Inspiring Great Spaces

Ceiling & Wall Panels

TECTUM

CEILING & WALL SOLUTIONS

Armstrong
Tectum® ceiling and wall panels provide durable, sustainable, acoustical solutions with unlimited design options. Tectum 1" thick panels are part of the Sustain® portfolio and meet the most stringent sustainability standards today. They are the first and only acoustical ceiling and wall solutions that are Living Product Imperative Certified by the International Living Future Institute.
Here’s how:
- Contribute to LEED® v4 (including new Materials and Resources credits)
- Have Health Product Declarations (HPDs) which tell you what’s in the products
- Are free of Red List chemicals per Living Building Challenge™ 3.0 (including no added formaldehyde)
- Have Declare™ labels – easy reference “nutrition labels”
- Meet California Department of Public Health (CDPH) low emissions standards
- Have Environmental Product Declarations (EPDs) which tell you the impact of the products
- Contribute to Living Building Challenge
- Contribute to WELL Building Standard™

THE SUSTAIN® Portfolio Contributes To Better Spaces

1” Thick Tectum® Panels in White and Natural

White (TWH)  Natural (TNA)
Tectum® is made of fibers from one of the most sustainably harvested trees of its kind, the Wisconsin Aspen. The part of the Aspen that grows above ground can live between 40-150 years. The root system of the Aspen can survive thousands of years. Aspen quickly regenerate from their root system after the trunks have been harvested.

Tectum products are made of natural fibers and binders that are turned into unique, sound absorbing, textured ceiling and wall panels that bring nature inside. Ideal for spaces where sustainability, durability, and noise control are needed.

Tectum panels are the first and only acoustical ceiling and wall solution to be Living Product Imperative Certified by the International Living Future Institute.
Blades™ & Baffles
FIT TO THE MAX
Vertical elements control acoustics with an upscale linear visual.

- Upscale linear visual adds acoustics and aesthetics to any space
- Noise absorption up to 0.50 Sabins/SF
- Custom shapes and sizes available to meet your project needs
- Mounting channels available to extend panel length beyond four feet

▼ Tectum® Blades™ custom vertical panels; Capital One Labs, San Francisco, CA

Hang with hanger wire or aircraft cables
- Noise absorption up to 0.50 Sabins/SF
- Wide variety of color options available
- Installs with 15/16” Prelude® suspension system
- Square or radius edges
- Made in sizes up to 4’ and can be suspended or direct-attached to drywall grid system

**Shapes & Clouds**

**FLEXIBLE FIT**

Shapes and Clouds offer design flexibility in a floating system.
Direct-Attach FIT THE BILL

Install panels directly to ceilings and walls to add durability and noise reduction to a wide variety of spaces using a sustainable solution.

- Now, 1” panels in White and Natural are Living Product Challenge Certified by the International Living Future Institute
- 1” thick panels are part of the Sustain® portfolio
- FSC® Certified Panels
- Excellent sound absorption – NRC up to 1.0 (mounting and thickness dependent)
- Retrofit solution for noise reduction
- Can be mechanically fastened to a wide variety of surfaces
- Now you can install 1” thick Tectum® on Trusses and I-Beams for added acoustics while maintaining an exposed structure visual on the deck
- Durable for heavy-use interiors, pools, and exterior-covered spaces
the challenge:

The gymnasium at the Boys & Girls Club of Lancaster is in use every day, not only for sports activities but a variety of other functions as well. Its acoustic environment, however, was not always ideal. Acoustical testing showed that reverberation time in the gym was 5.05 seconds, far above the 2.00 seconds or less recommended for this type of space. As Karen Schloer, the Club’s Chief Executive Officer, notes, “The noise level was putting a real strain on the staff because they had to shout so often when trying to communicate with the kids.”

the solution:

To solve the problem, Armstrong Ceiling and Wall Solutions installed more than 3,500 square feet of Tectum® Direct-Attach wall panels on the gym’s masonry walls. The panels were chosen because of their ability to absorb both sound and the impact of basketballs, volleyballs, and other objects that hit the walls.

