

Globe Technologies Position – Link Replacement in Equipment Used for Life Safety Devices

It is Globe's position that fusible links in all forms of life-safety equipment including fire dampers, fire doors, smoke hatches, smoke vents, fire curtains, rolling fire doors, conveyor doors, etc. be changed on an annual basis to coincide with their warranty. Links installed longer than a period of one year no longer carry a manufacturer warranty. Several factors can also affect the ability for the fusible link to perform as intended including exposure to ambient air temperature changes, undue stress or torque, possible damage caused during routine maintenance or other unknown events. Ambient air temperature changes in plenum areas above ceilings are common occurrences. In many cases the air in these spaces is not tempered. Even in the cases where the air is tempered, circumstances occur where the tempered air is shut-down for periods of time. Most fire dampers installed utilize a 165°F (74°C) fusible link. These links are recommended to be installed in ambient temperatures of 100°F (38°C) or less.

In the case of smoke hatches or smoke vents design consideration of these devices must be considered prior to selection of the link temperatures. Designs where radiant sunlight exposure exist resulting in rising and falling ambient temperatures considerably impact the fusible links integrity to operate as intended over time. In addition, these hatches are purposely located and designed in ceilings where heat and smoke are captured in order to vent to the outside when operated. Based on this same theory, fluctuations in ambient air temperatures may also degrade a fusible link over time.

Higher than recommended temperatures and air temperature fluctuations coupled with the load placed on fusible links as part of the method of operation will cause solder creep changing the "state" of the link as manufactured and approved. Globe cannot anticipate the operation of these links during an event and therefore require they be replaced.

Globe fusible links are used as a part of a "life safety" device. *Smoke inhalation and propagation is the number one cause of death in fires. ****In 2016, there were 1,342,000 fires reported in the United States. These fires caused 3,390 civilian deaths, 14,650 civilian injuries, and \$10.6 billion in property damage.** Most life safety codes and standards including NFPA 13, 17, 17A, & 96 require replacement of links at intervals of one year, six months, or even sooner based on the conditions where they are installed. While NFPA and the code world strive for reciprocity among the various standards, NFPA 80, 105, & 204 and many state and local codes remain alone in the lack of enforceable language to replace fusible links, an integral part of our life safety systems.



Globe Technologies, Inc. will not warranty any link installed in any fire protection service apparatus after the one-year warranty period is expired.

For more information please feel free to contact us.

Globe Technologies, Inc.

1109 W. Cedar Street

Standish, MI 48658

PH. 989.846.9591

FX. 989.846.9697

www.globetechnologies.com

*Source: NFPA

**Source: NFPA "Fires in the US"