

**TABLE OF CONTENTS** 

# A UNIQUE ACOUSTICAL PRODUCT

JANUARY 2007

# **Acoustical Ceilings, Walls,** and Special Applications

ACOUSTICAL CEILINGS	2
AESTHETIC ACOUSTICAL CEILINGS	3
ACOUSTI-TOUGH™ CEILING SYSTEM	4
ACOUSTICAL PERFORMANCE	
AND SIZE TABLE	5
HANGING BAFFLES	6
FULL-SPAN CORRIDOR PANELS	6
CLOUD PANELS	7
SOUND BLOCKS	7
ACOUSTICAL PANELS	8
ACOUSTICAL PANEL	
TECHNICAL INFORMATION	9
ACOUSTICAL TEST MOUNTINGS	9
FABRI-TOUGH™ WALL PANELS	10
FABRI-TOUGH™ DECOR PANELS	10
TECTUM VARIATIONS	11
FINALÉ FABRI-TOUGH™	12
FINALÉ	12
SECURITY CEILING SYSTEMS	13



15

16

GENERAL INFORMATION **TECTUM ACCESSORIES** 

**ENVIRONMENTAL STATEMENT** 





West York High School, York, Pennsylvania



#### **ACOUSTICAL CEILINGS**

Tectum™ ceiling panels combine a unique textured beauty with superior abuse resistance. These high-impact wood fiber panels combine several functions that truly set them apart for use in commercial, institutional, recreational and industrial buildings.

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. By using lay-in, Tonico, Multiplane, V-line and Designer Series Tectum panels, the designer can create a variety of three-dimensional patterns.

Tectum ceiling panels can be used in their attractive unpainted natural color, painted white, or custom colors. Also, these panels may be painted or re-painted in the field up to six times without reducing 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 area where noise is a problem and the ceilings are subject to abuse.

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

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



▲ Lay-in Ceiling Panels 1" x 2' x 2' Tonico Styvesant High School, New York, NY

#### **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.
   (See Marketing Bulletin M-77 on our website for specific application.)
- 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



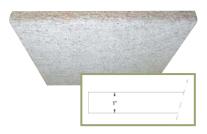
▲ Lay-in Ceiling Panels Miami Heat Arena, Miami, FL

#### **AESTHETIC ACOUSTICAL CEILINGS**

In addition to Tectum Lay-In square-edge ceiling panels, the following dimensional panels are available.

All Tectum Lay-In ceiling panels require a standard 15/16" intermediate duty grid with 1 1/2" high web.

Mounting E-400: Panel face 16" from the test surface.



**LAY-IN**—Tectum Lay-In panels offer the only lifetime warranty against breakage. No other panel can make this claim.  $1^{1}/2^{1} - 2^{1}$  thick panels require rabbeting to fit into the grid system.



V-LINE—Tectum V-Line direct attached ceiling panels allow for continuous installation without a seam being visible. The "V" groove is '/4" deep to match the beveled edges. This design divides the 2' wide panel into three 7 '/8" segments. Lengths from 2' to 14' also allow a true linear look without interruption over long spans. Panels available in 1", 1 '/2" and 2" thicknesses. Appropriate as wall panels, too. Beveled edges are recommended where panel edges meet upon installation.



**TONICO** –Tonico ceiling panels are face rabbeted to provide a <sup>13</sup>/<sub>32</sub>" reveal for 1" thick panels, a <sup>3</sup>/<sub>4</sub>" reveal for 1 <sup>1</sup>/<sub>2</sub>" thick panels and a 1" reveal for 2" thick panels. This provides a wide choice of possible ceiling effects, plus your choice of natural, painted white, or custom colors.



**SOFT LOOK TONICO** – Ceiling panels are face rabbeted to provide a <sup>13</sup>/<sub>32</sub>" reveal for 1" thick panels. This durable ceiling panel features a softer, tapered appearance, and comes in your choice of natural, painted white, or custom colors.



**DESIGNER**–Tectum 1" or 1 <sup>1</sup>/<sub>2</sub>" thick Designer panels provide a unique 3-D linear look that can be emphasized with panels as long as 8'. The rabbeted edges and face grooves are <sup>13</sup>/<sub>32</sub>" deep on the 1" panel and <sup>3</sup>/<sub>4</sub>" deep on the 1 <sup>1</sup>/<sub>2</sub>" panel. Natural, painted white, or custom colors.



DESIGNER SERIES PLUS – The nine three-dimensional squares in each 2' x 2' panel provide a very attractive ceiling pattern in any size room. Rabbeted depths for both 1" and 1 ½" thick Designer Series Plus panels are the same as those in the Designer panels. Choose from natural, painted white, or custom colors.

# **TECTUM**<sup>½</sup>

#### **ACOUSTI-TOUGH CEILING SYSTEM™**

#### LIMITED LIFETIME WARRANTY

The Tectum Acousti-Tough Ceiling System™ is a suspended acoustical ceiling specifically designed for multipurpose rooms and gymnasiums. Tectum panels are the only hard surfaced, durable panels that can take repeated blows from basketballs, volleyballs and soccer balls without cracking or breaking.

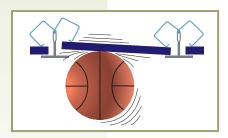
The Tectum Keep Clip, an integral part of the Acousti-Tough Ceiling System™, holds the Tectum ceiling panels in place and automatically repositions them after being struck, saving maintenance time and money in high ceiling areas. It is simple to install and permits full access to the plenum. Two sizes are available to accommodate panels from one inch to two inches thick. Panels must be square-edged, lay-in for this application. Aesthetics are not affected because the clip is invisible from below.

