

THIS SECTION IS BASED ON ROCKFON'S "BEAMGRID™" METAL CEILING.

Rockfon BeamGrid™ Metal Ceiling are meant for interior applications, specifications as shown here pertain to interior applications only.

GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes: Provide suspended ceiling acoustical ceiling panels including but not limited to:
 - 1. Metal Ceiling System.
- B. Related Sections:
 - 1. Section 09 52 23, Metal Acoustical Ceiling Suspension Assemblies.
 - 2. Section 09 54 00, Specialty Ceilings.
 - 3. Section 09 58 00, Integrated Ceiling Assemblies.
 - 4. Section 01 81 13, Sustainable Design Requirements
 - 5. Section 01 81 19, Indoor Air Quality Requirements
 - 6. Section 13 48 00, Sound, Vibration, and Seismic Control.
 - 7. Section 26 50 00, Lighting.

1.3 REFERENCES

- A. Abbreviations and Acronyms:
 - 1. ASTM: American Society for Testing and Materials
 - 2. CISCA: Ceilings & Interior Systems Construction Association; www.cisca.org.
 - 3. IBC: International Building Code
 - 4. ASCE 7 American Society of Civil Engineers, Minimum Design Loads for Buildings and Other Structures
 - 5. ICCES: International Code Council-Evaluation Services - AC 156 Acceptance Criteria for Seismic Qualification Testing of Non-structural Components
 - 6. ICCES: International Code Council-Evaluation Services Report - ESR 2631 Rockfon Chicago Metallic Corporation Suspended Ceiling Framing Systems and Suspension Ceiling Systems
 - 7. California Department of Public Health CDPH/EHLB Emission Standard Method Version 1.1 2010
 - 8. LEED - Leadership in Energy and Environmental Design is a set of rating systems for the design, construction, operation, and maintenance of green buildings
 - 9. International Well Building Standard
 - 10. Mindful Materials
 - 11. Living Building Challenge

B. Reference Standards:

1. ASTM A1008 - Standard Specification for Steel, Sheet, Cold Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability
2. ASTM A641 - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire
3. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process
4. ASTM C635/C635M - Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings
5. ASTM C636/C636M - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels
6. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials
7. ASTM E580 - Installation of Metal Suspension Systems in Areas Requiring Moderate Seismic Restraint
8. ASTM E1264 - Classification for Acoustical Ceiling Products

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 that have not been approved by Addenda, the specified products shall be provided without additional compensation.
2. Submittals that 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); Underwriters' Laboratories Classified Acoustical performance; Panel design, size, composition, color, and finish; Suspension system component profiles and sizes; Compliance with the referenced standards.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Pre-Installation Meetings: Conduct meeting at Project site. Agenda includes Project conditions, coordination with work of other trades and layout of items which penetrate ceilings.

1.5 SUBMITTALS

- A. Product Data: Submit manufacturer's Product data, including suspension system and maintenance data.
- B. Samples: Submit samples of specified ceiling.
- C. Show Drawings: Necessary technical drawings and documents that pertain to the layout of the acoustical metal ceiling.
- D. Certifications: Acoustical metal ceiling product's certifications that confirm compliance with applicable tests and standards. Acoustical metal ceiling products must also contain information pertaining to certification for NRC.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Supply extra materials that match Products installed and are packaged with protective covering for storage and identified with labels describing contents.

1.7 QUALITY ASSURANCE

- A. Single-Source Responsibility: Provide acoustical panel units and grid components by a single manufacturer.
- B. Fire Performance Details: Suspension ceiling components will feature markings of applicable testing and inspecting organization.
- C. Coordination of Work: Coordination between installers and other related professions in reference to acoustical ceiling work can include electrical fixtures and systems, fire safety systems, gypsum and building construction.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Protect system components from excessive moisture in shipment, storage, and handling. Deliver in unopened bundles and store in a dry place with adequate air circulation.

1.9 WARRANTY

- A. Manufacturer Warranty: Submit a written warranty executed by manufacturer for a period of 1 year from date for metal ceilings, of Substantial Completion, agreeing to repair or replace suspension system components that fail or are compromised within the specified warranty period. Failed or compromised parts can include, but are not limited to:
 - 1. Rusting or defects directly made by the manufacturer.
 - 2. Sagging or warping directly made by the manufacturer.

