General spec. notes:

References in blue are general indicators to the specifier. If not used it can be deleted, but may be needed in the future.

SECTION 095133 / 09 51 33 PANZ ™ Metal Ceiling Panels and Planks

Product Specification

PART 1 – GENERAL

1.01 SUMMARY

- A. Description of Work: Work of this Section includes, but is not limited to, the following:
 - 1. Metal Ceiling Panels
 - 2. Metal Suspension Systems
 - 3. Trim and Accessories

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. See Section _____ HVAC
- B. See Section _____ Lighting
- C. See Section 095100(09150)- Acoustical Ceilings

1.03 SUBMITTALS

A. Product Data: Submit manufacturer's specifications and installation instructions with Project conditions and materials clearly identified or detailed for each required system.

1.04 REFERENCES

- A. ASTM C635: Standard specifications for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
- B. ASTM C636: Recommended Practice for Installation of Metal Suspension System for Acoustical Tile and Lay-in Panels.
- C. ASTM E119: Fire Tests of Building Construction and Materials.
- D. ASTM C423: Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
- E. ASTM E84: Fire Hazard Classification.
- F. CISCA Ceiling System Handbook
- G. High Recycled Content (HRC) Classified as containing greater than fifty percent total recycled content. Total recycled content is based on product composition of post-consumer and pre-consumer (post-industrial) recycled content per FTC guidelines.

1.05 QUALITY ASSURANCE

- A. Reference Standards
 - 1. ASTM C635, Standard Specifications for Metal Suspension Systems

- 2. ASTM Recommended Practice for Installation of Metal Suspension Systems.
- 3. CISCA Ceiling Systems Installation Handbook
- B. Submittals
 - 1. Samples: Submit actual samples and technical data for suspension system main tees and cross tees for review.
 - 2. Shop Drawings:
 - a. Reflected ceiling plans: Submit ceiling suspension system layout indicating dimensions, lighting fixture locations, and related mechanical components.
 - Assembly Drawings: Indicate installation details, accessory attachments and installation of related lighting fixtures and related mechanical system components.
 - 3. Manufacturer's Data:
 - a. System Details: Submit manufacturer's catalogue cuts or standard drawing showing details of system with project conditions clearly identified and manufacturer's recommended installation instructions

1.06 DELIVERY, STORAGE AND HANDLING

- A. Delivery:
 - 1. Deliver Material to site promptly without exposure to weather.
 - 2. Deliver in manufacturer's unopened containers or bundles, fully identified with name, brand, type and grade.
- B. Inspection:
 - 1. Promptly inspect delivered materials, file freight claims for damage during shipment, and order replacement materials as required. Any damaged materials shall be promptly removed from the job site.
- C. Storage:
 - 1. Store above ground in dry, ventilated space.
 - 2. Protect materials from soiling, corrosion, and damage.
- D. Handling:
 - 1. Handle in such manner to insure against racking, distortion or physical damage of any kind.

1.07 PROJECT CONDITIONS

- A. Environmental Requirements:
 - 1. Do not install system or any parts until space is enclosed and weatherproof, wet-work is complete and dry, work above installation is complete and space temperature and humidity has been maintained as designed for occupancy.

1.08 COORDINATION WITH OTHER WORK:

- A. General:
 - 1. Coordinate with other work including mechanical and electrical work and partition systems. Installation of conduit and ductwork above suspension system shall be complete before installation of suspension system.

- B. Protection:
 - Follow good safety and industrial hygiene practices during handling and installation of all products and systems, with personnel to take necessary precautions and wear appropriate personal protective equipment as needed. Read Material Safety Data Sheets and related literature for important information on products before installation. Contractor to be solely responsible for all personal safety issues during and subsequent to installation; architect, specifier, owner and manufacturer will rely on contractor's performance in such regard

PART 2 – MATERIALS:

2.1 MATERIALS

- A. Panz Metal Lay-in ceiling panels:
 - 1. Manufactured by USG (United States Gypsum Company, USG Interiors), Chicago, IL, USA, in compliance with applicable ASTM Standards.
 - 2. Aluminum panels manufactured from premium metal, painted metal, anodized metal, brushed metal, polished metal, or wood tones and formed into panels. Installed into a compatible DONN® Brand DX/DXL or DXT/DXLT CENTRICITEE Suspension System.
 - 3. Panel finishes shall be: (anodized metal) (painted) (premium) (brushed) (polished) (wood tones) in color/finish # _____.
 - 4. Panels shall be (solid) (perforated) (embossed).
 - See pages 17-23 of <u>IC415</u> literature for perforation and embossing options*
 - 5. Recycled Content: High Recycled Content (HRC) not less than 90%.
 - 6. Sizes:
 - a. Squares: 2'x2', 30"x30", 4'x4'.
 - b. Planks: 1'x4', 1'x5', 2'x4', 2'x6', 2'x8', 20"x60", 30"x60".
 - c. Edges: Square (SQ), Shadowline(SL) and Fineline(FL)
 - 7. Accessories:
 - a. M9 wall molding: 15/16"x9/16"x12' long angle shape of prepainted steel.
 - b. MS274 shadow molding: 7/8"x3/4"x9/32"x1-1/4".[For Seismic installation]
 - c. PZTSL Panz Shadowline Perimeter Trim: 1/4"x5/8"x1/2"x12'.
 - d. PZTFL Panz Fineline Perimeter Trim: 1/4"x5/16"x1/2"x12'.
 - e. Panels with cutouts: For incandescent light, sprinklers, or speakers with integral trim to conceal the edge of the panel cutout (specify perforation sizes and locations for each type).

