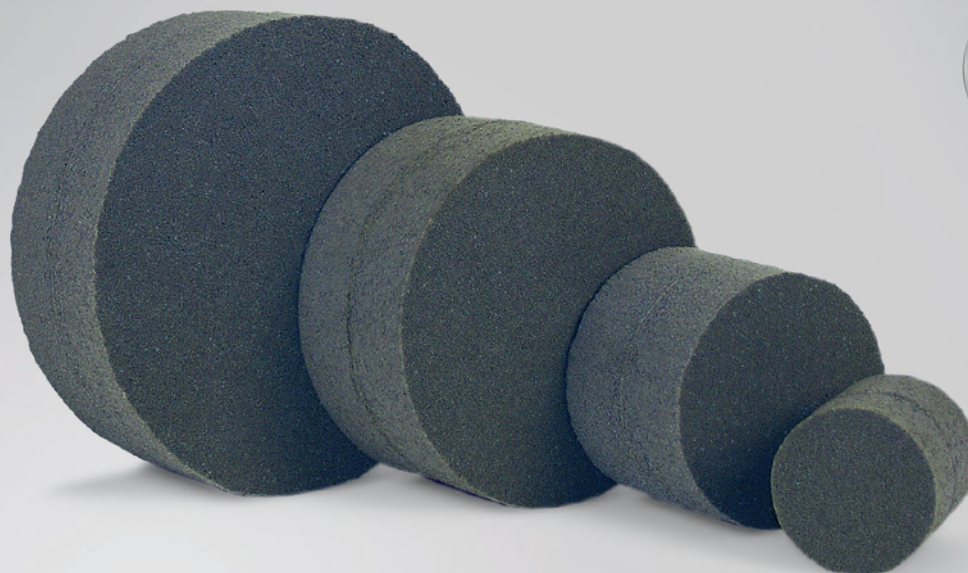


PRODUCT DATA SHEET

ISO-FLAME PLUG S 90



PRODUCT DESCRIPTION

ISO-FLAME PLUG S 90, is a specially developed form for a quick, easy and clean fitting for fire protection of single cables, cable bundles on circular openings (e. g. core hole) in fire walls and ceilings in accordance to DIN 4102.

It consists of fire resistant impregnated PUR high resilient foam and is designed for a maximum fire resistance durability up to 90 minutes.

APPLICATION

ISO-FLAME PLUG S 90 is suitable for fire-stop protection in wall and ceiling openings where fire protection rating S 30, S 60 or S 90 is required, in accordance with DIN 4102 T.9.

It is particularly suitable for fire protection walls and ceilings of concrete and / or reinforced concrete, cellular concrete, brick-work or lighter partitioning walls. The fitting of cables is simply done by cutting.

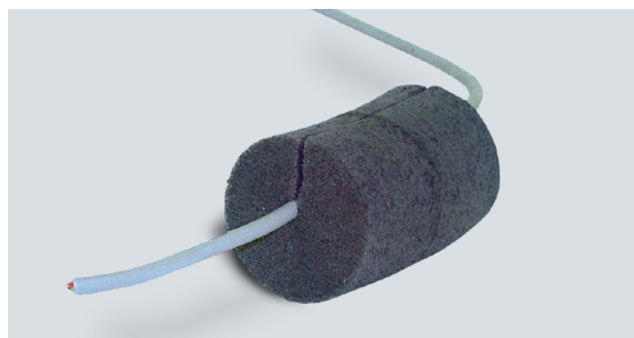
INSTALLATION

- coat either the wall aperture edges or the ISO-FLAME BRICK edges with ISO-FLAME KITT to bond the foam in place
- on ceiling openings both visible fire-stop surfaces are to be coated with ISO-FLAME KITT (this is optional on walls)
- the relevant building approval should be sort for using the ISO-FLAME PLUG S 90 as the services fire stop

PRODUCT ADVANTAGES

- quick and clean application (very economical)
- totally free from dust and fibres
- easy fitting of cables
- no special tools for fitting required or preparation of wall and ceiling openings necessary
- toxic fume blocker
- flexible application (temporary and permanent cable insulation)
- no cracking due to permanent elasticity with high flexibility
- free from halogens and solvents
- 10 Year Function Warranty*

* On the conditions of the manufacturer (available on request).



