RetroSorb™ Sound-Absorbing Panel System

The RetroSorb™ Sound-Absorbing Panel System is engineered for existing walls or structures that need supplemental sound absorption, for both indoor and outdoor applications.

Note to Specifier: The RetroSorb™ Sound-Absorbing Panel System is a finished functional product and should be specified per The Construction Specifications Institute’s format. All Division numbers listed within this document refer to the CSI format: 09 8000 - Acoustical Treatments

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 Metal Wall Panels as shown on the architectural drawings.

B. Related Sections include the Following: (list applicable sections)

1.3 SUBMITTALS

A. Manufacturer’s Literature and Data:
   1. Product Data: Submit manufacturer’s technical data and brochures for specified system.

B. Shop Drawings:
   1. Shop drawings shall show dimensions, sizes, thickness, finishes, joining, mounting attachments, and relationship to adjoining structure.

C. Samples:
   1. Upon request, samples shall be a nominal 12” X 12” panel, and components.

D. Certification:
   1. Submit certification from manufacturer of wall panels attesting that products comply with specified requirements including finish as specified.

E. Product Test Reports:
   1. All products furnished shall have a flame spread classification of 0-25 for a Class A or Class 1 rating in accordance with ASTM E84.

   2. All products furnished shall be tested in accordance with ASTM C-423-90 for Sound Absorption. Test results for a Type A mounting method shall yield an NRC (Noise Reduction Coefficient) of no less than 1.05.
F. Maintenance Data:
   1. Provide maintenance instructions for acoustical panels.

G. Warranty:
   1. Provide product warranty for one year from date of substantial project completion.

1.4 QUALITY ASSURANCE

A. Manufacturer: Firm with manufacturing and delivery capacity required for the project, shall have successfully completed at least ten projects within the past five years, utilizing systems, materials and techniques as herein specified.

B. Fabricator must own and operate its own Manufacturing facilities for all metal components. Systems consisting of components from a variety of manufacturers will not be considered or accepted.

C. Manufacturer/Fabricator must own and operate its own Painting and Finishing facility to assure single source responsibility and quality control.

D. Testing Agency Qualifications: An independent testing agency, acceptable to authorities having jurisdiction, with the experience and capability to conduct testing indicated, as documented according to ASTM E 548.

1.5 DELIVERY, STORAGE & HANDLING

A. All materials shall be protected during fabrication, shipment, site storage and erection to prevent damage to the finished work from other trades. Store acoustical panels inside a well-ventilated area, away from uncured concrete and masonry, and protected from the weather, moisture, soiling, abrasion, extreme temperatures, and humidity.

PART 2 – PRODUCTS

2.1 MANUFACTURER


B. The listed manufacturer shall not be construed as closing specifications to other prospective manufacturers, but rather as establishing a level of quality in a metal system.

2.2 SYSTEM DESCRIPTION

A. Wall Panel System shall be the RetroSorb™ Sound-Absorbing Panel System. All panels, J-trim perimeter, corner angles and Z furring, including acoustical component shall be provided as a complete package of this work.

2.3 MATERIALS

A. Mounting Accessories
   1. Brake form aluminum as manufactured by Sound Fighter® Systems, LLC. Accessories shall include Z-furring, J Trim and inside/outside corner angles in a size and length to completely support and finish trim the wall panels as shown in elevations. All mounting accessories shall be finished to match flat RetroSorb™ Sound-Absorbing Panels.

   2. General: Provide metals free from surface blemishes where exposed to view in finished unit. Surfaces that exhibit pitting, seam marks, roller marks, stains, and discolorations, or other imperfections on finished units are not acceptable. All metal shall be of the highest grade commercial type.
B. Metal Panels


2. The metal acoustical RetroSorb™ Sound-Absorbing Panels shall be Flat and perforated with 3/32" diameter holes on 3/16" staggered centers, approximately 23% open area.

3. The panels shall be fabricated of smooth aluminum (.063").

C. Sound Absorption Material:

1. Provide mineral wool insulation (2" thickness) x (6# density). The mineral wool insulation shall be installed in the formed metal panel cavity with no additional covering.

D. Weight:

1. RetroSorb™ Sound-Absorbing Panels and Mounting Hardware shall have a combined nominal weight of 2 lbs. per sq/ft.

2.4 FINISHES

A. Standard Powder Coat Finish – (Parchment White)

1. All RetroSorb™ Sound Absorbing Panels & Accessories shall receive a micro-etched pretreatment prior to receiving an electrostatically applied Standard powder coat paint finish.

2. All cut edges, including perforated holes must be coated. Finish shall be cured and oven baked to insure paint adhesion and uniform surface hardness.


OR

B. Premium Powder Coat Finishes – (Available Colors)

1. All RetroSorb™ Sound Absorbing Panels & Accessories shall receive a micro-etched pretreatment prior to receiving an electrostatically applied Premium powder coat paint finish.

2. All cut edges, including perforated holes must be coated. Finish shall be cured and oven baked to insure paint adhesion and uniform surface hardness.

3. Premium Color to be selected from RetroSorb™ Premium Colors.
PART 3 – EXECUTION

3.1 INSPECTION

A. Examine building structure scheduled to receive wall panel system for unevenness or irregularities that would affect quality and execution of work.

B. Tolerances:
   
   1. Install wall panel system with a maximum surface deviation of 1/8" in 4'-0" (No load applied) ASTM 635-92.

3.2 INSTALLATION

A. General: Comply with manufacturer’s printed instructions and governing regulations.

3.3 CLEANING

A. Clean all surfaces following installation.

B. Replace material having scratches, abrasions, or other defects, with unblemished components.

C. Maintenance per manufacturer’s finish maintenance instructions.

3.4 PROTECTION

A. Protection of RetroSorb™ Sound Absorbing Panels from damage by other trades after installation to be provided by general contractor.

3.5 GENERAL RESPONSIBILITY

A. Variation from specification: Any variation from this specification resulting in additional cost to any other contractor or subcontractor on this project shall be the sole financial responsibility of the contractor for the work of this section.