The Acousti-Tough Ceiling System™ is appropriate in a wide variety of abuse-prone applications:

- Recreational facilities—to prevent stray balls from dislodging/ breaking ceiling panels.
- Exterior applications—shopping centers, canopies, soffits, tunnels, parking ramps.
- Unsupervised corridors, locker rooms, garages and other areas to minimize maintenance.

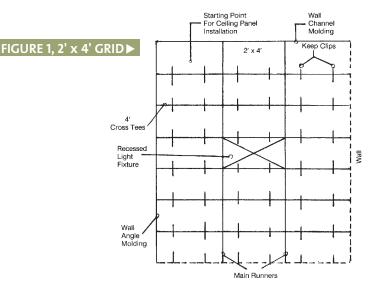
#### **EXPOSED GRID**

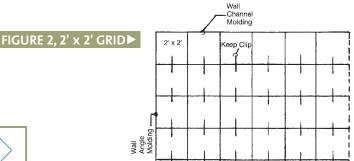
All manufacturers—must be minimum intermediate duty grid, 1 1/2" height main runners and cross tees.





▲ Tectum Acousti-Tough System, Moreau Seminary Gym, Notre Dame, IN







# ACOUSTICAL PERFORMANCE AND SIZE TABLE

TECTUM ACOUSTICAL PERFORMANCE												
TECTUM CEILING TILE												
			SOUND AB	SORPTION CO	FFICIENTS							
Panel Type	125	250	500	1000	2000	4000	NRC	Mounting				
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"												
Tonico / Soft Tonico	.37	.43	.34	.45	.58	.94	.45	E-400				
11/2" x 24" x 24" Designer	.44	.47	.36	.51	.71	1.06	.50	E-400				
1 <sup>1</sup> / <sub>2</sub> " x 24" x 24"												
Designer Plus	.35	.42	.39	.51	.72	1.05	.50	E-400				
2" C-2 24" x 24"	.43	.50	.42	.62	.86	1.04	.60	E-400				
3" C-3 24" x 24"	.70	.50	.52	.76	.92	1.16	.70	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				
1" x 24 x 24" Tonico / Soft Tonico with												
6 1/4" Fiberglass Backing	1.14	1.01	1.06	.94	.93	1.12	1.00	E-400				
1" x 24" x 24" Lay-in panel with												
3 <sup>5</sup> / <sub>8</sub> " Fiberglass Backing	.85	.81	.84	.82	.83	1.01	.85	E-400				
11/2" Clouds	.44	.43	.33	.49	.66	.77	.50	E-400				
1 ½" Clouds with 6" Fiberglass Backing	1.01	.89	1.06	.97	.93	1.13	.95	E-400				

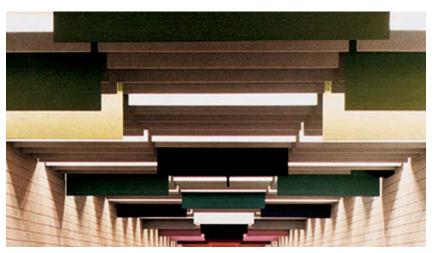
	Nominal Thickness	Actual Size	Edge	Factory	Light	Flame	Weight
Panel Type	(Inches)	(Inches)	Detail	Finish	Reflectance	Spread	P/SF
TECTUM CEILING TILE							
Standard	1, 1 <sup>1</sup> / <sub>2</sub> , 2	23 <sup>3</sup> / <sub>4</sub> x 23 <sup>3</sup> / <sub>4</sub> , 47 <sup>3</sup> / <sub>4</sub>	Square	White, Natural,	.75 / .60	0-25	1.63, 2.53, 3.3
Tectum Tile	1 1/2	$47^{3}/_{4} \times 47^{3}/_{4}$	·	Custom Colors			2.5
Full-Span	1, 1 <sup>1</sup> / <sub>2</sub> , 2	23 <sup>3</sup> / <sub>4</sub> or	Face	White, Natural,	.75 / .60	0-25	1.63, 2.53, 3.3
Corridor Panels		29 <sup>3</sup> / <sub>4</sub> x 48 up to 144	Rabbeted	Custom Colors			
			Two Long Sides				
Acousti-Tough	1, 1 <sup>1</sup> / <sub>2</sub> , 2	23 <sup>3</sup> / <sub>4</sub> x 23 <sup>3</sup> / <sub>4</sub> ,	Square	White, Natural,	.75 / .60	0-25	1.63, 2.53, 3.3
Ceiling System™		23 <sup>3</sup> / <sub>4</sub> x 47 <sup>3</sup> / <sub>4</sub>		Custom Colors			
Tonico	1	23 <sup>3</sup> / <sub>4</sub> x 23 <sup>3</sup> / <sub>4</sub> , 47 <sup>3</sup> / <sub>4</sub>	Face Rabbeted	White, Natural,	.75 / .60	0-25	1.63
	11/2	23 <sup>3</sup> / <sub>4</sub> x 23 <sup>3</sup> / <sub>4</sub> , 47 <sup>3</sup> / <sub>4</sub> ,		Custom Colors			2.53
		47 <sup>3</sup> / <sub>4</sub> x 47 <sup>3</sup> / <sub>4</sub>					
Designer Series	1, 1 <sup>1</sup> / <sub>2</sub>	23 <sup>3</sup> / <sub>4</sub> x 23 <sup>3</sup> / <sub>4</sub>	Face Rabbeted	White, Natural,	.75 / .60	0-25	1.63, 2.53
		23 <sup>3</sup> / <sub>4</sub> x 47 <sup>3</sup> / <sub>4</sub>		Custom Colors			
	4.414	23 <sup>3</sup> / <sub>4</sub> x 95 <sup>3</sup> / <sub>4</sub>			75 / 60	0.05	4 62 2 5
Designer Series Plus	1, 1 <sup>1</sup> / <sub>2</sub>	23 <sup>3</sup> / <sub>4</sub> x 23 <sup>3</sup> / <sub>4</sub>	Face Rabbeted	White, Natural,	.75 / .60	0-25	1.63, 2.53
Conveitor Cailing Danal	1 11/ o 2 mlus	22 3/ www.to.06	Beveled	Custom Colors	.75 / .60	0-25	40 40 56
Security Ceiling Panel	1, 1 ½, & 2 plus	23 <sup>3</sup> / <sub>4</sub> x up to 96	Beveled	White, Natural, Custom Colors	.75 / .60	0-25	4.0, 4.8, 5.6
	24 ga. steel plate 1 ½, & 2 plus	23 <sup>3</sup> / <sub>4</sub> x up to 96	Tongue & Groove	White, Natural,	.75 / .60	0-25	4.8, 5.6
	24 ga. steel plate	25 74 X up to 96	longue & Groove	Custom Colors	.757.60	0-25	4.0, 5.0
Multi-Plane	1, 2, 2 <sup>1</sup> / <sub>2</sub> , 3	23 <sup>3</sup> / <sub>4</sub> x 23 <sup>3</sup> / <sub>4</sub>	Face Rabbeted	White, Natural,	.75 / .60	0-25	1.63, 3.3
Marti-Flanc	1, 2, 2 72, 3	25 74 X 25 74	Tacc Rabbetted	Custom Colors	.737.00	0-23	4.3, 5.3
Soft Look Tonico	1, 1 1/ <sub>2</sub>	23 <sup>3</sup> / <sub>4</sub> x 23 <sup>3</sup> / <sub>4</sub> , 47 <sup>3</sup> / <sub>4</sub>	Face Rabbeted	White, Natural,	.75 / .60	0-25	1.63
5010 20010 1011100	.,	$47^{3}/_{4} \times 47^{3}/_{4}$	. acc nappeted	Custom Colors		0 25	2.53
Concealed Corridor	1 1/2, 2	23³/ <sub>4</sub> x up to 144	Beveled	White, Natural,	.75 / .60	0-25	2.53
Ceiling Panels	,	•	Rabbeted	Custom Colors			3.3
Ü			One side Beveled				
			Kerfed, Rabbeted				

