

This MANU-SPEC™ utilizes the Construction Specifications Institute (CSI) *Manual of Practice*, including *MasterFormat™*, *SectionFormat™* and *PageFormat™*. A MANU-SPEC is a manufacturer-specific proprietary product specification using the proprietary method of specifying applicable to project specifications and master guide specifications. Optional text is indicated by brackets [ ]; delete optional text in final copy of specification. Specifier Notes typically precede specification text; delete notes in final copy of specification. Trade/brand names with appropriate symbols typically are used in Specifier Notes; symbols are not used in specification text. Metric conversion, where used, is soft metric conversion.

This MANU-SPEC specifies an acoustical wall panel system. These products are manufactured by Tectum Inc. Revise MANU-SPEC section number and title below to suit project requirements, specification practices and section content. Refer to CSI *MasterFormat* for other section numbers and titles.

**SECTION 098400**  
**ACOUSTICAL WALL TREATMENT**  
**(CEMENTITIOUS WOOD FIBER WALL PANELS)**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section Includes: Cementitious wood fiber plank acoustical [Wall panel system] [And] [Baffles] and installation accessories.

Specifier Note: Revise paragraph below to suit project requirements. If a reader of this section could reasonably expect to find a product or component specified in this section, but it is actually specified elsewhere, then the related section number(s) should be listed in the paragraph below. Add section numbers and titles per CSI *MasterFormat* and specifier's practice. In the absence of related sections, delete paragraph below.

- B. Related Sections:
1. Division 9 Sections: Acoustical Suspension.
  2. Division 9 Sections: Acoustical Ceilings.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain References Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard. It is a listing of all references used in this section.

**1.02 REFERENCES**

- A. ASTM International:
1. ASTM C635 Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
  2. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
  3. ASTM E1264 Standard Classification for Acoustical Ceiling Products.
- B. Ceilings and Interior Systems Construction Association (CISCA):
1. CISCA Code of Practices.

Specifier Note: Article below should be restricted to statements describing design or performance requirements and functional (not dimensional) tolerances of a complete system. Limit descriptions to composite and operational properties required to link components of a system together and to interface with other systems.

**1.03 SYSTEM DESCRIPTION**

- A. Performance Requirements:
1. Provide acoustical wall panel assembly designed and tested to provide surface burning characteristics (ASTM E84) as follows:
    - a. Flamespread: 0.

- b. Smoke Developed: 0.
- 2. Provide acoustical wall panel system which has been manufactured, fabricated and installed to provide Noise Reduction Coefficient (NRC) rating as follows:
  - a. [Specify required NRC rating from 0.40 - 1.00].

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Division 1 Submittal Procedures Section.

#### 1.04 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit manufacturer's product data and installation instructions.
  - 1. Recommended procedures for normal cleaning and removal of stains including precautions in use of cleaning materials that may be detrimental to surfaces.
- C. Samples: Submit selection and verification samples: [6 inch x 6 inch (152 x 152 mm) sample for each wall panel unit required, showing full range of exposed texture to be expected in completed work] [And] [One 8 inch x 10 inch (203 x 254 mm) sample for each fabric color is available].
- D. Quality Assurance/Control Submittals: Submit the following:
  - 1. Test Reports: Upon request, submit certified test reports from recognized test laboratories.
  - 2. Certificates: Submit manufacturer's certificate that products meet or exceed specified requirements.

Specifier Note: Article below should include statements of prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 1 Quality Assurance Section.

#### 1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Utilize an installer having demonstrated experience on projects of similar size and complexity.

Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section. General statements to comply with a particular code are typically addressed in Conditions of the Contract and Division 1 Regulatory Requirements Section. Repetitive statements should be avoided.

- B. Regulatory Requirements and Approvals: [Comply with requirements below.] [Specify applicable requirements of regulatory agencies].
  - 1. International Code Council (ICC):
    - a. ICC-ES Evaluation Report ESR-1112.
  - 2. State of California:
    - a. DSA Number PA-008.
  - 3. Underwriters' Laboratories of Canada (ULC) label.
    - a. Structural Cement-Fiber Unit-535X
- C. Certifications: [Specify requirement for certifications].

Specifier Note: Retain paragraph below if pre-installation meeting is required.

- D. Pre-installation Meetings: [Specify requirements for meeting].

Specifier Note: Article below should include specific protection and environmental conditions required during storage. Coordinate article below with Division 1 Product Requirements Section.

#### 1.06 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Product Requirement Section.
- B. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.
  - 1. Prevent soiling, physical damage or wetting.
  - 2. Store cartons open at each end to stabilize moisture content and temperature.

Specifier Note: In article below, state physical or environmental limitations or criteria for installation such as weather, temperature, humidity, ventilation or illumination required for proper installation or application.

