



SECTION 09 54 33

WOOD COFFERED CEILINGS

Wood Ceiling Coffers by Madrid, Inc. are a striking solution for beautiful wood ceilings with visual depth. Two styles are available: Dome Coffers made with molded plywood, and Woven Coffers with an attracted woven wood, leather, or metal panel. Coffered panels clip onto a standard suspension grid, providing flush joints and concealing grid.

Specification Coordination: Edit this section to satisfy project requirements and coordinate with work of related sections. This document is available in word processing format at madridinc.com; TURN ON HIDDEN TEXT to view or print notes to specifier.

Drawing Coordination: Show locations of each type of coffer in Drawings or Schedules. Show panel layout, border or perimeter details, and trim. Coordinate above-ceiling work with coffer depth.

Madrid, Inc.

7800 Industry Ave., Pico Riviera, CA 90660

Phone: 562-404-9941, Email: info@madridinc.com. Web: madridinc.com FSC-C115051

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes ceilings made with wood coffered panels.
- A. Related Sections:
 - 1. [Section 06 40 23, Interior Architectural Woodwork][06 42 00, Wood Paneling][09 78 00, Interior Wall Paneling]: Woodwork types not specified in this Section.
 - 2. [Section 09 51 13, Acoustical Panel Ceilings][Section 09 53 00, Acoustical Ceiling Suspension Assemblies]: Suspension system.
 - 3. Section 09 54 26, Suspended Wood Ceilings: Wood veneer ceiling tiles [to match coffers].
 - 4. Section 09 78 00, Woven Paneling: Woven wood paneling to match coffers.

1.2 REFERENCES

- A. ASTM C423: Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
- B. ASTM C635: Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings
- C. ASTM E795: Mounting Test Specimens during Sound Absorption Tests.
- D. ASTM E84: Surface Burning Characteristics of Building Materials.

- E. CISCA Ceiling Systems Handbook.
- F. CISCA Wood Ceilings Technical Guidelines.
- G. **[FSC[®]: Forest Stewardship Council[®] Chain of Custody Certification.]**

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate suspension grid locations with locations of wood coffers.
- B. Coordinate location of penetrations through wood coffers with work of other sections.
- C. To extent practical, schedule installation of wood coffers after work above ceiling is complete.

1.4 ACTION SUBMITTALS

- A. Product Data:
 - 1. Submit manufacturer's product data sheets and installation instructions.
 - 2. **[Include surface-burning characteristics of intumescent coating.]**
- B. **[Shop Drawings: <Insert requirements.>]**
- C. Samples for Verification: Provide **[two]** **<other number>** 12- by 12-inch corner samples of each wood coffer specified.
- D. LEED Submittals:
 - 1. LEED Credit MR 6, Rapidly Renewable Materials: Product Data indicating percentage by weight of rapidly renewable content for products having rapidly renewable content. Include a statement indicating costs for each product having rapidly renewable content.
 - 2. LEED Credit MR 7, Certified Wood: 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 wood products.
 - 3. LEED Credit EQ 4.4, Low-Emitting Materials: Composite Wood and Agrifiber Products: Documentation indicating that adhesive contains no urea formaldehyde.

1.5 QUALITY ASSURANCE

- A. **[Manufacturer Qualifications: FSC[®]; Chain of Custody Certification.]**
- B. Mock-up: No fewer than four coffers, showing installation[**and field finishing**]. **[Accepted mock-up may remain in place in completed Work if undisturbed at Substantial Completion.]**

1.6 DELIVERY, STORAGE, AND HANDLING

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

- C. Conditioning: At least 72 hours before installation, move wood coffers into spaces where they will be installed.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer: **Madrid Inc.**
Address: 7800 Industry Ave., Pico Riviera, CA 90660
Phone: 562-404-9941
Email: info@madridinc.com
Web: madridinc.com
- B. Substitutions will not be considered.
- C. Substitutions will be considered according to **[Instructions to Bidders.]****[Division 01 Requirements.]**

2.2 SUSPENSION SYSTEM

- A. Provide 15/16 inch wide suspension system complying with ASTM C635 and as specified in Related Section.

2.3 PANELS – GENERAL

- A. Materials: **[Provide FSC[®] certified wood products]**.
 - 1. Solid Wood: **[Steamed beech.]**<Insert other species>
 - 2. Molded Plywood, made with no added urea formaldehyde.
 - 3. Face Veneer:
 - a. **[Plain]****[Rift]** sliced oak.
 - b. **[Plain]****[Quarter]** sliced cherry.
 - c. **[Plain]****[Quarter]** sliced maple.
 - d. **[Plain]****[Quarter]** sliced mahogany.
 - e. Natural bamboo, wide strips.
 - f. Dark bamboo, wide strips.
 - g. <Insert veneer from custom options; see madridinc.com.>
- B. Attachment:
 - 1. Clip: Panels shall have clip to snap coffer to face of suspension grid, allowing installation without special tools.
 - 2. Joint: Butt joint, concealing suspension grid.
 - 3. Above-Ceiling Access: Downward non-progressive removal of individual panels.
 - a. Product: McMaster Carr; hook 7426A32. Phone: 609-689-3415.
 - b. Provide **[two]**<insert number> tools for removing individual panels.
 - 4. Clearance: No clearance required between top of coffer and work above.
- C. Face Dimensions:
 - 1. Coffered Panels: Nominal 24 by 24 inches.
 - 2. Perimeter Panels: As indicated in Drawings.

- D. Panel Edges: Solid wood.
- E. Adhesives: No added urea formaldehyde.
- F. Fabrication Tolerances: Complying with CISCA Wood Ceilings Technical Guidelines.

