

Safety Venting

Model XRV-IC

08/23/2024

Suggested Specifications | Section 08 95 16

PART 1 GENERAL

1.01 Summary

- A. Furnish all explosion & pressure relief vents, frames, curbs, and attachments necessary to complete the work as indicated on the drawings and specified herein.

1.02 Related Sections

- A. Division 6 Section "Rough Carpentry" for wood curbs and nailers.
- B. Division 7 Section "Roof Accessories" for curbs, roof hatches, and smoke vents.
- C. Division 7 Section "Flashing and Sheet Metal" for metal flashing for explosion & pressure relief vents.
- D. Refer to roofing system sections for roofing accessories to be built into this roof system to accommodate work of this section.

1.03 References

- A. American Society for Testing and Materials (ASTM)
- B. The Aluminum Association (AA)
- C. American Architectural Manufacturers Association (AAMA)
- D. NFPA 68 Guide for Venting of Deflagrations, 1999 Edition.
- E. Factory Mutual Engineering Corporation, 1-44, Damage-Limiting Construction, July 1991.

1.04 Submittals

- A. General: Submit the following according to the Condition of Contract and Division 1 Specification Sections.
- B. Product data for each type of explosion & pressure relief vent specified, including details of construction relative to materials, dimensions of individual components, profiles, finishes, and light transmission values.
- C. Shop drawings showing fabrication and installation of explosion & pressure relief vents, including plans, elevation, sections, and details of components.

1.05 Quality Testing

- A. Materials and work shall conform to the latest edition of reference specification specified herein and to all applicable codes and requirements of local authorities having jurisdiction.
- B. Explosion release device shall be FM listed and approved.
- C. Units shall meet NFPA 68 Design Guidelines for Deflagration Vents and Vents.
- D. Single Source Responsibility: Obtain explosion & pressure relief vents from one of a single manufacturer.

1.06 Delivery, Storage, & Handling

- A. All explosion & pressure relief vents, frames, and curbs shall be factory assembled in units and shipped to the job site.
- B. Deliver to site in original, unopened containers and/or pallets bearing manufacturer's name and label.

1.07 Limited Warranty

- A. Manufacturers shall provide limited warranty that the units provided will be free of defects in materials and workmanship for a period of one (1) year from date of substantial completion.
- PART 2 PRODUCTS

2.01 Manufacturers

- A. Explovent® Basis of Design – model XRV-IC manufactured by Construction Specialties subject to compliance with requirements listed. The grilles and related materials herein specified and indicated on the drawings shall be manufactured by: Construction Specialties, 3 Werner Way, Lebanon, NJ 08833. Tel: 800.233.8493. Email: cet@c-sgroup.com. No substitutions.
- B. Each panel shall be shop calibrated and tested for proper operation and for release at the design loads specified on the approved drawing.
- C. All panels shall be permanently marked with the design release pressure and the maximum static release force.
- D. Installation shall be performed in accordance with approved drawings and installation instructions.
- E. Manufacturer shall have complete in-house finishing capabilities.

2.02 Materials

- A. Frames shall be constructed of ASTM B 221 alloy 6063-T5 aluminum, mitered with sufficient seepage ports. Mill finished.
- B. Fasteners to be corrosion resistant.
- C. Curbs shall be constructed with a prefabricated aluminum curb, 3003-H14 alloy sheets. Curbs to be 10 5/8" high with mounting flange and shall include manufacturer's standard double wall insulated curb. Mill finished

2.03 Fabrication

- A. Model XRV-IC: Insulated core roof mounted explosion relief vents.
- B. Vents shall release automatically at an outward pressure of 20 lb/ft² (+/- 10%) using FM approved release devices.
- A. Panel shall be 3003-H14 alloy aluminum sheet with insulation.
- B. Integral curb to be double wall with insulation.
- C. Tether restraint included eliminating unit from being thrown from immediate area.

PART 3 EXECUTION

3.01 Installation

- A. Preparatory work: Standard trade practices are recommended for preparation of structural arrangements for installation of Explovent XRV vents or skylights.
- B. Method: Individual Explovent XRV units are furnished completely assembled, ready for installation on the roof deck, and for flashing into the roof system. Tandem arrays are delivered in accordance with drawings and instructions provided.
- C. Installation, cant, flashing, and roofing materials are not included.