

ISLAMIC LIFE CENTER

SECTION 098433 - SOUND-ABSORBING WALL UNITS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes shop-fabricated, sound-absorbing acoustical panel units tested for acoustical performance.
- B. Section includes site-fabricated, stretched acoustic fabric.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at **Project site**.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For unit assembly and installation.
- C. Samples: For each exposed product and for each color and texture specified.

1.4 INFORMATIONAL SUBMITTALS

- A. Product certificates.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance data.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: Units shall comply with "Surface-Burning Characteristics" or "Fire Growth Contribution" Subparagraph below, or both, as determined by testing identical products by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
 - 1. Surface-Burning Characteristics: Comply with ASTM E 84 or UL 723; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

ISLAMIC LIFE CENTER

- a. Flame-Spread Index: 25 or less.
 - b. Smoke-Developed Index: **450** or less.
2. Fire Growth Contribution: Comply with acceptance criteria of local code and authorities having jurisdiction when tested according to NFPA 265 Method B Protocol or NFPA 286.

2.2 SOUND-ABSORBING WALL UNITS

- A. Sound-Absorbing Wall Panel: Manufacturer's standard panel construction consisting of facing material **stretched over front face of edge-framed core and bonded or attached to edges and back of frame.**
- B. **Basis of Design: Acoustical Solutions AlphaSorb Panels.**
1. Mounting: Back mounted with manufacturer's standard **impaling clips**, secured to substrate.
 2. Core: **Glass-fiber board**
 - a. Core-Face Layer: Manufacturer's standard, **impact-resistant, high-density board.**
 3. Edge Profile: **Square.**
 4. Corner Detail in Elevation: **Square** with continuous edge profile indicated.
 5. Reveals between Panels: **Flush.**
 6. Facing Material: **Polyester Fabric.**
 7. Acoustical Performance: Sound absorption **NRC of 0.80** minimum according to ASTM C 423.
 8. Nominal **Overall Panel Thickness: 1 inch (25 mm).**

2.3 MATERIALS

- A. Core Materials: **Manufacturer's standard.**
1. Glass-Fiber Board: ASTM C 612; of type standard with manufacturer, unfaced, and dimensionally stable, molded rigid board; and with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.
 2. Impact-Resistant, Acoustically Transparent, Copolymer Sheet for Face Layer: 1/16- to 1/8-inch- (1.6- to 3.2-mm-) thick layer of perforated, noncombustible, copolymer sheet laminated to face of core.
- B. Facing Material: Fabric from same dye lot; color and pattern **as selected by Architect from manufacturer's full range.**
- C. Mounting Devices: Concealed on back of unit, recommended by manufacturer to support weight of unit, and as follows:

ISLAMIC LIFE CENTER

2.4 FABRICATION

- A. Standard Construction: Use manufacturer's standard construction unless otherwise indicated; with facing material applied to face, edges, and back border of dimensionally stable core; and with rigid edges to reinforce panel perimeter against warpage and damage.
- B. Core-Face Layer: Evenly stretched over core face and edges and securely attached to core; free from puckers, ripples, wrinkles, or sags.
- C. Facing Material: Apply fabric facing fully covering visible surfaces of unit; with material stretched straight, on the grain, tight, square, and free from puckers, ripples, wrinkles, sags, blisters, seams, adhesive, or other visible distortions or foreign matter.
 - 1. Fabrics with Directional or Repeating Patterns or Directional Weave: Mark fabric top and attach fabric in same direction so pattern or weave matches in adjacent units.
- D. Dimensional Tolerances of Finished Units: Plus or minus 1/16 inch (1.6 mm).

2.5 STRETCHED-FABRIC WALL SYSTEM

- A. **Basis of Design: Acoustical Solutions LLC's CrossPoint Sound Absorbing Fabric (Needlebond)**
- B. **Stretched Fabric Wall System: 3/16" nominal thickness in rolls 54" wide, 30 oz. linear yard attached with heavy duty adhesive (approved by manufacturer)**
- C. **Pattern: Single Rib**
- D. **Fire Resistance: Class 1 per ASTM E84, Passes Corner Burn NFPA-265, UBC 8-2 Tunnel Test**
- E. **NRC: 0.20 minimum**

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install units in locations indicated. Unless otherwise indicated, install units with vertical surfaces and edges plumb, top edges level and in alignment with other units, faces flush, and scribed to fit adjoining work accurately at borders and at penetrations.
- B. Comply with manufacturer's written instructions for installation of units using type of mounting devices indicated. Mount units securely to supporting substrate.
- C. Align fabric pattern and grain with adjacent units.