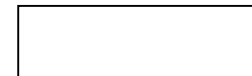
2.4 DOME COFFER PANELS

- A. Product: Domed Wood Ceiling Coffers by Madrid, Inc.
- B. Configuration:
 - 1. Frame: Solid wood.
 - 2. Dome: Veneer-faced molded plywood.
- C. Height: 3 3/4 inches above bottom face of suspension grid; 1/2 inch below suspension grid.
- D. Weight: 3.0 lb. per square foot maximum.



2.5 WOVEN COFFER PANELS

- A. Product: Weave Wood Ceiling Coffers by Madrid, Inc.
- B. Configuration:
 - 1. Frame: Solid wood, 1 3/4 inches wide.
 - 2. Concave Molding: Solid wood, 3 3/4 inches wide.
 - 3. Woven Wood Insert: Veneer-wrapped bent wood strips with flat faces, 1.5 inches wide, nominal 1.5 inches on center, 0.5 inches thick overall. Monolithic tiles or panels are not acceptable. Align veneer grain with long edge of woven strips.
 - a. **[Plain][Rift]**sliced oak.
 - b. **[Plain][Quarter]**sliced cherry.
 - c. **[Plain][Quarter]**sliced mahogany.
 - d. **<Insert veneer from custom options; see www.madridinc.com.>**
 - 4. Woven Leather Panel: Leather-wrapped bent wood strips with flat faces, 1.5 inches wide, nominal 1.5 inches on center, 0.5 inches thick overall.
 - a. Leather Cladding: **<Insert leather requirements>**.
 - 1. Woven Metal Panel: Cast aluminum simulated woven strips, 1.5 inches wide and nominal 1.5 inches on center, with electroplated **[copper][antique bronze][satin nickel]** finish.
- C. Noise Reduction: Wood coffered ceiling shall provide NRC of **[0.60][0.50]<Insert requirement>** per ASTM C423 with ASTM E795 Type E-400 mounting.
- D. Height: 3 3/4 inch height above bottom face of suspension grid; 1/2 inch below suspension grid.
- E. Weight: 3.0 lb. per square foot maximum.



2.6 PERIMETER PANELS

- A. Flat Panels:
 - 1. Product: Wood Ceiling Tiles by Madrid, Inc.

2. Core: One of following:
 - a. MDF: ANSI A208.2, Grade 130. Fire-treated. [FSC® Certified.]
 - b. Particle board: ANSI A208.1 Grade M-2. [FSC® Certified.]
3. Face Veneer: Align grain **[[parallel] [perpendicular] to edge of ceiling; miter veneer on corner panels.] [as shown on Drawings.]**

B. Woven Panels:

1. Product: Fabricated from Weave tiles by Madrid, Inc.
2. Tiles shall match woven inserts specified for woven coffers.
3. Tiles:
 - a. Pattern: Woven strips 1.5 inches wide and 1.5 inches on center.
 - b. Woven Wood: Veneer-wrapped bent wood strips with flat faces, 1.5 inches wide, nominal 1.5 inches on center, 0.5 inches thick overall. Monolithic tiles or panels are not acceptable. Align veneer grain with long edge of woven strips.
 - 1) [Plain][Rift]sliced oak.
 - 2) [Plain][Quarter]sliced cherry.
 - 3) [Plain][Quarter]sliced mahogany.
 - 4) <Insert veneer from custom options; see www.madridinc.com.>
 - c. Woven Leather Panel: Leather-wrapped bent wood strips with flat faces, 1.5 inches wide, nominal 1.5 inches on center, 0.5 inches thick overall.
 - 1) Leather Cladding: <Insert leather requirements>.
 - d. Woven Metal Panel: Cast aluminum simulated woven strips, 1.5 inches wide and nominal 1.5 inches on center, with electroplated [copper][antique bronze][satin nickel]finish.
4. Apply woven tiles to a backer sheet.
5. Orient woven tiles [parallel] [at 45 degree angle] to edges of panel.

2.7 FACTORY-APPLIED FINISHES

- A. Transparent Finish:
 1. Stain solid wood to match [veneer.] [color selected by Architect.]
 2. Apply transparent, water-based, UV-cured matte finish to exposed wood.
 3. [Fire Resistant Treatment: Factory-applied transparent intumescent coating providing 25 maximum flame-spread and 200 maximum smoke-developed per ASTM E84.]
- B. Primer: Prime for field painting.

2.8 FABRICATION

- A. To extent practical, factory cut holes for [lighting,] [fire sprinklers,] [speakers,] [and other] panel penetrations.

2.9 ACCESSORIES

- A. Trim: [Match veneer and finish of coffers, in profile shown in Drawings.][See related sections for trim supplied as part of suspension system.]
- B. Acoustical Insulation: <Insert requirements.>

- C. Fire-Resistant Treatment: Clear field-applied intumescent coating formulated for application over transparent-finished wood, providing 25 maximum flame-spread and 200 maximum smoke-developed per ASTM E84.
 - 1. Available Product: Envirograf; Q/VFR/Premier/Clear, [**matte**] [**satin**] [**gloss**].

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that suspension grid is acceptable for installation of panels.

3.2 INSTALLATION

- A. Install panels according to manufacturer's instructions and CISCA Ceiling Systems Handbook.
- B. Snap panels into place onto face of suspension grid.
- C. Trim: <**Insert requirements.**>
- D. Acoustical Insulation: <**Insert requirements.**>
- E. Field Finishing: <**Insert requirements.**>

3.3 CLEANING AND PROTECTION

- A. Clean panels as recommended by manufacturer.
- B. Prevent damage to panels during remainder of construction period.

END OF SECTION

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