## 1.07 PROJECT/SITE CONDITIONS

### A. Environmental Requirements:

1. Do not install acoustical panels until building is closed in and HVAC system is operational.
2. Locate materials onsite at least 24 hours before beginning installation to allow materials to reach temperature and moisture content equilibrium.
3. Maintain the following conditions in areas where acoustical materials are to be installed 24 hours before, during and after installation:
  - a. Relative Humidity: 65 - 75%.
  - b. Uniform Temperature: 55 - 70 degrees F (13 - 21 degrees C).

## 1.08 MAINTENANCE

- A. Extra Materials: Provide [A recommended percentage of] [Specify percentage.] additional material for use by owner in building maintenance and repair.
- B. Provide new unopened cartons of extra materials, packaged with protective covering for storage, identified with appropriate labels.

## PART 2 PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

### 2.01 ACOUSTICAL [WALL PANEL] [AND] [BAFFLE] SYSTEM

Specifier Note: Paragraph below is an addition to CSI *SectionFormat* and a supplement to MANU-SPEC. Retain or delete paragraph below per project requirements and specifier's practice.

#### A. Manufacturer: Tectum Inc.

1. Contact: 105 South Sixth Street, Newark, OH 43055; Telephone: (888) 977-9691, (740) 345-9691; Fax: (800) 832-8869; E-mail: [info@tectum.com](mailto:info@tectum.com); website: [www.tectum.com](http://www.tectum.com).
- B. Proprietary Systems. Acoustical [Wall panel] [And] [Baffle] systems, including the following:

Specifier Note: Retain one or more of the products below to suit project requirements.

1. Tectum Standard Interior Wall Panels:
  - a. Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Thickness: [1 inch (25.4 mm)] [1½ inches (38 mm)] [2 inches (51 mm)].
  - c. Edge: [Long edge beveled] [Tongue-and-groove edges, square ends].
  - d. Width: [23¾ inches (603 mm)] [31¾ inches (806 mm)] [47¾ inches (1213 mm)].
  - e. Length: [Specify length from 48 inches – 144 inches (1220 - 3658 mm) in 1 inch (25.4 mm) increments.].
  - f. Color: [Natural] [Factory painted white] [Custom Color].
  - g. Mounting Style: ["A"] ["C-20"] ["C-40"] ["D-20"]. Provide all fasteners, [Furring strips] and [OCF 703 fiberglass insulation] for a complete single source installation.
2. Tectum Kerfed Wall Panels:
  - a. Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Thickness: 1 inch (25.4 mm).
  - c. Edge: Long edge beveled.
  - d. Width: [23¾ inches (603 mm)].
  - e. Length: [Specify length from 48 inches – 144 inches (1220 - 3658 mm) in 1 inch (25.4 mm) increments.].
  - f. Color: [Natural] [Factory painted white] [Custom Color].
  - g. Mounting Style: ["A"] ["C-20"] ["C-40"] ["D-20"]. Plastic spline.
3. Tectum V-Line Wall Panels:
  - a. Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Thickness: [1 inch (25.4 mm)] [1½ inches (38 mm)] [2 inches (51 mm)].
  - c. Edge: Long edges beveled.

