# Vista Parallel Beam 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

Broadening the horizons of contemporary design is Vista. A bold dimension in parallel beam ceilings. Tough performance characteristics expand the limits of design possibilities in this fully integrated system. Stimulate visual excitement with linear expanses, parallel beam islands floating in exposed or concealed fields and textural checkerboard patterns. Add motion with concave and convex radii or arched contours. For continuous design flexibility, Vista is offered in both steel and aluminum components. Steel components offer greater strength and cost economies. Aluminum components are suitable for high moisture or exterior applications.

This new generation of fire-rated and non-fire-rated ceiling components is now a fully integrated systems package. Lighting fixtures, air handling components, acoustical blankets, beam splices, recessed or flush filler strips and end caps are all specially designed for proper integration. The choices of round or square edge, perforated or non-perforated, open or closed reveal beams increase the system's functional and aesthetic versatility.

In addition to the standard 4" wide beam, Vista is also offered in 6" and 8" beams. Both have the same ease of installation, the same renovation capabilities, and the same wide variety of colors and finishes as the standard Vista system. The wider beams mean that the finished ceiling will have a more monolithic look, plus the advantage of labor savings over the standard system. All lighting, air handling, acoustical materials and other accessories are also the same as with the standard Vista system.

In renovation or remodeling applications, Vista beam adapters easily install over any existing roll formed, inverted T-bar type ceiling system. Without altering the original ceiling components, Vista revitalizes the new environment. Full compatibility with CMC exposed, concealed or

drywall ceiling systems ease transitions of style in existing or new projects.

All Vista beams are available in a wide range of colors and finishes, making it easy to harmonize or contrast any interior setting.

#### TS-TECHNICAL SUPPORT

# Specification Guidelines for Vista Parallel Beam Ceiling System

Section 09500 - Acoustical Treatment

### **PART 1 - GENERAL**

## 1.01 Scope

A. Furnish and install the Vista Parallel Beam Ceiling System as 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 635 Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings.
  - 2. 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 the Interfinish literature.
- B. Samples
  - 1. Submit Interfinish sample kit containing appropriate Vista Parallel Beam 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 Vista 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 Vista Parallel Beam 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(s)

A. Vista Parallel Beam ceiling system as manufactured by Interfinish, 4849 South Austin Avenue, Chicago, Illinois 60638.

#### 2 02 Materials

- A. Vista Parallel Beams and Related Accessories
  - 1. Round-Edge Vista Parallel Beams
    - a. Vista round-edge parallel beams shall be manufactured from either .025 aluminum or .020 steel. The beams shall be made available with either a baked polyester enamel, bright reflective, or brushed satin (aluminum only) finish.
    - b. The round-edge beams shall be manufactured to a (4") (6") (8") width and a standard length of 12 feet. Length variations may be permitted within a range of 2 to 16 feet. The factory shall be consulted for the availability of lengths above and below this range.
    - c. The round-edge beams shall be manufactured in such a way so as to provide either a 3/4" open or closed reveal (4" and 6" wide beams only) when installed on the Vista suspension system. When required, a black vinyl tape shall be applied to the closed reveal so as to provide a contrast to the finish of the beam face. Unless specified, a closed reveal with a matching finish to the beam face shall be supplied.
    - d. The round-edge beams shall be perforated, when enhanced acoustical performance is desired, with a pattern consisting of 1/16" diameter perforations on .216" staggered centers. As an option, a non-woven material, referred to by the tradename 'Acoutex', shall be bonded to the back side of the Vista beam, behind the perforations. The Acoutex material, in combination with the perforation pattern described above, shall provide an NRC of .70.

## 2. Square-Edge Vista Parallel Beams

- a. Vista square-edge parallel beams shall be manufactured from .024 aluminum. The beams shall be made available with either a baked polyester enamel, bright reflective, or brushed satin finish.
- b. Square-edge parallel beams shall be offered in the same width and length dimensions as the round-edge beams described above.
- c. The square-edge beams shall be manufactured in such a way so as to provide a 3/4" open reveal between adjacent beams when installed on the Vista suspension system.
- d. The same perforation pattern and optional Acoutex backing offered for the Vista roundedge beams shall be made available for the square-edge beams.

## 3. Filler Strips

- a. When required, filler strips shall be installed within or above the 3/4" gap existing between parallel beams providing an open reveal.
- b. For standard applications, the filler strips shall be offered in a (reveal) (flush) style so as to provide either dimensional variation or dimensional similarity between the parallel beams. The filler strips shall be 3/4" wide, 12 ft. in length, and of an appropriate height to create the desired dimensional appearance. The filler strips shall be of a metal

- composition identical to the parallel beam and shall possess either a matching or contrasting finish.
- c. For sharp curvilinear ceiling treatments, a radius filler strip shall be offered. The radius filler strip shall measure approximately 1" in width by 8 ft. in length and shall be finished with a black, baked polyester enamel.

