

SECTION 09841

FABRIC-COVERED ACOUSTICAL WALL PANELS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Class A fabric-covered fiberboard panels manufactured from recycled wood fiber material.
- B. Class A burlap covered fiberboard panels manufactured from recycled wood fiber material.
- C. Class C burlap covered fiberboard panels manufactured from recycled wood fiber material.

1.2 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry.
- B. Section 09110 - Non-Load-Bearing Wall Framing.
- C. Section 09250 - Gypsum Board.
- D. Section _____ - Field Painting; painting of acoustic panels.
- E. Section _____ - _____.

1.3 REFERENCES

- A. ASTM E 84 - Test Method for Surface Burning Characteristics of Building Materials.
- B. AATCC 16 - Colorfastness to Light; American Association of Textile Chemists & Colorists.
- C. NFPA 701 - Standard Methods of Fire Tests for Flame-Resistant Textiles and Films.
- D. UL Test No. 214 - Standard for Tests for Flame-Propagation of Fabrics and Films.
- E. _____.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's catalog data, detail sheets, and specifications.

- C. Samples: Two each of manufacturer's full range of fabric colors applied to substrate material; 7 by 7 inches (180 by 180 mm).
- D. Quality Assurance/Control Submittals:
 - 1. Manufacturer's installation instructions.
- E. Closeout Submittals: Maintenance and cleaning instructions.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications:
 - 1. Minimum 10 years experience in producing acoustical panels of the type specified herein.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original packages.
- B. Inspect the materials upon delivery to assure that specified products have been received.
- C. Report damaged material immediately to the delivering carrier and note such damage on the carrier's freight bill of lading.
- D. Store materials in a dry place, indoors, or on raised platform protected from weather damage.

1.7 PROJECT CONDITIONS

- A. Environmental Requirements: For 24 hours before, during, and continually after installation, maintain temperature and humidity conditions that will approximate interior conditions following building occupancy.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Homasote Company, P.O. Box 7240, West Trenton, NJ 08628-0240; ASD. Tel: (609) 883-3300, Fax: (609) 530-1584, Internet address:

<http://www.homasote.com>; For local rep contact: Sweet's
Buyline 1-800-892-1165 (#0878).

- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- C. Substitutions: Not permitted.
- D. Provide all fabric-covered acoustical wall panels from a single manufacturer.

2.2 MATERIALS

- A. Class A Acoustic Panels: Homasote DesignWall(tm) Interior Panels.
 - 1. Substrate: NCFR(R) fiberboard manufactured from 100 percent recycled wood fiber material; physical properties as follows:
 - a. Thickness: 1/2 inch (13 mm).
 - b. Density: 34-40 pcf (545-640 kg/cubic m).
 - c. Water Absorption by volume (2 hour immersion): 5 percent maximum.
 - d. Expansion, 50 to 90 percent relative humidity: 0.30 percent.
 - e. R-value: 0.85 (0.015).
 - f. NRC: 0.20.
 - g. Flame Spread: 25, per ASTM E 84.
 - h. Smoke Developed: 20, per ASTM E 84.
 - i. Fuel Contributed: 10.
 - j. Classification: Class A, per NFPA.
 - 2. Fabric: FR 701(R), as manufactured by Guilford of Maine, physical properties as follows:
 - a. Content: 100 percent polyester.
 - b. Weight: 16.0 +/- 0.5 oz./lin. yard (50 kg +/- 16 g/m).
 - c. Colorfastness to Light: No less than Grade 4 after 40 hours, per AATCC 16, Option A.
 - d. ASTM E 84: Class A.
 - e. NFPA-701: Passes.
 - f. UL Test No. 214: Passes.
 - g. FAA (PARA.25.853B): Passes.
 - h. NY/NJ Port Authority (FTMS 191-5903): Passes.
 - i. Boston Fire Code BFD IX-1: Passes.
 - j. State of Massachusetts 527 CMR 21.00: Passes.
 - k. State of California Tech Bulletin 117 Section E (CS-191-53): Passes.
 - l. GSA-PBS: Passes.
 - m. Color: 380 Quartz.
 - n. Color: 400 Cherry Neutral.

