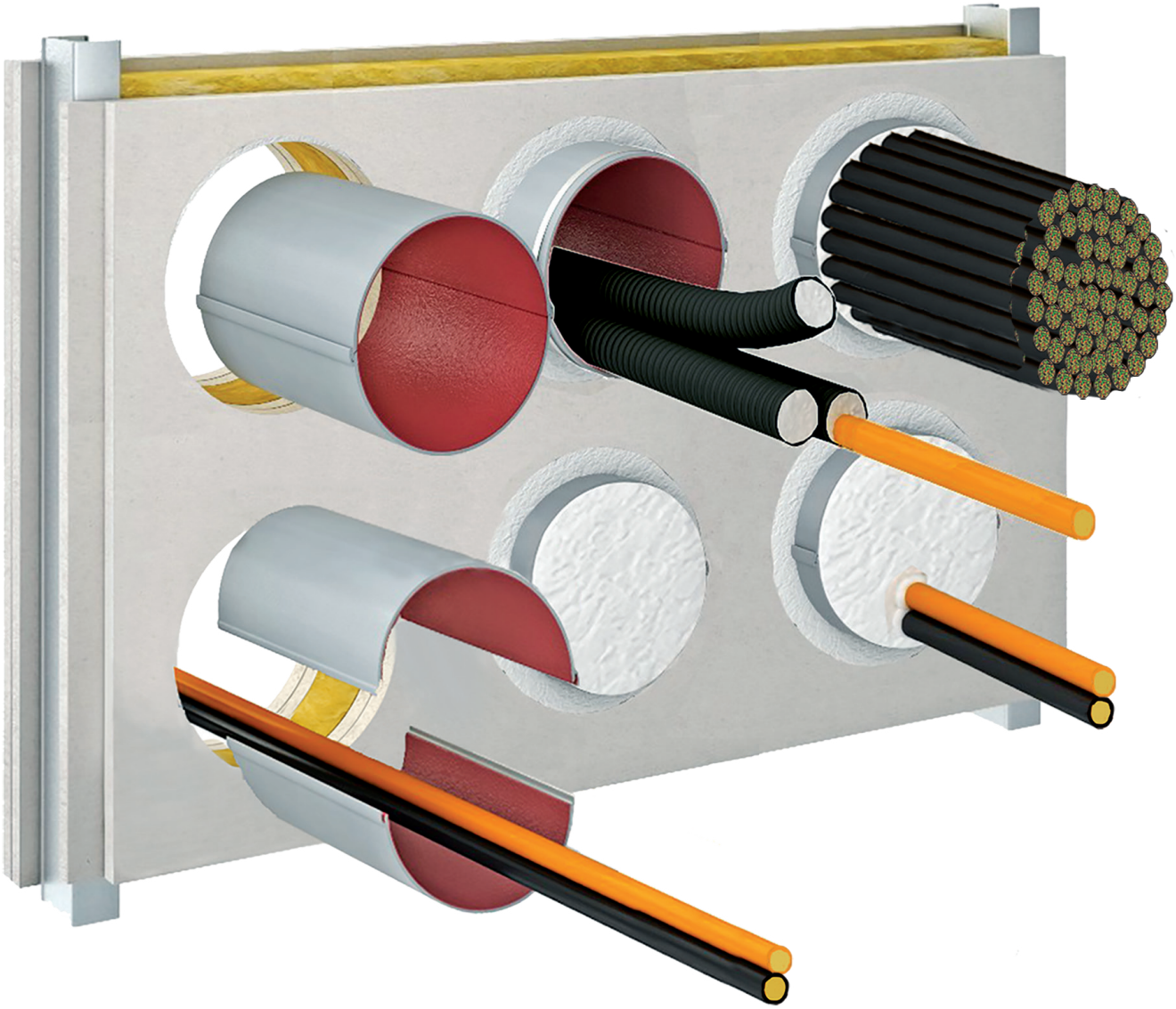
PYRO-SAFE® CT

Installation instructions

Cable Tube with click closure for sealing electrical cables and lines of all types, electrical installation conduits and other configurations; also for existing installations.
Maximum Fire resistance classes EI 120 according to EN 13501-2 as per ETA-16/0016.



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Contents

1. Preliminary remarks / overview

1.1 Target group

- The installation instructions are intended solely for personnel trained in fire protection.

