

## A UNIQUE ACOUSTICAL PRODUCT

January 2014

# Acoustical Products for Schools & Universities



### TABLE OF CONTENTS PAGE

ACOUSTICAL CEILINGS, WALLS & SPECIALTY APPLICATIONS	2
ACOUSTICAL CEILINGS	2
ACOUSTICAL WALL PANELS	3
FINALÉ WALL PANELS	3
FABRI-TOUGH WALL PANELS	3
FINALÉ FABRI-TOUGH WALL PANELS	3
TECTUM I STRUCTURAL ROOF DECK	4
TECTUM III & E STRUCTURAL ROOF DECK	4
ACOUSTICAL WALL PANEL TECHNICAL INFORMATION	4



Tectum panels are made from renewable and sustainable raw materials.

## ACOUSTICAL • CEILINGS • WALLS • SPECIAL APPLICATIONS

For over half a century, the commercial and institutional design and construction industry has depended on Tectum's unique, cost-effective solutions to meet their acoustical challenges. Easy to work with and install, Tectum acoustical wall and ceiling treatments are not only sound absorbing, they are tough enough to stand up to abuse. Painted or left natural, they provide an attractive, durable finish in any interior application. Manufactured at the Tectum Inc. plant in Newark, Ohio, Tectum performance products have stood the test of time.

Today, Tectum Inc. has new products using the standard Tectum panel in conjunction with other materials. Now, the architect, acoustical engineer, designer or building owner has a variety of acoustical products to choose from to create a different look or add character to any project.

Tectum acoustical panels are composed of aspen wood fibers, bonded with an exclusive inorganic hydraulic cement binder, and are formed in a continuous process under heat and pressure. Physical characteristics usually obtained only with a combination of several separate building materials are found in Tectum products: insulation, excellent sound absorption, abuse resistance, a decorative textured interior finish...all in a structurally strong yet lightweight product that carries a Class A/I flame spread rating.

Note: Thickness dimensions throughout this brochure are nominal.

**THERE IS NO ASBESTOS, NOR HAS THERE EVER BEEN ANY ASBESTOS, USED IN TECTUM PRODUCTS.**

Tectum is a registered trademark of Tectum Inc.



## ACOUSTICAL CEILINGS FOR CHURCHES & WORSHIP FACILITIES

Tectum Ceiling panels combine a unique textured beauty with superior abuse resistance and high acoustical performance. These wood fiber panels combine several functions that truly set them apart for use in the education market.

The panels are available in a wide range of sizes. They can be cut easily and shaped with standard woodworking tools, and installed in standard grid systems.

Tectum ceiling panels are available in natural color, painted white or custom colors. They can be painted up to six times without losing their acoustical properties.

Tectum decorative and acoustical panels can take repeated abuse and still retain their appearance. Tectum ceiling panels have remained the product of choice for over 50 years for any school or university where noise is a problem.

Tectum ceiling panels meet the requirements of ASTM E-1264 Type XIV pattern L; Class A.

### FEATURES

- Reduces noise – NRC up to 1.00
- Class A/Class I interior finish
- Durability – tough, abuse resistant
- Lifetime warranty against breakage
- Flexible – easy to use
- Economical – longer life span
- Can be field painted six times.
- Nationwide distribution – local stocks
- Proven performance – over 50 years
- Also available in metric sizes
- R-Value is 1.75/inch
- Light reflectance up to .75



### TECTUM CEILING TILE ACOUSTICAL PERFORMANCE

Panel Type	SOUND ABSORPTION COEFFICIENTS							NRC	Mounting
	125	250	500	1000	2000	4000			
1" x 24" x 24" Lay-in	.40	.43	.35	.48	.60	.93	.45	E-400	
1 1/2" x 24" x 24" Lay-in	.44	.43	.33	.49	.66	.77	.50	E-400	
2" x 24" x 24" Lay-in	.48	.46	.36	.55	.74	.79	.55	E-400	
1" x 24" x 24" Lay-in panel with 6 1/4" Fiberglass Backing	1.01	.89	1.06	.97	.93	1.13	.95	E-400	



## ACOUSTICAL WALL PANELS

Tectum Interior Wall Panels offer an effective, permanent and attractive solution for any undesirable noise in any school gymnasium, auditorium or music room. They are abuse resistant yet lightweight and easily installed in an existing building for effective sound control. Furring strips installed horizontally (when using vertical panels) are recommended and should be a maximum of 24" o.c. when using 1" thick panels.

### SIZES

Tectum wall panels are available 1", 1 1/2" and 2" thick in widths of 23 3/4", 31 3/4" and 47 3/4" with long edges beveled. 1 1/2" and 2" panels are also available with T&G edges in widths of 23", 31" and 47" for interlocking continuous paneling. 48" to 144" lengths are available.



## FINALÉ WALL PANELS

Tectum Finalé panels make installation as easy as 1-2-3. Whenever your school calls for absorption of undesirable noises, Tectum Finalé is the answer. With a high NRC of .75 to 1.00.