ISLAMIC LIFE CENTER

3.2 CLEANING

- A. Clip loose threads; remove pills and extraneous materials.
- B. Clean panels on completion of installation to remove dust and other foreign materials according to manufacturer's written instructions.

END OF SECTION 098433

ISLAMIC LIFE CENTER

SECTION 098436 - SOUND-ABSORBING CEILING UNITS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes shop-fabricated, sound-absorbing acoustical panel units tested for acoustical performance.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at **Project site**.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For unit assembly and installation.
- C. Samples: For each exposed product and for each color and texture specified.

1.4 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Reflected ceiling plans and other details, drawn to scale and coordinated with each other, using input from installers of the items involved.
- B. Product certificates.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance data.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: Units shall comply with "Surface-Burning Characteristics" or "Fire Growth Contribution" Subparagraph below, or both, as determined by testing identical products by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:

ISLAMIC LIFE CENTER

1. Surface-Burning Characteristics: Comply with ASTM E 84 or UL 723; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - a. Flame-Spread Index: 25 or less.
 - b. Smoke-Developed Index: **450** or less.
2. Fire Growth Contribution: Comply with acceptance criteria of local code and authorities having jurisdiction when tested according to NFPA 286.

2.2 SOUND-ABSORBING CEILING UNITS

- A. Sound-Absorbing Ceiling Panel: Manufacturer's standard panel construction consisting of facing material **laminated to front face, edges, and back edge border of core**

1. **Basis of Design: Acoustical Solutions LLC' AlphaSorb Sound-Absorbing Ceiling Units**
2. Mounting: Back mounted with manufacturer's standard **suspension system with stiffening, back-support angles**, secured to substrate.
3. Core: **Glass-fiber board**
4. Edge Construction: Manufacturer's standard **chemically hardened core with no frame**.
5. Edge Profile: **Square**.
6. Facing Material: **Polyester Fabric**.
7. Acoustical Performance: Sound absorption **NRC not less than 1.00** according to ASTM C 423 for [Type A] [Type J] mounting according to ASTM E 795.
8. Nominal: **Overall Panel Thickness: 2 inches (51 mm)**

2.3 MATERIALS

- A. Core Materials: **Manufacturer's standard**.
1. Glass-Fiber Board: ASTM C 612; of type standard with manufacturer, unfaced, and dimensionally stable, molded rigid board; and with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.
- B. Facing Material: Fabric from same dye lot; color and pattern **as selected by Architect from manufacturer's full range**.
- C. Mounting Devices: Concealed on back or top edge of unit, recommended by manufacturer to support weight of unit.

2.4 FABRICATION

- A. Standard Construction: Use manufacturer's standard construction unless otherwise indicated, with facing material applied to face, edges, and back border of dimensionally stable core and with rigid edges to reinforce panel perimeter against warpage and damage.
- B. Measure each area and establish layout of panels and joints of sizes indicated on Drawings within a given area.

ISLAMIC LIFE CENTER

- C. Facing Material: Apply fabric facing fully covering visible surfaces of unit; with material stretched straight, on the grain, tight, square, and free from puckers, ripples, wrinkles, sags, blisters, seams, adhesive, or other visible distortions or foreign matter.
 - 1. Fabrics with Directional or Repeating Patterns or Directional Weave: Mark fabric top and attach fabric in same direction so pattern or weave matches adjacent units.
- D. Dimensional Tolerances of Finished Units: Plus or minus 1/16 inch (1.6 mm).

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install units in locations indicated. Unless otherwise indicated, install units with edges in alignment with walls and other units, faces flush, and scribed to fit adjoining work accurately at borders and at penetrations.
- B. Comply with manufacturer's written instructions for installation of units using type of mounting devices indicated. Mount units securely to supporting substrate.
- C. Align fabric pattern and grain with adjacent units.

3.2 CLEANING

- A. Clip loose threads; remove pills and extraneous materials.
- B. Clean panels on completion of installation to remove dust and other foreign materials according to manufacturer's written instructions.

END OF SECTION 098436