1.2 Use of the instructions

- Before starting work, read through these installation instructions completely once. Pay particular attention to the following safety instructions.
- The authorisation holder assumes no liability for damage caused by failure to comply with these instructions.
- Pictorial representations serve as examples only. Installation results may differ in appearance.
- Unless stated otherwise, all lengths are specified in mm.
- All information in this document represents the state of the art at the time of writing or the current version of the standard.
  Upon request, svt will be pleased to provide the relevant legal and technical framework and manufacturer specifications for each individual case.
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1.3 Safety instructions

- The safety data sheets must be consulted when processing the penetration seal components.
- Personal protective equipment:

	Wear protective clothing and non-slip shoes.
	Use safety goggles, safety glasses.
	P2 particle filter in case of short-term or low level exposure. For intensive or prolonged exposure use a breathing apparatus with independent air supply. Use breathing protection in compliance with international/national standards.
	Use chemically resistant gloves. Recommended materials: Butyl rubber, nitrile rubber, fluorinated rubber, PVC.

Safety instructions for the installation of floor penetration seals

	The area below the floor penetration seal must be cordoned off against entry during penetration seal work (barrier tape and warning sign: warning of possible falling objects, do not enter the area, penetration seal work in floor component openings).
	The contractor for the production of floor penetration seals must inform the client in writing (for forwarding to the client or appointed representative) that after the production of the fire penetration seals in floors, these must be secured on site against loads, in particular against walking, by suitable measures (e.g. by fencing or by covering with grating).

1.4 Field of application

The suitability for use of PYRO-SAFE® CT penetration sealing has been assessed in accordance with ETAG 026-2 in terms of the "Reaction to fire", "Resistance to fire", "Release of dangerous substances" and "Durability and Serviceability" product characteristics.

Reaction to fire

The "PYRO-SAFE® FLAMMOTECT-A" ablative components and the "PYRO-SAFE® DG-CR 1.5 SK" intumescent material meet Class E for reaction to fire in accordance with EN 13501-1.

Fire resistance

PYRO-SAFE® CT meets the maximum requirements of Class EI 120 (ending for plastic conduits –U/U) according to EN 13501-2.

The Fire resistance classes for plastic conduits EI 120-U/U also covers all other possible endings according to EN 13501-2. When installed in walls or floors with a lower fire resistance rating, the fire resistance rating of the penetration is also reduced to that of the fire resistance rating of the wall or ceiling.

Release of dangerous substances

None

Durability and suitability for use

The "PYRO-SAFE® FLAMMOTECT-A“ ablative components and the "PYRO-SAFE® DG-CR 1.5 SK" intumescent fire protection fabric meet the requirements of type X for durability according to EOTA TR 024.

PYRO-SAFE® CT can be subjected to the conditions of interior rooms with and without exposure to moisture, with no substantial changes to the fire protection characteristics to be expected.

1.5 Components

Plasterboard walls with steel substructure

In stud design and double-sided cladding with at least 2 layers of 12.5 mm cement or gypsum-bound building boards with a reaction to fire of Class A1 or A2 according to EN 13501-1.

The walls must be classified for the required fire resistance rating according to EN 13501-2.

Plasterboard walls with wood substructure

In stud design and double-sided cladding with at least 2 layers of 12.5 mm cement or gypsum-bound building boards with a reaction to fire of Class A1 or A2 according to EN 13501-1.

The distance between the opening and the studs and transoms must be 100 mm ≥ and the hollow spaces between the cladding of the wall, studs and transoms and the opening reveal must be tightly sealed to a depth of 100 mm ≥ with mineral wool, reaction to fire Class A1 or A2 according to EN 13501-1.

The walls must be classified for the required fire resistance rating according to EN 13501-2.

Solid walls

made of masonry, concrete, reinforced concrete or cellular concrete with a density of ≥ 450 kg/m³.

The walls must be classified for the required fire resistance rating according to EN 13501-2.

Solid floors

Of concrete, reinforced concrete or cellular concrete with a density of ≥ 650 kg/m³.

The walls must be classified for the required fire resistance rating according to EN 13501-2.

