# MagnaPlus Open Cell Ceiling System

## **MR-MANUFACTURER**

### Interfinish

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Interfinish is a division of the Chicago Metallic Corporation focused on Metal and Specialty Ceiling Systems. The wide variety of ceiling products includes linear metal, open cell, baffles, skylights, metal tiles and planks, and security systems.

Interfinish was created in 1994 as a result of the acquisition of Alcan Building Products' Ceiling Division. Interfinish is a combination of Chicago Metallic's long history and experience of over 100 years in manufacturing building products, and Alcan's proven metal ceiling systems. Chicago Metallic's dedication and commitment to excellence extends to Interfinish with a strong focus on design innovation, quality and service.

Interfinish has local sales representatives located all across the country to promptly respond to your project needs, providing you with the extra effort and technical expertise that will help your project run more smoothly from start to finish.

## **PP-PRODUCT PRESENTATION**

To supplement the standard MagnaGrid System, a selection of variants known as MagnaPlus offer alternative cell and blade arrangements.

MagnaBand: Uni-directional blades within a larger cell create a baffle effect.

**MagnaPlane:** Deep blades running one direction with shallow blades running the opposite direction creates a bi-planer effect.

MagnaGrid R: Rectangular cells provide directional effects.

## **TS-TECHNICAL SUPPORT**

## Specification Guidelines MagnaGrid Open Cell Ceiling System Section 09500 - Acoustical Treatment

### PART 1 - GENERAL

### 1.01 Scope

A. Furnish and install the (MagnaGrid R Rectangular Cell) (MagnaPlane) (MagnaGrid Bi-Level Cell) (MagnaBand) MagnaPlus Ceiling System manufactured and supplied by Interfinish, a division of Chicago Metallic Corporation.

1.02 Related Sections

- A. Section 09120 Ceiling Suspension Systems
- B. Section 09130 Acoustical Suspension Systems
- C. Section 09545 Special Ceiling Surfaces
- D. Section 13020 Integrated Assemblies
- E. Section 13080 Sound, Vibration, and Seismic Control
- F. Section 15550 Heating, Ventilating, and Air Conditioning
- G. Section 16500 Lighting

## 1.03 References

- A. American Society for Testing and Materials (ASTM)
  - 1. C 636 Standard Recommended Practice for Installation of Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings.
- 1.04 Submittals
  - A. Product/Technical Literature
    - 1. Submit descriptive literature along with installation recommendations and practices as illustrated in appropriate Interfinish literature.
  - B. Samples
    - 1. Submit Interfinish sample kit containing appropriate (MagnaGrid R Rectangular Cell) (MagnaPlane) (MagnaBand) MagnaPlus samples.
  - C. Shop Drawings
    - 1. Submit shop drawings illustrating appropriate placement of product.
  - D. Certification
    - 1. Furnish certification of materials and system conforming to specification requirements.
- 1.05 Project Conditions
  - A. Environmental Requirements
    - 1. Verify that the area in which the (MagnaGrid R Rectangular Cell) (MagnaPlane) (MagnaBand) MagnaPlus System is to be installed is weathertight and dry.
    - 2. Installation shall occur only when temperature and humidity conditions closely approximate interior conditions that will exist when area is complete and occupied.
  - B. Trade Requirements
    - 1. Heating or cooling systems shall be in operation in order to establish and maintain a suitable climate as referenced above prior to, during, and after installation.
    - 2. All wet trades work is to be dry and thoroughly complete prior to installation of the (MagnaGrid R Rectangular Cell) (MagnaPlane) (MagnaBand) MagnaPlus Ceiling System.

### 1.06 Maintenance

- A. Replacement Material
  - 1. Furnish additional material equal to \_\_\_\_% of the ceiling system area.

## PART 2 - PRODUCTS

- 2.01 Manufacturer
  - A. (MagnaGrid R Rectangular Cell) (MagnaPlane) (MagnaBand) MagnaPlus Ceiling System as manufactured by Interfinish, 4849 S Austin Ave, Chicago, IL 60638-1492.

### 2.02 Materials

## MagnaGrid R Rectangular Cell

A. Integrated Cell Panel: The panel shall measure 2' x 2' and be comprised of U-shaped metal blades of two types, A and B, that measure 3/8" wide and 2.0" high, that interlock to form

 $(3" \times 6") (3" \times 8") (4.8" \times 6.0") (4.8" \times 8.0")$  cell shapes. The panels shall be manufactured from aluminum with a finish as selected from those offered for this system by Interfinish. Attachment tabs shall be formed at each end of the blades in order to provide a means of attachment to the suspension components described below. The panel shall be supplied assembled.

