MARVON

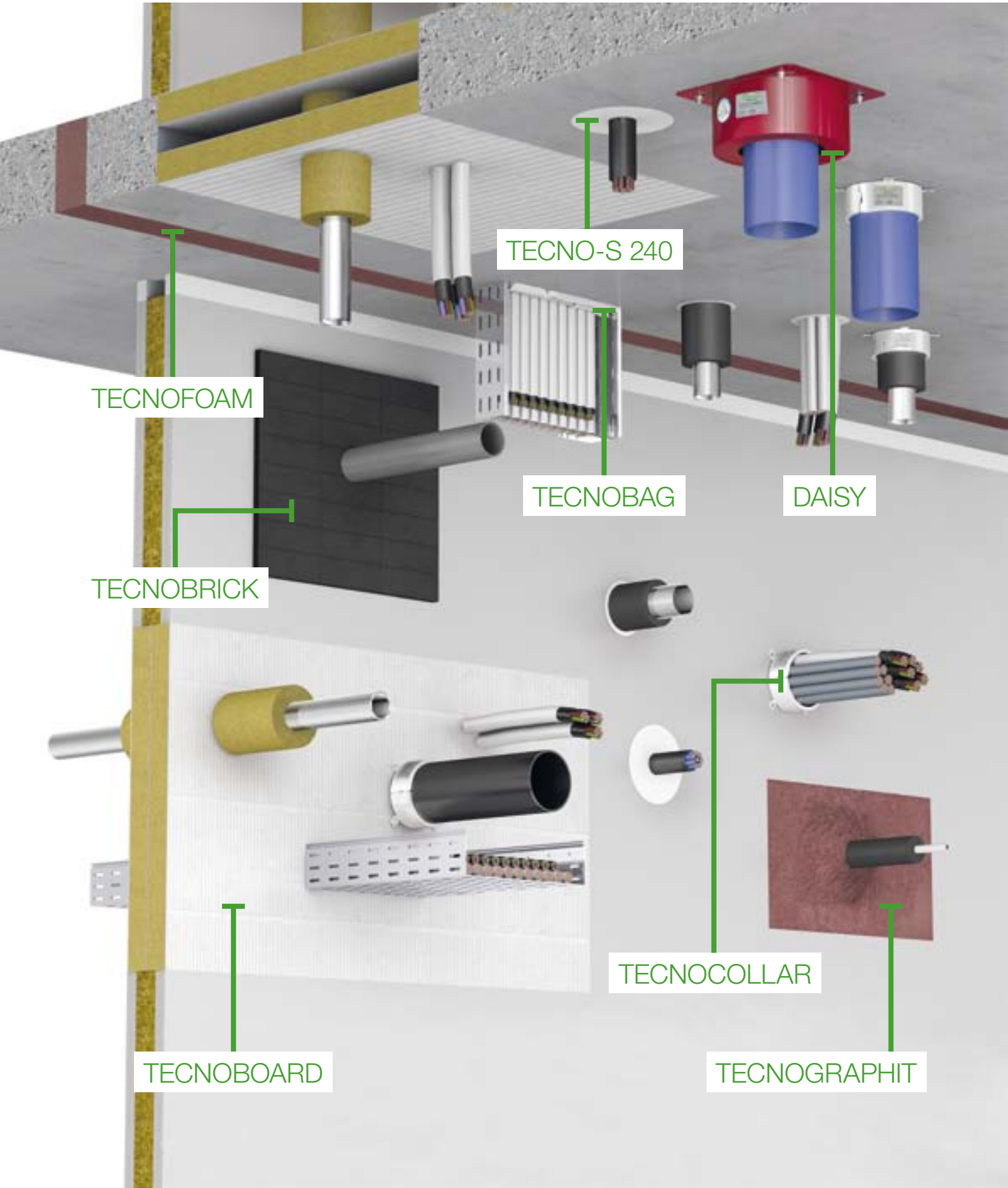
BROCHURE

PASSIVE FIRE PROTECTION

PENETRATION AND JOINT SEALS

MARVON

Marvon solutions



Regulatory introduction

The European Regulation 305/2011 on construction works establishes, as one of the basic requirements for buildings, safety in the case of fire.

In particular, the compartimentation of the different areas in a building must be guaranteed in case of fire.

The compartments are made with load-bearing, non-bearing and separate constructions with a certain fire resistance and are often crossed by electrical and mechanical services that stop the effectiveness of the compartmentalization.

Marvon has certified a range of fire protection systems for penetration seals and linear joint seals, according to European Test Standards EN 1366-3 and EN 1366-4.