# **TECTUM**<sup>½</sup>

#### **HANGING BAFFLES**

The use of Tectum acoustical panels as hanging sound baffles is growing in popularity as the durability, paintability, ease of application in numerous situations, and the need for their sound absorbing qualities is recognized by architects and acoustical engineers. Standard Tectum sound baffles are available 1", 1 1/2" or 2" thick, with square edges or beveled edges (bottom only). Widths are 2' and they are 4' long. Finish is natural, painted white, or custom colors (both sides). Various methods are appropriate for hanging. See Marketing Bulletin M-8 on our website for more details.

**CAUTION:** Do not use baffles above swimming pools or in gyms where repeated impacts occur.



▲ Custom Painted Baffles - Hartsfield Airport, Atlanta, GA

TECTUM ACOUSTICAL PERFORMANCE											
HANGING BAFFLES SABINS PER UNIT											
SOUND ABSORPTION COEFFICIENTS											
Panel Type	125	250	500	1000	2000	4000					
1' Face to Face (1" Thick)	1.62	1.35	2.36	3.81	4.76	6.54					
2' Face to Face (1" Thick)	.95	1.63	2.32	3.92	5.18	7.27					
3' Face to Face (1" Thick)	1.01	1.44	2.32	4.05	5.16	7.21					

TECTUM PRODUCT												
Panel Type	Nominal Thickness (Inches)	Actual Size (Inches)	Edge Detail	Factory Finish	Light Reflectance	Flame Spread	Weight P/SF					
HANGING BAFFLES												
Standard Tectum Panel	1, 1 1/2, 2	11 <sup>3</sup> / <sub>4</sub> , 23 <sup>3</sup> / <sub>4</sub> x 48	Bottom Edges Beveled Both Sides	White, Natural, Custom Colors	.75/ .60	0-25	1.63, 2.53, 3.3					

## **FULL-SPAN CORRIDOR PANELS**

A true linear look ... Tectum
Full-Span corridor panels are
specifically designed for corridor
ceilings in schools and other
wide-corridored buildings.
Tectum products' resistance to
impact and abrasion offers a
durability for such heavily used
areas that is not found in other
acoustical materials. The panels
are completely accessible for
concealed services.

Used with standard grid suspension components, Full Span panels are available in natural, painted white, or custom colors and lengths up to 144".



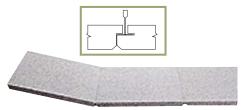
▲ Full-Span Corridor Panels-Royal Middle School, TX



▲ Lay-in Ceiling Panels in Corridor-West Valley Elementary-Utah

## CONCEALED CORRIDOR CEILING

The Concealed Corridor Ceiling was specifically created for corridor ceilings in schools and other wide-corridor buildings. Used with standard suspension components, Concealed Corridor panels are available in natural, painted white, or custom colors and lengths to 144".



