



Section 09 80 00

FSorb Acoustic Wall and Ceiling Panels

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Sound Attenuation Panels
- B. Sound Attenuation Baffles
- C. Sound Attenuation Grids

1.2 RELATED SECTIONS

- A. 09 81 00 - Acoustic Insulation
- B. 09 51 00 - Acoustical Ceilings

1.3 REFERENCES

- A. ASTM C423: Sound Absorption by Reverberation Room Method
- B. ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials
- C. ASTM E1264: Standard Classification for Acoustical Ceiling Products
- D. UL Laboratories CDPH 2.0 TVOC Testing Standard Method – LEEDv4
- E. Living Building Challenge Criteria: Compliant. LBC Red List Free
- F. Interior Performance: CDPH Standard Method v1.2-2017

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's technical data sheets for each product to be used, including:
 - 1. Recommended cutting and preparation instructions
 - 2. Handling and storage requirements
 - 3. Installation techniques and methods
- C. Shop Drawings:
- D. Selection Samples: For each finish product specified, two sets of color samples representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, minimum size 2-7/8" x 3-1/2" representing actual product, color, and thickness.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5 year experience manufacturing similar products.
- B. Installer Qualifications: Minimum 2 year experience installing similar products.



- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship is approved by Architect.
 - 3. Confirm consistency of installation. Monitor front surface vs back surface during installation for consistency unless otherwise specified.
 - 4. Refinish mock-up area as required to produce acceptable work.

1.6 PRE-INSTALLATION MEETINGS

- A. Convene minimum two weeks prior to starting work of this section.

1.7 STORAGE, DELIVERY, AND HANDLING

- A. Deliver and store product in dry location within unopened manufacturer's packaging bearing the label with manufacturer's identification until ready for installation.
- B. Do not compress or bend product or package during storage.
- C. Segregate from strong oxidizers. Keep covered, clean and dry.
- D. Avoid handling. Handle materials only when required to avoid damage.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.9 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress or damage to FSorb material.

1.10 Extra Stock

- A. Provide a quantity equal to 2% of total installed or a minimum of two cartons of each type. New unopened cartons only.

PART 2 PRODUCTS

2.1 MANUFACTURERS

Acceptable Manufacturer: FSorb, located at 15135 NE 90th Street, Suite 200 Redmond, WA 98052 – Tel: 425.881.0888 or 1.844.313.7672 Email requests to info@fsorb.com further details can be found here: <https://www.fsorb.com>

- A. Substitutions: Not permitted

2.2 ACOUSTICAL WALL AND CEILING PANELS

- A. Product: FSorb:
 - 1. Design: FSorb
 - a. Assemble Size: All panels are manufactured at 48"x96" (4'x8')
 - b. Noise Reduction Coefficient (NRC)
 - 1) [½" - 0.50 (Testing per ASTM C423 - A mount)]
 - 2) [1" - 0.70 (Testing per ASTM C423 - A mount)]



3) [2" - 1.05 (Testing per ASTM C423 - A mount)]

- B. Material: Thermally bonded (heat pressed) high density, recycled polyester (100%) acoustic panel containing not less than 65 percent post-consumer material.
1. Composition: Unfaced monolithic panel
 2. Thickness: ½" or 1" or 2"
 3. Weight: 12 lbs/cf or 7.5 lbs/cf or 5 lbs/cf
 4. Colors: Refer to section 2.5

2.3 SOUND ATTENUATION BAFFLES

A. Product: FSorb:

1. Design: Silentline

a. Assembled Size: All baffles shapes cut from 48"x96" (4'x8') panels.

b. Noise Reduction Coefficient (NRC)

1) [1/2" – 0.75 Standard (Testing per ASTM C423 - J mount)]

2) [1" – 0.95 (Testing per ASTM C423 - J mount)]

3) [2" – 1.20 (Testing per ASTM C423 - J Mount)]

c. Design Options:

1) [Ocean]

a) [47" Long Baffles]

b) [95" Long Baffles]

2) [Mountain]

a) [47" Long Baffles]

b) [95" Long Baffles]

3) [Metro]

a) [47" Long Baffles]

b) [95" Long Baffles]

4) [Transit]

a) [47" Long Baffles]

b) [95" Long Baffles]

d. Design Length

1) Standard 47" and 95" Long

2) Custom made from [12" to 96" (1' to 8')]

f. Design Depth

1) [6"]

2) [8" Standard]

3) [12"]

4) [Custom]

e. Mounting:

1) Eye Lag

2) Dome Cap & Quick Adjust Gripper

3) F-Snap High or Low (For attachment to 9/16" bolt slot ceiling grid)

4) T-Snap High or Low (For attachment to standard 9/16" faced ceiling grid)

B. Material: Thermally bonded (heat pressed), high density, recycled polyester (100%) acoustic panel containing not less than 65 percent post-consumer recycled material.