## 4. Parallel Beam Splices

- a. Where continuous runs of parallel beams are required, beam splices shall be used to join consecutive parallel beams and shall be of a design which eliminates any noticeable gap between the beams.
- b. The parallel beam splice shall measure 12" in length and be of a profile and width appropriate for the parallel beam. The splice shall be manufactured from .024 aluminum with a baked polyester enamel finish. The standard finish shall be black, and the availability of other finishes shall be as determined by Interfinish.

## 5. Parallel Beam Caps

- a. The beam cap shall be inserted into the open end of a parallel beam when angle or channel molding is not or cannot be used.
- b. The beam end cap shall be of sufficient and appropriate dimensions to fit into the open end of either a Vista round- or square-edge parallel beam. The end cap shall be manufactured from .024 aluminum and shall be offered in a finish to match that of the parallel beams.

#### 6. Perimeter Trim

- a. At the perimeter of the installation, utilize wall angle of J-mold as edge trim when end caps are not or cannot be utilized.
- b. Wall angle shall be of an L-shape design, and shall measure 3/4" x 15/16" x 12'. Both edges of the angle shall be hemmed so as to provide a finished appearance. The angle shall be manufactured from a metal identical in composition and finish to that of the parallel beam.
- c. J-molding shall measure 1/2" x 5/8" I.D. x 7/8", with a length of either 8 ft. (reflective finishes only) or 10 ft. (painted finishes only). The angle shall be manufactured from a metal identical in composition and finish to that of the parallel beam.

#### B. Suspension System

#### 1. Main Carrier

- a. The main carrier shall be used to support the Vista panels.
- b. The main carrier shall be cold roll-formed from .020 thick steel or .024 aluminum coated with a black polyester enamel finish. The carrier shall be formed into an inverted T-shape and measure 12 ft. in length, 1-1/2" in height, and 15/16" at its widest point.
- c. Carrier tabs, to which the Vista parallel beams will attach, shall be integral to the carrier and shall protrude from the center of the carrier's 15/16" face. The carrier tabs shall be of appropriate length and center spacing to accommodate the selected Vista parallel beam.
- d. An integral splice, located at each end of the carrier component, shall be utilized to connect consecutive carrier components.
- e. The main carrier shall be slotted at appropriate intervals, as defined by the nominal width of the selected Vista parallel beam, in order to receive stabilizing cross tee components as described below.

#### 2. Cross Tees

- a. Cross tees shall be utilized to stabilize the main carriers.
- b. The cross tee components shall be cold roll-formed from .015 steel or .024 aluminum into an inverted T-shape, measuring 4 ft. in length, 1-1/2" high, and 15/16" at the widest point.
- c. Those tee components manufactured from steel shall receive a factory-applied finish to

- the base metal and a steel cap, pre-finished with a black polyester enamel finish. Tee components manufactured from aluminum shall receive the same pre-painted black polyester enamel finish.
- d. The cross tees shall possess an integral coupling at each end which is designed to interlock with that of an adjoining tee within the slots located on the main carrier.

## 3. Spacer Bars

- a. Spacer bars may be utilized in lieu of cross tees to stabilize the main carriers, and also serve to laterally stabilize light fixtures.
- b. The spacer bar components shall be cold roll-formed from .020 steel with a factory-applied finish. The spacer bar shall be of a V-shape design and shall measure 4 ft. in length.
- c. The spacer bar shall possess notches at each end which are designed to permit the attachment of the component over the top of a main carrier component.

## 4. Flat Carrier

- a. The flat carrier shall be utilized when attachment of Vista panels to a flat surface is required or when constructing a radiused/contoured ceiling system.
- b. The flat carrier shall be roll-formed to a U-shape from .024 aluminum pre-painted with a black polyester enamel finish. The carrier shall measure 10 ft. in length, 1-3/4" in width, and 23/32" in height.
- c. Each of the flat carrier's two legs shall consist of carrier tabs to which the Vista parallel beams will attach. The carrier tabs shall be appropriate for the selected Vista panel and identical to those found on the main carrier component.

#### 5. Renovation Carrier

- a. The renovation carrier shall be utilized to convert a standard T-bar grid system to a linear metal system or to change panel direction on a Vista system comprised of main carrier and cross tee components.
- b. The renovation carrier shall be roll-formed from .024 aluminum and pre-painted with a black polyester enamel finish.
- c. Carrier tabs, to which the Vista parallel beams will attach, shall be appropriate for the selected Vista panel and identical to those found on the main carrier component and integral to the component.
- d. The renovation carrier shall attach to the face of a standard T-bar component by means of a friction-fit clip that is integral to the component.

#### 6. Acoustical Insulation

- a. Insulation shall be of a blanket-type, and faced on one side.
- b. The insulation shall be offered in (1") (1-1/2") thickness with a density of (1) (1-1/2) pcf.