Aesthetically, the two-inch-thick, 2’ x 4’ panels are installed in ribbons of white and a custom blue that match the Club’s colors. They start nearly 10-feet off the floor and continue up the wall another 18-feet.

In addition, a re-creation of the Boys & Girls Club logo is installed at each end of the gym. The 15-feet wide and 13-feet high visual of two interlocking hands was created using eight-inch triangular Tectum Panel Art shapes. The white triangles are one-inch thick, while the blue triangles are two-inches thick so that they stand out from the wall. Two rows of 12 SoundSoak® Baffles were installed in the center of the ceiling for added noise absorption.

Acoustically, the 2” Direct-Attach Tectum wall panels have a Noise Reduction Coefficient (NRC) of 0.70. Acoustical testing conducted after the installation of the combination acoustical treatment showed that reverberation time dropped to 1.85 seconds, a 63% reduction. According to Chief Operations Officer, Scott McLellan, “The difference is like night and day. The biggest takeaway is how much easier it is now for the staff to gain control of the space because the kids can hear directions much more clearly.”

Looking back at the difference in the gym’s acoustic comfort, McLellan adds, “The staff simply didn’t realize how bad it was because they didn’t realize how good it could be.”
Finale™ High NRC

A SOUND FIT

Finale™ ceiling and wall panels offer maximum noise reduction and install 2.5x faster than C-20 mount Direct-Attach panels for reduced installation costs. A perfect way to add acoustics to exposed structure spaces.

- Abuse-resistant composite panel design for maximum noise reduction and efficient installation
- Excellent sound absorption – NRC up to 0.95 (2” panels)
- Variety of color options available
- Can be mechanically fastened to a wide variety of surfaces
Lay-In & Tegular
FIT FOR PURPOSE
Durable, sustainable, noise control for spaces requiring acoustics and design flexibility.

- Now, 1” panels in White and Natural are Living Product Challenge Certified by the International Living Future Institute
- 1” thick panels are part of the Sustain® portfolio
- Tegular panels have Total Acoustics® Performance (NRC 0.90 CAC 35) with 1713 infill panel
- FSC® Certified Panels
- Durable for heavy-use interiors

▼ Tectum® Tegular 24” x 48” panels in White with Prelude® XL® 15/16” suspension system
Fabric Walls

TWICE THE FIT

Fabric walls do double duty, providing both acoustics and a tackable surface for displays and bulletin boards.

- Abuse-resistant, fabric-wrapped panels attach directly to walls
- Excellent Noise Absorption – NRC up to 0.90
- Mounting is quick and easy using internal spline system
- Durable fabric options available

▼ Tectum® Fabric wall panels; Southland Christian Church, Lexington, KY
Panel Art
FIT TO A “T”
Create your own custom shapes, or use one of eight prefabricated geometrics to help your ceiling and wall designs take shape.

- Available in eight shapes, or create custom shapes from panels up to 48” x 48”
- Excellent sound absorption – NRC up to 1.0
- All panels have beveled edges on all four sides
- Can be mechanically fastened to a wide variety of surfaces
- Now, 1” panels in White and Natural are Living Product Challenge Certified by the International Living Future Institute
- White or Natural 1” thick panels are part of the Sustain® portfolio
Tectum® ceiling and wall panels are available in a variety of sizes, shapes, forms, and colors. Select from a natural factory finish, white, or made-to-order colors. Panels can be field-painted up to six times without impacting acoustic or fire performance. Tectum panels are made to fit your design needs.
TECTUM® PANELS

<table>
<thead>
<tr>
<th>Width</th>
<th>Length</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shapes &amp; Clouds</td>
<td>23-3/4” – 47-3/4”</td>
<td>Up to 96”</td>
</tr>
<tr>
<td>Direct-Attach</td>
<td>23-3/4” – 47-3/4”</td>
<td>48” – 144”</td>
</tr>
<tr>
<td>Finale™ High NRC</td>
<td>23-3/4” – 47-3/4”</td>
<td>48” – 144”</td>
</tr>
<tr>
<td>Panel Art</td>
<td>47-3/4”</td>
<td>48”</td>
</tr>
<tr>
<td>Fabric Walls</td>
<td>23-3/4” – 47-3/4”</td>
<td>48” – 120”</td>
</tr>
</tbody>
</table>

* Available height for Blades™ & Baffles. Length can extend beyond 4’ with mounting channels.