- o. Color: 401 Blue Neutral.
 - p. Color: 238 Grey Mix.
 - q. Color: As selected by Architect from manufacturer's standard range.
 - 3. Fabrication: Wrap fabric around long edges of panel to back side and laminate to substrate.
- B. Class C Acoustic Panels: Homasote Burlap Panels.
- 1. Substrate: "440" fiberboard manufactured from 100 percent recycled wood fiber material; physical properties as follows:
 - a. Thickness: 1/2 inch (13 mm).
 - b. Density: 24-26 pcf (385-415 kg/cubic m).
 - c. Water Absorption by volume (2 hour immersion): 5 percent maximum.
 - d. Expansion, 50 to 90 percent relative humidity: 0.25 percent.
 - e. R-value: 1.11 (0.19).
 - f. NRC: 0.20.
 - g. Flame Spread: Less than 200, per ASTM E 84.
 - h. Classification: Class C, per NFPA.
 - 2. Burlap: Natural colored heavyweight jute fabric.
 - 3. Fabrication: Wrap fabric around long edges of panel to back side and laminate to substrate.
- C. Class A Fire-Rated Acoustic Panels: Homasote Fire Resistant Burlap Panels.
- 1. Substrate: NCFR(R) fiberboard manufactured from 100 percent recycled wood fiber material; physical properties as follows:
 - a. Thickness: 1/2 inch (13 mm).
 - b. Density: 34-40 pcf (545-640 kg/cubic m).
 - c. Water Absorption by volume (2 hour immersion): 5 percent maximum.
 - d. Expansion, 50 to 90 percent relative humidity: 0.30 percent.
 - e. R-value: 0.85 (0.015).
 - f. NRC: 0.20.
 - g. Flame Spread: 25, per ASTM E 84.
 - h. Smoke Developed: 20, per ASTM E 84.
 - i. Fuel Contributed: 0.
 - j. Classification: Class A, per NFPA.
 - 2. Burlap: Natural colored tight-weave fabric, chemically treated to resist fire.
 - 3. Fabrication: Wrap fabric around long edges of panel to back side and laminate to substrate.
 - 4. Panel Fire Resistance:
 - a. Flame Spread: 20, Class A, per ASTM E 84.
 - b. Smoke Developed: 0, Class A, per ASTM E 84.

- c. Fuel Contributed: 10.
- d. Classification: Class A, per NFPA.

2.3 ACCESSORIES

- A. Metal Frame Clips: Manufacturer's standard clip for securing panels to framing.
- B. Adhesive: APA approved panel adhesive.
- C. Adhesive: APA AFG-01 subfloor adhesive.
- D. Nails: Color coordinated paneling nails, length as required to penetrate wood framing 3/4 inch (19 mm) minimum.
- E. Nails: Finishing nails, length as required to penetrate wood framing 3/4 inch (19 mm) minimum.
- F. Screws:
 - 1. Wood Framing: Coarse thread drywall type wood screw, length as required to penetrate framing 3/4 inch (19 mm) minimum.
 - 2. Metal Framing: 22-25 gage, drywall type steel screw.
 - 3. Metal Framing: 20 gage or heavier, self-tapping drywall type steel screw.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates upon which work will be installed.
- B. Verify framing member spacing complies with manufacturer's requirements depending on substrates and installation methods.
- C. Verify environmental conditions are, and will continue to be, maintained in accordance with manufacturer's recommendations.
- D. Coordinate with responsible entity to perform corrective work on unsatisfactory substrates or conditions.
- E. Starting work by installer is acceptance of substrate and environmental conditions.

3.2 PREPARATION

- A. Follow manufacturer's instructions for allowing panels to be exposed to environmental temperature and humidity conditions for not less than 24 hours before start of installation.
- B. Temporarily position Burlap Panels in place and request Architect's approval, to ensure that desired appearance is obtained.

3.3 INSTALLATION

- A. Follow manufacturer's instructions for cutting and installation of panels:
 - 1. Wood Framed Walls, Method No. 1, (using framing clips).
 - 2. Wood Framed Walls, Method No. 2, (using adhesive).
 - 3. Metal Framed Walls.
 - 4. Wood or Metal Furring over masonry or concrete walls.
 - 5. Finished Walls (walls with continuous substrate in place).

3.4 CLEANING

- A. Follow manufacturer's instructions for cleaning panels soiled during installation.
- B. Replace panels that cannot be cleaned to "as new" condition.

END OF SECTION