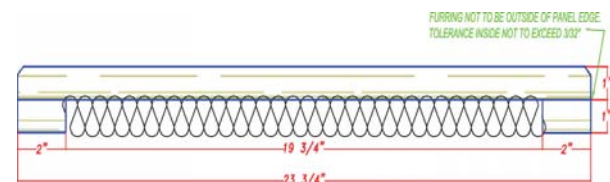
Tectum Finalé is your one-step answer to abuse-resistant acoustics. The Finalé system consists of Tectum wall panels, Tectum furring strips on all four sides and SoniCor core united in a single product.

### SIZES

Tectum Finalé wall panels are available in various thicknesses. Widths of 23 3/4", 31 3/4" and 47 3/4" with beveled edges. 48" up to 144" lengths are available.



←Finalé



## FABRI-TOUGH WALL PANELS

Control noise efficiently, economically and attractively in any classroom with the Fabri-Tough wall panel system.

Efficiently because Tectum panels are known for sound absorption. Economically because these panels are competitively priced and will last longer than ordinary, self-base panels. Attractively because they come in your choice of fabric colors that coordinate with popular contract furnishings.

Depending on mounting, the Fabri-Tough wall panel system can provide NRC's from .50 to .90.

### SIZES

They are available 1" thick, 24" x 48" up to 120". Fabri-Tough wall panels can be field cut to desired size. They have a flame spread of 25 or less under the ASTM E84 test method. For panels to be used in recessed areas, some field adjusting may be necessary.



## FINALÉ FABRI-TOUGH WALL PANELS

Abuse-resistant Tectum Finalé Fabri-Tough panels have a greater noise absorption than their sister panel, Fabri-Tough. Finalé Fabri-Tough panels combine 1" Tectum panels along with 1" Tectum furring with the cavity filled with a SoniCor core. The face of the panel is then wrapped with a durable fabric, making the panel one of the highest NRC abuse-resistant panels available.

### SIZES

Tectum Finalé Fabri-Tough wall panels are available in a variety of fabric colors. They are 24" wide with lengths of 48" up to 120". The overall thickness of the panels is 2".



←Finalé Fabri-Tough

Choose from a variety of different fabric colors to match any school or university's colors or décor.

## TECTUM I STRUCTURAL ROOF DECK

Tectum I is typically used in low slope applications, perfect for theater construction. It is compatible with virtually all roof installation materials. Underside exposed joists have attractive beveled edges. LS (long span) panels available with 16 gauge galvanized steel channel for increased spans (See *Roof Deck Systems Sweets catalog 03500/TEC* for more about Tectum Roof Deck Systems).

The unique open texture of the Tectum roof deck system provides an effective acoustical treatment demonstrated by tests in accordance with ASTM Test Method C423. The use of a Tectum roof deck may eliminate the necessity of using other acoustical treatments such as lay-in tile ceilings or acoustical baffles. Tectum roof deck compares favorably with products designed exclusively for sound absorption.

## Tectum III & E STRUCTURAL ROOF DECK

Tectum III Roof Deck panel is a composite of 1 1/2" or thicker Tectum substrate, Dow Styrofoam brand XPS (extruded polystyrene) insulation 1 1/2" to 8" thick and 7/16" OSB sheathing with slip-resistant surface.

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

Tectum E Roof Deck panel is a composite of a 1 1/2" or thicker Tectum substrate, EPS (expanded polystyrene) insulation 1/2" to 8" thick and 7/16" OSB sheathing with 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.



## ACOUSTICAL WALL PANEL TECHNICAL INFORMATION

### TECTUM WALL PANEL ACOUSTICAL PERFORMANCE

#### SOUND ABSORPTION COEFFICIENTS

Panel Type	125	250	500	1000	2000	4000	NRC	MOUNTING
1"	.06	.13	.24	.45	.82	.64	.40	A
1"	.07	.15	.36	.65	.71	.81	.45	D-20
1"	.16	.43	1.00	1.05	.79	.98	.80	C-20
1"	.32	.70	1.09	.93	.76	.94	.85	C-40
1 1/2"	.07	.22	.48	.82	.64	.96	.55	A
1 1/2"	.15	.26	.62	.83	.70	.91	.60	D-20
1 1/2"	.24	.57	1.17	.87	.93	.87	.90	C-20
1 1/2"	.40	.84	1.18	.84	.94	.88	.95	C-40
2"	.15	.26	.62	.94	.62	.92	.60	A
2"	.15	.36	.74	.82	.82	.92	.70	D-20
2"	.24	.67	1.14	.87	1.06	.96	.95	C-20
2"	.42	.89	1.19	.85	1.08	.94	1.00	C-40

### TECTUM FINALÉ FABRI-TOUGH ACOUSTICAL PERFORMANCE

1"	.33	.59	.90	.98	.85	.93	.85	A
----	-----	-----	-----	-----	-----	-----	-----	---

### TECTUM FINALÉ ACOUSTICAL PERFORMANCE

Panel Type	125	250	500	1000	2000	4000	NRC	SAA
1" Finalé w/SoniCor	.18	.47	.87	1.03	.70	1.02	.75	.75
1 1/2" Finalé w/SoniCor	.27	.46	.97	1.01	.70	.89	.80	.81