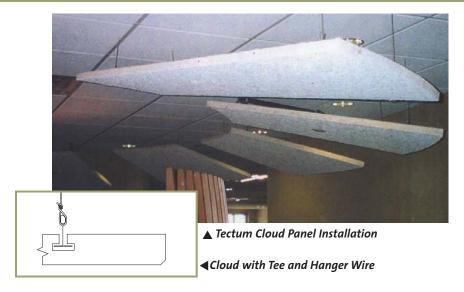
## **RADIUS AND SQUARE CLOUD PANELS**

These innovative panels deliver better design flexibility and better performance in high areas where a grid is not practical and superior noise control is needed.

Square corner or radius corner panels installed at an angle will reduce the risk of damage caused by balls and other objects becoming lodged on top of panels. Radius corner clouds are available in 1 1/2" and 2" x 23 3/4" x 47 3/4", 23 3/4" x 96" and up to 47 3/4" x 47 3/4".

Square corner clouds are available in  $1^{1}/_{2}$ " and  $2^{"}$  up to  $47^{3}/_{4}$ " widths by 144" lengths.

Edges can be beveled or square.



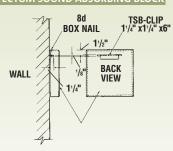
TECTUM PROD	TECTUM PRODUCT											
Panel Type	Nominal Thickness (Inches)	Actual Size (Inches)	Edge Detail	Factory Finish	Light Reflectance	Flame Spread	Weight P/SF					
TECTUM CLOUDS												
Standard Tectum Panel		23 <sup>3</sup> / <sub>4</sub> , 47 <sup>3</sup> / <sub>4</sub> up to 144, 23 <sup>3</sup> / <sub>4</sub> x up to 96, 47 <sup>3</sup> / <sub>4</sub> x 47 <sup>3</sup> / <sub>4</sub>	Square and Radius	White, Natural, Custom Colors	.75/ .60	0-25	2.53, 3.3					

# **SOUND BLOCKS**

Tectum Sound Blocks are a decorative way to control reverberant sound in either new or existing rooms. Their 3"x 15 ½"x 15 ½" dimensions and beveled edges make them easy to install in various patterns.

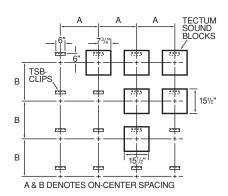
Recommended spacing is 24" or 32" o.c. They come complete with individual hanging clips and in natural, painted white, and custom colors. Other sizes are available on special order.

#### TECTUM SOUND ABSORBING BLOCK





▲ Sound Blocks – WBNS-TV News Studio, Columbus, OH



TECTUM ACOUSTICAL PERFORMANCE											
SOUND ABSORPTION BLOCKS SABINS PER UNIT											
SOUND ABSORPTION COEFFICIENTS											
Panel Type	125	250	500	1000	2000	4000					
24" o.c.	.36	.53	1.81	2.65	2.75	2.73					
32" o.c.	.45	.71	1.87	2.94	2.90	2.91					

TECTUM PRODUCT											
Panel Type	Nominal Thickness (Inches)	Actual Size (Inches)	Edge Detail	Factory Finish	Light Reflectance	Flame Spread	Weight P/SF				
SOUND ABSORPTION BLOCKS											
Standard Tectum Panel	3	15 <sup>1</sup> / <sub>2</sub> x 15 <sup>1</sup> / <sub>2</sub>	All Edges Beveled	White, Natural, Custom Colors	.75/ .60	0-25	5.3				

# **TECTUM**<sup>½</sup>

#### **ACOUSTICAL PANELS**

Tectum interior panels offer an effective, permanent and attractive solution for any kind of activity that produces undesirable noise levels within an enclosed space. They are abuse resistant and are able to withstand the impact of thrown or kicked balls in gyms, yet are lightweight.

Tectum acoustical panels are easy to install in new construction and in existing buildings for effective sound control. Up to 1.00 NRC can be achieved. 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, FINISHES**

Tectum interior 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. 4' to 12' lengths are available in 1' increments. Tectum interior panels are available in natural, painted white or custom colors, and can easily be field painted without losing their acoustical efficiency.

# TECTUM KERFED AND V-LINE INTERIOR PANELS

Kerfed and V-Line Wall Panels offer extra value and installation ease plus all the features you expect from Tectum acoustical products. Both are available in natural, painted white or custom colors.

Installation of 1" thick Kerfed Wall Panels is fast and economical.

Mounting occurs using the concealed attachment method. By inserting the furnished vinyl splines into the kerf,

then fastening the splines to the wall or other structure, you have successfully installed your Kerfed Wall Panel.

V-Line Interior Panels attach directly for a continuous installation without a seam being visible. The "V" groove is '/4" deep to match the beveled edges, and the design divides the 2' or 4' wide panel into equal segments approximately 8" wide. Lengths from 2' to 14' are available in 1", 1 '/2" and 2" thicknesses.

