



Kirei EchoPanel

SECTION 098400

ACOUSTICAL WALL PANELS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general conditions of Contract, including General and Supplementary Conditions and Divisions-1 Specification sections apply to work of this section.

1.2 SUMMARY

A. Section Includes:

1. Acoustical wall panels and installation components.

B. Related Sections:

1. Section 09 20 00 (09200) – Plaster and Gypsum Board

C. Alternates

1. Prior Approval: Unless otherwise provided for in the Contract documents, proposed product substitutions may be submitted no later than TEN (10) working days prior to the date established for receipt of bids. Acceptability of a proposed substitution is contingent upon the Architect's review of the proposal for acceptability and approved products will be set forth by the Addenda. If included in a Bid are substitute products which have not been approved by Addenda, the specified products shall be provided without additional compensation.
2. Submittals which do not provide adequate data for the product evaluation will not be considered. The proposed substitution must meet all requirements of this section, including but not necessarily limited to, the following: Single source materials suppliers (if specified in Section 1.5); 3rd-party tested acoustical performance; Panel design, size, composition, color, and finish; installation system component profiles and sizes; Compliance with the referenced standards.

1.3 REFERENCES

A. Test Methods:

1. ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
2. ASTM E 84/CAN/ULC S102 Standard Test Method for Surface Burning Characteristics of Building Materials.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data for each type of acoustical wall panel required.

- B. Samples: Minimum 6 inch x 6 inch samples of specified acoustical wall panel; minimum 4 inch long samples of attachment method including trim and decorative accents.
- C. Certifications: Manufacturer's certifications that products comply with specified requirements, including laboratory reports showing compliance with specified tests and standards. For acoustical performance, each carton of material must carry 3rd party-tested NRC classification .
- D. Shop Drawings: Submit shop drawings showing how panels are to be laid out on the walls, details of trim members and width of panels. Width of panels and location of vertical seams are critical.

1.5 QUALITY ASSURANCE

- A. Single-Source Responsibility: Provide acoustical panel units and installation components by a single manufacturer.
- B. Coordination of Work: Coordinate acoustical wall work with installers of related work including, but not limited to building insulation, gypsum board, light fixtures, mechanical systems, electrical systems, and sprinklers.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver acoustical wall panels to project site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.
- B. Before installing acoustical wall panels, permit them to reach room temperature and a stabilized moisture content.
- C. Handle acoustical wall panels carefully to avoid chipping edges or damaged units in any way.

1.7 PROJECT CONDITIONS

- A. Space Enclosure:
 - 1. EchoPanel Acoustical Panels: All wet work must be complete and dry prior to installation. Installation shall be carried out where the temperature is between 40 degrees F and 120 degrees F. These temperature conditions must be maintained throughout the life of the warranty. .

1.8 WARRANTY

- A. Acoustical Wall Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace acoustical panels that fail within the warranty period. Failures include, but are not limited to:
 - 1. Acoustical Wall Panels: Manufacturer's defects
- B. Warranty Period:
 - 1. Acoustical wall panels: One (1) year from date of substantial completion.
- C. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

1.9 MAINTENANCE

- A. Extra Materials: Deliver extra materials to Owner. Furnish extra materials described below that match products installed. Packaged with protective covering for storage and identified with appropriate labels.

1. Acoustical Wall Panels: Furnish quantity of full-size units equal to 5.0 percent of amount installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Acoustical Wall Panels:
 1. Kirei USA, LLC

2.2 ACOUSTICAL WALL PANELS

- A. Acoustical Wall Panels: Type AWP-1:
 1. Composition: Recycled & Virgin PET Recycled content up to 60%
 2. Finish: *(Color) (Print) (Custom print)*
 3. Color: As selected by architect from manufacturer's standard color offering.
 4. Thickness: (7mm) (12mm)
 5. Width: 4' (nominal)
 6. Panel Heights: 8 feet
 7. Mounting Type: Adhesive / Resin.
 8. Mounting Type: Adhesive No Resin.
 9. Mounting Type: Impaling / Adhesive.
 10. Mounting Type: Lay-in.
 11. Mounting Type: Magnet.
 12. Mounting Type: Spline.
 13. Mounting Type: Velcro.
 14. Mounting Type: Panel Clip to Z-Bar.
 15. Mounting Type: Panel Clip to Double Wall Clip.
 16. Mounting Type: Z-Bar to Z-Bar.
 17. Mounting Type: Aluminum Z-Clip.
 18. Mounting Type: Panel Clip / Velcro.
 19. Noise Reduction Coefficient (NRC): ASTM C 423;
 - A. 24mm A Mounting (.65 no air gap) D Mounting (20mm air gap 0.75) (50mm air gap 0.85)
 - B. 12mm: A Mounting (.25 no air gap) D Mounting (20mm air gap 0.55) (50mm air gap 0.75)
 - C. 7mm: A Mounting (.36 no air gap) D Mounting (20mm air gap 0.45) (50mm air gap 0.70)
 20. Dimensional Stability: Standard – space must be enclosed with HVAC systems operating at all times.
 21. Acceptable Product: EchoPanel item number, as supplied by Kirei USA, LLC

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not proceed with installation until all wet work such as concrete, terrazzo, plastering and painting has been completed and thoroughly dried out, unless expressly permitted by manufacturer's printed recommendations.

3.2 PREPARATION

- A. Measure each wall area and establish layout of acoustical units to balance border widths at opposite edges of each wall. Coordinate panel layout with mechanical and electrical fixtures.

3.3 INSTALLATION

- A. Install wall panels by attaching the panels to an existing wall per the manufacturer's instructions, LA 295818, and in accordance with the authorities having jurisdiction.
- B. Attachment of panels to the wall will include the use of internal splines (included) and J molding as required for top and bottom edges.

3.4 ADJUSTING AND CLEANING

- A. Replace damaged and broken panels.
- B. Routine maintenance of EchoPanel wall panels should consist of: Blot excess spills from material quickly. Wipe with a damp cloth. If stain persists, apply small quantities of carpet or upholstery shampoo solution with a damp cloth. Blot well with a clean cloth after each application of the solution. Warning, avoid excessive amounts of water. Note: Ensure adequate ventilation if the product is likely to be subject to excessive moisture

3.5 WASTE MANAGEMENT

- A. EchoPanel may be disposed of in standard PET recycling stream provided that no disqualifying foreign matter has been affixed, such as adhesives.
- B. Waste Management:
 - a. Coordinate recycling of waste materials with Section [01 74 19 - Construction Waste Management and Disposal].
 - b. Collect recyclable waste and dispose of or recycle field generated construction waste created during demolition, construction or final cleaning.
 - c. Remove recycling containers and bins from site.

3.6 PROTECTION

- A. Protect finished work from damage due to subsequent construction activity on the site

END OF SECTION