

TECTUM Roof Deck Systems

With various edge treatments, Tectum panels are used as the substrate for all Tectum roof deck systems. Tectum roof plank panels have T&G long edges and square ends. Plank is designed to span structural supports. Tectum roof tile systems have rabbeted long edges and either square or T&G ends. Tiles span between structural tees. Tees span between supports.

LIMITATIONS - TECTUM I, III, E, NS

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

COMBUSTIBILITY

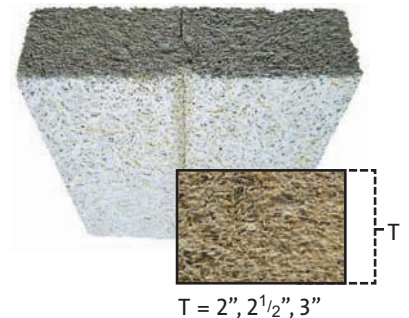
Warning: All foam insulation should be adequately protected. Styrofoam brand and EPS insulation are combustible and may constitute fire hazards if improperly used or installed. Use only as directed by the specific instructions for these products. Styrofoam brand and EPS insulation contain a flame retardant additive to inhibit accidental ignition from small fire sources. During shipping, storage, installation and use, this material should not be exposed to flame or other ignition sources.



TECTUM I

Tectum I is typically used in low slope applications and provides a thermal barrier for field-applied foam plastics. It is compatible with virtually all roof installation materials. Underside exposed joints have attractive beveled edges. LS (long span) panels available with steel channel reinforcement.

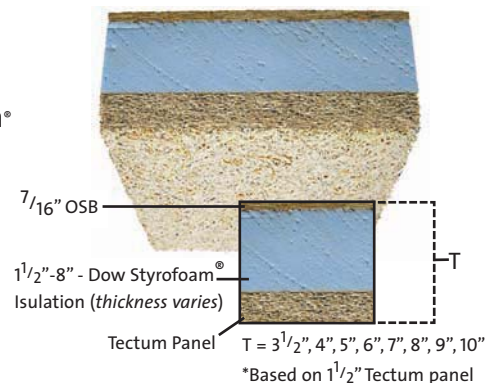
The Tectum I roof deck system consists of standard TECTUM panels in either plank or tile configurations.



TECTUM III

The Tectum III roof deck panel is a composite of a 1 1/2" or thicker Tectum substrate, Dow Styrofoam® brand XPS (extruded polystyrene) insulation 1 1/2" to 8" thick and 7/16" OSB (oriented strand board) sheathing with a slip-resistant surface. Components are bonded with code-listed structural adhesives.

Tectum III panels are typically used in sloped applications where insulation and a nailable surface are required.



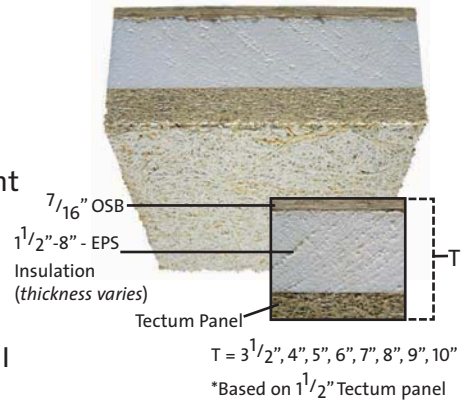
Tectum panels are composed of aspen wood fiber (excelsior) bonded with an exclusive inorganic hydraulic cement and are formed by a continuous process under heat and pressure. Tectum panels combine several materials to create a decorative product that provides excellent sound absorption, abuse resistance, insulation and a textured interior finish. A silicone treatment to the panel resists water and water migration. There are no urea formaldehydes or CFCs in any Tectum product.

NOTE: There is no asbestos, nor has there ever been any asbestos, used in Tectum products.

TECTUM E

The Tectum E roof deck panel is a composite of a 1 1/2" or thicker Tectum substrate, EPS (expanded polystyrene) insulation and 7/16" OSB sheathing with a slip-resistant surface. Components are bonded with code-listed structural adhesives.

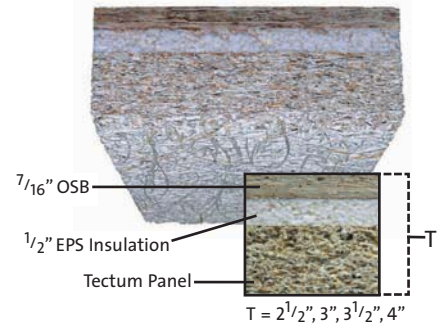
The EPS core exceeds the requirements of ASTM C-578 Type I and bears the UL classification mark.



