For Your Information

Inspection, Maintenance, Testing and Replacement Frequency of Fusible Links Used in Fire Doors

Following constant investigation and study of the Inspection, Maintenance, Testing and the Replacement frequency of Fusible Links that are used as heat detectors with Fire Doors, Globe Technologies Corporation (manufacturer of Fusible links) advise its Customers to the following conclusions:

1. Fusible Links shall be subjected to axial tensile loads only. The loads shall not exceed the maximum design load of the link.

2. Fusible Links shall not be subjected to high temperatures that exceed its maximum acceptable ambient temperatures. Field verification of the maximum anticipated ambient temperature shall be evaluated prior to the selection of the temperature rating of the Link. (See table below)

3. Fusible Links shall not be painted or coated. Fusible Links shall be replaced immediately if painted or sprayed with chemicals.

4. All Fusible Links shall be inspected and examined at least once annually for corrosion, soldered joint cracks, paint residue, chemical residue, or other foreign material that will impair the performance of the Link. In such cases the Fusible Links shall be replaced.

5. NFPA 80 1999 edition paragraph 15-2.4.3 and Factory Mutual 1-23 Data sheet requires that all Fire Doors shall be tested at least annually for automatic release and full closure. It is of our opinion and Factory Mutual recommendation that the Fusible link shall be fused during the testing to simulate a fire condition.

6. All Fusible Links shall be replaced one a year. The Links shall be replaced sooner during annual inspection if the conditions in (4) exist. The Fusible alloy that is used in the manufacturing of the Fusible Links undergoes a phenomenon known as Creep or Cold flow. It is the continuous application of load versus time that will ultimately fracture the Link. We recognize that NFPA 80 does not address the replacement frequency of the Fusible Links. However, it is stated that the Fusible Links shall be installed according to the manufacturer.

7. Globe Fusible Links are stamped with the year of manufacturing. The stamped year shall be used to determine the one year replacement period.

See UL 33 for the definitive

Maintenance, inspection and replacement of fusible links utilized in range hood fire protection

NFPA Bulletin 96 section 11.4.7 indicates, "Cleaning Chemicals shall not be applied on fusible links". Globe Technologies Corporation strongly recommends that the Fusible links be wiped and cleaned with a wet cloth in between routine servicing and replacement and not by the application of cleaning chemicals or steam. Where code requires replacement.

Replacement schedules mandate bi-annual service and replacement .To ensure premature activation does not occur. Globe technologies strongly advise more frequent replacement in situations of heavy usage or where local cleaning as mentioned previously may take place

As a life safety and property protection system, both premature and actual activation can be a costly action solved by adherence to this information

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Product Reminder

On July 1, 2002, all manufacturers of Dynamic Fire, Combination Fire/Smoke Dampers must comply with new UL requirements: DYNAMIC CLOSURE TEST. Globe's (PFV) installed with pneumatic actuator and Globe's (EFL) installed with Electric actuator utilize a fast standard responsive fusible link coupled with a better positioning of the fusible link in the heated airflow will respond faster than the Fire/Smoke dampers equipped with only a fusible link or a bi-metallic link when subjected to the new UL heated airflow tests. You can install them in small and large dampers irrespective of the applied spring tension.

The PFV and the EFL are Underwriters Laboratories listed thermal release devices listed in the following temperatures: 135° F, 155° F, 165° F, 212° F and 280° F. We are working with U.L. to obtain a 350° F listing for both products.

Temperature Rating		Maximum Ambient Temp.*	
°F	°C	°F	°C
135°	57°	100°	38°
155°	68°	100°	38°
165°	74°	100°	38°
212°	100°	150°	66°
280°	138°	225°	107°
350°	177°	300°	149°
360°	182°	300°	149°
450°	232°	375°	191°
500°	260°	475°	246°

*If the fire suppression system manufacturer specifies different maximum ambient temperatures, the most stringent requirement should be followed

Fusible Link Caution

Please Read Carefully
Globe Technologies Fusible Links are manufactured and tested in accordance with applicable standards of Underwriters Laboratories, Inc., and or Factory Mutual Research Corporation.

Any alteration to this product after it leaves the factory or exposure of the links to temperatures or loads exceeding those indicated below will void and nullify any written or implied warranty.

Important Precautions

Globe Technologies Fusible Links are designed for straight pull load applications. Do not use these links in applications involving radial or twisting loads. Store in a cool dry area. Do not subject links to loads exceeding those indicated. Do not install links where temperatures exceed those indicated above. Do not paint or coat fuse links as this may prevent operation.

It is recommended that, where fusible links are installed in atmospheres, which can cause stress/strains or corrosion of surfaces, the links be examined at least annually and replaced if evidence of corrosion or stress/strain is evident. NFPA Bulletin 17 section 11.3.2, NFPA Bulletin 17A section 7.3.3 and NFPA Bulletin 96 section 11.2.4, mandates at least semi-annually or more frequent in severe conditions, such as restaurant range hoods, etc. to assure proper operation of the system. In these severe conditions/locations we advise system inspection and fusible link replacement every six months.