- d. Width: [23¾ inches (603 mm)] [31¾ inches (806 mm)] [47¾ inches (1213 mm)].
  - e. Length: [Specify length from 48 inches – 144 inches (1220 - 3658 mm) in 1 inch (25.4 mm) increments.].
  - f. Color: [Natural] [Factory painted white] [Custom Color].
  - g. Mounting Style: ["A"] ["C-20"] ["C-40"] ["D-20"]. Provide all fasteners, [Furring strips] and [OCF 703 fiberglass insulation] for a complete single source installation.
4. Tectum Hanging Baffles:
- a. Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Thickness: [1 inch (25.4 mm)] [1½ inches (38 mm)] [2 inches (51 mm)].
  - c. Size: [11¾ inches (298 mm)] [23¾ inches (603 mm)].
  - d. Length: 48 inches (1219 mm).
  - e. Color: [Natural] [Factory painted white] [Custom Color].
5. Tectum Sound Blocks:
- a. Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Thickness: 3 inches (76 mm).
  - c. Size: 15½ inches x 15½ inches (394 x 394 mm).
  - d. Edge: All edges beveled.
  - e. Color: [Natural] [Factory painted white] [Custom Color].
  - f. Mounting Style: [TSB-Clip].
6. Tectum Fabri-Tough Kerfed Wall Panels (Non-woven Fabric Lines):
- a. Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Thickness: 1 inch (25.4 mm).
  - c. Edge: Long edges, fabric wrapped to kerf.
  - d. Width: 24 inches (610 mm).
  - e. Length: [Specify length from 48 inches – 144 inches (1220 - 3658 mm) in 1 inch (25.4 mm) increments.].
  - f. Fabric Covering: [Specify fabric covering from manufacturer literature or samples.].
  - g. Mounting Style: ["A"] ["C-20"] ["C-40"] ["D-20"]. Plastic spline.
7. Tectum Fabri-Tough Decor Wall Panels (Non-woven Fabric Lines):
- a. Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Thickness: [1 inch (25.4 mm)] [2 inches (51 mm)].
  - c. Edge: Fabric returned at edges to back.
  - d. Width: [24 inches (610 mm)] [48 inches (1219 mm)].
  - e. Length: [48 inches (1219 mm)] [72 inches (1829 mm)] [96 inches (2438 mm)].
  - f. Fabric Covering: [Specify fabric covering from manufacturer literature or samples.].
  - g. Mounting Style: ["A"]. Plastic Z-clip attachment.
8. Tectum Fabri-Glass Wall Panels (Non-woven Fabric Lines):
- a. Material: 6.0 lb density fiberglass core.
  - b. Thickness: 1 inch (25.4 mm).
  - c. Edge: Long edges, fabric wrapped to kerf.
  - d. Width: [24 inches (610mm)] [48 inches (1219 mm)].
  - e. Length: [Specify length from 48 inches – 96 inches (1220 - 2438 mm) in 1 inch (25.4 mm) increments.].
  - f. Fabric Covering: [Guilford 701 fabric].
  - g. Mounting Style: ["A"]. Impaler Clip.
9. Tectum Finalé Wall Panels:
- a. Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Thickness: 1 inch (25.4 mm) baseboard + 1 inch (25.4 mm) Tectum furring with SoniCor fiber core between furring.
  - c. Edge: Long edges beveled.

- d. Width: [23¾ inches (603 mm)] [47¾ inches (1213 mm)].
  - e. Length: [Specify length from 48 inches – 144 inches (1220 - 3658 mm) in 1 inch (25.4 mm) increments.].
  - f. Color: [Natural] [Factory painted white] [Custom Color].
  - g. Mounting Style: ["A"] ["C-20"] ["C-40"] ["D-20"]. Provide all fasteners, [Furring strips] and [OCF 703 fiberglass insulation] for a complete single source installation.
10. Tectum Finalé Fabri-Tough Kerfed Wall Panels (Non-woven Fabric Lines):
- a. Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Thickness: 1 inch (25.4 mm) baseboard + 1 inch (25.4 mm) Tectum furring with SoniCor fiber core between furring.
  - c. Edge: Long edges, fabric wrapped to kerf.
  - d. Width: [24 inches (610mm)].
  - e. Length: [Specify length from 48 inches – 120 inches (1220 - 3048 mm) in 1 inch (25.4 mm) increments.].
  - f. Fabric Covering: [Specify fabric covering from manufacturer literature or samples.].
  - g. Mounting Style: ["A"] ["C-20"] ["C-40"] ["D-20"]. Plastic spline.
11. Tectum Finalé Fabri-Tough Decor Wall Panels (Non-woven Fabric Lines):
- a. Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Thickness: 1 inch (25.4 mm) baseboard + 1 inch (25.4 mm) Tectum furring with SoniCor fiber core between furring.
  - c. Edge: Fabric returned at edges to back.
  - d. Width: [24 inches (610mm)] [48 inches (1219 mm)].
  - e. Length: [Specify length from 48 inches – 120 inches (1220 - 3048 mm) in 1 inch (25.4 mm) increments.].
  - f. Fabric Covering: [Specify fabric covering from manufacturer literature or samples.].
  - g. Mounting Style: ["A"]. Plastic Z-clip attachment.
12. Tectum Fabri-Tough II Kerfed Wall Panels (Woven & Custom Fabrics):
- a. Material: Aspen wood fibers bonded with inorganic hydraulic cement laminated to 1/8", 18-pound density fiberglass fascia.
  - b. Thickness: 1 inch (25.4 mm).
  - c. Edge: Long edges, fabric wrapped to kerf.
  - d. Width: 23¾ inches (603 mm).
  - e. Length: [Specify length from 48 inches – 120 inches (1220 - 3048 mm) in 1 inch (25.4 mm) increments.].
  - f. Fabric Covering: [Specify fabric covering from manufacturer literature or samples.].
  - g. Mounting Style: ["A"] ["C-20"] ["C-40"] ["D-20"]. Plastic spline.
13. Tectum Fabri-Tough II Décor Wall Panels (Woven & Custom Fabrics):
- a. Material: Aspen wood fibers bonded with inorganic hydraulic cement laminated to 1/8", 18-pound density fiberglass fascia.
  - b. Thickness: 1 inch (25.4 mm).
  - c. Edge: Fabric returned at edges to back.
  - d. Width: [24 inches (610mm)] [48 inches (1219 mm)].
  - e. Length: [Specify length from 48 inches – 120 inches (1220 - 3048 mm) in 1 inch (25.4 mm) increments.].
  - f. Fabric Covering: [Specify fabric covering from manufacturer literature or samples.].
  - g. Mounting Style: ["A"] ["C-20"] ["C-40"] ["D-20"]. Plastic Z-clip attachment.
14. Tectum Correctional Panel Wall System:
- a. Panel Material: Aspen wood fibers bonded with inorganic hydraulic cement.
  - b. Backing: 24 gauge galvanized steel laminated.
  - c. Flamespread: Conforms to ASTM E1264.
  - d. Panel Thickness: [1 inch (25.4 mm)] [1½ inches (38 mm)].
  - e. Panel Width: [24 inches (610 mm)].
  - f. Panel Length: [Specify length from 48 inches – 120 inches (1220 - 3048 mm) in 1 inch (25.4 mm) increments.].
  - g. Mounting Style: ["A"] Provide all fasteners, [Furring strips] and [OCF 703 fiberglass insulation] for a complete single source installation.