#### **TECTUM KERFED WALL PANELS**





Chautauqua Lake Schools (Chautauqua, NY)
Tectum V-Line Ceiling Panels







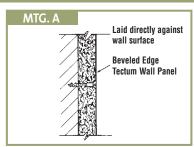


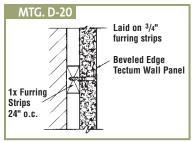
# **ACOUSTICAL PANEL TECHNICAL INFORMATION**

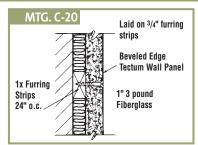
#### **TECTUM ACOUSTICAL PERFORMANCE TECTUM WALL PANELS • STANDARD • KERFED • V-LINE SOUND ABSORPTION COEFFICIENTS Panel Type** 125 250 500 1000 2000 4000 NRC MOUNTING 1" .06 .13 .24 .45 .82 .64 .40 1" D-20 .07 .15 .36 .65 .71 .81 .45 1" .16 .43 1.00 1.05 .79 .98 .80 C-20 1" C-40 .32 .70 1.09 .93 .76 .85 .94 $1^{1}/2"$ .07 .22 .48 .82 .64 .96 .55 Α $1^{1}/2"$ .15 D-20 .26 .62 .83 .70 .91 .60 1 <sup>1</sup>/2" .24 .57 .87 .93 .87 .90 C-20 1.17 $1^{1}/2"$ .40 .84 1.18 .84 .94 .88 .95 C-40 2" .15 .26 .62 .94 .62 .92 .60 Α 2" .15 D-20 .36 .74 .82 .82 .92 .70 2" .24 .67 .87 1.06 .96 C-20 1.14 .95 2" .42 .89 1.19 .85 1.08 .94 1.00 C-40

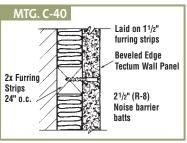
Panel Type	Nominal Thickness (Inches)	Actual Size (Inches)	Edge Detail	Factory Finish	Light Reflectance	Flame Spread	Weight P/SF
TECTUM WALL PANELS							
Standard Tectum Panel	1, 1 <sup>1</sup> /2, 2	23 <sup>3</sup> /4, 31 <sup>3</sup> /4, 47 <sup>3</sup> /4 x 72 to 144 in 12" increments	Long Edges Beveled	White, Natural, Custom Colors	.75 / .60	0-25	1.63, 2.53, 3.3
	1 <sup>1</sup> /2, 2	23, 31, 47 x 72 to 144 in 12" increments	T&G Edges Square Ends	White, Natural, Custom Colors	.75 / .60	0-25	2.53, 3.3
Kerfed	1	23 <sup>3</sup> /4 x 48 to 144 in 12" increments	BKR, Bevel, Kerfed, Rabbeted, Square Ends	White, Natural, Custom Colors	.75 / .60	0-25	1.63
V-Line	1, 1 <sup>1</sup> /2, 2	23 <sup>3</sup> /4, 31 <sup>3</sup> /4, 47 <sup>3</sup> /4 x 72 to 144 in 12" increments	Long Edges Beveled	White, Natural, Custom Colors	.75 / .60	0-25	1.63, 2.53, 3.3

## **ACOUSTICAL TEST MOUNTINGS**









TECTUM painted head screws available for all installations.



## FABRI-TOUGH™ WALL PANEL SYSTEMS

Abuse-resistant Tectum Fabri-Tough acoustical panels set a new standard for durability in fabric wrap wall panel systems.

Control noise efficiently, economically and attractively in open plan, closed or mixed-use space 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, soft- base panels. Attractively because they come in your choice of fabric colors that coordinate

with popular contract

furnishings.

Tackability is another feature of all Tectum Fabri-Tough panels. They can be used repeatedly as bulletin or display boards without visible effect, making them ideal for work areas, conference rooms and classrooms.

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

1" thick, 2'x4' up to 10'. Fabri-Tough wall panels can be field cut to desired size. Mounting is quick and easy via the internal spline system. The wall panel fabric is wrapped around the edges of the long sides to the kerf. Panels are

installed by inserting the furnished vinyl splines into the kerf, then fastening the splines to the wall or other structure.

Tectum Fabri-Tough panels have a flame spread of 25 or less under the ASTM E84 test method. Tectum Fabri-Tough panels meet the requirements of the room corner fire test (UBC 8-2



or equivalent) for use in areas not protected by automatic sprinklers.

For panels to be used in recessed areas, some field adjusting may be necessary.

#### FABRI-TOUGH™ DÉCOR PANEL SYSTEMS

Fabri-Tough Décor panels provide an economical and eye-pleasing way to control environmental sound problems.

For over ten years these tough, sound absorbing panels have proven they can stand up to the abuse delivered daily in such high-traffic areas as schools. They take the hard knocks without showing the indentations you might expect with other products.

Besides their inherent sound absorbing qualities, Fabri-Tough Decor panels are tackable, making them ideal for personal work areas, conference rooms, etc. The unique fiber panel construction and fabric weave allows repeated insertion of tacks and push pins without leaving visible marks. For attachment, 20" Z clips are available, providing a sturdy way of hanging decor panels.

Tectum Fabri-Tough Decor panels have decor-matching fabric selections, providing many ways to use these tough, attractive and economical sound absorbers in commercial installations.



