



Fire curtain features

- * Flexible textile stopping fire and smoke as a flexible wall
- * Block fire and smoke into sections highly limiting the effects and dangers of fire and smoke
- * Mineral based flexible textiles based on pure silicone, nothing which can burn
- * Capable of 1450 degree for 15 minutes and 1200 degree for thousands of hours
- * Admits smart installation where steel doors etc. is no good alternative
- * Optional installation hard ware, integrated illumination and emergency loudspeaker for easy evacuation

Laseroptronix offers fire curtains which is a textile based solution sometimes replacing fire doors. The flexible textile is easy to install in places where steel doors is less useable. The fire curtain can be installed in doors and walls and when released a mechanism drop it down or swept out from a hidden location. When used it is easy to rewind it back into position and use it again. False alarms are not so costly if so.

The flexible barrier stops fire and smoke and reduce the heat radiation. Our materials are silicon based but still flexible as cotton. Melting temperature is about 1700 degree. It can operate for years at 1200 degree and for over 15 minutes at 1450 degree C. These high temperatures can not be reached at any normal fire.

There are two styles of textiles. One is a bare textile and it leaks smoke like any normal textile but handle the temperature. One other is silicon coated and is gas sealed. The silicone rubber material can handle 550 degree but the textile 1450 degree/ 15 minutes. Booth models are very soft and elastic.

Many of our products are protected by patents and patent applications

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Silicone textile characteristics

SP series is the standard material useable for most applications. It is available in several shapes and textures. The material contains a purity of silicone of 96 %. SP materials are normally not heat shrunk at high temperature so it can change width up to 2 %.

HP is the high purity material with better characteristics. It shrinks less or is pre-heated to zero shrinkage. The material can operate for thousands of hours at 1200 degree C and intermittent higher. The purity of silicone is 96-98 %.

Both materials are very flexible and smooth. They appear pleasant for the skin. The wear resistance to surfaces like sand paper is limited.

Fire curtains technical specifications

Material	Silicon based material on all models Coated models can have Silicon rubber sealing against smoke penetration
Max temperatures	HP materials (high purity silicon) can operate continuously at 1200 degree C for thousands of hours. Intermittent higher temperatures for a shorter time SP materials can operate at 900 degree for thousands of hours SP materials survive 1450 degree C for 15 minutes SP materials can operate at 1000 degree for 24 hours Silicone rubber coatings can survive 550 degree C for over 15 minutes. After this coating is degenerated but still the silica textile keeps the specifications.
Textile	Several types of textures are offered
Filament diameter	Typical 4-6 micron continuous fibres.
Medical health	No material is cancerogenic. No material contains hazardous elements.
Web width	HP materials are 900 mm in width SP materials are 1000 or 2700 mm in width On demand we can offer larger dimensions and blankets of the silicon materials.
Colour	White partially optical diffusing

Options to fire curtains and textiles

SP materials can be delivered with a silicone rubber coating for stopping smoke and chemical penetration. This is available in several colours.

HP materials can be delivered with extra thermal insulation of 6 mm thick high purity silicone insulation. This stops the thermal radiation through the curtain very efficiently. Silica insulation is very efficient and have a thermal coefficient of 20% of what stone and glass wool offers.

HP materials can be delivered with a aluminium foil on one or both sides. This reflects heat and cool radiation away very efficiently.

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