The systems are CE marked according to EAD (European Assessment Document) and related ETA (European Technical Assessment) of system.

We are working to develop increasingly innovative systems, following the ever-evolving regulations, in order to give a complete solution to the passive fire protection market.

Marvon sealing systems

	Combustible pipes	Incombustible pipes	Electrical services	Empty holes	Mixed services	Linear joints
TECNOCOLLAR	■	■	■	■		
DAISY	■					
TECNOFOAM						■
TECNOBOARD	■	■	■	■	■	
TECNOBAG			■			
TECNOBRICK	■	■	■		■	
TECNOGRAPHIT	■	■	■	■	■	
TECNO-S 240	■	■	■	■		■



TECNOCOLLAR

TECNOCOLLAR is Marvon fire collar designed and developed to ensure the fire resistance up to EI 240 of penetration seals on wall and floor according to EN 1366-3.

TECNOCOLLAR is composed of a white coated steel shell that splits in two to fit around the service penetrations by means of a simple »slide-lock« system. Inside it is fitted with an intumescent graphite based reactive material that in case of fire reacts sealing the crossing.

Diameters range from Ø 32 to 315 mm.

Application field

TECNOCOLLAR can be used on flexible wall, rigid wall and on rigid floor.

It has a fire resistance up to EI 240 classified according to EN 13501 for:

- Combustible pipes (PVC-U, PVC-C, PE, LDPE, MDPE, HDPE, ABS, SAN+PVC, PP).
- Combustible soundproof pipes (Valsir Triplus®, Valsir Silere®, Valsir PP3, Valsir Blackfire®).
- Isolated incombustible pipes (copper or steel).
- Single or bundled electrical cables.
- Empty holes.

Standard rules and certifications

- Test Standard: EN 1366-3.
- Fire Classification Standard: EN 13501-2.
- European Assessment Document: EAD 350454-00-1104.
- European Technical Assessment: ETA 17/0879.

CE

Penetration seals

Services	Supporting construction [mm]	Dimensions [mm]	Classification
Combustible pipe	Flexible or rigid wall ≥ 100	≤ 315	EI 60 - 240
	Floor ≥ 150		
Incombustible pipe	Flexible or rigid wall ≥ 120	≤ 50	EI 90
	Floor ≥ 150		EI 60
Single or bundled electrical cables	Flexible or rigid wall ≥ 120	Cable ≤ 80 Bundle ≤ 160	EI 60
	Floor ≥ 150	Cable ≤ 21 Bundle ≤ 160	EI 180
Empty hole	Flexible or rigid wall ≥ 120	≤ 160	EI 120
	Floor ≥ 150		







DAISY

DAISY is Marvon fire collar designed and developed to ensure EI 240 fire resistance of penetration seals on wall and floor according to EN 1366-3.

DAISY is made of a red coated steel shell with two different types of intumescent graphite based reactive material (TECNOFLAME + EVA) inside.

Diameters range from Ø 32 to 160 mm.

Application field

The fire collar DAISY can be used on rigid wall and on rigid floor.

It has a fire resistance EI 240 classified according to EN 13501-2 for:

- Combustible pipes (PVC-U, PVC-C, PE, LDPE, MDPE, HDPE, ABS, SAN+PVC, PP).
- Combustible soundproof pipes (Valsir Triplus®, Valsir Silere®, Valsir PP3, Valsir Blackfire®).

Standard rules and certifications

- Test Standard: EN 1366-3.
- Fire Classification Standard: EN 13501-2.
- Classification Reports: CSI1862FR - CSI1917FR - CSI1915FR.

Penetration seals

Services	Supporting construction [mm]	Dimensions [mm]	Classification
Combustible pipe	Rigid wall ≥ 120 Floor ≥ 150	≤ 160	EI 240



TECNOFOAM

TECNOFOAM is Marvon monocomponent polyurethane foam designed and developed to ensure fire resistance up to EI 180 of linear joint seals on wall and floor according to EN 1366-4.

TECNOFOAM contains a special prepolymer mixed with hydrocarbons used as propellants.

740 ml cartridges.

Application field

TECNOFOAM can be used on rigid wall and on rigid floor.

It has a fire resistance up to EI 180 classified according to EN 13501 for:

- Linear joint and gap seals.

Standard rules and certifications

- Test Standard: EN 1366-4.
- Fire Classification Standard: EN 13501-2.
- Classification Reports: I.G. 294977/3412FR, I.G. 332786/3781FR.