▲ Fabri-Tough Wall Panels

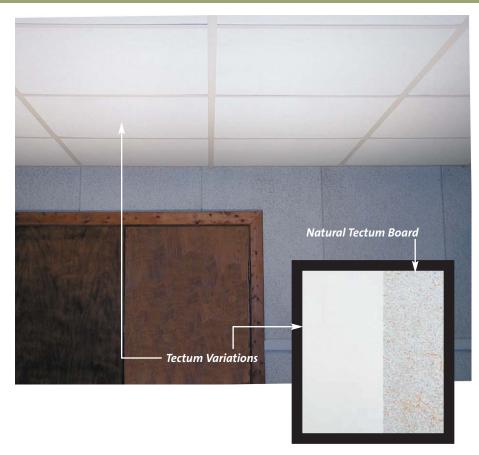


<b>TECTUM ACOUSTICAL PERFO</b>	DRMANCE												
FABRI-TOUGH™ WALL PANEL SYS	FABRI-TOUGH™ WALL PANEL SYSTEM												
			SOUND A	BSORPTION COEFFICIE	NTS								
Panel Type	125	250	500	1000	2000 4	000	NRC	MOUNTING					
1"	.05	.16	.30	.57	.94	.70	.50	Α					
1"	.13	.19	.45	.86	.80	.84	.60	D-20					
1"	.30	.77	1.11	.98	.79	.95	.90	C-40					
TECTUM PRODUCT													
Panel Type	Nominal Thickness (Inches)	Actual Size (Inches)		Edge Detail	Factory Finish	Light Reflectance	Flame Spread						
FABRI-TOUGH™ WALL PANEL SYS													
Fabric-Wrapped Tectum Panel	1	24 x 24 to 1 in 12" incre		Long Edges, Fabric Wrapped to Kerf	Fabric Selection	n N/A	0-25	1.63					
Fabric-Wrapped	1 1				Fabric Selectior	n N/A	0-25	1.63					

## **TECTUM VARIATIONS LAY-IN CEILING PANEL**

A new "variation" of a familiar and trusted product, Tectum Variations is a Tectum lay- in ceiling panel with a thin fiberglass veil laminated to the face of the panel. The panel is then painted. The end result is a smooth, attractive panel that will complement any design where high-end finishes are specified, while maintaining the outstanding abuse resistance Tectum panels have provided for years.

The non-gloss surface gives the panel an exclusive and true "plaster like" look. The facer allows sound waves that are not absorbed by the veil to pass through and be absorbed by the base board. The veil enhances the acoustical performance of Tectum one-inch ceiling panels.



TECTUM ACOUSTICAL PERFORMANCE										
VARIATIONS LAY-IN CEILING TILE   SABINS PER UNIT										
SOUND ABSORPTION COEFFICIENTS										
Panel Type	125	250	500	1000	2000	4000	NRC	MOUNTING		
1" Variations (Lay-In)	.47	.53	.35	.50	.68	.86	.50	E-400		

IECIUM PROD	UUI	1			l		
Panel Type	Nominal Thickness (Inches)	Actual Size (Inches)	Edge Detail	Factory Finish	Light Reflectance	Flame Spread	Weight P/SF
VARIATIONS LAY-IN CEILING TILE							
Standard Tectum Panel	1	23 3/4 x 23 3/4, 23 3/4 x 48, 30 x 30, 30 x 60 Custom Lengths Available	Square	Painted Veil	.75	5	1.8
Standard Tectum Panel	11/2, 2	23 <sup>3</sup> / <sub>4</sub> x 23 <sup>3</sup> / <sub>4</sub> , 23 <sup>3</sup> / <sub>4</sub> x 48, 48 x 48, 30 X 30 30 x 60 Custom Lengths Available	Square	Painted Veil	.75	5	2.7, 3.6



# FINALÉ WALL PANEL SYSTEMS

#### FINALÉ

Tectum Finalé panels make installation as easy as 1-2-3. Whenever your product calls for absorption of undesirable noises, and where the activities demand abuse-resistant panels, Tectum Finalé is the answer. With a high NRC (noise reduction coefficient) 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 insulation united in a single product.

#### Finalé 🕨



#### SIZES, FINISHES

Tectum Finalé wall panels are available in various thicknesses. Widths of 23 ³/4" and 47 ³/4" with beveled edges. Up to 12' lengths are available in 1' increments. Custom lengths are also available. Factory finish is in natural, painted white or custom colors. Panels can be painted up to six times without losing their acoustical efficiency.

#### **MOUNTING METHODS**

Screw panels to a substrate with either painted head drywall screws, painted self drilling screws, or painted TapCon™ screws as appropriate for the substrate.



#### Also available in 47 3/4" with a center furring.

Edges are not considered "finished edges." Tectum Inc. suggests an attachment of either wood, plastic or metal edge treatment be added for a finished look.

#### FINALÉ FABRI-TOUGH™

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 2.5 lb./sq. ft. fiberglass. The face of the panel is then wrapped with a durable fabric, making the panel one of the highest NRC abuse-resistant panels available.

Tectum Finalé Fabri-Tough panels are the ideal solution for controlling noise efficiently, economically and attractively in any area where abuse resistance and decorative panels are needed. These panels are priced

competitively and will last longer than ordinary, soft core panels.

Tectum Finalé Fabri-Tough panels are tackable and tough. They can be used repeatedly as bulletin or display boards without visible effects.

#### SIZES, FINISHES

Tectum Finalé Fabri-Tough wall panels are available in a variety of fabric colors. They are 24" wide with lengths of 4', 5', 6', 7', 8', 9' and 10'. The overall thickness of the panels is 2".

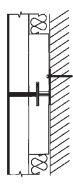


**▲** Finalé Fabri-Tough™

## **MOUNTING METHODS**

Mounting these panels is easy. Tectum Finalé Fabri-Tough wall panels can be field cut to desired lengths.

Using the spline system to mount the panels makes installation quick and easy. The wall panel fabric is wrapped around the edges on the long sides to the kerf, which is located on the 1" thick furring. Panels are installed by inserting the vinyl spline into the kerf, then fastening the splines to a substrate.



