

**Section 097714—Medium-Tension Fabric Wall System [SnapLoc®]****Part 1—General****1.1 Related Documents**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

**1.2 Summary**

- A. This Section includes a concealed-fastened, tackless, site-built, medium-tension, site-stretched fabric system for walls and/or ceilings as indicated on the Drawings.
- B. Related Sections include the following:
  - 1. Division 1 Section "LEED® Requirements" for additional LEED® requirements.
  - 2. Division 9 Section "Acoustical Panel Ceilings" for acoustical ceiling panels supported by exposed suspension system and tested for noise reduction.
  - 3. Division 9 Section "Wall Coverings" for adhesively applied textile wall coverings.
  - 4. Division 9 Section "Prefabricated Fabric-Wrapped Wood Panels" for demountable fabric-covered systems for ceilings and walls.
  - 5. Division 9 Section "Site-Built Stretched Fabric Wall System" for site-built stretched fabric systems for ceilings and walls.

**1.3 Submittals**

- A. Product Data: For each type of panel edge, core material, and mounting indicated.
- B. Shop Drawings: To include mounting devices and details at panel head, base, joints, and corners, floor base, ceiling, and wall intersections. Indicate panel edge and core materials.
  - 1. To include elevations, and reflected ceiling plans, if applicable, showing panel sizes and direction of fabric weave and pattern matching.
- C. Coordination Drawings: To indicate intersections with any adjacent work—wall base, shelves, countertops, drawers, doors, chart rails, chalk rails, electrical outlets and switches, thermostats, lighting fixtures, air supply and returns, speakers, sprinklers, access panels, and any other related divisions of scope. To indicate operation of casework doors and drawers, and interior doors.
- D. Samples for Verification: Prepare Samples from the same materials shall be used for the Work.
  - 1. Fabric: A Sample, which is full-width by 36-in. (914mm) long from the same dye lot to be used for the Work, and as follows:
    - a. With specified treatments applied.
    - b. To show complete pattern repeat.

- c. To mark top and face of fabric.
  2. Panel Edge: A Sample, which is 12-in. (300mm) long, showing edge profile, corner, and finish.
  3. Core Material: A Sample, which is 12-in. (300mm) square, showing the corner.
  4. Mounting Device: Full-size Sample.
  5. Sample Panels: No larger than 36 by 36 in. (914 by 914mm). Show joints and mounting methods.
- E. LEED® Submittals:
1. Credit EQ 4.1: Manufacturer's product data for installation adhesive, including printed statement of VOC content.
  2. Credit EQ 4.4: Medium-density fiberboard and manufacturer's Particleboard [if used] product data, indicating that the bonding agent used contains no urea formaldehyde. To coordinate first paragraph below with qualification requirements in Division 1 Section "Quality Requirements" and as supplemented in "Quality Assurance" Article.
- F. Maintenance Data: For panels, to include in the maintenance manuals the fabric manufacturers' written cleaning and stain-removal recommendations.

#### 1.4 Quality Assurance

- A. Fabricator Qualifications: The Work shall be performed by a Fabricator, which employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a ten-year record of successful in-service performance.
- B. Source Limitations: To obtain panels through one source from a single manufacturer.
- C. Fire-Test-Response Characteristics: To provide panels with the following surface-burning characteristics as determined by the testing of identical products per ASTM E84 as an assembly, UBC Standard 8-1 and / or by UL, or another testing and inspecting agency, which is acceptable to authorities having jurisdiction:
1. Flame-Spread Index: 20 or less.
  2. Smoke-Developed Index: 400 or less.
- D. Acoustical Performance: Shall provide acoustical panels with the noise-reduction coefficient (NRC) value stated on Architect's Drawings.
- E. Mockups: To build mockups, which verify selections made under sample submittals and to demonstrate the aesthetic effects and set quality standards for materials, fabrication, and installation.
1. Shall install mockups in the location of the size indicated on the Drawings or, if not indicated, as directed by the Architect.
  2. Shall install mockups of typical wall and ceiling areas as shown on the Drawings.
    - a. To include the intersection at the walls and ceiling, corners, casework doors and drawers, and base-building door openings.

- F. Pre-installation Conference: General contractor will conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."