*When Specifying Finishes for Panz Panels: Not all finishes and perforations are available for all sizes. See pages 16 and 17 of the Metal Ceiling Panels brochure, literature <u>IC415</u>/3-07. Be sure to confirm with your local sales representative that you are specifying a correct finish and panel size combination. When specifying Panels or Planks (1'x4', 1'x5', 2'x4', 2'x6', 2'x8', 2'x2', 30"x30", 4'x4', 20"x60", 30"x60") the specifier has to assign the correct Donn DX/DXL or Donn CENTRICITEE DXT/DXLT or Donn FINELINE DXF/DXLF or Donn FINELINE 1/8 /DXFF Suspension System installation procedure.

- B. Suspension System Components:
 - 1. Donn® DX/DXL Suspension System [Delete when not used]

- a. Main Tees: double-web design; 1-1/2" high; rectangular top bulb; 15/16" exposed flange with roll-formed steel cap; cross tee holes and hanger wire holes at 6" o.c.; convenience holes at approximately 2" o.c.; integral reversible splices.
- b. Cross Tees:
 - 1. 1-1/2" high; roll-formed into double-web design with rectangular bulb; 15/16" exposed flange with prepainted steel cap; high tensile steel end clips clenched to web.
 - 1" high; roll-formed into double-web design with rectangular bulb; 15/16" exposed flange with prepainted steel cap; high tensile steel end clips clenched to web.
 - 3. Main tees and cross tees shall be positively locked yet shall be removable without the use of tools.
- c. Recycled Content: 32.3% 61.3% (Total varies by item number and plant location.)
- 2. Donn® DX/DXL HRC Suspension System [Delete when not used]
 - a. Main Tees: double-web design; 1-1/2" high; rectangular top bulb; 15/16" exposed flange with roll-formed steel cap; cross tee holes and hanger wire holes at 6" o.c.; convenience holes at approximately 2" o.c.; integral reversible splices.
 - b. Cross Tees:
 - 1. 1-1/2" high; roll-formed into double-web design with rectangular bulb; 15/16" exposed flange with prepainted steel cap; high tensile steel end clips clenched to web.
 - 1" high; roll-formed into double-web design with rectangular bulb; 15/16" exposed flange with prepainted steel cap; high tensile steel end clips clenched to web.
 - 3. Main tees and cross tees shall be positively locked yet shall be removable without the use of tools.
 - c. High Recycled Content: 65%
- 3. Donn® DXT/DXLT CENTRICITEE Suspension System [Delete when not used]
 - a. Main Tees: double-web design; 1-1/2" high; rectangular top bulb; 9/16" exposed flange with roll-formed steel cap; cross tee holes and hanger wire holes at 6" o.c.; convenience holes at approximately 2" o.c.; integral reversible splices.
 - b. Cross Tees:
 - 1. 1-1/2" high; roll-formed into double-web design with rectangular bulb; 9/16" exposed flange with prepainted steel cap; high tensile steel end clips clenched to web.
 - 1" high; roll-formed into double-web design with rectangular bulb; 9/16" exposed flange with prepainted steel cap; high tensile steel end clips clenched to web.
 - 3. Main tees and cross tees shall be positively locked yet shall be removable without the use of tools.
 - c. Recycled Content: 32.3% 47.1% (Total varies by item number and plant location.)
- 4. Donn® DXT/DXLT CENTRICITEE HRC Suspension System [Delete when not used]
 - a. Main Tees: double-web design; 1-1/2" high; rectangular top bulb; 9/16" exposed flange with roll-formed steel cap; cross tee holes and hanger

wire holes at 6" o.c.; convenience holes at approximately 2" o.c.; integral reversible splices.