PART 2 - PRODUCTS**2.01 Manufacturer**

- A. Metal Ceiling Systems:
 - 1. Rockfon, 4849 South Austin Avenue, Chicago, IL 60638. 1-800-323-7164; www.rockfon.com.
- B. Suspension Systems:
 - 1. Rockfon, 4849 South Austin Avenue, Chicago, IL 60638. 1-800-323-7164; www.rockfon.com.
- C. Aluminum Perimeter Trim:
 - 1. Rockfon, 4849 South Austin Avenue, Chicago, IL 60638. 1-800-323-7164; www.rockfon.com.

2.1 MATERIALS

- A. Acoustical Metal Panels: Panel Metal Ceiling System, "BEAMGRID™" METAL CEILING" by Rockfon with following characteristics:
 - 1. Surface: Smooth

2. Composition: Metal
 3. Material:
 4. Color:
 5. Fire Class: Class A.
 6. Light Reflectance:
 7. Recycled Content: up to 85%
- B. Metal Ceiling and Accessories:
1. BeamGrid:
 - a. Manufactured identical to main and cross beams with intersection slots on one side only at inside and outside 90-degree corners provide 90-degree corner kits with 45-degree miters.
 2. Corner Kit:
 - a. Manufactured to same profile as main beams from identical metal with 45-degree miter at appropriate end.
 3. Wall channel:
 - a. Manufactured from same material and finish as main and cross beams. [(Painted 360-degrees)(Reflective finish on outer surface only)].
 4. Wall channel-double:
 - a. Manufactured from same material and finish as main and cross beams.
 5. Perimeter Trim:
 - a. Rockfon Infinity Perimeter Trim: Made from extruded aluminum (2) (4) (6), (8), (10), (12) inches deep. Painted exposed faces or on all sides to match planks.
- C. Main and Cross Beams
1. Manufactured to a (1 in. by 1 in.) (1 in. by 2 in.) (1 in. by 4 in.) (2 in. by 2 in.) (2 in. by 4 in.) (3 in. by 3 in.) (4 in. by 4 in.) (custom) channel shape from aluminum.
 2. Manufactured with factory pre-punched slots and holes properly spaced to provide module size: (12 in. by 12 in.)(12 in. by 24 in.)(16 in. by 16 in.)(24 in. by 24 in.)(24 in. by 48 in.)(30 in. by 30 in.)(36 in. by 36 in.)(48 in. by 48 in.) (Custom).

EXECUTION

2.2 EXAMINATION

- A. Examine suspension assemblies, with installer present, for compliance with requirements specified in this and other Sections affecting ceiling panel installation and with requirements for installation tolerances and other conditions affecting performance of acoustic ceiling assemblies.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

2.3 INSTALLATION

- A. Install ceiling to comply with ASTM C636/C636M, ASTM E580, and seismic design requirements indicated, according to manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."
- B. Affix hanger/couplers on appropriate centers, as recommended by ROCKFON, to main beam components. Suspend main beam components from 12 gauge hanger wire attached to the coupler. Main beams are to be installed on appropriate centers as dictated by module size and

component layout. For continuous runs of the main beam components, splice the components together by pop-riveting the coupler to the consecutive main beam components.

- C. Install cross beam components by inserting the attachment tabs located at each end of the component into the appropriate slot on the main beam components.
- D. Complete the system by affixing main and cross beam components to the perimeter components. For free-floating applications, perimeter beam components shall be suspended from 12 gauge wire attached to hanger/couplers affixed to the component in an identical manner as described above for the main beam components. For applications requiring the BeamGrid system to be affixed to a wall or other structure establishing the perimeter of an installation, attach the perimeter beams to the structure, prior to installing main and cross beams, by means of an industry-accepted practice. For free-floating applications, attach the 90-degree corners, upon completion of field assembly, to appropriate components by means of the hanger/coupler.

2.4 REPAIR

- A. Remove damaged or compromised components; replace with undamaged components.

2.5 CLEANING

- A. Clean exposed surfaces in accordance with manufacturer's written instructions.

END OF SECTION