### **1.5 Delivery, Storage, and Handling**

- A. To comply with the written instructions of the manufacturer's fabric and fabric-wrapped panel for minimum and maximum temperature and humidity requirements for shipment, storage, and handling.
- B. To deliver materials and panels in unopened bundles and store in a temperature-controlled dry place with adequate air circulation.
- C. To protect panel edges from crushing and impact.

### **1.6 Project Conditions**

- A. Environmental Limitations: Do not install fabric-wrapped panels until spaces are enclosed and weatherproofed, wet work in spaces is complete and dry, work above the ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for the Project when occupied for its intended use.
- B. Lighting: Do not install fabric-wrapped panels until the permanent level of lighting for the space is provided on surfaces to receive fabric-wrapped panels.
- C. Air-Quality Limitations: Do not install fabric-wrapped panels if they are being exposed to airborne odors such as tobacco smoke and until conditions are free from the odor contamination of ambient air.

### **1.7 Warranty**

- A. Shall be provided in the Manufacturer's standard form in which the Manufacturer agrees to repair or replace components of fabric-wrapped panels, which fail in materials or workmanship within the specified warranty period.
  - 1. Failures: To include fabric sagging, distorting, or releasing from the panel edge, or warping of the core.
  - 2. Warranty Period: Two years from the date of Substantial Completion.

### **1.8 Extra Materials**

- A. To furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Fabric: For each fabric, color and pattern installed, provide length equal to 5% of amount installed, but no fewer than 10 yards (9 m).
  - 2. Fabric-Wrapped Panel Mounting Devices: Full-size units equal to 5% of amount installed, but no fewer than 5 attachment devices.

**Part 2—Products****1.9 Site-Built, Medium-Tension, Fabric-Mounting System**

- A. Basis of Design: Concealed, tackless, SnapLoc<sup>®</sup> system to be installed as shown on Drawings by StretchWall Installations, Inc. Contact: \_\_\_\_\_
1. Alternate products: Prefabricated systems, wood systems, and/or extruded-track, site-built systems, which rely on grooved, non-locking cross sections that hold fabric forced into the track under low tension to meet the intent of this specification. Any alternate products must be submitted to the Architect for review and for comment at least two weeks prior to the bid date. If the Architect accepts an alternate product, all bidders will be informed and given an opportunity to bid the alternate system.
- B. Fabric: To be provided from the same dye lot; color, and pattern [as indicated by the manufacturer's designations] [matching the Architect's samples] [as selected by the Architect from manufacturer's full range] [as indicated on the Drawings].
1. Fabric Manufacturer: <Insert manufacturer's name>.
  2. Product Line/Pattern: <Insert product name or designation>.
  3. Style Number: <Insert number>.
  4. Color: <Insert name or number or both>.
  5. Fiber Content: [100] <Insert number> percent [woven polyester] [nonwoven polyester] [polyolefin] [acoustically transparent vinyl] <fiber content>.
  6. Width: [54 in. (1371 mm)] [66 in. (1676mm)] <Insert width>.
  7. Applied Treatments: [Stain resistance] <Insert treatment>.
- C. Nominal Overall Panel Thickness: [1/2 in. (13mm)] [1 in. (25mm)] and custom.
- D. NRC: For Type A mounting per ASTM E 795 [NRC 0.50 to NRC 0.90] [NRC 0.60 to NRC 0.70] [NRC 0.65 to NRC 0.75] <Insert NRC range>.
- E. Panel Width: As indicated on the Drawings.
- F. Panel Height: As indicated on the Drawings.
- G. Panel Edge: Square, radius, and/or custom.

**1.10 Core Materials**

- A. Glass Fiberboard: ASTM C 612, Type IA or Types IA and IB; density as specified, unfaced, dimensionally stable, molded rigid board with maximum flame-spread and smoke-developed indices of 25 and 50, respectively.
- B. Mineral Fiberboard: Maximum flame-spread and smoke-developed indices of 15 and 5, respectively.
1. Product: To provide Micore<sup>®</sup> mineral fiberboard by United States Gypsum Company, subject to compliance with requirements.
- C. Cementitious Fiberboard Core: Density of not less than 20 lb/cu. ft. (320 kg/cu. m).