Linear joint seals

Joints	Supporting construction [mm]	Dimensions [mm]	Classification
Vertical	Rigid wall ≥ 150	≤ 50	EI 180
Horizontal	Floor ≥ 150		EI 120



TECNOBOARD

TECNOBOARD is Marvon fire board designed and developed to ensure fire resistance up to EI 240 of penetration seals on wall and floor according to EN 1366-3.

TECNOBOARD is composed of a mineral wool board coated on both sides with a white intumescent paint.

In contact with fire, the paint reacts and expand preventing the passage of flame and acting as a thermal insulation.

Fire board dimensions 1200x600 mm and thickness 60 mm.

Application field

TECNOBOARD can be used on flexible wall, rigid wall and on rigid floor.

It has a fire resistance up to EI 240 classified according to EN 13501 for:

- Combustible pipes (PVC-U, PVC-C, PE, LDPE, MDPE, HDPE, ABS, SAN+PVC, PP).
- Combustible soundproof pipes (Valsir Triplus®, Valsir Silere®, Valsir PP3, Valsir Blackfire®).
- Multilayer pipes.
- Isolated incombustible pipes (copper or steel).
- Single or bundled electrical cables.
- Cable trays, conduits and corrugated pipes with electrical cables.
- Empty holes.

Standard rules and certifications

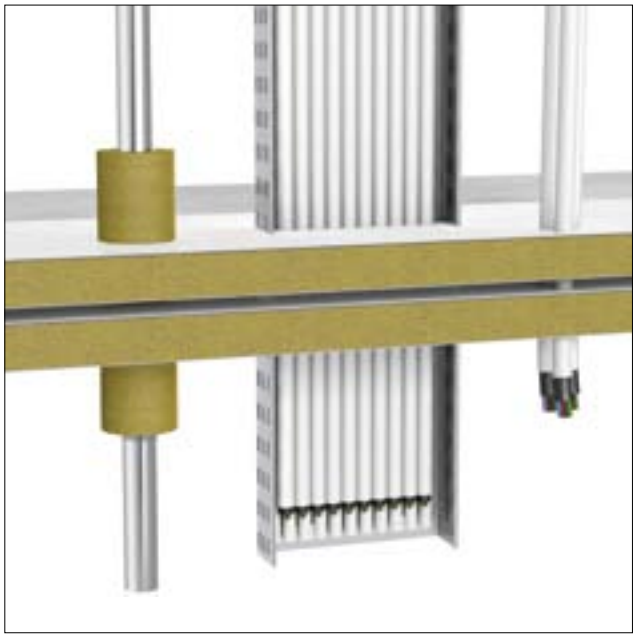
- Test Standard: EN 1366-3.
- Fire Classification Standard: EN 13501-2.
- European Assessment Document: ETAG 026-2.
- European Technical Assessment: pending.

Penetration seals

Services	Supporting construction [mm]	Dimensions [mm]	Classification
Combustible pipe	Flexible or rigid wall ≥ 100	≤ 110	EI 60 - 120
Multilayer pipe	Flexible or rigid wall ≥ 100	≤ 75	EI 120 - 240
Incombustible pipe	Flexible or rigid wall ≥ 100	≤ 300	EI 60 - 240
	Floor ≥ 150	≤ 200	EI 60 - 120
Single or bundled electrical cables	Flexible or rigid wall ≥ 100	Cable ≤ 80 Bundle ≤ 100	EI 60 - 240
	Floor ≥ 150		EI 120
Single or bundled electrical cables on tray	Flexible or rigid wall ≥ 100	≤ 80	EI 60 - 180
	Floor ≥ 150		EI 60 - 120
Empty hole	Flexible or rigid wall ≥ 100	≤ 2400x1200	EI 120
	Floor ≥ 150	≤ 2400x1200	EI 90 -120
		≤ 1200x600	EI 120 - 180
Mixed service	Please contact Marvon for more information		

Maximum aperture size 2400x1200 mm.







TECNOBAG

TECNOBAG is Marvon fire bag designed and developed to ensure fire resistance up to EI 120 of penetration seals on wall and floor according to EN 1366-3.

TECNOBAG consists of a special mixture of inert material, intumescent material and insulating material inside a fiberglass casing. At 180°C, the expansion process begins, isolating the penetration seals.

Fire bag dimensions 120x100x25 mm and 120x200x30 mm.

Application field

TECNOBAG can be used on flexible wall, rigid wall and on rigid floor.

It has a fire resistance up to EI 120 classified according to EN 13501 for:

- Cable trays.

Standard rules and certifications

- Test Standard: EN 1366-3.
- Fire Classification Standard: EN 13501-2.
- European Assessment Document: ETAG 026-2.
- European Technical Assessment: ETA 16/0733.