1.6 Fire resistance classes

Fire resistance classes					
	Measure	Wall		Floor	
		Fire resistance classes	Source*	Fire resistance classes	Source*
PYRO-SAFE® CT Cable Tube – installation length 150 mm					
Cables, cable bundles					
Cable Ø ≤ 21 mm	-	**EI 90 / E 120**	**1**	**EI 120**	**4**
Cable Ø ≤ 50 mm	Only in 100% configuration	**-**		**EI 90 / E 90**	**6**
Cable bundle Ø ≤ 107 mm with cable Ø ≤ 14 mm	-	**EI 90 / E 120**	**1**	**EI 120**	**4**
Cable bundle Ø ≤ 107 mm with cable Ø ≤ 21 mm	-	**EI 90 / E 120**	**1**	**EI 60 / E 90**	**5**
	"PYRO-SAFE® DG-CR 1.5" 1x 1-layer, 50 mm overlap, above or below	**-**		**EI 120**	**4**
Electrical conduits					
Conduits Ø ≤ 32 mm with/without cable Ø ≤ 14 mm	Max. 3 pcs.	**EI 90 U/U**	**2**	**EI 90 U/U**	**2**
HVAC split line combinations					
Pipe Ø 6-10 mm/ 10-18 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	-	**EI 90 U/U**	**2**	**EI 90 U/U**	**2**
Pipe 1/pipe 2 outer-Ø 6-22 mm/ 6-22 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	Lamella mat ≥ 250 mm x ≥ 30 mm above	**-**	**-**	**EI 120 U/U**	**4**
"Speed pipes", bundled or individually, with/without glass fibre cables					
max. 24 pcs. pipe outer-Ø ≤ 7 max. 7 pcs. pipe outer-Ø ≤ 10 max. 5 pcs. pipe outer-Ø ≤ 12	-	**-**	**-**	**EI 120 U/U**	**4**

PYRO-SAFE® CT Cable Tube – installation length 200 mm					
Cables, cable bundles					
Cable Ø ≤ 21 mm	-	**EI 120**	**1**	**EI 120**	**4**
Cable Ø ≤ 50 mm	Only in 100% configuration	**-**	**-**	**EI 90 / E 90**	**6**
Cable bundle Ø ≤ 107 mm with cable Ø ≤ 14 mm	-	**EI 120**	**9**	**EI 120**	**4**
Cable bundle Ø ≤ 107 mm with cable Ø ≤ 21 mm	-	**EI 120**	**9**	**EI 60 / E 90**	**5**
	"PYRO-SAFE® DG-CR 1.5" 1x 1-layer, 50 mm overlap, above or below	**-**	**-**	**EI 120**	**4**
Electrical conduits					
Conduits Ø ≤ 32 mm with/without cable Ø ≤ 14 mm	Max. 3 pcs.	**EI 120 U/U**	**2**	**EI 90 U/U**	**2**
Conduit bundle Ø ≤ 107 mm with conduit Ø ≤ 32 mm, with/without cable Ø ≤ 21 mm	-	**EI 120 U/U**	**2**	**-**	**-**

*Classification report no.:
1 → KB K-3600/886/12-MPA BS, 2 → KB 1913.1/13/Z00NP, 3 → KB 3.2/11-104-1, 4 → KB 01883.2/14/Z00NP, 5 → KB K-3576/852/12-MPA BS,
6 → PB 3096/155/10-CR, 7 → KB 3.2/11-103-1, 8 → KB 00924.2/15/Z00NP, 9 → PB 210006274

PYRO-SAFE® CT

Fire resistance classess

	Measure	Wall		Floor	
		Fire resistance classes	Source*	Fire resistance classes	Source*
HVAC split line combinations					
Pipe 1/pipe 2 outer-Ø 6-10 mm/ 10-18 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	-	**EI 90 U/U**	**2**	**EI 90 U/U**	**2**
Pipe 1/pipe 2 outer-Ø 6-22 mm/ 6-22 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	Lamella mat ≥ 250 mm x ≥ 30 mm above	**-**	**-**	**EI 120 U/U**	**4**
"Speed pipes", bundled or individually, with/without glass fibre cables					
max. 24 pcs. pipe outer-Ø ≤ 7 max. 7 pcs. pipe outer-Ø ≤ 10 max. 5 pcs. pipe outer-Ø ≤ 12	-	**-**	**-**	**EI 120 U/U**	**4**

