



SECTION 09 56 16

METAL-PANEL TEXTURED CEILINGS

PART 1 - GENERAL

1.1 CONDITIONS AND REQUIREMENTS

- A. The General Conditions, Supplementary Conditions, and Division 1 – General Requirements apply.

1.2 SECTION INCLUDES

Specifier Note: Delete items below that are not included in this section.

- A. Metal-panel textured ceilings.

1.3 RELATED SECTIONS

Specifier Note: In this article, specify work specified in other sections that is related to work of this section.

- A. Section 06 10 00 - Rough Carpentry: Metal-panel ceiling wood substrate.
- B. Section 09 53 23 - Metal Acoustical Ceiling Suspension Assemblies: Metal-panel suspension system.

Specifier Note: The following paragraph is a sample that may be used in this article. Add to or delete from the following as appropriate for the specific project.

- C. Section [xx xx xx] - [Section Title]: [Include brief description of work specified in another section that is related to the work of this section.]

1.4 SUBMITTALS

Specifier Note: In this article, specify various types of data to be furnished by the contractor before, during, or after construction. Topics included in this article are: product data, shop drawings, samples, design data, test reports, certificates, manufacturers' instructions, manufacturers' field reports, qualification statements, and closeout submittals.

- A. Submit under provisions of Section [01 33 00] [_____].
- B. Product Data: Submit for metal-panels.
- C. Shop Drawings: Submit for custom metal-panels. Indicate design, pattern and texture.
- D. Samples: Submit two (2) sets of color chips illustrating manufacturer's full range of available colors and patterns for selection.

1.5 QUALITY ASSURANCE

Specifier Note: In this article, describe qualifications, regulatory requirements, certifications, field samples, mock-ups, and pre-installation meetings.

- A. Source Limitations: Obtain metal-panels through one (1) source from a single manufacturer.
- B. Surface-Burning Characteristics: Provide metal-panels with the following surface-burning characteristics for Class A materials as determined by testing per ASTM E84:
 - 1. Flame-Spread Rating: 25 or less.
 - 2. Smoke-Developed Index: 450 or less.

Specifier Note: Delete the following paragraph if not required.

- C. Mockups: Construct a mockup to verify pattern and color selection and to serve as a standard for aesthetic effects and qualities of materials and execution.

Specifier Note: In the following subparagraph, retain one (1) of the two (2) options and delete the other.

- 1. Approved mockups [may] [may not] become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver metal-panels in manufacturer's original, unopened and labeled packages.
- B. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
- C. Protect from damage due to weather, excessive temperature, and construction operations.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: The design for metal-panel textured ceilings is based on products manufactured by M-Boss Inc., 4400 Willow Parkway, Cleveland, OH 44125; telephone: 866-886-2677, fax 216-641-7387; Web Site: www.mbossinc.com.

Specifier Note: Select either of the following two (2) paragraphs and delete the other.

- B. Substitutions are not permitted.
- C. Substitutions will be considered under provisions of Section 01600.

2.2 METAL-PANEL TEXTURED CEILINGS

- A. Textured Metal-Panels:

Specifier Note: Select either of the following two (2) subparagraphs and delete the other.

- 1. Aluminum: ASTM B209, alloy and temper appropriate for type of use and finish indicated; 0.016-inch thick.
- 2. Copper: ASTM B370, solid copper sheet; 0.016-inch thick.

Specifier Note: In the following subparagraph, retain one (1) of the two (2) options and delete the other. If retaining both options, indicate locations of each type on the Drawings.

- 3. Type: [Nail-up] [Lay-in].

Specifier Note: In the following subparagraph, retain the first option if using the nail-up type and retain the second option if using the lay-in type of metal-panel.

- 4. Sizes: [24-3/8 x 24-3/8] [23-7/8 x 23-7/8] inches.
- 5. Patterns and Finishes:

Specifier Note: In the following subparagraph, retain at least one (1) of the options and delete the others. If retaining more than one (1) option, indicate locations of each type on the Drawings.

- a. Patterns: [As selected from manufacturer's standard range] [Custom design as provided by Architect] [Match existing panels].

