





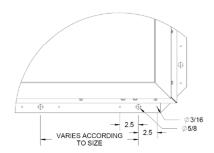


Overview:

Smoke vents are designed to open automatically to provide emergency smoke and heat ventilation. Prompt venting in case of fire is essential for the safe evacuation of occupants and for effective fire-fighting conditions within a building. The smoke vent is not intended for use as general purpose building ventilation devices. International Building Code requires smoke venting in a variety of applications including; Factory and Storage Facilities, Stages and Platforms. The following is a general instruction for installing, operating and maintaining smoke vent products. These are recommended general guidelines only. Locally accepted roofing and sealing practices and procedures should be followed to ensure the ultimate weather-ability of vents installed into the various different types of roofing systems used.

The following is a general instruction for installing, operating and maintaining smoke vent products. These are recommended general guidelines only. Locally accepted roofing and sealing practices and procedures should be followed to ensure the ultimate weather-ability of vents installed into the various different types of roofing systems used. **Important:** Please use caution, since the doors are under spring pressure.

- 1. Insure that the roof mounting surface is level to avoid twisting of the smoke vent base. It is essential that the vents are installed level and square in order for the door to make a proper seal. Place the smoke vent over the existing opening in the roof that has been prepared with appropriate roofing membrane, if applicable.
 - a. The roof rough opening dimensions are equal to the vent dimensions as measure from the inside curb to inside curb. For example a 48"x96" smoke vent will have a roof rough opening of 48"x96".
- 2. The smoke vent single wall curb flange comes with two (2) types of mounting holes to accommodate multiple fastening methods practiced and accepted at a local level.



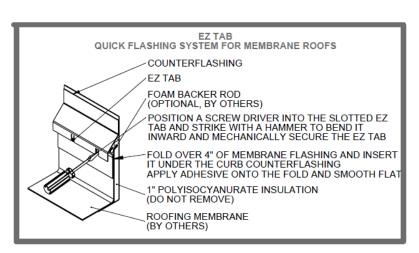
- a. Mark the pre-drilled 5/8" diameter holes from the mounting flange through to the roof deck or a concrete curb. Drill roof deck or concrete curb for installation of anchors or other fasteners (provided by others). Bolt or otherwise fasten roof hatch curb flange to roof deck using three eighths or one half inch bolts w/ washers.
- b. Mark the pre-drilled 3/16" diameter holes from the mounting flange through to the roof deck, typically into a built up wood fame curb. Fasten roof hatch curb flange to faming using roofing nailers and/or screws, recommended size 3/16" x 1 1/4" long.







- 3. Install roofing material up to and around the roof curb, up under the counterflashing, using appropriate roofing material and locally accepted processes. Ensure all joints are fully sealed to provide a weather tight seal. On standard single wall design, foam insulation should not be removed.
- 4. Finally, check operation by opening the smoke vent doors by pulling the exterior manual pull handle. It may take two people to close the doors and ensure proper latch engagement.
- 5. Refer to following illustrations for installation information and further assistance.





Operation:

Vents are designed and built for years of dependable service. The curb has a continuous extruded EPDM gasket that creates a weather resistant seal. Smoke vents **do not** require field painting. If field painted, all component parts must be masked, especially moving parts and all labels. Painted component parts will void the warranty. Please call if there are any questions about this.

Latch: Positive hold release mechanism designed to hold the covers closed. Manually released by interior and exterior pull cables or thermally released by fusible melt out link.

Gas Spring/Damper: Provides the force to automatically open covers against a 10psf snow load at a controlled speed. Hold Open Arm: Locking hold open arm automatically engages and locks when the door fully opens. Pull the red vinyl grip handle to unlock and safely close the door.