- D. Tackable, Impact-Resistant, High-Density Face Layer: 1/8 in. (3.2mm) thick layer of compressed, molded, glass fiberboard with a minimum nominal density of 16 to 18 lb./cu. ft. (256 to 288 kg/cu. m), laminated to the face of the core.
- E. Impact-Resistant, Acoustically Transparent, Copolymer Face-Sheet Layer for High-Abuse Applications: 1/16 to 1/8in. (1.6 to 3.2mm) thick layer of perforated, noncombustible, copolymer sheet laminated to face of core.
- F. Wood: Clear, vertical grain, straight, kiln-dried hardwood of manufacturer's standard species, AWPA C20, Interior Type A, fire-retardant treated, low-hygroscopic-type formulation. Use fire-retardant-treatment formulations that do not bleed through or otherwise adversely affect finishes. Kiln-dry material after treatment to 5 to 10% moisture content.

## Part 2—Execution

### 1.11 Examination

- A. Fabric, substrates, blocking, and conditions shall be examined, with the Installer present, to assure compliance with requirements, installation tolerances, and other conditions potentially affecting the performance of the fabric-wrapped panels.
  - 1. Shall proceed with the installation only after unsatisfactory conditions have been corrected.

### 1.12 Installation

- A. Wall Panels: Panels shall be installed in locations indicated with vertical surfaces and edges plumb, top edges level and in alignment with other panels, faces flush, and scribed to conform accurately at the border and penetrations of the adjoining Work.
  - 1. Cut units shall be at least 50% of the unit width with facing material extended over the cut edge to match the uncut edge. Acoustical wall panels shall be scribed to conform to the adjacent work. Butt joints shall be tight.
- B. Ceiling Panels: Panels shall be installed in locations indicated with surfaces and edges plumb to surface, edges level and in alignment with other panels, faces flush, and scribed to conform accurately to the adjoining work at the borders and penetrations of the adjoining Work.
  - 1. Cut units shall be at least 50% of the unit width with the face fabric extended over the cut edge to match the uncut edge. Acoustical wall panels shall be scribed to fit adjacent work. Butt joints shall be tight.
- C. Shall comply with the panel Manufacturer's written instructions for the installation of panels using the type of concealed mounting accessories indicated or, if not indicated, as recommended by the Manufacturer. Anchor panels shall be secured onto the supporting substrate.
- D. Core: Shall be closely fitted to the frame, and openings for penetrations (electrical outlets, switches, etc.).

- E. Lining Material (if required): Shall be evenly stretched over the core face and wood grounds and securely attached to core, free from puckers, ripples, wrinkles, and sags.
- F. Fabric Facing Material: Shall be basted to the tacking surface of the mounting system and shall be stretched, aligned, squared, and left to cure prior to the final stretching and finishing of the specified fabric(s). And shall be mechanically basted, restretched and fastened to the framing system to assure that the fabric grain is square.
- G. After curing, when stretched, the fabric shall wrap around the frame profile and shall be mechanically crimped and glued to two separate glue strips and then locked into the fabric-holding channels by the jaws of the SnapLoc<sup>®</sup> system.
- H. The ball and socket assembly shall maintain compression within the system and prevent the cover from lifting due to changes in fabric tension as the fabric expands and contracts.
- I. The fabric shall be demountable, providing access to the core's surface behind the fabric.
- J. The fabric shall be installed with the warp (vertical) and weft (horizontal) threads plumb, level, and true. Pattern, texture, and grain of fabric shall align at any / all seams and throughout the entire elevation (if seamed) without distortion of the fabric geometry and pattern.
- K. Dimensional Tolerances of Finished Units: Shall be not more than 1/16 in. (1.6mm) within one foot (304.8mm) up to 1/8 in. over ten feet:
  - 1. Thickness.
  - 2. Edge straightness.
  - 3. Overall length and width.
  - 4. Squareness from corner to corner.
  - 5. Chords, radii, and diameters.

#### **1.13 Cleaning**

- A. Loose threads shall be clipped, and pills and extraneous materials shall be removed.
- B. Panels shall be cleaned with the fabric facing, on completion of installation, to remove dust and other foreign materials according to Manufacturer's written instructions.

#### **1.14 Protection**

- A. Final protection and maintain conditions shall be provided, in a manner acceptable to the Manufacturer and Installer, to ensure that the fabric-wrapped panels are absent of damage or deterioration at the time of Substantial Completion.
- B. Panels, which cannot be cleaned and repaired, shall be replaced in a manner approved by the Architect before the time of Substantial Completion.

#### **End of Section 09841**