

About K-Mass® Fireproofing

The K-MASS® Fireproofing System is based on intumescent epoxy technologies that were originally developed for the Apollo space program. It has been used in critical areas such as valve actuators, electrical junction boxes, electrical switches, electrical motors, valves, flanges, and cable trays.



K-Mass Fireprotected pneumatic actuators

The K-MASS® Fireproofing System, a two-part polyamide cured epoxy containing heat absorbent chemicals, is moulded directly to the item to be protected. For instance, a uniform 12.70mm (0.5") thickness provides 30 minutes of protection and limits the internal temperature increase within protected systems to 60°C (140°F) in a 1093°C (2000°F) hydrocarbon fire.

The K-MASS® Fireproofing Systems uses the principle of intumescence. As the fire makes contact with the surface, the outer layer will intumesce swell by a factor of four or five. A hard black char forms that in turn reflects upwards of 85% of the heat back into the fire. When the first layer is expended, the next layer intumesces. In addition to this fireproofing capability, the system will withstand the strong force of a hose stream during fire extinguishing efforts.

Since its development in 1985, the K-MASS® Fireproofing Systems have been subjected to over 30 different fire tests in North America including testing by Thermal Designs' customers and third parties. Five such third party tests have been conducted by the Alberta Research Council in

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