

SECTION 09 54 46
FABRITEC Acoustical Wall Panels

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Fabric-wrapped, tackable, and impact-resistant acoustical wall panels with melamine foam core.

B. Related Sections:

EDIT NOTE: ADD OR DELETE SECTIONS PER PROJECT REQUIREMENTS.

1. Section 03 38 00 – Post-Tensioned Concrete.
2. Section 03 41 00 – Plant-Precast Structural Concrete.
3. Section 03 41 13 – Precast Concrete Hollow Core Planks.
4. Section 05 21 00 – Steel Joist Framing.
5. Section 05 31 00 – Steel Decking.
6. Section 06 15 00 – Wood Decking.
7. Section 06 17 53 – Shop-Fabricated Wood Trusses
8. Section 06 17 33 – Wood I-Joists.
9. Section 06 17 36 – Metal-Web Wood Joists.
10. Section 09 21 16 – Gypsum Board Assemblies.

1.2 SYSTEM DESCRIPTION

A. Acoustical Performance Requirements:

1. NRC (Noise Reduction Coefficient): Comply with ASTM C423-90a.

1.3 SUBMITTALS

A. Comply with Section 01 33 00 – Submittal Procedures.

B. Product Data: Manufacturer's technical data for each type of panel and baffle including fire-resistive characteristics, finishes, details of installation, and the following:

1. Manufacturer's installation instructions.
2. Certified test reports indicating compliance with Performance Requirements specified herein.

C. Samples: 2 full size sets of Samples of each specified panel for color selection or verification.

D. Closeout Submittals: Comply with Section 01 77 00 – Closeout Procedures.

1. Operating and Maintenance Manual, including cleaning and maintenance instructions.
2. Extra Material for Owner's stock.
3. Material Safety Data Sheets (MSDS).

1.4 QUALITY ASSURANCE

A. Single Source Responsibility: Obtain panel units for entire Project from a single manufacturer.

B. Manufacturer's Qualifications: Firm with not less than Closeout Submittals: Comply with Section 5 years experience in manufacturing of products similar in complexity to those required for this Project.

C. Installer's Qualifications: Firm with not less than 5 years experience in installation of products similar in complexity to those required for this Project, including specific requirements indicated.

1. Successfully completed not less than 5 comparable scale projects.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Comply with Section 01 60 00 – Product Requirements.
- B. Deliver and store materials in manufacturer's original unopened containers with brands, names, and production lot numbers clearly marked on these containers.
- C. Storage and Protection: Comply with manufacturer's recommendations.
 1. Store products in a cool, dry place out of direct sunlight.
 2. Protect from elements and from damage.

1.6 PROJECT CONDITIONS

- A. Environmental Requirements within building:
 1. Panels do not require special environmental conditions.
 2. Systems may be installed at any stage of construction.

1.7 WARRANTY

- A. Provide manufacturer's written warranty per Section 01 77 00 – Closeout Procedures.

1.8 MAINTENANCE

- A. Extra Materials:
 1. Deliver not less than the following quantity of each type, color, and pattern of material, exclusive of material required to properly complete installation.

EDIT NOTE: RETAIN AMOUNT OF EXTRA MATERIALS USED ON PROJECT. DELETE THIS ARTICLE IF NO EXTRA MATERIALS REQUIRED OR ACCEPTABLE.

- a. 3 percent.
- b. 5 percent.
- c. 1 carton.
2. Furnish Extra Materials from same production run to verify run for color.
3. Package replacement materials with protective covering, identified with appropriate labels.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide products from the following manufacturer:
 1. ArtUSA.
2775 Bankers Industrial Dr
Atlanta GA 30360
Telephone: 888-454-6975

Fax: 770-246-7860
Website: www.noisecontrolproducts.com
E-mail: sales@noisecontrolproducts.com
- B. Substitutions: Comply with Section 01 60 00 – Product Requirements.

2.2 MANUFACTURED UNITS

- A. Fabric-Wrapped Acoustical Wall Panels: Wall panels consisting of lightweight, open-cell willtec® foam core with fabric-wrapped, impact-resistant, tackable surface, meeting the following requirements:
1. Density: 0.5 to 0.7 pounds per cubic foot (0.23 to 0.32 kg per m³).
 2. Tensile Strength: 8 psi (0.06 MPa).
 3. Elongation: 8 percent per ASTM D3574-77.
 4. Flammability: Class 1 per ASTM E84.
 5. Size: Nominal 24 inch by 24 inch (610 mm by 610 mm).