- b. Cross Tees:
 - 1. 1-1/2" high; roll-formed into double-web design with rectangular bulb; 9/16" exposed flange with prepainted steel cap; high tensile steel end clips clenched to web.
 - 1" high; roll-formed into double-web design with rectangular bulb; 9/16" exposed flange with prepainted steel cap; high tensile steel end clips clenched to web.
 - 3. Main tees and cross tees shall be positively locked yet shall be removable without the use of tools.
- c. High Recycled Content: 65%
- 5. Donn® FINELINE 1/8 DXFF Suspension System [Delete when not used]
 - Main Tees:Double-web design; 1-25/32" high; rectangular top bulb; 5/16" deep x 9/16" wide bottom face with center recessed section nominal 1/8"; cross tee holes and hanger wire holes at 6" o.c.; mitered intersections 12" o.c.; integral reversible splices.
 - b. Cross Tees:
 - 1-25/32" high; roll-formed into double-web design with rectangular bulb; 5/16" deep x 9/16" wide bottom face with center recessed section nominal 1/8"; high tensile steel end clips clenched to web.
 - 2. Main tees and cross tees shall be positively locked, yet shall be removable without the use of tools.
 - 3. Recycled Content: 48.7%
- 6. Donn® FINELINE 1/8 DXFF HRC Suspension System [Delete when not used]
 - a. Main Tees:Double-web design; 1-25/32" high; rectangular top bulb; 5/16" deep x 9/16" wide bottom face with center recessed section nominal 1/8"; cross tee holes and hanger wire holes at 6" o.c.; mitered intersections 12" o.c.; integral reversible splices.
 - b. Cross Tees:
 - 1. 1-25/32" high; roll-formed into double-web design with rectangular bulb; 5/16" deep x 9/16" wide bottom face with center recessed section nominal 1/8"; high tensile steel end clips clenched to web.
 - 2. Main tees and cross tees shall be positively locked, yet shall be removable without the use of tools.
 - 3. High Recycled Content: 65%
- 7. DONN® Brand FINELINE DXF/DXLF Suspension System [Delete when not used]
 - a. Main Tees: FINELINE® double web design, 1-25/32"-high, rectangular top bulb and 5/16"-deep x 9/16"-wide bottom face centered recessed section 1/4"-wide.
 - b. Cross Members: FINELINE® double web design, 1-25/32"-high, rectangular top bulb and 5/16"-deep x 9/16"-wide bottom face centered recessed section 1/4"-wide.
 - c. Recycled Content: 48.7%
- 8. DONN® Brand FINELINE DXF/DXLF HRC Suspension System [Delete when not used]
 - a. Main Tees: FINELINE® double web design, 1-25/32"-high, rectangular top bulb and 5/16"-deep x 9/16"-wide bottom face centered recessed section 1/4"-wide.

- b. Cross Members: FINELINE® double web design, 1-25/32"-high, rectangular top bulb and 5/16"-deep x 9/16"-wide bottom face centered recessed section 1/4"-wide.
- c. High Recycled Content: 65%
- C. Air Distribution components:
 - 1. Plenum: 28-gauge galvanized steel insulated with 1/2" fiberglass insulation, ________ diameter top inlet collar.
 - 2. When using PANZ Panels specify Air Diffusers only with the DXF/DXLF FINELINE Suspension System.

PART 3 – EXECUTION

- 3.1 EXAMINATION:
 - A. Examine substrates and adjoining construction and conditions under which Work is to be installed. Do not proceed with Work until unsatisfactory conditions are corrected.
- 3.2 GENERAL INSTALLATION REQUIREMENTS:
 - A. Standard reference: Install grid members in accordance with ASTM C636, CISCA installation standards, and other applicable references.
 - B. Manufacturer's reference: Install in accordance with manufacturer's current printed recommendations.
 - C. Drawing reference: Install in accordance with approved shop drawings and locate ceiling in accordance with main tee dimensions relative to elevations
 - D. Install in accordance with reference standards and manufacturer's instructions

3.3 APPLICATION INSTALLATION REQUIREMENTS:

- A. Installation:
- B. PANZ Panels: Install by dropping down into grid frame from above.
- C. PANZ Ceiling Applications:
 - 1. Lay out ceiling area as indicated on reflected ceiling plan before any installation
 - 2. Hanger Wire Installation: Secure hanger wires to upper structural elements and space hangers so that each hanger wire supports a maximum of 16 sq. ft. layout as indicated and dimensioned in reflected ceiling plan.
 - 3. Space main tee members a maximum span 48" on center.
 - 4. Space cross tees as shown in reflected ceiling plan, usually 24" and/or 48".
 - 5. Install bracing wires to suspension members and to supports without attachment to metal formwork, steel decks or steel deck tabs.
 - 6. Install trim, and similar accessories as necessary and as applicable to meet project requirements where indicated on drawings.
 - 7. Install wearing soft gloves to reduce transfer of oil to finished framing members.
 - 8. Install mains and tees as to align joints in a straight parallel/perpendicular fashion as indicated on reflected ceiling plan. Fit all joints tight and flush.
 - 9. If cross tee's chromate clips are to be field painted, paint after installed but before panel installation.
 - 10. If installation of grid is not wall to wall, but free style, install trim before panels

- 11. If grid is terminated at walls or not complete 24" modules, care should be taken as panels have cutting limitations.
- 12. Trim PANZ panels as needed with linesman's pliers.
- 13. Install as specified above.
- 14. Remove all manufacturer-applied temporary protective coverings, clean and touchup minor finish damage. If parts were damaged, remove and replace as needed.
- 15. Upon completion, clean all exposed surfaces of decorative suspension grid including trims and edge molding.

END OF SECTION 095133

The text material contained herein is intended for use as product reference material by architects, engineers, other design professionals, contractors, building code officials, or other competent construction industry trade factors having an interest in the selection, specification and use of products manufactured by the subsidiaries of USG Corporation. It is intended solely as technical support incident to the sale and use of our products.

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