

# Safety Venting

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**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](mailto: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/ft<sup>2</sup> (+/- 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-IC vents or skylights.
- B. Method: Individual Explovent ® XRV -IC 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, flashing, and roofing materials are not included.