

APC Dayliter® XRV-IC

Insulated Core Aluminum Roof Mounted Explosion Relief Vent

Application:

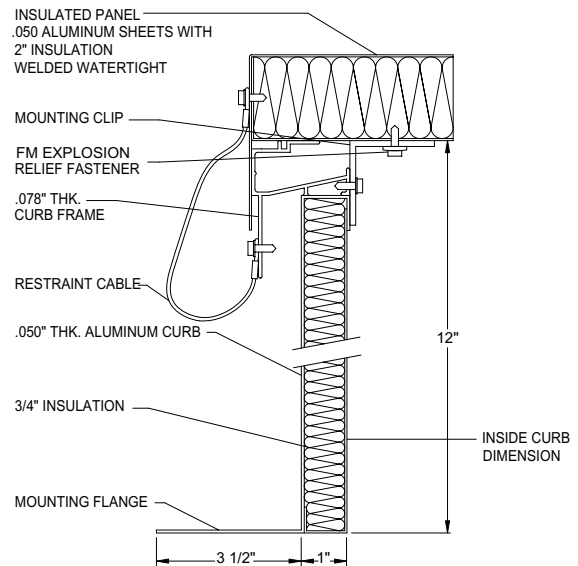
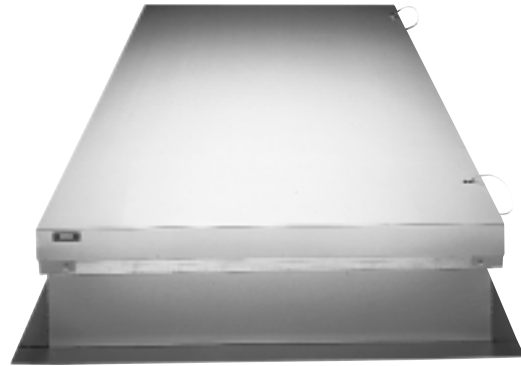
Any facility where potentially explosive atmospheres exist and require explosion venting. Specify XRV-IC roof vents when enhanced thermal performance is desired and/or when exterior walls are not present (i.e. internal rooms), when vent wall area is insufficient, when exterior walls are obstructed, facing public area, or where proximity to property line or other structures could prevent the use of wall vents.

Function:

The explosion relief metal lid is held in place by Factory Mutual approved explosion relief fasteners. The fasteners are designed to collapse under the force of an explosion, releasing the lid and allowing the pressure to vent.

Technical Features and Options:

- Aluminum insulated cover can reduce energy cost and heat loss.
- Non-light transmitting lid can reduce possibly damaging UV rays from entering the facility and damaging contents.
- XRV-IC is compliant with major building and fire codes.
- Unit includes Factory Mutual approved explosion relief fasteners.
- Responsiveness to Pressure Shocks: The XRV-IC releases within 12-18 milliseconds.
- Standard release rating is 20-30 lb/ft².
- Tandem and cluster units available for large venting area requirements.
- Vents are constructed with a prefabricated aluminum curb, 3003-H14 alloy sheet.
- Restraint tether is designed to prevent the unit from becoming a dangerous projectile.



XRV-IC-2

SPEC SECTION 13074

PART 1 GENERAL

1.01 Section Includes

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 five (5) years from date of substantial completion.

PART 2 PRODUCTS

2.01 Manufacturers

- A. APC Daylitter® products specified herein and indicated on drawings shall be manufactured by Conspec Systems, Inc., 49 Meeker Ave., Cranford, NJ, or other manufacturers with prior written approval.

2.03 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 12" high with mounting flange and shall include manufacturer's standard insulation and wood nailer or double wall aluminum with insulation. Mill finished

2.04 Fabrication

- A. Model XRV-IC: Insulated core roof mounted explosion relief vents.
- B. Vents shall release automatically at an outward pressure of —lb/ft² using FM approved release devices.
- C. Panel shall be 3003-H14 alloy aluminum sheet with insulation.
- D. Integral curb to be double wall with insulation.
- E. 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 APC vents or skylights.
- B. Method: Individual APC 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.

C/S GROUP OF COMPANIES

MANUFACTURING/SALES/DISTRIBUTION LOCATIONS

U.S.A. Conspec Systems, Inc., Cranford, NJ Tel:(800)222-0201 Fax:(800)293-4509

Canada C/S Construction Specialties Company, Mississauga, Ont. Tel:(905)274-3611 Fax:(905)274-6241

For Phone Number of Nearest Representative, Call Toll Free (800)222-0201 (U.S.A.) and (888)895-8955 (Canada only).

For Assistance with Overseas Requirements, Fax C/S International (908)236-2903.

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