- B. Integrated Suspension System: The suspension system shall interlock to form 2' x 2' modules into which the cell panel will be attached. The suspension system shall be comprised of three components: hanger runner, cross runner, of 2 ft. and 4 ft. lengths, and hanger clips, either wire or rod.
  - 1. The hanger runner component shall be of a U-shape design, measuring 3/8" wide x 8 ft. long x 2.0" high, and fabricated from the same metal used to manufacture the panel. The hanger runner shall be directional in application, with a male end, containing an integral splice plate, and a female end. The integral splice plate shall be utilized to connect consecutive hanger runner components by interlocking with the female end. The integral splice plate shall be utilized to connect consecutive hanger runner components by interlocking with the female end of a successive hanger runner component. The hanger runner shall be slotted on appropriate centers in order to accommodate the attachment tabs of the cell panel and cross runner.
  - 2. The cross runner component shall be of (4') (2') length and shall be manufactured to the same dimensions and from the same material as the hanger runner. The cross runners shall also be slotted on appropriate centers in order to accommodate the attachment tabs of the cell panel. The cross runners shall interconnect with the hanger runner at any notch location by means of an attachment tab, located at each end of the runner.
  - 3. The ceiling system shall be suspended by means of a wire or rod hanger clip that is inserted into factory-punched holes located on the hanger runner component.
- C. Perimeter Treatment: At the perimeter of the installation, various types of perimeter trims shall be utilized.
  - 1. For applications where the MagnaGrid R Rectangular Cell ceiling system runs wall-towall, one of numerous types of L-shaped angles shall be selected as perimeter treatment. The angles shall be manufactured from various thicknesses and types of metal, coated with a matching finish, when applicable. The choice of angle shall be dictated by project conditions and installation requirements.
  - 2. For free-floating MagnaGrid R Rectangular Cell ceiling system applications, a perimeter cap or perimeter channel shall be utilized. The perimeter cap shall be utilized when the end-of-ceiling system conditions are such that a full cell panel blade or runner exists. The perimeter cap shall be affixed to the panel blade or runner by means of double-sided adhesive tape. The perimeter channel shall be utilized when the end-of-ceiling system conditions are such that cut edge of either a cell blade or runner exists. The channel shall attach to the cut edge by means of a friction fit. Both the cap and channel shall be formed from similar material as that used to form the cell panels and runners.

#### MagnaPlane

- A. Integrated Cell Panel: The panel shall measure 2' x 2' and be comprised of U-shaped metal blades of two types, A and B, that measure 3/8" wide and either 1.6" (A blades) or 1.2" (B blades) high, that interlock to form (3" x 3") (3.4" x 3.4") (4.8" x 4.8") (6" x 6") cell shapes. The panels shall be manufactured from aluminum with a finish as selected from those offered for this system by Interfinish. Attachment tabs shall be formed at each end of the blades in order to provide a means of attachment to the suspension components described below. The panel shall be supplied assembled.
- B. Integrated Suspension System: The suspension system shall interlock to form 2' x 2' modules into which the cell panel will be attached. The suspension system shall be comprised of three components: hanger runner, cross runner, of 2 ft. and 4 ft. lengths, and hanger clips,

either wire or rod.

- 1. The hanger runner component shall be of a U-shape design, measuring 3/8" wide x 8 ft. long x 2.0" high, and fabricated from the same metal used to manufacture the panel. The hanger runner shall be directional in application, with a male end, containing an integral splice plate, and a female end. The integral splice plate shall be utilized to connect consecutive hanger runner components by interlocking with the female end. The integral splice plate shall be utilized to connect consecutive hanger runner components by interlocking with the female end of a successive hanger runner component. The hanger runner shall be slotted on appropriate centers in order to accommodate the attachment tabs of the cell panel and cross runner.
- 2. The cross runner component shall be of (4') (2') length and shall be manufactured to the same dimensions and from the same material as the hanger runner. The cross runners shall also be slotted on appropriate centers in order to accommodate the attachment tabs of the cell panel. The cross runners shall interconnect with the hanger runner at any notch location by means of an attachment tab, located at each end of the runner.
- 3. The ceiling system shall be suspended by means of a wire or rod hanger clip that is inserted into factory-punched holes located on the hanger runner component.
- C. Perimeter Treatment: At the perimeter of the installation, various types of perimeter trims shall be utilized.
  - 1. For applications where the MagnaPlane ceiling system runs wall-to-wall, one of numerous types of L-shaped angles shall be selected as perimeter treatment. The angles shall be manufactured from various thicknesses and types of metal, coated with a matching finish, when applicable. The choice of angle shall be dictated by project conditions and installation requirements.
  - 2. For free-floating MagnaPlane ceiling system applications, a perimeter cap or perimeter channel shall be utilized. The perimeter cap shall be utilized when the end-of-ceiling system conditions are such that a full cell panel blade or runner exists. The perimeter cap shall be affixed to the panel blade or runner by means of double-sided adhesive tape. The perimeter channel shall be utilized when the end-of-ceiling system conditions are such that cut edge of either a cell blade or runner exists. The channel shall attach to the cut edge by means of a friction fit. Both the cap and channel shall be formed from similar material as that used to form the cell panels and runners.