Specifier Note: In the following subparagraph, retain at least one (1) of the options and delete the others. If retaining more than one (1) option, indicate locations of each type on the Drawings.

- b. Finishes: [Solid copper] [Polished copper] [Burnt Mahogany] [Leather] [Antique Brass] [Polished Brass] [Sage] [Sky Tones] [Clear] [White] [Mill with field finish] [Powder coat custom color(s) as selected by Architect].

2.3 ACCESSORIES

Specifier Note: In the following paragraph, retain the first option if the suspension system is provided under another section; retain the second option and select either of the two (2) options for grid sizes if the suspension system is to be provided as part of this section.

- A. Suspension System: [As specified in Section 09 53 23] [Standard [9/16-] [15/16-] inch T-Bar suspension grid].
- B. Hanger Wire: 12-gage pre-straightened steel wire.

Specifier Note: In the following paragraph, retain the first option if the substrate material is provided under another section; retain the second option if the substrate material is to be provided as part of this section.

- C. Wood Substrate: [As specified in Section 06 10 00] [Minimum 3/8-inch thick B-C Grade plywood].
- D. Cornices and Moldings: Manufactured to match metal-panels with respect to material, finish and texture.

2.4 FABRICATION

Specifier Note: In the following paragraph, retain the first option if using the nail-up type and the second option if using the lay-in type of metal-panel.

- A. Textured Metal-Panels: Form metal-panels to [size] [fit specified grid module]. Selected metal materials for their surface flatness, smoothness, and freedom from surface blemishes. Do not use materials whose exposed surfaces exhibit pitting, seam marks, variations in flatness exceeding those permitted by referenced standards.
1. Emboss pattern as indicated on approved shop drawings and samples.
- B. Inspect each metal-panel during fabrication to ensure conformance to manufacturing tolerances and high definition of pattern details.

PART 3 - EXECUTION

3.1 EXAMINATION

Specifier Note: In the following paragraph, retain the first option if using the nail-up type and the second option if using the lay-in type of metal-panel.

- A. Examine substrates, areas, and conditions, including [wood substrate] [suspension system] to which metal-panels attach or abut, for compliance with requirements that affect installation and anchorage and with requirements for installation tolerances. Notify the Architect in writing of conditions detrimental to proper completion of the work. Do not proceed with work until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Measure ceiling areas to receive metal-panels and establish layout to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders, and comply with layout shown on reflected ceiling plans.

Specifier Note: Delete the following paragraph if metal-panels are installed to wood substrate; retain if lay-in type panels are specified.

- B. Verify that suspension system grid is configured to provide 24 x 24 inch square openings. Verify that the grid is flat and level and that hanger wires are spaced at 4 ft 0 inches oc.
- C. Coordinate work that penetrates the ceiling. Provide cutouts for lights, speakers, sprinklers or other items accurately and cleanly.

3.3 INSTALLATION

- A. Install in strict accordance with manufacturer's written installation instructions and recommendations and approved shop drawings. Coordinate installation with adjacent work to ensure proper clearances.

Specifier Note: Delete the following two (2) paragraphs and subparagraphs if metal-panel suspension system is provided by Section 09 53 23; retain if provided by this section.

- B. Suspend hanger wires from building's structural members. Install hangers plumb and in such a manner to avoid contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.
 - 1. Where size of ducts and other construction within ceiling plenum does not permit hanger spacings as required to support suspension system members, install supplemental suspension members and hangers to provide additional support.
- C. Install edge moldings and trim of type indicated at perimeter of ceiling areas and where necessary to conceal edges of metal-panels.
- D. Accessories: Provide cornices and moldings as indicated on the shop drawings for a complete installation.
- E. Prevent the deposition of oils on the metal-panel finish surfaces during installation by wearing cotton gloves.

3.4 CLEANING AND PROTECTION

- A. Clean exposed surfaces of metal-panels, cornices, trim and moldings in accordance with manufacturer's recommendations.
- B. Protect installed products from damage or soiling until completion of project.
- C. Remove and replace metal-panels, cornices, trim and moldings that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage, including dented and bent units.

END OF SECTION