TECTUM ACOUSTICAL PERFORMANCE
FINALÉ

			SOUND ABSO	RPTION COEFFI	CIENTS			
Panel Type	125	250	500	1000	2000	4000	NRC	MOUNTING
1" + 1" Furring and SoniCor 1 <sup>1</sup> /2" + 1" Furring and SoniCor 1 <sup>1</sup> /2" + 2" Furring and SoniCor	.18 .27 .30	.47 .46 1.03	.87 .97 1.23	1.03 1.01 .89	.70 .70 1.06	1.02 .89 .97	.75 .80 1.05	A A A
FINALÉ FABRI-TOUGH™ WALL PANEL SYSTEM								
1"	.33	.59	.90	.98	.85	.93	.85	Α
TECTUM PRODUCT								

ILCIOM PRODUCT							
Panel Type	Nominal Thickness (Inches)	Actual Size (Inches)	Edge Detail	Factory Finish	Light Reflectance	Flame Spread	Weight P/SF
FINALÉ WALL PANEL SYSTEM							
Finalé w/ Sonicor	1	23 <sup>3</sup> /4, 47 <sup>3</sup> /4	Long Edges Beveled	White, Natural	.75 / .60	0-25	1.80
Finalé Fabri-Tough™	1	23 3/4	Kerfed	Fabric Selection	N/A	0-25	1.90
FABRI-TOUGH™ WALL PANEL S	YSTEM						
Fabric-Wrapped Tectum Panel	1	24 x 24 to 108 in 12" increments	Long Edges, Fabric Wrapped to Kerf	Fabric Selection	N/A	0-25	1.63

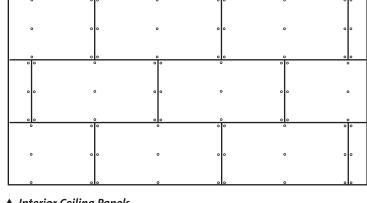
#### **SECURITY CEILING SYSTEMS**

Designed to meet the specific security and acoustical requirements in confinement areas, the Tectum Direct Attachment Ceiling/Wall System has been successfully used in hundreds of correctional facilities across the country. The system is ideal for large, open areas such as dormitories and dining halls, as well as corridors where one long, steel-backed panel can span the corridor width.

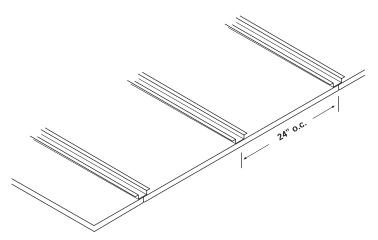
The Tectum panels used for the direct attachment ceiling/wall system are as follows:

- Tectum 1" acoustical panels beveled on all four sides.
- Tectum 1 1/2" acoustical panels with T&G detailing on all four sides.

To install, simply attach the panels in an Ashlar pattern directly to the ceiling, furring, or drywall suspension grid using tamperresistant screws.



▲ Interior Ceiling Panels



▲ Ceiling with furring



▲ Panels are available with (as shown above) or without 24-gauge galvanized steel plate laminated to the back.



▲ Direct attachment to furring



▲ Direct attachment to wall or ceiling



## **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 stand 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 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.

Tectum Roof Deck panels are available in natural (color may vary), white or custom colors.

**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.

#### GENERAL INFORMATION

#### GENERAL

Installation of Tectum panels consists of furnishing all labor, materials, accessories and equipment necessary to cover all areas shown on the drawings and specified herein.

Acoustical systems must be installed only by an approved acoustical contractor.

The acoustical contractor shall furnish all labor, materials and equipment necessary for the complete acoustical installation as shown in the drawings and as specified.

Tectum panels are also available in metric sizes.

#### METRIC EQUIVALENTS

 $1 \text{ sq. ft.} = .093 \text{ m}^2$ 

1 sq. m = 10.76 sq. ft.

1'' = 25.4 mm

1 lb. = .454 kg

1 kg = 2.21 lbs.

#### **DELIVERY & STORAGE**

Store this product in a dry place. Do not place in contact with the floors or walls. Ceiling panel packages must be protected against marring, soil or damage during storage and erection. Cover the bottom of tiles with moisture-proof materials and allow for circulation under cover to prevent condensation.

**WARNING:** Tectum acoustical panels are interior acoustical products, and must not be subjected to water.

#### **JOB CONDITIONS**

The building in which the Tectum panels are to be erected should be closed in and, in cold seasons, heating should be in operation prior to installation.

Materials should be located at the job site for at least 24 hours prior to application so that they can adjust to bring temperature and moisture into equilibrium.

Panels are not recommended for installation where they can come into contact with free water.

#### **RECOMMENDATIONS**

- Tectum wall panel edges should always be beveled on the long side.
- Use 8' panels or shorter when three or more panels are butted end to end.
- The butting of end joints will require field cutting to ensure proper alignment.
- Reveal edge panels (Tonico or Multiplane) should not be used in areas where high humidity exists.
- Refer to *Technical Bulletin T-60* on our website for complete wall panel installation instructions.
- At minimum, 1<sup>1</sup>/<sub>2</sub>" panels are recommended for protected exterior applications.

Additional technical information and design details on the use of Tectum panels is available and may be obtained by contacting Tectum Inc.



#### **GENERAL INFORMATION**

#### **CODE LISTINGS**

- New York City Board of Standards and Appeals. Calendar No. 391-52-SM.
- 2. Corp of Engineers Guide: Specification CE-219.01.
- 3. Southern Building Code Congress Report No. 9406B.
- 4. International Conference of Building Officials Report No. 1116.
- 5. Building Officials Conference of America. BOCA 86-39.
- 6. Los Angeles Research Report: RR 25165.
- 7. State of CA DSA number PA-008.
- 8. Complies with ASTM E1264, Type XIV, Pattern L, Class A.
- 9. Underwriters' Laboratories Canada label.

