



Flexible system for fire protection of metal air ducts

DESCRIPTION

AF SAFEGUARD is a flexible protection certified under EN 1366-1 to guarantee an EI 120/180 performance for metal duct penetrations exposed to internal and external fire.

The product consists of a rock wool cushion quilted externally on a metal mesh and internally on a glass wool fabric treated with a special ablative product; spacer profiles and a metal mesh in galvanised steel, to be assembled after the cushion has been wrapped.

AF SAFEGUARD is an ideal product for fire protection of metal air transfer and/or smoke evacuation ducts.

DIRECT APPLICATION

Metal air supply ducts

CUSHION FEATURES

Weight:	4.5 kg/m ² approx.
Dimensions:	5000x1000x40 mm
Rock wool specific weight:	100 kg/m ³
Outer colour:	silver
Inner colour:	white
Thermal conductivity λ _D :	0.036 W/mK at 10 °C
Water absorption	≤ 1 kg/m ²

SPACER PROFILES AND MESH FEATURES

Spacer profile dimensions:	5000x45x50 mm
Mesh:	12.7x12.7x1 mm

PACKAGING AND STORAGE

Kit packaged on pallets and comprising cushion, spacers, wire mesh, aluminised adhesive tape and self-drilling screws.

The product remains unaltered if stored in a closed environment away from humidity and direct exposure to atmospheric agents.

APPLICATION METHOD

1. Attach a 120x50x2 mm L-shaped metal profile to the duct and to one side of the structure, at the penetration, using metal dowels (on the support) and self-drilling screws (on the duct);
2. insert loose rock wool on the free side of the penetration to fill the space between the duct and the structure;
3. once the opening is filled, fix the second 120x50x2 mm L-shaped profile to the structure using metal dowels;
- 4a. RECTANGULAR SECTION: measure the duct perimeter and increase by 320 mm to compensate for the cushion thickness + 150 mm overlap of the two sections. (Total: duct perimeter + 470 mm);
- 4b. CIRCULAR SECTION: measure the duct circumference and increase by 250 mm to compensate for the cushion thickness + 150 mm overlap of the two sections (Total: duct circumference + 400 mm);
5. cut the AF SAFEGUARD cushion based on the length;
6. wrap the cushion obtained around the pipe and place it against the structure; overlap the longitudinal joint by 150 mm and knot the wire mesh using a hook;
7. repeat these steps to cover the whole duct with a second parallel layer;
8. apply the special adhesive aluminium tape (below the wire mesh) to the transverse joint between the two cushions;
9. place the first L-shaped spacer around the cushion with a 50 mm overlap and fasten it using self-drilling screws. Repeat the operation, maintaining a 500 mm spacing;
10. wrap the wire mesh around the previously positioned spacers and fasten it using.

All the steps must be repeated until the duct is covered.

SPECIFICATION

Supply and application of AF SAFEGUARD flexible system for the protection of metal ducts, consisting of a 40 mm thick rock wool cushion with a density of 100 kg/m³, with an ablative protective layer and an outer covering of aluminium and steel mesh, for EI 120/180 protection of air ducts exposed to internal and external fire under EN 1366-1 / EN- 1366-8.

The transverse joints must be covered with aluminised adhesive tape.

CERTIFICATIONS

Class EI 180 (UNI EN 1366-1)	<i>Vertical</i>	Class EI 120 (UNI EN 1366-8)	<i>Vertical</i>
Class EI 120 (UNI EN 1366-1)	<i>Horizontal</i>	Class EI 120 (UNI EN 1366-8)	<i>Horizontal</i>