TECTUM NS

The Tectum NS (nailable surface) roof deck panel is a composite of a 1 1/2" or thicker Tectum substrate, 1/2" thick EPS (expanded polystyrene) insulation and 7/16" OSB sheathing with a slip-resistant surface. Components are bonded with code-listed structural adhesives.

Tectum NS Panels are typically used in sloped applications where minimal insulation is required, such as outdoor pavilions.



DIAPHRAGM DESIGN DATA

TECTUM ROOF DECK FASTENER SPACING SCHEDULE

Type	Panel Size	Test No.	Joist	Span ⁴	Fasteners	Field Spacing ²	Perimeter	Adhesive ^{1,3}	Grout	ULT/ LF	DSN/ LF
T-I Plank	3"x31"x96"	88-3113-1	Steel	48"	S-25/2" Washer	3/Joist/Panel	16" o.c.	No	None	825	275
T-I Plank	3"x31"x96"	88-3113-1	Steel	48"	S-25/2" Washer	3/Joist/Panel	16" o.c.	T&G+Joist	None	1350	450
T-I LS	2 1/2"x31"x120"	94-30037D	Wood	60"	3 1/2" 14 Gauge Scr/2"w	2/Joist/Panel	10" o.c. sides + ends	T&G+Joist	None	1170	389
T-I LS	3"x31"x144"	94-30037D	Wood	72"	4 1/2" 14 Gauge Scr/2"w	2/Joist/Panel	12" o.c. sides + ends	T&G+Joist	None	860	286
T-I LS	2"x31"x96"	94-30270	Wood	48"	3 1/4" 14 Gauge Scr/2"w	2/Joist/Panel	12" o.c. sides + ends	T&G+Joist	None	964	321
T-I LS ⁵	3"x 31"x144"	02-030070B	Wood	72"	4 1/2" 14 Gauge Scr/2"w	2/Joist/Panel	12" o.c. sides + ends	T&G+Joist	None	1631	542
T-I Tile	2"x23 1/2"x143"	88-3113-1	Steel	72"	112 Ts/112 x Ts	24" o.c.	112 Ts	No	4 Sides	925	313
T-I Tile	2"x31 1/2"x95"	88-3113-1	Steel	96"	168 Ts/112 x Ts	32" o.c.	168 Ts	No	4 Sides	575	200
T-I RT/TG	2"x31 1/2"x96"	91-3222	Steel	96"	000-5-14-2+S-25/2"w	32" o.c.+2/Joist	S-25@16"+3/End	T&G+Per	Long Edge	696	231
T-I Tile	2"x31 1/2"x96"	94-30037H	Steel	96"	000-5-14-2+S-25/2"w	2/Joist	10 1/2" o.c.	Joist	Long Edge	835	278
T-I Tile ⁵	2"x31 1/2"x96"	02-030070A	Steel	96"	218 Ts/3 1/4" 14 Gauge/2"w	2/Joist/Panel	12" o.c. sides + ends	Joist	Long Edge	1530	509
T-III Plank	3 1/2"x47"x144"	94-30037A	Wood	72"	6" 14 Gauge Sip Scr	3/Joist/Panel	12" o.c. sides + ends	T&G+Joist	None	1068	355
T-III Plank	3 1/2"x47"x120"	94-30037B	Wood	60"	6" 14 Gauge Sip Scr	3/Joist/Panel	12" o.c. sides + ends	T&G+Joist	None	1093	363
T-III Plank	5"x47"x144"	94-30037E	Wood	72"	6" 14 Gauge Sip Scr	3/Joist/Panel	12" o.c. sides + ends	T&G+Joist	None	964	320
T-III Tile	3 1/2"x47 1/2"x96"	95-30060	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
T-E 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
T-E 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
T-E 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
T-III Plank/ Overlay	5"x47"x144" 7/16"x48"x144"	92-3777	Wood OSB	72" —	6" 14 Gauge Scr/1 1/2"w 2"x16 Gauge Staples	6/Joist/Panel 8"@24" Centers	6" o.c. sides + ends 4" o.c. sides + ends	T&G+Joist Per&24" o.c.	None	2363	786
T-E Plank/ Overlay	5"x47"x96" 7/16"x48"x96"	98030262	Wood OSB	96" —	6" 14 Gauge Sip Scr 2"x16 Gauge Staples	4/Joist/Panel 8"@24" Centers	8" o.c. sides + ends 4" o.c. sides + ends	T&G+Joist 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 50 lin. ft. of adhesive per quart tube.
 2. All panels were installed with staggered ends except Tectum I tile with 168 bulb tees and Tectum III tile on truss tees.
 3. Specific adhesive used on test assemblies was Miracle Construction adhesive SFA-66.
 4. Values over wood joists are conservative when supports are steel.
 5. Visit our Web site to download technical bulletin T-77 for more information. Call for assistance when designing and detailing this Tectum roof deck system.