1. Composition: Unfaced monolithic panel.
2. Thickness: [½" or 1" or 2"]
3. Weight: 12 lbs/cf or 7.5 lbs/cf or 5 lbs/cf
4. Colors: Refer to Section 2.5



2.4 SOUND ATTENUATION GRIDS

- A. Product: FSorb
1. Design: Quietgrid
 - a. Assembled Size: All Quietgrid shapes cut from 48"x96" (4'x8') panels.
 - b. Noise Reduction Coefficient (NRC)
 - 1) [1/2" – 0.95 (Testing per ASTM C423 - J mount)]
 - c. Design Options:
 - 1) [47", 71", or 95" Angle (A)]
 - 2) [47", 71", or 95" Chevron (K)]
 - 3) [47", 71", or 95" Curve (C)]
 - 4) [47", 71", or 95" Square (S)]
 - 5) [48 Ocean]
 - a) [Tegular Lay-in (T)]
 - b) [Shift and Set (SS)]
 - 6) [48 Mountain]
 - a) [Tegular (T)]
 - b) [Shift and Set (SS)]
 - 7) [48 Metro]
 - a) [Tegular (T)]
 - b) [Shift and Set (SS)]
 - 8) [48 Metro Block]
 - a) [Tegular (T)]
 - b) [Shift and Set (SS)]
 - 9) [48 Transit]
 - a) [Tegular (T)]
 - b) [Shift and Set (SS)]
 - d. Design Depth
 - 1) [6"]
 - 2) [8" Standard]
 - 3) [12"]
 - 4) [Custom]
- B. Material: Thermally bonded (heat pressed), high density, recycled polyester (100%) acoustic panel containing not less than 65 percent post-consumer recycled material.
1. Composition: Unfaced monolithic panel.
 2. Thickness: [1/2"]
 3. Weight: [12 lbs/cf]
 4. Colors: Refer to Section 2.5

2.5 FSORB COLORS

- A. Finish: Unfaced panel color options:
1. Standard Colors:
 - a. [White #100]
 - b. [Light Grey #130]
 - c. [Grey #160]
 - d. [Tan #190]
 - e. [Charcoal #220]
 - f. [Black #250]
 2. Premium Colors:
 - a. [Light Beige #300]
 - b. [Rose Red #330]



- c. [Red #360]
- d. [Pink #390]
- e. [Orange #420]
- f. [Apricot #450]
- g. [Yellow #480]
- h. [Dark Green #510]
- i. [Green #540]
- j. [Moss Green #570]
- k. [Sea Foam Green #600]
- l. [Midnight Blue #630]
- m. [True Blue #660]
- n. [Ocean Blue #690]
- o. [Sky Blue #720]
- p. [Dark Purple #750]
- q. [Purple #780]
- r. [Chestnut #810]

3.1 EXAMINATION

- B. Do not begin installation until substrates have been properly prepared.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- D. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Locate system in accordance to the reflected plan and/or elevations. Install acoustical panels in location indicated. Follow the installation recommendations of the manufacturer. Align panels accurately, with edges plum and top edges level.
- B. Install panels to construction tolerance of plus or minus 1/8 inch for the following:
 - 1) Plumb and Level
 - 2) Flatness
 - 3) Width of joints
- E. Cutting Acoustical Units: Make field cut edges of same profile as factory edges.
- F. Fit units in place, free from damaged edges or other defects detrimental to appearance and function.
- G. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.
- H. Install units using adhesives, mechanical fasteners or clips to walls or ceilings as directed. The use of a suspension system, blocking or furring may be required.

3.4 TOLERANCES



- A. Maximum variation from flat and level surface: 1/8 inch in 10 feet.
- B. Maximum variation from plumb of suspension system caused by eccentric loads: 2 degrees.

3.5 PROTECTION

- A Protect installed products until completion of project.
- B Touch-up, repair or replace damaged products before Substantial Completion.