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## How to Replace an Existing Vent

1. Remove and discard weather cover(s), frame, and existing membrane vent. Save bolts and washers for re-use during vent panel installation.



2. Remove gasket and silicone adhesive.



Before



After



3. Install replacement vent per MC 594 Installation Instructions. Reuse bolts and washers from Step 1.

Note: Brilex KER vent panels are equipped with an integral frame and factory installed gasket.

## DO NOT REUSE FRAME or EXISTING MEMBRANE



# Sizes Available

23" x 34" and 34" x 46"

Contact IEP Technologies for current pricing.

Burst indicators available upon request.



# Installation Instructions for GE, KE, & KER Explosion Vent Panels

# **General Information**

This document is intended to provide installation information for the installation of IEP Technologies GE, KE, and KER Explosion Vent Panels which are designed to minimize damage to process vessels, ducts, and other industrial structures in the event of a deflagration involving combustible materials. They are relief devices designed to rupture at a predetermined pressure which allows the fireball and pressure from a deflagration to vent into a safe area. These highly efficient vent panels fit into the walls of a process volume and are available in a variety of sizes, configurations, ratings, and materials to suit specific applications. Please take note of the following:

- Make sure the process vessel is depressurized and safe for human exposure.
- Prior to removal of the vent from the packaging, perform a visual inspection of the vent for damage caused in transit. If damage is found, do not install the vent and contact IEP Technologies.



- Handle the vent with extreme care when removing it from the packaging and during installation. Bending, twisting, or careless handling can cause severe damage to the vent and impair its functionality. In addition, the vents have sharp edges which could cause personal injury.
- The vent discharge area should be clear of personnel, equipment, and other obstructions.
- Product and/or materials must not impede the opening of the vent. This could cause excessive pressure to build up in the process vessel which may result in failure.
- Do not position vents where they could be walked on by personnel.
- No coatings or paint should be applied to the vents.

#### **Markings & Labels**

All explosion vents include a warning and identification label on the exterior of the panel. The identification label contains important information regarding the vent panel specifications and limits which must be adhered to in your application. Both labels should be visible from the outside of the process when the vent is installed. To re-order vents, please contact IEP Technologies and provide the serial number listed on the identification label.

Туре	: GE 1000
Dimensions	: 586 x 920
Serial Number	: 1101001
Vent Area	: 5350 cm <sup>2</sup>
Burst Overpressure Pstat	: 0,1bar @ 20°C
Tolerance +/-	: 0,01 bar
Vacuum Resistance	: 100 mbar
Max. Temperature	: 120 °C
Material	: 316L
Options	:
Options	

#### **Mounting Frames**

Mounting frames are used to install explosion vent panels to process vessels, ducts, and other industrial structures. Inlet mounting frames can be either bolted or welded in place. Outlet frames are required for all vents other than the KE-R style. Outlet frames are prohibited on the KE-R design. For mounting frame dimensions and requirements, see IEP Technologies document 43-610006-951 which is also provided along with your vent panel.

#### **Mounting Instructions**

Ensure inlet frame is clean and flat and place vent panel onto the inlet mounting frame. For vents with 9/16" diameter mounting holes, hold the vent in place using 7/16" bolts in the <u>upper corners</u> (for hole sizes other than 7/16" diameter, see vent drawing or consult with IEP Technologies). Install outlet frame (if required), washers, and nuts on the <u>upper corners</u> and <u>bottom corners</u>, and hand-tighten them only. Once all four corners are hand-tightened, install the bolts, nuts, and washers on the rest of the vent and hand-tighten them as well. Incrementally apply a maximum of 30 ft-lbs of torque to the bolts in an alternating star or crisscross pattern.



Installing bolts to a <u>center point</u> on a vent first instead of the hinge side corner can cause excessive flexure and result in damage to the vent. Center points are not designed to support the weight of the entire vent while other bolts are being installed. Do not force the vent into the frame as it could bend the tabs and cause the vent to not to operate as designed. All bolt holes must be used to secure the vent in place or the manufacturer's warranty is void.

