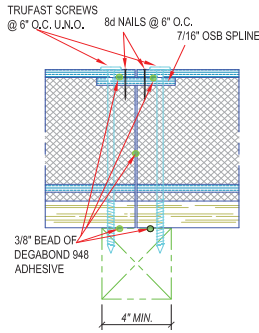
Lemberg Children's Center at Brandeis University



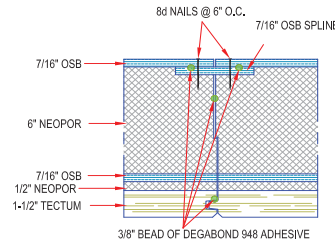
P.O. Box 3002  
Newark, OH 43058

**TECTUM**  
The Noise Control Solution

105 S. 6th St.  
Newark, OH 43055



END JOINTS MUST FALL OVER SUPPORTING MEMBERS  
MINIMUM BEARING IS 2" PER PANEL



CONTINUOUS PERIMETER SUPPORT BY OTHER MEANS, MINIMUM BEARING IS 3" SCREW PANELS @ 6" O.C. ALONG PERIMETER.

## TECTUM ROOF DECK DESIGN GUIDELINES

### TECTUM V ROOF DECK DESIGN LOAD DATA\*\*

System	Thickness***	Wt. (PFS) ***	Product	96"	108"	120"	132"	144"
Comp. Plank V	9"	6.0	V	112	88	72	59	50

\*\* All published design loads are based on minimum safety factor of four. For example, 50 psf design load has an ultimate load of 200 psf.

\*\*\* Thickness and weight are nominal. For loads greater than 200 lbs., contact Tectum Inc. Technical Department

## DIAPHRAGM DESIGN DATA

### TECTUM ROOF DECK FASTENER SPACING SCHEDULE

Type	Panel Size	Test No.	Joist	Span <sup>2</sup>	Fasteners	Field Spacing	Perimeter	Adhesive <sup>1</sup>	Grout	ULT/ LF	DSN/ LF
T-V Plank	9" x 47" x 144"	Pending	Wood	144"	11" 14 Gauge Sip Scr	7/Joist/Panel	6" o.c. sides + ends	T & G + Joist + Splines	None	1251	417

Notes: 1. Adhesive is to meet the requirements of AFG-01. A 3/8" bead of adhesive is to be used. Approximately 38 linear feet of adhesive per quart tube.

Specific adhesive used on test assemblies was Degabond Adhesive 948.

2. Values over wood joists are conservative when supports are steel.

## ENVIRONMENTAL INFORMATION

The wood fibers (excelsior) used in Tectum Panels come from Trembling Aspen (Populus Tremuloides) trees. The Aspen is a self-propagating tree. When cut, a new tree will begin to grow back from its root structure. All Aspen wood used for Tectum products is air-dried. The wood is stored in ranks to age naturally. No pesticides or chemicals are used in the production of any excelsior purchased by Tectum Inc.

Tectum Inc. purchases excelsior from a single source that is affiliated with both the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI). 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 and SFI principles.

Magnesium oxide is mixed with magnesium sulfate (Epsom salts) to form the primary binder. Tectum Inc. manufactures the magnesium

sulfate solution on site by recycling waste that is naturally generated in the production process. The secondary binder is composed of sodium silicate and calcium carbonate (limestone). All of the water used in the manufacture of Tectum products is captured and recycled.

### TECTUM PRODUCTS AND LEED

Tectum Inc. fully endorses the LEED Green Building Rating System.

Our products may contribute to the following LEED credit areas:

EA Prerequisite 2: Minimum Energy Performance

EA Credit 1: Optimized Energy Performance

MR Credit 2: Construction Site Waste Management

MR Credit 4: Recycled Content

MR Credit 5: Regional Materials

MR Credit 6: Rapidly Renewable Resources

MR Credit 7: Certified Wood

EQ Prerequisite 3 (LEED for Schools): Minimum Acoustical Performance

EQ Credit 3.1 and 3.2: Construction IAQ Plans

EQ Credit 4.1: Low-Emitting Materials, Adhesives and Sealants

EQ Credit 4.4: Low-Emitting Materials, Composite Wood & Agrifiber Products

EQ Credit 10 (LEED for Schools): Mold Prevention

EQ Credit 11 (LEED for Schools): Low-Impact Cleaning and Maintenance Equipment Policy  
ID Credit 1: Innovation in Design

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

ASBESTOS HAS NEVER BEEN USED IN TECTUM PRODUCTS.

THERE IS NO ADDED UREA FORMALDEHYDE IN ANY TECTUM PRODUCTS.