



PRODUCT SPECIFICATION GUIDE
MODEL:CEILING RADIATION DAMPERS
DIVISION 23 - HEATING, VENTILATION, AND AIR
CONDITIONING (HVAC)

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) Format.

The section must be carefully reviewed and edited by the Engineer to meet the requirements of the project and local building code. Coordinate with other specification sections and the drawings.

Delete all "Specifier Notes" when editing this section.

SECTION 233313 (Previously 15820)

DYNAMIC CEILING RADIATION DAMPERS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Ceiling Radiation Dampers with butterfly style blades and outlet box meeting the requirements of the latest edition of UL Standard 555C Standard for Safety; Ceiling Radiation Dampers.

1.2 SUMMARY

- A. Section 233100 – HVAC Ducts and Casings (Previously 15810).

1.3 REFERENCES

- A. IBC – International Building Code.
- B. NFPA 90A - Installation of Air Conditioning and Ventilating Systems.
- C. UL 555C - Standard for Safety; Ceiling Radiation Dampers.

1.4 SUBMITTALS

- A. Comply with requirements of Section 013300 - Submittal Procedures.
- B. Product Data: Submit manufacturer's product data.
 - 1. Include UL ratings, fire resistance, size limitations, and mounting orientation.
 - 2. Indicate materials, construction, dimensions, and installation details.
 - 3. Verify conformance to NFPA, UL and applicable building code.
 - 4. Include a copy of UL approved installation instructions.

1.5 QUALITY ASSURANCE

- A. Dampers shall be warranted against manufacturing defects for a period of 5 years.
- B. Dynamic Ceiling Radiation Dampers shall be tested, rated and labeled in accordance with the latest UL-555C requirements - for Dynamic Ceiling Radiation-Dampers.
- C. Comply with NFPA 90A, "Installation of Air Conditioning and Ventilating Systems".

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly indicating manufacturer, material, and location of installation.
- B. Storage: Store materials in a dry area indoor and protected from damage and in accordance with manufacturer's instructions.
- C. Handling: Handle and lift dampers by sleeve or frame only. Do not lift damper by blades. Protect materials and finishes during handling and installation to prevent damage.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Metal-Fab Inc., 3025 May St. Wichita, KS 67213. Phone (316) 943-2351.
www.mtlfab.com

2.2 DYNAMIC CEILING RADIATION DAMPERS

- A. Model: DGCD™ series dynamic ceiling radiation dampers.
- B. Ratings:
 - 1. Fire Rating: 1 hour rated in accordance with UL 555C for installation in wood truss floor/ceiling (UL Design No. M557) and wood truss roof/ceiling (UL Design No. P581).
 - 2. Thermal Resistance: R-11
- C. Construction:
 - 1. Boot/Plenum Box: Minimum 28 gauge (0.46 mm) galvanized steel outlet box with 3½" thick fiberglass R-11 insulation and plaster ground flange.
 - 2. Blades: Minimum 22 gauge (0.85 mm) roll formed, galvanized steel, butterfly type.
 - 3. Fire Closure Device: Fusible link
 - 4. Closure Temperature: 165 °F (74 °C).
 - 5. Mounting: Horizontal

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive dampers. Notify the Engineer of conditions that would adversely affect installation or subsequent utilization of dampers. Do not proceed with installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION

- A. Install dampers at locations as indicated on the drawings and in accordance with manufacturer's UL approved installation instructions.
- B. Install dampers square and free from racking. DO NOT compress or stretch damper sleeve or frame into the duct or opening.
- C. Handle dampers using the frame or sleeve.

END OF SECTION