# SURFACE BURNING CHARACTERISTICS (ASTM E84)

THICKNESS	FLAME Spread	SMOKE DEVELOPED
1"	0	0
3"	5	5

#### LIMITATIONS

Tectum acoustical panels can be used over swimming pools and in open construction such as breezeways and open garages. However, they should not be installed where they will come in direct contact with water or condensation. Reveal edge panels (Tonico or Multi-Plane) should not be used for these purposes.

1" panels 23 <sup>3</sup>/<sub>4</sub>" x 47 <sup>3</sup>/<sub>4</sub>" size should not be used where the relative humidity will exceed 85%. Panels 1<sup>1</sup>/<sub>2</sub>" or thicker are not restricted by humidity conditions.

In all cases, the plenum must provide cross-ventilation to prevent condensation. The ventilation recommendation of the current edition of the ASHRAE Handbook of Fundamentals and Guide and Data Book should be followed.

#### **TOLERANCES**

Tectum ceiling and wall panel width and length, plus zero minus 1/8", over 4' lengths is plus 1/8"-1/4". Thickness is nominal. Panels that are to be butted must be beveled and will require field fitting. (Or molding can be used to cover edges.)

#### **TRADEMARKS**

The following are trademarks of Tectum Inc.:

- Tectum
- Acousti-Tough Ceiling System
- Fabri-Tough
- Fabri-Glass
- Finalé
- Finalé Fabri-Tough
- Tectum Variations

#### LIMITED WARRANTY

Tectum Inc. assumes full responsibility for its products and systems when installed in accordance with Tectum's published recommendations at the time of purchase. Liability is limited to a refund of the purchase price or replacement of the material. Tectum Inc. will not be responsible for any labor or other charges for replacement of installation of defective material that has been shipped and/or installed, regardless of the circumstances.

All installations should be in accordance with the Ceiling & Interior Systems Construction Association's Code of Practices.

TECTUM PRODUCT ACCESSORIES					
Acousti-Tough Keep Clips	ATC-100 ATC-200	for 1" panels for 11/2", 2" panels	200/ctn. – 19 lbs. 150/ctn. – 18 lbs.		
Painted Head Drywall Screws	15/6" Natural & White 21/4" Natural & White 3" Natural & White	1" thick panels 11/2" thick panels 2" thick panels	1000/ctn. – 4 lbs. 1000/ctn. – 7 lbs. 1000/ctn. – 11 lbs.		
Tectum Molding	1" CHC 1" CHH	10 lf/pc. 10 lf/pc.	400 ft./ctn. – 21 lbs. 320 ft./ctn. – 30 lbs.		
Paint–Touch-up	Natural Color White Color		6 cans/ctn. – 6 lbs. 6 cans/ctn. – 6 lbs.		

Refer to Marketing Bulletin M-40, available on our website for additional information.

#### **GENERAL INFORMATION**

#### **ENVIRONMENTAL STATEMENT/LEED CONTRIBUTION**

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE. TECTUM INC. ASSUMES NO RESPONSIBILITY FOR TYPOGRAPHICAL ERRORS.

# OTHER CATALOGS IN SWEET'S CATALOG FILE:

Tectum Roof Deck & Form Systems
Sweet's Section:
035113/TEC
Buyline 1436



▲ Tectum panels used for sound control in the Los Angeles, CA, Police Department Firing Range.

# **TECTUM**<sup>½</sup>

P.O. Box 3002 Newark, OH 43058-3002 Phone: 888-977-9691 Fax: 800-832-8869

EMAIL: info@tectum.com

More information about available Tectum products and specifications available online at **www.tectum.com**.

# ENVIRONMENTAL STATEMENT/GREEN ARCHITECTURE

Tectum panels are made from sustainable domestic, renewable raw materials. The wood excelsior is harvested from new forest growth that reaches maturity in 25-30 years. Tectum Inc. only purchases excelsior from companies that are part of the Sustainable Forestry Initiatives (SFI) Program. This program is a comprehensive system of objectives and performance measures that integrates the perpetual growing and harvesting of trees with the protection of wildlife, plants, soil, and water quality.

The primary source of magnesium oxide used in the binder is saltwater. The silicate used is made from sand. Tectum Inc. has the ability to recover waste magnesium and to recycle the water used in the manufacturing process. The recovered magnesium oxide can be used in the manufacture of magnesium sulfate, a primary ingredient in the binder. Tectum products continue to meet the needs of owners, architects, and engineers that require "green" building products.

### **TECTUM PRODUCTS AND LEED**

The Leadership in Energy and Environmental Design (LEED\*) Green Building Rating System represents the U.S. Green Building Council's effort to provide a national standard for what constitutes a "green building." Through its use as a design guideline and third-party certification tool, it

aims to improve occupant well-being, environmental performance and economic returns of buildings using established and innovative practices, standards and technologies.

The LEED building rating system has been established to evaluate every aspect of the construction process and building components used in new and existing buildings. While the main emphasis is on energy efficiency, conservation and the overall "health" of the building, the use of "green" products contributes favorably to the overall rating of a building.

Six rating categories make up the project checklist. Four of the six categories are not applicable to Tectum products. Categories four and five, Materials and Resources and Indoor Environmental Quality, consist of 11 elements applicable to the use of Tectum products. Tectum products contribute favorably in all eleven areas to the overall positive rating of the building. For more information, see our complete environmental statement, available on our website: www.tectum.com

Tectum is proud to have its products listed in the GreenSpec Directory\*\* published by Building Green from the editors of Environmental Building News. Tectum™ roof deck is noted on page 69, section 3511 and Tectum™ interior products are listed on page 230, section 9512.

<sup>\*</sup> Trademark of USGBC

<sup>\*\*</sup> Trademark of Building Green, Inc.