Specifier Note: Edit Article below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements (Product Substitutions Procedures) Section.

## 2.02 PRODUCT SUBSTITUTIONS

- A. Substitutions: No substitutions permitted.

Specifier Note: Coordinate accessories below with manufacturer's literature.

## 2.03 ACCESSORIES

- A. Provide accessories as follows:

1. Tectum Painted Head Drywall Screws (Standard attachment method for Interior Panels):
  - a. Material: Steel.
  - b. Length: [1 5/8 inches (41 mm)] [2¼ inches (57 mm)] [3 inches (76 mm)].
  - c. Color: [Natural] [White].
2. Torx Tamper-Resistant Screws (self-drilling & self tapping)(For use with Correctional Panels):
  - a. Material: Steel.
  - b. Length: [1¾ inches (45 mm)] [2¼ inches (57 mm)] [2¾ inches (70 mm)].
  - c. Color: [Natural] [White].
3. Tectum Plastic Spline (For use with Fabri-Tough Kerfed Panels):
  - a. Material: Plastic.
4. Tectum Z-clips (For use with Fabri-Tough Dècor Panels):
  - a. Material: Plastic.
5. Tectum Moulding:
  - a. Material: Plastic.
  - b. Designation: [CHC] [CHH].
6. Tectum Touch-Up Paint:
  - a. Color: [Natural] [White].

## PART 3 EXECUTION

Specifier Note: Article below is an addition to the CSI *SectionFormat* and a supplement to MANU-SPEC. Revise article below to suit project requirements and specifier's practice.

### 3.01 MANUFACTURER'S INSTRUCTIONS

- A. Comply with the instructions and recommendations of the acoustical wall panel system manufacturer.
- B. Install materials in accordance with governing regulations, fire resistance rating requirements and industry standards applicable to work.
1. Comply with CISCA Code of Practices.

### 3.02 EXAMINATION

- A. Site Verification of Conditions:
1. Examine surfaces scheduled to receive suspended or directly attached acoustical units for unevenness, irregularities and dampness that would affect quality and execution of work.
  2. Do not proceed with installation of wall panel system until unacceptable conditions are corrected.

Specifier Note: Coordinate article below with manufacturer's recommended installation requirements. Retain language applicable to project and to the products specified in Part 2.

### 3.03 INSTALLATION

- A. Screw head to be flush with panel surface.
- B. Securely affix wall panels by means of splines attached vertically to smooth wall or furring strips. Engage vertical kerfs on the edges of the wall panels with splines. Apply adhesive or use Velcro hook and loop fastening where necessary.
- C. Cover field cut edges by means of trim or other moldings.

Specifier Note: Specify the final actions required to clean installed equipment or other completed work to properly function or perform. Coordinate article below with Division 1 Execution Requirements (Cleaning) Section.

### 3.04 CLEANING

- A. Clean exposed surfaces of acoustical panel, trim, moldings and suspension members to comply with manufacturer's instructions for cleaning.
- B. Touch up any minor finish damage.
- C. Remove and replace work that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

Specifier Note: Specify provisions for protecting work after installation but prior to acceptance by the owner. Coordinate article below with Division 1 Execution Requirements Section.

### 3.05 PROTECTION

- A. Protect installed work from damage due to subsequent construction activity, including temperature and humidity limitations and dust control, so that the work will be without damage and deterioration at the time of acceptance by the Owner.

**END OF SECTION**