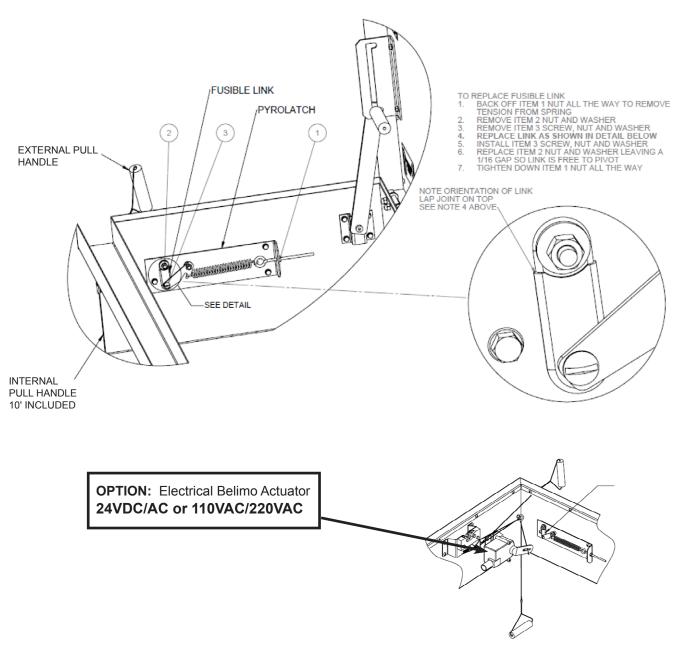
- 1. Smoke vents are designed to **open manually** via pull handles located on the exterior and interior of the smoke vent. Typically the internal pull cable is extended and rigged down near floor level or other specified location.
- 2. Smoke vents are designed to **open thermally** when a UL listed fusible link melts at link rating temperatures of 165F, 212F, 280F, 350F, 360F,370F,386F, 450F etc. Fusible links are easily accessed from the roof for replacement. For replacement instructions, see figure below.
- 3. OPTION: Smoke vents are designed to **open electrically** when a low voltage (24VDC/AC) or High Voltage (110VAC/220VAC) at 2.5Watt signal is sent to a UL listed rotary actuator to open vents in coordination with a fire alarm or sprinkler system.

Smoke vent covers closed manually from the exterior roof top level.





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Maintenance:

- Vents should be manually operated in accordance with local fire safety precautions. At a minimum, the vents should be opened once a year to check proper component performance.
- Lubricate moving parts such as hinges and latches with a silicone spray lube as required to maintain a smooth opening and closing of the door. Do not over grease. Do not use regular lubricating oil that can attract dust and grit.
- Non-moving parts can be cleaned with a mild soap or dishwashing detergent and water solution.
- Gaskets can be cleaned with a clean, damp, lint-free cloth. Do not apply mineral oils, vinyl dressings, or other lubricants to the gasket as they can cause the gasket to break down over time.



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Fusible Link Ambient Temperature Rating:

The fusible link should be specified with a temperature rating greater than the maximum ambient exposure temperature that will be seen at the installation. For example, an "ordinary" fusible link rated at 165 degrees F has a maximum ambient exposure temperature rating of 100 degrees F. If this fusible link is routinely exposed to ambient temperatures over 100 degrees F, it is liable to separate. Select a fusible link rated at 212 degrees F (or greater) for this type of application. See table below to find a fusible link temperature range compatible with an expected or measured ambient temperature. This is in accordance with UL guidelines.

Temperature classification	Temperature ratings		Maximum ambient temperature	
	Degrees F	(Degrees C)	Degrees F	(Degrees C)
Low	125 - 130	(51 – 54)	90	(32)
Ordinary	135 - 170	(57 – 77)	100	(38)
Intermediate	175 – 225	(79 - 107)	150	(66)
High	250 - 300	(121 - 149)	225	(107)
Extra high	325 - 375	(163 - 191)	300	(149)
Very extra high	400 – 475	(204 - 246)	375	(191)
Ultra high	500 - 575	(260 - 302)	475	(246)

Fusible Link Inspection:

The following guidelines are recommended for facility managers or other end-users of smoke vent products.

- Inspect fusible links at least annually for evidence of corrosion, stress/strain or build-up of particulate matter.
- Fusible links that have been painted must be replaced as soon as the condition is observed.
- Fusible links coated with paper dust, fiberglass hairs or similar particulate matter should be cleaned. If cleaning with air pressure does not remove such matter, replace the links or contact either the Authority Having Jurisdiction or the fusible link manufacturer for guidance.

If any questions arise during the operation or maintenance of the products, please feel free to call our toll-free number for assistance, 1-800-547-2635.