** Larger custom sizes available upon request.

### Mounting

<table>
<thead>
<tr>
<th>Product</th>
<th>Panel Thickness</th>
<th>Weight (Sq.Ft)</th>
<th>Suspended</th>
<th>A Mounting</th>
<th>NRC Rating</th>
<th>C-40 Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blades™ &amp; Baffles</td>
<td>1”</td>
<td>1.63 lbs/SF</td>
<td>0.40</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>1-1/2”</td>
<td>2.53 lbs/SF</td>
<td>0.50</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Shapes &amp; Clouds</td>
<td>1-1/2”</td>
<td>2.55 lbs/SF</td>
<td>0.50</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Lay-in &amp; Tegular Ceiling Panels</td>
<td>1”</td>
<td>1.63 lbs/SF</td>
<td>0.40</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>1” w/ 1713 Infill</td>
<td>–</td>
<td>0.90/CAC 33</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>1-1/2”</td>
<td>2.53 lbs/SF</td>
<td>0.50</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Fabric Walls</td>
<td>1”</td>
<td>1.63 lbs/SF</td>
<td>–</td>
<td>0.50</td>
<td>0.60</td>
<td>0.90</td>
</tr>
<tr>
<td>Direct-Attach Ceiling &amp; Wall Panels</td>
<td>1”</td>
<td>1.63 lbs/SF</td>
<td>0.40</td>
<td>0.45</td>
<td>0.80</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>1-1/2”</td>
<td>2.53 lbs/SF</td>
<td>0.55</td>
<td>0.60</td>
<td>0.90</td>
<td>0.95</td>
</tr>
<tr>
<td></td>
<td>2”</td>
<td>3.30 lbs/SF</td>
<td>0.60</td>
<td>0.70</td>
<td>0.95</td>
<td>1.00</td>
</tr>
<tr>
<td>Panel Art Ceiling &amp; Wall Panels</td>
<td>1-1/2”</td>
<td>3.00 lbs/SF</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2”</td>
<td>3.50 lbs/SF</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finale™ Ceiling &amp; Wall Panels</td>
<td>1” Panel with Integral Minwool Insert &amp; 1” Furring</td>
<td>4.06 lbs/SF</td>
<td>0.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-1/2” Panel with Integral Minwool Insert &amp; 1” Furring</td>
<td>4.06 lbs/SF</td>
<td>0.95</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### EDGE DETAIL RECOMMENDATIONS

- **Long edges beveled**
- **Short edges beveled**
- **Square edge**
- **Beveled edge**

NOTE: Use Beveled Edge/Square End for the above panel layout.

NOTE: Use Beveled Edge/Beveled End panels for all adjoining panel installations.

### STANDARDS COLORS

- **White (TWH)**
- **Natural (TNA)**
- **Custom Colors Available**

### ACOUSTICAL MOUNTING METHODS

**Mounting A**: Tectum® Direct-Attach Panel placed on 3/4” Furring Strips 24” O.C. or Equal.

**Mounting D-20**: Tectum® Direct-Attach Panel placed on 3/4” Furring Strips 24” O.C. or Equal.

**Mounting C-20**: Tectum® Direct-Attach Panel placed on 3/4” Furring Strips 24” O.C. or Equal.

**Mounting C-40**: Tectum® Direct-Attach Panel placed on 1-1/2” Furring Strips 2” Furring Strips (2” nominal) Batt Insulation.

NOTE: Stacked bond patterns are possible, but not recommended. Field trimming panels may be required to achieve desired fit and alignment.