ISO-FLAME PLUG S 90

Technical data: PLUG	Standard	Classification
Material description		fire resistant impregnated PUR-flexible foam
Colour		anthracite
Fire resistance durability in fire protection walls and ceilings	DIN 4102 T.9	S 90
General construction technique permit		aBG Z-19.53-2364
Handling temperature		+5°C to +40°C
Temperature stability range, dry		-40°C to + 80°C
Building material class	DIN 4102 T.1	B2
Dimension tolerance	DIN 7715 T5 P3	requirements fulfilled
Shelf life		1 year
Technical data: KITT	Standard	Classification
Material description		paste-like, endothermic fire protection compound
Colour		white
Density in g/cm ³		approx. 1.34 to 1.48
Fire resistance durability in fire protection walls and ceilings	DIN 4102 T.9	S90 in combination with ISO-FLAME PLUG
Handling temperature		+5°C to +25°C
Drying time		dust-dry after approx. 4 h, completely dry depending on layer thickness after a maximum of 4 days
Shelf life		2 years

SYSTEM ACCESSORIES

- ISO-FLAME KITT – fire protection kitt (FLAMMOTECT-A) ablative fire protection compound (paste consistency) ETA-18/0237

PACKAGING ISO-FLAME KITT

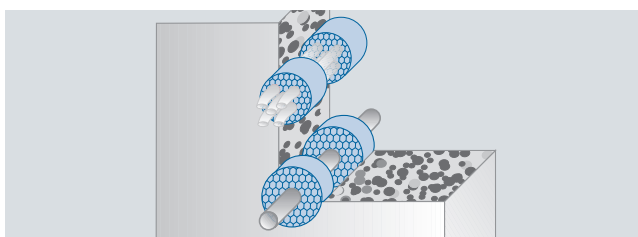
- buckets of 12.5 kg / 12 cartridges (of 310 ml) per box
- consumption depends on the installation situation

TECHNICAL APPROVAL

general construction technique permit through DIBt Berlin for S 90 aBG Z-19.53-2364

Dia. x H = Ordner no.	Max. hole diameter	Achieved F-Class*	Minimum wall- and ceiling thickness	Plugs per carton
54x90mm	51 mm	up to S90	100 mm (wall) and 150 mm (ceiling)	30
62x90mm	58 mm	up to S90	100 mm (wall) and 150 mm (ceiling)	30
74x90mm	70 mm	up to S90	100 mm (wall) and 150 mm (ceiling)	18
85x90mm	80 mm	up to S90	100 mm (wall) and 150 mm (ceiling)	12
100x90mm	95 mm	up to S90	100 mm (wall) and 150 mm (ceiling)	12
115x90mm	109 mm	up to S90	100 mm (wall) and 150 mm (ceiling)	12
130x90mm	123 mm	up to S90	100 mm (wall) and 150 mm (ceiling)	12
151x90mm	143 mm	up to S90	100 mm (wall) and 150 mm (ceiling)	12
181x90mm	175 mm	up to S90	100 mm (wall) and 150 mm (ceiling)	12

* For the fire protection S 90 the minimum thickness of the fire-stop is 200 mm. 2 plugs per openings must be installed.



Installation example: ISO-FLAME PLUG S 90

Fitting	Wall (mm)	Ceiling (mm)
Minimum distance to next fire-stop	100	100
Maximum amount of cables	60%	60%
Maximum cable diameter	30	30
Maximum metal duct diameter	114	54

The details and information given in this literature are based on best current knowledge. They are intended to serve as general information only and it is advised that the user conducts their own tests for their specific set of conditions to determine the suitability of the product for its proposed use. No warranty or liability is given or implied regarding any part of these instructions or details, or the completeness of the information. We reserve the right to modify, or change, the specifications and information without advance notification. All goods are supplied subject to our standard conditions of sales, copies of which are available upon request.