Penetration seals

Services	Supporting construction [mm]	Dimensions [mm]	Classification
Single or bundled electrical cables on tray	Flexible or rigid wall ≥ 125	Cable ≤ 80 Bundle ≤ 100	EI 60 - 120
	Floor ≥ 200		EI 120

Maximum aperture size 600x600 mm.



TECNOBRICK

TECNOBRICK is Marvon polyurethane sponge intumescent brick designed and developed to ensure fire resistance up to EI 120 of penetration seals on wall and floor according to EN 1366-3.

TECNOBRICK is an easily shaped spongy product suitable to seal holes in different geometries.

Exposed to fire, it expands at 200°C further increasing the volume thanks to the presence of graphite.

Brick dimensions 150x150x50 mm.

Application field

TECNOBRICK can be used on flexible wall and on rigid wall.

It has a fire resistance up to EI 120 classified according to EN 13501 for:

- Combustible pipes (PVC-U, PVC-C).
- Isolated incombustible pipes (copper or steel).
- Single or bundled electrical cables.
- Cable trays.

Standard rules and certifications

- Test Standard: EN 1366-3.
- Fire Classification Standard: EN 13501-2.
- Classification Report: I.G. 361718/3981FR.

Penetration seals

Services	Supporting construction [mm]	Dimensions [mm]	Classification
Combustible pipe	Flexible or rigid wall ≥ 120	≤ 63	EI 120
Incombustible pipe	Flexible or rigid wall ≥ 120	≤ 100	EI 120
Single or bundled electrical cables on tray	Flexible or rigid wall ≥ 120	≤ 21	EI 120
Mixed service	Please contact Marvon for more information		

Maximum aperture size 550x1050 mm.



TECNOGRAPHIT

TECNOGRAPHIT is Marvon bicomponent polyurethane foam with graphite designed and developed to ensure fire resistance up to EI 120 of penetration seals on wall and floor according to EN 1366-3.

TECNOGRAPHIT is applied with a particular gun that mixes the two components trough a special application nozzle.

Exposed to fire, it expands at 150°C further increasing the volume thanks to the presence of graphite.

330 ml cartridges.

Application field

TECNOGRAPHIT can be used on flexible wall, rigid wall and on rigid floor.

It has a fire resistance up to EI 120 classified according to EN 13501 for:

- Combustible pipes (PVC-U, PVC-C).
- Multilayer pipes.
- Isolated incombustible pipes (copper or steel).
- Single or bundled electrical cables.
- Cable trays.
- Empty holes.

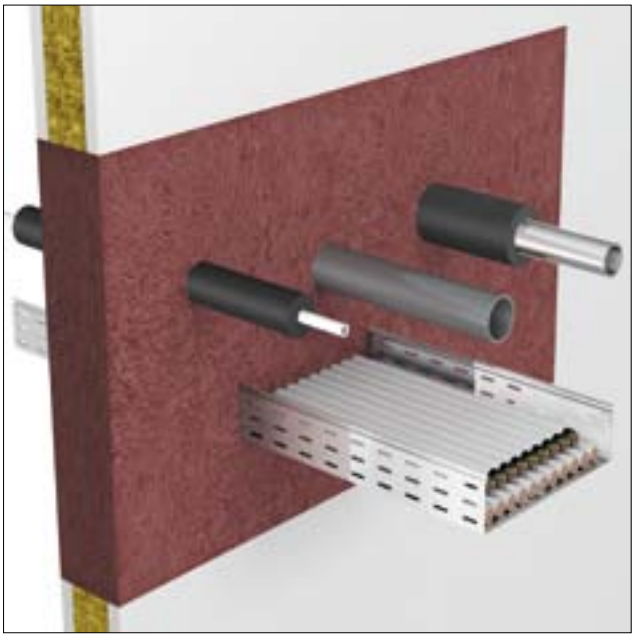
Standard rules and certifications

- Test Standard: EN 1366-3.
- Fire Classification Standard: EN 13501-2.
- Classification Reports: I.G. 325676/3724FR, I.G. 340264/3836FR, I.G. 298681/3466FR, I.G. 338324/3824FR.

