TECTUM® E & TECTUM® E-N

Structural Acoustical Roof Deck



Tectum E Acoustical Roof Deck panels; Duranes Elementary School, Albuquerque, NM

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

- Sound absorption – NRC up to 0.80
- R-value up to 43.76
- Spans up to 8 feet
- Diaphragm shear up to 437 dsn/lf
- Nailable surface
- Low or high slope applications

new

- This product can be adjusted to comply with Build America, Buy America (BABA) requirements. Modifications to pricing and lead times may apply. Contact your local sales representative for additional information.

TYPICAL APPLICATIONS

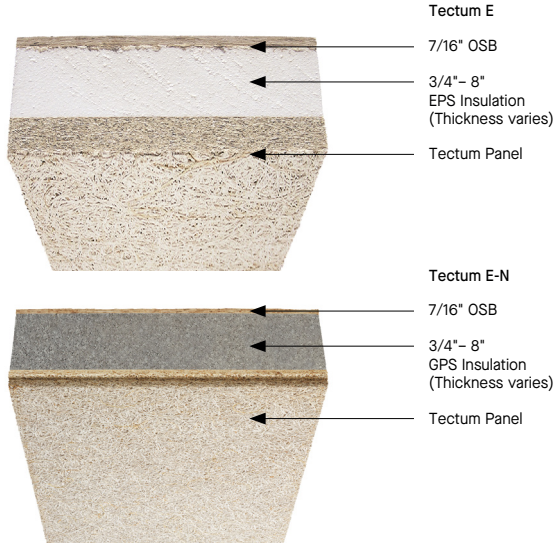
- Schools
- Gymnasiums
- Arenas

TECTUM® E

Tectum® E Roof Deck panel is a composite of 1-1/2" 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 1-1/2" or thicker Tectum® I panel, 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.



TechLine 877 276-7876
armstrongceilings.com/roofdeck

Armstrong® World Industries

TECTUM® E & TECTUM® E-N

Structural Acoustical Roof Deck

FSC www.fsc.org FSC® C007626
The mark of responsible forestry
(Upon Request)

LEED V5

COMMON MATERIALS FRAMEWORK	Climate Health
Human Health	Ecosystem Health FSC®
	Circular Economy
OCCUPANT EXPERIENCE	Acoustics ✓

DESIGN LOAD DATA[1]

System	Thickness[1]	Wt. (PFS)[1]	24"	30"	36"	38"	40"	42"	44"	48"	50"	52"	54"	60"	66"	72"	84"	96"
Plank	2-3/4"	4.2	200	125	100	90	80	74	65	50								
	3-1/2"	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 Armstrong TechLine.
[1] Thickness and weight are nominal.

TECTUM E THERMAL PERFORMANCE

Based on 1-1/2" Tectum Substrate

Insulating Foam Thickness	Total[1] Thickness	R-Value[2]	Weight PSF
3/4"	2-3/4"	7.24	3.6
1-1/2"	3-1/2"	10.13	3.8
2"	4"	12.06	3.9
3"	5"	15.91	4.7
4"	6"	19.76	4.8
5-1/4"	7-1/4"	24.57	5.2
6-1/2"	8-1/2"	29.38	5.4
7"	9"	31.31	5.6
8"	10"	35.16	6.0

[1] Total thickness includes 7/16" OSB nailable top surface.
[2] R-values include air films and built-up roofing.

DIAPHRAGM DESIGN DATA

Call TechLine for assistance when designing and detailing Tectum® Roof Deck Systems

Type	Panel Size D × W × L	Joist	Span[1]	Fasteners	Field Spacing	Perimeter	Adhesive[2]	Grout	ULT/LF	DSN/LF
Plank	4 × 47 × 144"	Wood	72"	6" 14-Gauge Sip Scr	3/Joist/ Panel	12" O.C. sides + ends	T&G + Joist	None	1042	346
	5 × 47 × 168"	Wood	84"	6" 14-Gauge Sip Scr	3/Joist/ Panel	12" O.C. sides + ends	T&G + Joist	None	1012	336
	5 × 48 × 96"	Wood	96"	6" 14-Gauge Sip Scr	4/Joist/ Panel	12" O.C. sides + ends	T&G + Joist	None	604	201
Plank/ Overlay	5 × 47 × 96"	Wood	96"	6" 14-Gauge Sip Scr	4/Joist/ Panel	8" O.C. sides + ends	T&G + Joist	None	1315	437
	7/16 × 48 × 96"	OSB	–	2" × 16-Gauge Staples	8"@24" Centers	4" O.C. sides + ends	Per & 24" O.C.	None	1315	437

[1] Values over wood joists are conservative compared to values over steel.
[2] Adhesive is to meet the requirements of AFG-01. A 3/8" bead of adhesive is to be used. Approximately 50 linear feet of adhesive per quart tube. Specific adhesive used on test assemblies was Miracle® SFA-66 adhesive.

TECTUM E-N THERMAL PERFORMANCE

Based on 1-1/2" Tectum Substrate

Insulating Foam Thickness	Total[1] Thickness	R-Value[2]	Weight PSF
3/4"	2-3/4"	7.96	3.6
1-1/2"	3-1/2"	11.56	3.8
2"	4"	13.96	3.9
3"	5"	18.76	4.7
4"	6"	23.56	4.8
5-1/4"	7-1/4"	29.56	5.2
6-1/2"	8-1/2"	35.56	5.4
7"	9"	37.96	5.6
8"	10"	43.76	6.0

[1] Total thickness includes 7/16" OSB nailable top surface.
[2] R-values include air films and built-up roofing.

SUSTAINABILITY INFORMATION

- 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
- 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

ADDITIONAL DETAILS

For more information, or for an Armstrong representative, call 877 276-7876. For complete technical information, detail drawings, CAD design assistance, installation information, and many other technical services, call TechLine customer support at 877 276-7876 or email techline@armstrong.com.

For the latest product selection and specification data, visit armstrong.com/roofdeck.

COMPOSITE ROOF DECK PANELS

LEED® is a registered trademark of the U.S. Green Building Council; FSC® is a registered trademark of FSC Forest Stewardship Council, A.C., license code FSC-C007626; Miracle® Construction Adhesive is a registered trademark of ITW Polymers Sealants North America; all other trademarks used herein are the property of AWI Licensing LLC and/or its affiliates © 2026 AWI Licensing LLC

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