#### 7. Air Diffusion

- a. The linear air distribution components shall have a 4' nominal length and range in width from 10" to 32" to utilize regressed open reveals between parallel beams for air distribution.
- b. An air entry collar, which will vary in size depending on the unit required, shall be top-mounted on each diffuser. Optional oval, side-entry inlet collars should be substituted for installations with limited plenum height.
- c. The diffuser shall be offered with or without a collar-located air volume control damper depending on the installation requirements. The diffuser may be supplied with a remote control damper which allows for adjustment of the damper from below the ceiling plane by means of a control cable which extends through an air distribution slot.
- d. The diffuser's air chamber shall be constructed of not less than .024 inch steel and without longitudinal seams. The lower flanges of the chamber shall be provided with gasketing to prevent air leakage. Acoustical insulation shall be factory-applied to all internal surfaces of the diffuser.

- e. The diffuser shall be manufactured in such a manner so that neither physical nor aesthetic modifications to the ceiling system shall be necessary to properly mount the diffuser within the ceiling system.
- f. The diffuser shall be supported by integral brackets which extend outward from the narrow side of the diffuser so that neither physical not aesthetic modifications to the ceiling system shall be necessary to properly mount the diffuser within the ceiling system.
- g. The diffuser shall be supplied with air control vanes, which provide a means for directing the horizontal air flow. The vanes shall be manufactured to an L-shape from .024 galvanized steel coated with a flat black finish. Two clips, located 6" from each end of the vane, shall be utilized to attach the vane to a leg of the Vista parallel beam.

## 8. Light Fixtures

- a. Light fixtures shall provide fluorescent light from either a single lamp (4" wide fixture) or double lamp (6" and 8" wide fixtures) design.
- b. The fixtures shall be manufactured from cold-rolled steel which is phosphatized for corrosion resistance. The inner areas of the fixture housing shall be painted with an oven-baked, non-yellowing, white polypowder finish. The exterior areas of the fixture housing shall be painted with an oven-baked, black polypowder finish.
- c. All fixtures shall be pre-wired and shall possess a rapid-start, high power factor, 120 V/60 HZ energy-savings ballast that is U.L. rated, Class "P" CBM-ETL certified, sound-rated "A", and has coil and capacitor protection. Other ballast types, such as 277 V energy-savings and 0-degree, are to be offered optionally.
- d. Three types of lenses, in appropriate widths, shall be made available: 1.) A clear, K12 prismatic lens; 2.) A chrome-plated Paracube lens, comprised of 1/2" x 1/2" x 1/2" cells; and, 3.) a white opal, smooth acrylic lens (4" fixture only).

## 9. Access Panels

a. When access into the plenum area of an interior installation is desired, an access panel shall be incorporated into the Vista ceiling system. The panel shall be a one-piece unit which is factory-assembled and is provided with an adjustment feature so as to insure that the panel and ceiling are on a level plane.

#### PART 3 - EXECUTION

#### 3.01 Examination

- A. Examine area receiving system to identify conditions which will adversely affect installation. Do not begin installation until adverse conditions have been remedied.
- B. Verify completion of work above ceiling plane prior to cell panel installation.

### 3.02 Installation

#### A. Suspension System

- 1. Main carriers shall be suspended from 12 gage hanger wire attached to the existing substrate in an industry-approved manner. The hanger wire shall be affixed to the main carrier components at an on center spacing appropriate for the installation and as recommended by Interfinish. The main carrier components shall be installed 4 ft. on center, with consecutive components joined by means of an integral splice that requires no pop-riveting or screw attachment.
- 2. Cross tees or spacer bars shall be installed along the main carrier at intervals appropriate for the installation and as recommended by Interfinish. The cross tees and spacer bars shall serve to stabilize the main carrier components and, in the case of spacer bars, serve to provide lateral stabilization for the light fixtures.

3. Flat and renovation carriers shall be used as needed and shall be installed as recommended by Interfinish.

## B. Parallel Beams and Related Accessories

- 1. The parallel beams shall be attached to the tabs that protrude from the face of carrier components.
- 2. Beam splices shall be utilized to join consecutive parallel beams. The parallel beams should be installed in such a way so that the resulting joint seams, formed when two beams are spliced, are staggered in adjacent rows of beams.
- 3. Where the ends of the parallel beams are visible, a beam end cap, wall angle, or J-molding shall be utilized to trim.
- 4. Where required, install filler strips to close the reveal created when open reveal parallel beams are installed. The filler strips shall be installed per Interfinish recommendations.
- 5. Where required, install access panels per Interfinish recommendations.

## C. Integrated Accessories

- 1. Trim insulation in order to lay upon the plenum side of the parallel beams and between carrier components.
- 2. Air diffusers shall be installed so that the lower, gasketed flanges rest on the plenum side of the parallel beams and the unit's support brackets rest on the flanges of the main carrier components. No special methods of attachment shall be necessary to mount and install the diffuser. The attachment of the air duct to the diffuser, the installation of the air pattern control vanes, and damper adjustments should be performed as recommended by Interfinish.
- 3. Light fixtures shall be installed so that the narrow side of the fixture rests upon the flanges of the main carrier. A spacer bar should be mounted along each 4 ft. side of the fixture for the purpose of lateral stabilization. The installation of fixture lenses and the electrical hookup of the light fixture should be performed as recommended by Interfinish.