PYRO-SAFE® CT Cable Tube – installation length 300 mm					
Cable, cable bundles					
Cable Ø ≤ 21 mm	-	**EI 120**	**3**	**EI 120**	**4**
Cable Ø ≤ 50 mm	-	**EI 90 / E 120**	**3**	**EI 60 / E 120**	**7**
	100% Configuration	**-**	**-**	**EI 90 / E 90**	**6**
	Lamella mat ≥ 100 mm x ≥ 30 mm + "PYRO-SAFE® DG-CR 1.5" 1x 1-layer, above	**-**	**-**	**EI 120**	**6**
Cable Ø ≤ 80 mm	Solid wall	**EI 90 / E 120**	**3**	**EI 60 / E 120**	**7**
Cable bundle Ø ≤ 107 mm with cable Ø ≤ 21 mm	-	**EI 120**	**9**	**EI 120**	**7**
Electrical conduits					
Conduit bundle Ø ≤ 107 mm with conduit Ø ≤ 32 mm, with/without cable Ø ≤ 21 mm	Floor ≥ 200 mm	**EI 120 U/U**	**2**	**EI 120 U/U**	**4**
Conduit Ø ≤ 63 mm with/without cable Ø ≤ 21 mm	-	**-**	**-**	**EI 120 U/U**	**8**
HVAC split line combinations					
Pipe 1/pipe 2 outer-Ø 6-10 mm/ 10-18 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	-	**EI 90 U/U**	**2**	**EI 90 U/U**	**2**
Pipe 1/pipe 2 outer-Ø 6-22 mm/ 6-22 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	Lamella mat ≥ 250 mm x ≥ 30 mm above	**-**	**-**	**EI 120 U/U**	**4**
"Speed pipes", bundled or individually, with/without glass fibre cables					
max. 24 pcs. pipe outer-Ø ≤ 7 max. 7 pcs. pipe outer-Ø ≤ 10 max. 5 pcs. pipe outer-Ø ≤ 12	-	**-**	**-**	**EI 120 U/U**	**4**
Combustible pipes made of PVC-U					
Pipe outer Ø 20 mm x s 1.5 mm up to pipe outer Ø 32 mm x s 2.4 mm	-	**EI 120 U/U**	**9**	**-**	**-**

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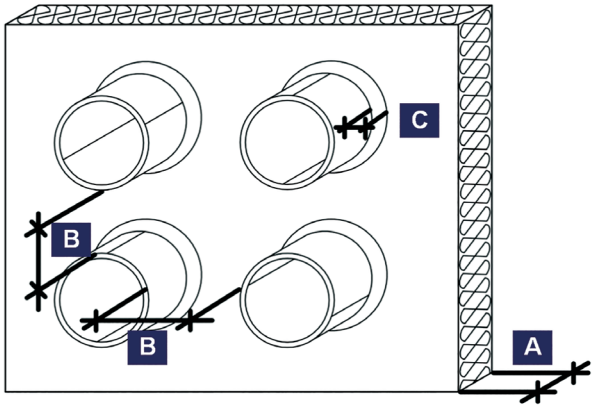
6 → PB 3096/155/10-CR, 7 → KB 3.2/11-103-1, 8 → KB 00924.2/15/Z00NP, 9 → PB 210006274

1.7 Field of application (component and penetration seal thicknesses, penetration seal distances)

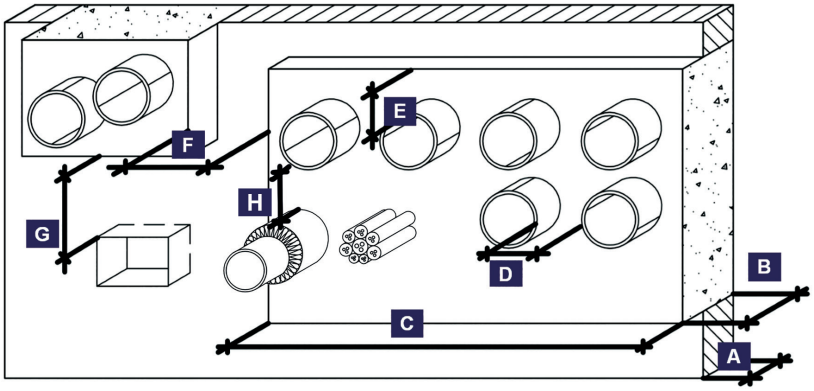
Dimensions arranged individually

Item	Name	Wall [mm]	Floor [mm]
A	Component thickness	≥ 100	≥ 125
B	Distance to PYRO-SAFE® CT in single arrangement	≥ 60	≥ 60
C	Annular gap size	5 to 25	5 to 25



