

TECTUM® III
Structural Acoustical Roof Deck



Tectum III Acoustical Roof Deck

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 44
- Spans up to 8 feet
- 50-pound design load
- Diaphragm shear up to 786 dsn/lf
- Nailable surface
- Low or high slope applications
- 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.

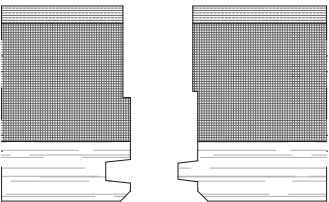
TYPICAL APPLICATIONS

- Schools
- Gymnasiums
- Arenas

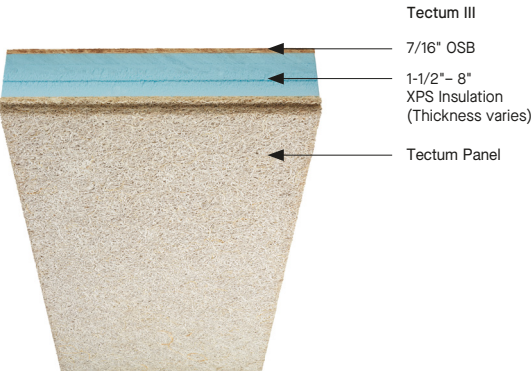
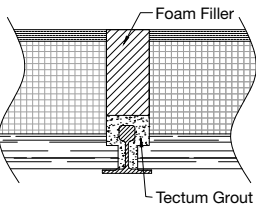
TECTUM® III

Tectum III roof deck panel is a composite of a 1-1/2" or thicker Tectum substrate, XPS (extruded polystyrene) insulation 1-1/2" to 8" thick and 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 III PLANK EDGE DETAIL



TECTUM III TILE EDGE DETAIL



TECTUM® III

Structural Acoustical Roof Deck

LEED V5

COMMON MATERIALS FRAMEWORK
Human Health

Climate Health
Ecosystem Health

Circular Economy

OCCUPANT EXPERIENCE

Acoustics



DESIGN LOAD DATA¹

System	Thickness ²	Wt. (PFS) ²	24"	30"	36"	38"	40"	42"	44"	48"	50"	52"	54"	60"	66"	72"	84"	96"
Plank	3-1/2"	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	35	
	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 Armstrong TechLine.

¹ Contact Armstrong when designing high-humidity environments such as pools and ice arenas.

² Thickness and weight are nominal.

THERMAL PERFORMANCE

Based on 1-1/2" Tectum Substrate

Insulating Foam Thickness	Total ¹ Thickness	R-Value ²	Weight PSF
1-1/2"	3-1/2"	11.86	4.0
2"	4"	14.36	4.1
3"	5"	19.36	4.7
4"	6"	24.36	4.8
5"	7"	29.36	5.0
6"	8"	34.36	5.4
7"	9"	39.36	5.8
8"	10"	44.36	6.2

¹ Total thickness includes 7/16" OSB
naillable 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	3-1/2 × 47 × 120"	Wood	60"	6" 14-Gauge Sip Scr	3/Joist/ Panel	12" O.C. sides + ends	T&G + Joist	None	1093	363
	3-1/2 × 47 × 144"	Wood	72"	6" 14-Gauge Sip Scr	3/Joist/ Panel	12" O.C. sides + ends	T&G + Joist	None	1068	355
	5 × 47 × 144"	Wood	72"	6" 14-Gauge Sip Scr	3/Joist/ Panel	12" O.C. sides + ends	T&G + Joist	None	964	320
Plank/ Overlay	5 × 47 × 144"	Wood	72"	6" 14-Gauge Sip Scr/1-1/2" w	6/Joist/ Panel	6" O.C. sides + ends	T&G + Joist	None	2363	786
	7/16 × 48 × 144"	OSB	N/A	2" × 16-Gauge Staples	8" @ 24" Centers	4" O.C. sides + ends	Per & 24" O.C.	None	2363	786
Tile	3-1/2 × 47-1/2 × 96"	Steel	96"	000-3-14 3-1/2"+ 14GA/1-1/2" w	3/Joist/ Panel	12" O.C. sides + ends	Joist	Long Edge	939	312

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.

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

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@armstrongceilings.com.

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