

Technical Datasheet

RoofSupport

FireWrap

Date: 08-09-2023

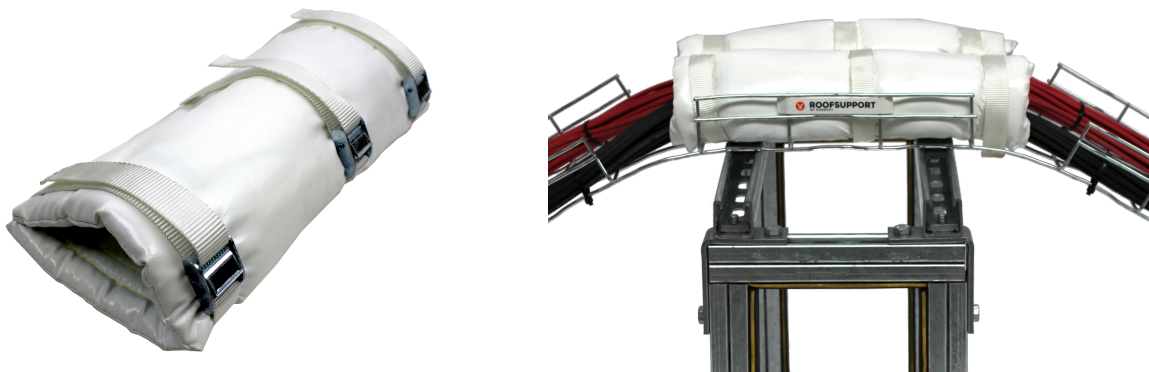
Article number: FW4042

HS-Code: 6806 90 00 00

Product description

RoofSupport FireWrap is made of high-quality insulation material that can handle continuous temperature loads of 1100 degrees celsius. Due to its very low thermal conductivity at high temperatures, it is able to greatly reduce high temperatures in minimal thickness (19 mm). In this way, the FireWrap effectively stops the spread of fire in PV cabling. The insulation of the FireWrap is finished with a fire-resistant fabric that is also water repellent due to a thin silicone protective layer. The RoofSupport FireWrap is equipped with clamp buckles, making it easy and quick to install around different cable diameters.

Product image



Product specifications

- Measurements: 420mm (l) x 400mm (w) x 19mm (h)
- Weight: 1100 gram
- Color: white
- Material padding: insulation blanket based on alkaline earth silicate fibers
- Thickness: 19mm
- Material buckles: -
- Temperature load: 1100 degrees Celsius
- Country of origin: the Netherlands

The standard size of the FireWrap is 400x420mm, but it is possible to supply the RoofSupport FireWrap in any length upon request. It is important to contact the insurer's requirements regarding the required length.

Tests and certification

A number of official fire tests were conducted by the fire safety laboratory of Peutz, a recognized independent testing institute:

- Fire behavior Test according to EN_13823:2020 (report no: Y 2586-3E-RA-001)
- Fire behavior Test according to EN_ISO_11925-2:2020 (report no: Y 2586-4E-RA-001)
- Classification of fire behavior according to EN_13501-1:2018, class B-s1, dO. (Report no: Y 2586-5E-RA-001)

An additional field test was conducted where the test setup mimicked the real-world situation: a RoofSupport Fire Wall Bracket was mounted on a fire wall. The PV cabling running through the bracket was protected with a FireWrap. During the test, both ends of the PV cabling were exposed to fire, with the FireWrap effectively preventing the spread of fire throughout the test period.

Metric data

Classification temperature °C	1200			
Colour	White			
Density, kg/m ³	64	80	96	128
Thermal conductivity, ASTM C-201, W/mK				
@200 °C	0.06	0.06	0.05	0.05
@400 °C	0.11	0.09	0.09	0.08
@600 °C	0.18	0.15	0.14	0.12
@800 °C	0.29	0.24	0.21	0.18
@1000 °C	0.42	0.36	0.29	0.25
Tensile strength, EN 1094-1 kPa	30	45	55	75
Permanent linear shrinkage ENV 1094-1, %	1			
After 24 hours isothermal heating, % @ 1200 °C				
Chemical composition %				
SiO ₂	62-68			
CaO+MgO	-			
CaO	26-32			
MgO	3-7			
Other oxides	< 1			