Penetration seals

Services	Supporting construction [mm]	Dimensions [mm]	Classification
Combustible pipe	Flexible or rigid wall ≥ 125 Floor ≥ 150	≤ 50	EI 120
Multilayer pipe	Flexible or rigid wall ≥ 125 Floor ≥ 150	≤ 32	EI 120
Incombustible pipe	Flexible or rigid wall ≥ 135 Floor ≥ 150	≤ 50	EI 120
Single or bundled electrical cables on tray	Flexible or rigid wall ≥ 125 Floor ≥ 150	≤ 21	EI 120
Empty hole	Flexible or rigid wall ≥ 125 Floor ≥ 150	≤ 400x250	EI 120
Mixed service	Please contact Marvon for more information		

Maximum aperture size 400x250 mm.







TECNO-S 240

TECNO-S 240 is Marvon monocomponent acrylic sealant designed and developed to ensure the fire resistance up to EI 240 of penetration seals and linear joint seals on wall and floor according to EN 1366-3 and EN 1366-4.

310 ml cartridges.

Application field

TECNO-S 240 can be used on flexible wall, rigid wall and on rigid floor.

It has a fire resistance up to EI 240 classified according to EN 13501-2 for:

- Combustible pipes (PVC-U, PVC-C, PE, LDPE, MDPE, HDPE, ABS, SAN+PVC, PP).
- Combustible soundproof pipes (Valsir Triplus®, Valsir Silere®, Valsir PP3, Valsir Blackfire®).
- Non-insulated multilayer pipes.
- Insulated and non-insulated incombustible pipes (copper or steel).
- Single or bundled electrical cables.
- Corrugated pipes with electrical cables.
- Empty holes.
- Linear joint and gap seals.

Standard rules and certifications

- Test Standard: EN 1366-3 - EN 1366-4.
- Fire Classification Standard: EN 13501-2.
- European Assessment Document: EAD 350454-00-1104 - ETAG 026-3.
- European Technical Assessment: ETA 16/0993 - ETA 16/0994.

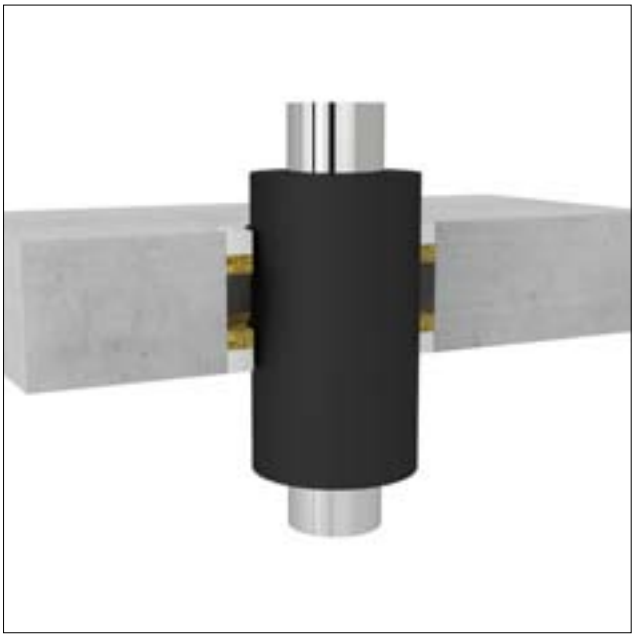
Penetration seals

Services	Supporting construction [mm]	Dimensions [mm]	Classification
Combustible pipe	Flexible or rigid wall ≥ 100	≤ 32	EI 120 - 240
	Floor ≥ 150		EI 180 - 240
Multilayer pipe	Flexible or rigid wall ≥ 100	≤ 75	EI 120
	Floor ≥ 150		
Incombustible pipe	Flexible or rigid wall ≥ 100	≤ 300	EI 90 - 240
	Floor ≥ 150	≤ 200	
Single or bundled electrical cables on tray	Flexible or rigid wall ≥ 100	Cable ≤ 80 Bundle ≤ 100	EI 60 - 120
	Floor ≥ 150		
Corrugated pipes with electrical cables	Flexible or rigid wall ≥ 100	≤ 40	EI 120
	Floor ≥ 150		EI 180
Empty hole	Flexible or rigid wall ≥ 100	≤ 300x300	EI 120 - 240
	Floor ≥ 150		EI 240

Linear joint seals

Joints	Supporting construction [mm]	Dimensions [mm]	Classification
Vertical	Flexible or rigid wall ≥ 100	≤ 30	EI 60 - 240
Horizontal	Floor ≥ 150	≤ 100	EI 120 - 180

Maximum aperture size 300x300 mm.





MARVON

GROUP SILMAR

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001:2015

ENVIRONMENTAL SYSTEM CERTIFICATION DNV·GL ISO 14001:2015

ENERGY MANAGEMENT SYSTEM DNV·GL ISO 50001:2011

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