### MagnaBand

- A. Integrated Cell Panel: The panel shall measure from 6" to 18" wide by 48" in length and be comprised of U-shaped metal blades of two types, cross and perimeter, that measure 3/8" wide x (1.2") (2.0") high, that interlock to form rectangular cell shapes measuring (3") (3.4") (4.0") x the width of the panel (for 1.2" high panels) or (3.0") (3.4") (4.0") (6.0") x the width of the panel (for 1.6" high panels). The panels shall be manufactured from aluminum with a finish as selected from those offered for this system by Interfinish. The panel shall be supplied assembled.
- B. Perimeter Treatment: L-shaped angles of various types as recommended by Interfinish shall serve as both a means of suspension and perimeter treatment. The angles shall be manufactured from various thicknesses and types of metal, coated with a matching finish, when applicable. The choice of angle shall be dictated by project conditions and installation requirements.

## PART 3 - INSTALLATION

- 3.01 Inspection and Preparation
  - A. Inspect area in which ceiling system is to be installed in order to identify any conditions that might adversely affect the installation of the ceiling system. Do not start work until adverse

conditions have been corrected. Verify that all work performed by other trades above the ceiling system has been completed prior to installation.

B. Field measure the area in which the ceiling system is to be installed and establish the layout in order to create appropriate borders and minimize out-of-square conditions.

## 3.02 Installation

## MagnaGrid Rectangular R and MagnaPlane Systems

- A. Suspension System: Hanger runners shall be installed 4 ft. O.C. and be suspended directly from the structure above by not less than 12 gauge electro-galvanized hanger wire spaced 4 ft. O.C. along the length of the hanger runner. The hanger wire shall be attached to hanger clips or hanger rods that are inserted into factory-punched holes located along the length of the hanger runner. The hanger runner are to be interconnected by 4 ft. cross runner components installed at appropriate intervals along the length of the hanger runner. The 4 ft. cross runners shall be bridged at midpoint, when dictated by panel size, by 2 ft. cross runners.
- B. Integrated Cell Panel: The integrated cell panel shall be installed within the same-sized module created by the suspension components. The panel shall interlock with the hanger runner by means of attachment tabs located at each end of the panel blades. Cut panels as necessary for border and penetration treatments.
- C. Perimeter Treatment: Angle shall be used in those instances where the (MagnaGrid Rectangular R) (MagnaPlane) system is to be attached directly to a wall or other structure that establishes the perimeter of the installation. The angle should be attached utilizing an industry-accepted practice, with care taken to minimize the placement of attachment devices in those visible areas between the blades of the (MagnaGrid Rectangular R) (MagnaPlane) panel. In those instances where the (MagnaGrid Rectangular R) (MagnaPlane) system is to have a floating perimeter, the perimeter channel or perimeter cap, as installation conditions dictate, shall be utilized. The perimeter channel shall be affixed to the (MagnaGrid Rectangular R) (MagnaPlane) system by means of a friction fit, and the perimeter cap shall be attached to the (MagnaGrid Rectangular R) (MagnaPlane) system by means of double-sided tape attached to the inner web of the cap.

### MagnaBand

A. Install appropriate L-shaped angles at the perimeter of the area to contain the MagnaBand panels. Install MagnaBand panels upon the L-shaped angles. Trim length of panels to fit opening.

### 3.03 Repair and Clean

- A. Repair any damaged or dented areas by removing and replacing the affected components.
- B. Clean all ceiling system components with a non-solvent-based, non-abrasive commercial cleaning solution.