Dimensions for group arrangement (only in solid components)

Item	Name		Wall [mm]	Floor [mm]
A	Component thickness		≥ 150	≥ 150
B	Penetration sealing system thickness		≥ 150	≥ 150
C	Maximum dimensions of the component opening (width x height)		1200 x 2000	640 x ∞
D	Distance below one another in group arrangement		≥ 3	≥ 10
E	Distance to opening reveal		≥ 15	≥ 15
F	Distance to other cable or pipe penetration seals one/both opening(s) > 400 x 400 mm both openings ≤ 400 x 400 mm		 ≥ 200 ≥ 100	 ≥ 200 ≥ 100
G	Distance to other openings or installations		≥ 200	≥ 200
H	Distance to other media in the same opening	Cables, cable bundles, cable trays	≥ 65	≥ 65
		Other media	≥ 100	≥ 100



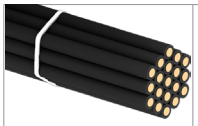
- The Cable Tubes may be completely configured with installations, the installations may lie against each other and against the inside of the Cable Tube.
- The total permissible cross-section of the installations (external dimensions) is ≤ 60% of the rough opening!

2. Allowed services

2.1 Cables / cable bundles / electrical installation conduits

Electrical cables and lines of all types (including fibre optic cables)

Maximum size of the overall cross-section of the individual cables depends on the required fire resistance rating



Cable bundles

up to Ø 107 mm with single cable Ø ≤ 21 mm.

No gusset filling necessary for tightly packed, tied cable bundles.

Electrical installation conduits made of plastic according to EN 61386-22

With and without cable configuration.

Single up to outer Ø 32 mm (Ø ≤ 63 mm in floors) or bundled up to outer Ø ≤ 107 mm, cable Ø ≤ 21 mm

2.2 Combustible pipes

Combustible pipes

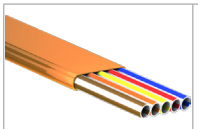
made of PVC according to EN 1452 and DIN 8061/8062

Pipe type	Pipe outer-Ø [mm]	Pipe wall thickness [mm]
PVC	≤ 32	1.5 - 2.4

2.3 Further allowed services

HVAC split line combinations

Double- or single copper pipe (pipe 1/pipe 2 outer Ø 6 - 22 mm/6 - 22 mm) and pipe insulation 9 mm thick PE foam according to EN14313 with optional accompanying pipes (one plastic pipe (U/U) made of PVC-U, outer Ø 25 mm and pipe wall thickness 1.5 mm, according to EN1453-1 or EN1452-1 and DIN 8061/ DIN 8062 and up to 3 sheathed lines with max. 5 cores of ≤ 1.5 mm², Ø ≤ 14 mm) at zero distance.



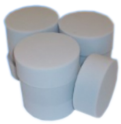
PE pipes "speed pipes" (for glass fibre cables and micro cables)

From Gabocom Systemtechnik GmbH, bundled or individual, with/without glass fibre cable.

Pipe outer Ø [mm]	Max. number [pcs.]	Pipe wall thickness [mm]
≤ 7	24	≤ 1.5
≤ 10	7	≤ 2.0
≤ 12	5	≤ 2.0

3. Products used

PYRO-SAFE® CT
Cable Tube
comprising PYRO-SAFE® CT Cable Tube and 2 flexible foam plugs
CT 150 – Art. no. 01281150
CT 200 – Art. no. 01281200
CT 300 – Art. no. 01281300



Melamine resin stopper set
spare stoppers
Melamine resin stoppers thickness: 42 ± 2 mm
diameter: 112 ± 2 mm,
10 pieces in box – Art. no. 01271999

PYRO-SAFE® FLAMMOTECT-A
Putty
according to ETA-14/0418
12.5 kg pail – Art. no. 01155104
15.0 kg pail – Art. no. 01155109
310 ml cartridge - Art. No. 01155115

