TECTUM INC.
The Noise Control Solution

TECTUM E & Tectum E-N Structural-Acoustical Roof Deck

Tectum E & Tectum E-N 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 7/16" OSB (Oriented Strand Board).

TECTUM E

Tectum E Roof Deck panel is a composite of 1½" 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.

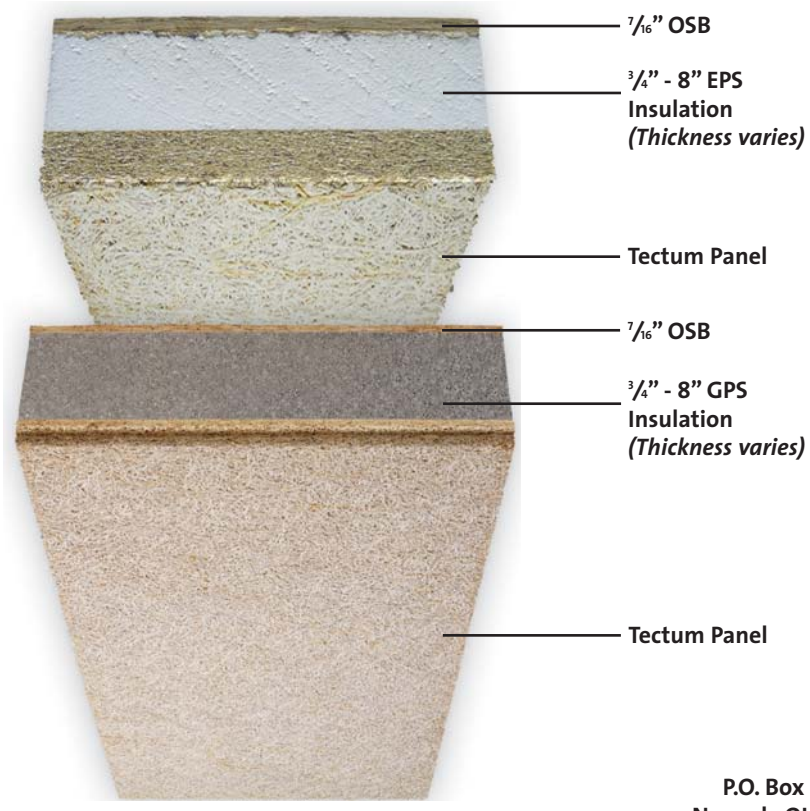
TECTUM E-N

Tectum E-N roof deck panel is a composite of a 1½" 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-N offers an R-value of up to 44.

® - registered trademark of BASF

Palm Valley High School - Palm Valley, CA



P.O. Box 3002
Newark, OH 43058

TECTUM INC.
The Noise Control Solution

105 S. 6th St.
Newark, OH 43055

www.tectum.com e-mail: info@tectum.com Phone: 888-977-9691 Fax: 800-832-8869

TECTUM INC.
The Noise Control Solution

TECTUM ROOF DECK DESIGN GUIDELINES

TECTUM E & TECTUM E-N ROOF DECK DESIGN LOAD DATA

System	Thickness[1]	Wt. (PFS)[1]	24"	30"	36"	38"	40"	42"	44"	48"	50"	52"	54"	60"	66"	72"	84"	96"
Plank	2¾"	4.2	200	125	100	90	80	74	65	50								
	3½"	4.2	200	150	135	120	110	100	90	75	70	65	60	50				
	4"	4.3	200	180	165	150	135	125	115	95	85	75	70	60	55	50	35	
	5"	4.4		200	195	175	155	140	120	110	100	95	85	70	65	60	45	
	6", 7"	4.4, 4.5								200	180	170	160	150	125	105	75	60
	8", 9", 10"	4.6, 4.7, 4.8												200	165	130	100	75

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

[1] Thickness and weight are nominal.

DIAPHRAGM DESIGN DATA

TECTUM E & TECTUM E-N ROOF DECK FASTENER SPACING SCHEDULE

Type	Panel Size	Test No.	Joist	Span[1]	Fasteners	Field Spacing	Perimeter	Adhesive[2]	Grout	ULT/ LF	DSN/ LF
Plank	4"x47"x144"	94-30037C	Wood	72"	6" 14 Gauge Sip Scr	3/Joist/Panel	12" o.c. sides + ends	T&G+Joist	None	1042	346
Plank	5"x47"x168"	98030199	Wood	84"	6" 14 Gauge Sip Scr	3/Joist/Panel	12" o.c. sides + ends	T&G+Joist	None	1012	336
Plank	5"x48"x96"	94030321	Wood	96"	6" 14 Gauge Sip Scr	4/Joist/Panel	12" o.c. sides + ends	T&G+Joist	None	604	201
Plank/ Overlay	5"x47"x96"		Wood	96"	6" 14 Gauge Sip Scr	4/Joist/Panel	8" o.c. sides + ends	T&G+Joist	None		
	7/16"x48"x96"	98030262	OSB	—	2"x16 Gauge Staples	8"@24" Centers	4" o.c. sides + ends	Per&24"o.c.	None	1315	437

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 (Populous 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.

ASBESTOS HAS NEVER BEEN USED IN TECTUM PRODUCTS.

THERE IS NO ADDED UREA FORMALDEHYDE IN ANY TECTUM PRODUCTS.

04/15
Pub. #T145