

SECTION 09 84 39

ACOUSTIC WOOD PANELS



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PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: Acoustic wood [ceiling] [and] [wall] panels for direct attachment to substrate.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Include installers of suspension system and wood grille panels. Comply with requirements in [Section 01 31 00 "Project Management and Coordination."] <Insert Section number and title.>

1.03 ACTION SUBMITTALS

- A. Product Data: Submit manufacturer's product data sheets and installation instructions.
- B. Finish Selection Samples: Provide printed color charts or finished chips.
- C. Verification Samples: Provide [two] <other number>12- by 12-inch samples of each wood panel specified, showing two adjacent edges and a corner.

Note to Specifier: Retain below if LEED credit compliance is required; adjust list to reflect credits sought. Credits are based on LEED v4 BD+C for New Construction, Schools, Core and Shell, Retail, Data Centers, Hospitality, Warehouses and Distribution Centers, and Healthcare.

- D. LEED Submittals:

Note to Specifier: Bio-blend core has high recycled content.

1. MR Credit, Building Product Disclosure and Optimization – Sourcing of Raw Materials; Option 2 Recycled Content: Product Data indicating percentage by weight of post-consumer and post-industrial recycled content for products having recycled content. Include a statement indicating costs for each product having recycled content.

Note to Specifier: Acoustic wood panels contribute to credit below when specified with FSC-certified cores and veneers.

1. MR Credit, Building Product Disclosure and Optimization - Sourcing of Raw Materials; Option 2 Wood Products: Chain-of-custody certificates certifying that wood products comply with forest certification requirements. Include evidence that manufacturer is certified for chain of custody by an FSC-accredited certification body. Include statement of costs for linear wood panels.

Note to Specifier: This prerequisite only applies to LEED BD+C for Schools.

2. EQ Prerequisite, Minimum Acoustic Performance; Option 1: Test data indicating the NRC of the ceiling system.

Note to Specifier: Acoustic wood panels contribute to credit below when specified with recycled-fiber core.

3. EQ Credit, Low-Emitting Materials: For each composite-wood product used in ceiling panel fabrication, provide documentation indicating that the bonding agent contains no urea formaldehyde. For each adhesive used in ceiling panel fabrication, documentation indicating that the adhesive contains no urea formaldehyde.

1.04 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: **[Elevations] [and] [reflected ceiling plans]**, drawn to scale, showing acoustic wood panels and the following items:

Note to Specifier: Edit list below as applicable to selected installation.

1. Suspended ceiling system attachment locations to building structure.
2. Lighting fixtures.
3. Sprinklers.
4. HVAC vents and diffusers.
5. Audio-visual equipment.
6. **<Insert item>**.

1.05 QUALITY ASSURANCE

Note to Specifier: Retain the following paragraph if FSC Certified wood products are required.

- A. Manufacturer Qualifications: FSC Chain of Custody Certification.

Note to Specifier: Mockups are generally not required.

- B. Mockups: Install **[one] <Insert number>** panel(s). **[Approved Mockups may remain in place in completed Work if undisturbed at Substantial Completion.]**

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver acoustic wood panels after building is enclosed, concrete, plaster, and gypsum board work is complete, and HVAC system is operating and maintaining temperature and humidity at occupancy levels.
- B. Store acoustic wood panels in conditioned space. Keep panels dry.

PART 2 PRODUCTS

2.01 PRODUCT

- A. Acceptable Product: Groove and Bore Panel; Madrid Inc.

[Project No.]
[Date]

[Project Name]
[Project Location]

1. Address: 7800 Industry Ave., Pico Riviera, CA 90660.
2. Phone: (562) 404-9941.
3. Email: info@madridinc.com.
4. Website: www.madridinc.com.

B. Substitutions will not be considered.

Note to Specifier: Select substitution limitation paragraph above or below.

C. Substitutions will be considered [**according to Instructions to Bidders**] [**as specified in Division 01**].

2.02 PERFORMANCE CRITERIA

- A. Sound Absorption: ASTM C 423, Type A mounting.
 1. NRC: 0.80.
 2. SAA: 0.78.
- B. Surface-Burning Characteristics: Comply with ASTM E 84.
 1. Flame-Spread Index: 25 or less.
 2. Smoke-Developed Index: 40 or less.

2.03 MATERIALS

- A. Veneer-Faced Plywood: Made with no added urea formaldehyde per California Air Resources Boards "ATCM to Reduce Formaldehyde Emissions from Composite Wood Products."
 1. Core: Medium density fiberboard, ANSI A208.2, Grade 130, fire-retardant-treated.

Note to Specifier: Veneers in paragraph below are standard. See <http://madridinc.com/veneer-1.html> for custom veneer options.

2. Veneer: **[Cherry] [Maple] [Red oak] [Ash] [White birch] [Beech] [Bamboo] <Insert custom veneer>**.

2.04 ACOUSTIC WOOD PANELS

Note to Specifier: Certified materials are not standard. Retain paragraph below if FSC-certified are required.

- A. Certified Materials: Provide wood components certified as "FSC 100%" or "FSC Mixed" according to FSC STD-01-001.
- B. Panels: Veneer-faced plywood with tongue and groove edges on two sides. Provide 1/16-inch-wide by 1/8-inch-deep grooves at 23/64-inch centers across face of panels parallel to tongue and groove edges. Perforate panels from back side with 1/4-inch diameter holes, aligned with grooves, at 1-1/4-inch centers, staggered.
 1. Finish: Transparent.
 2. Panel Size: 6-inch nominal width exposed face by **[108] <Insert length>** inches long.
 3. Panel Thickness: 3/4 inch.

2.05 ACCESSORIES

- A. Z-Clips: Manufacturer's standard clip for concealed attachment.
- B. Acoustic Insulation: 2-inch-thick glass-fiber board.

[Author]
[File Name]

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2.06 FINISHING

- A. Transparent Finish: Waterborne, UV-curable acrylated epoxy, polyester, or urethane.
 - 1. Stain: **[None required]** **[Match Architect's sample]** <Insert stain color>.
 - 2. Sheen: **[Flat]** **[Satin]** **[Semi-gloss]** **[Gloss]**.
- B. Apply finishes to exposed surfaces.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine areas for compliance with requirements for applicable substrates.

3.02 PREPARATION

- A. Condition acoustic wood panels by placing panels in spaces where they will be installed at least 72 hours prior to installation.

3.03 ACOUSTIC WOOD PANEL INSTALLATION

- A. Attached insulation to substrate using adhesive or fasteners.
- B. Install acoustic wood panels in accordance with manufacturer's written instructions.
 - 1. Install panels **[horizontally]** **[vertically]** **[as indicated on Drawings]**.
 - 2. Attach panels to substrate through insulation using Z-clips and manufacturer-approved fasteners.
 - 3. Maintain continuous lines with grooves of adjacent panels aligned with tight joints between ends.

END OF SECTION