EDIT NOTE: SELECT PANEL SIZE ABOVE OR BELOW. DELETE SIZE NOT REQUIRED FOR PROJECT.

6. Size: Nominal 24 inch by 48 inch (610 mm by 1219 mm).
7. Size: Custom size per Drawings.
8. Panel Thickness: 1 inch (25 mm) total thickness.

EDIT NOTE: SELECT PANEL THICKNESS ABOVE OR BELOW. DELETE THICKNESSES NOT REQUIRED FOR PROJECT.

9. Panel Thickness: 1-1/2 inches (76 mm).
10. Panel Thickness: 2 inches (102 mm).
11. Panel Thickness: 1-3/4 inches (44 mm) total thickness.
12. Panel Thickness: Custom thickness indicated on Drawings.
13. Panel Edges: Square.

EDIT NOTE: SELECT PANEL EDGE ABOVE OR BELOW. DELETE EDGE NOT REQUIRED FOR PROJECT.

14. Panel Edges: Beveled.
15. Tackable surface: 1/16 inch (1.6 mm) thick fiberglass substrate.

EDIT NOTE: PANEL COVERING SELECTED BY ARCHITECT. SELECT COVERING AND INSERT PRODUCT INFORMATION BELOW. DELETE COVERINGS NOT REQUIRED FOR PROJECT.

16. Covering: Guilford FR701.
17. Covering: Selected by Architect from wall covering manufacturers' products.
18. Covering: Microperforated vinyl.
19. Covering: Custom fabrics.

EDIT NOTE: PANEL PATTERN SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL PATTERN SELECTIONS.

20. Pattern Number. Architect will select from manufacturer's standard products.
21. Sound Absorption Coefficients: Type D mountings, Guilford FR701 fabric covering, ASTM C423-90a.

Frequencies (Hz)	<u>125</u>	<u>250</u>	<u>500</u>	<u>1,000</u>	<u>2,000</u>	<u>4,000</u>	<u>NRC</u>
1 inch thick panel:	0.18	0.68	0.95	0.92	0.78	0.67	0.85

22. Acceptable Product: FABRITEC Wall Panels.

2.3 ACCESSORIES

EDIT NOTE: SELECT APPROPRIATE MOUNTING SYSTEM.

- A. Adhesive: Non-toxic, water-based adhesive, for use with foam products. AcouSTIC™ foam adhesive or approved substitute.
- B. Mechanically Mounted Panels: Manufacturer-installed concealed splines mounted to panel.
- C. Mechanically Mounted Panels: Manufacturer-installed Z-clips mounted to panel.

- D. Hook and Loop: Manufacturer-installed loop-side fastener attached to panels, shipped with accompanying hook-side fastener with tape adhesive for wall installation.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper and or timely completion.
 - 1. Do not proceed until unsatisfactory conditions have been corrected.

[EDIT NOTE: USE THE FOLLOWING PREPARATION ARTICLE FOR ADHESIVE APPLIED INSTALLATIONS ONLY.](#)

3.2 PREPARATION

- A. Prior to installing ceiling panels, make certain that surfaces to which adhesive will be applied are clean and free of dust, dirt, and other residues that would inhibit a proper bond.

3.3 INSTALLATION

- A. Comply with manufacturer's instructions and recommendations for panel installation.

[EDIT NOTE: SELECT THE NEXT THREE PARAGRAPHS FOR ADHERED APPLICATIONS.](#)

- B. Cut adhesive tube end to produce a 1/4 inch (6.4 mm) bead.
- C. Apply adhesive to panels per manufacturer's recommended pattern and press panel firmly into place per manufacturer's installation requirements.
- D. Install panels true to lines and plane indicated.

[EDIT NOTE: SELECT THE NEXT PARAGRAPH FOR METAL CLIP APPLICATIONS.](#)

- E. Comply with panel manufacturer's written instructions for installation of panels using type of mounting accessories indicated or, if not indicated, as recommended by manufacturer.

3.4 CLEANING

- A. Clean adjacent surfaces and remove unused product and debris from site.
- B. After installation is completed, clean soiled surfaces of materials per panel manufacturer's recommendations.
- C. Remove and reinstall improperly installed material.
- D. Remove damaged or discolored material, or material that cannot be properly cleaned, and install new material.

END OF SECTION