PYRO-SAFE® NOVASIT BM
Fire protection compound
according to ETA-16/0132
20 kg bag – Art. no. 01161000
10 kg pail – Art. no. 01161010

PYRO-SAFE® GFM
Fire protection mortar
Fibre-free ready-mix dry mortar M20 / MG III according to EN 998-2
Bag of 25 kg – Art. no. 01167000
Pail of 15 kg – Art. no. 01167020

PYRO-SAFE® NOVASIT K2
Fire protection mortar
Fibre-free ready-mix dry mortar M20 / MG III according to EN 998-2
25 kg bag – Art. no. 01163000

Manufacturer-independent closure material

Dimensionally stable, non-combustible (Class A1 or A2-s1,d0 according to EN 13501-1) materials such as concrete, cement mortar, gypsum mortar

Lamella mat "KLIMAROCK"
according to DIN EN 14303 and LE DE0628071802
of 13th July 2018
Class of reaction to fire according to EN 13501-1: Class A1
Dimensions 610 x 50 cm
Thickness 30 mm
Roll of 3.05 m² – Art. no. 01187100
Alternatively, lamella mats, mineral fibre mats/ pipe sleeves may be used if they meet the following criteria:
EN 14303 volume weight ≥ 40 kg/m³
Reaction to fire Class A1 in accordance with EN 13501-1 Thickness ≥ 30 mm

Mineral wool
Reaction to fire class according to EN 13501-1: A1
Melting point ≥ 1000 °C
10 kg bag – Art. no. 01183000

PYRO-SAFE® DG-CR 1.5
Fire protection wrap
according to ETA-16/0268
Roll of 10 m x 125 mm – Art. no. 01261125

Label

1 piece – Art. no. 01229000

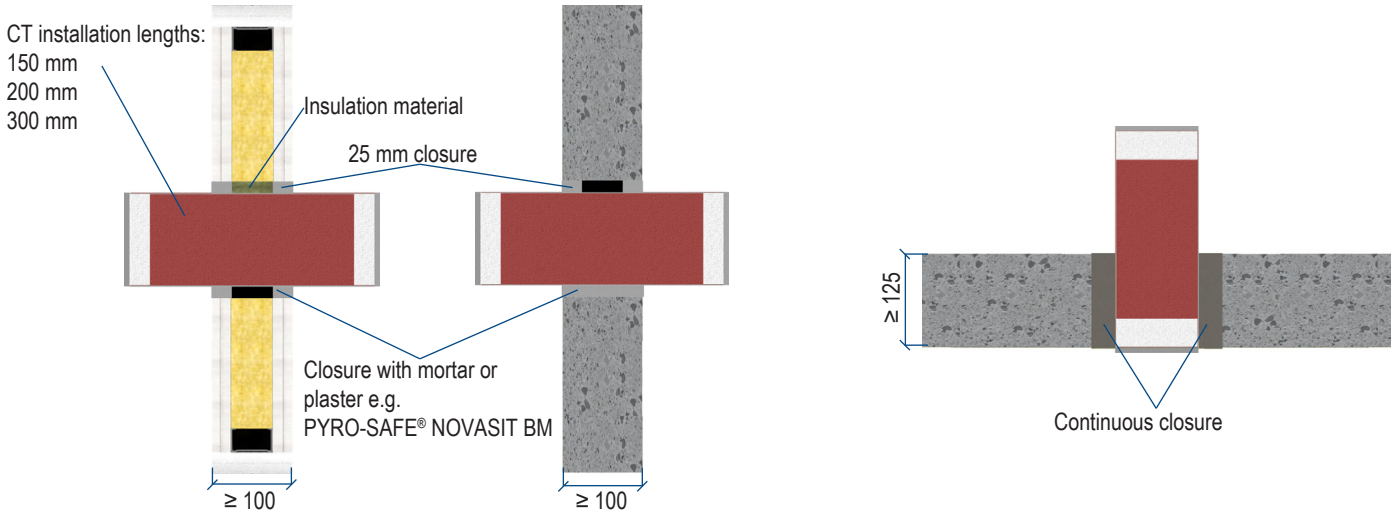
Recommended tools

spatula, brush, crepe tape
mat knife and saw
possibly foil, folding ladder, wire tying pliers, galvanised steel wire

4. Regulations and variants

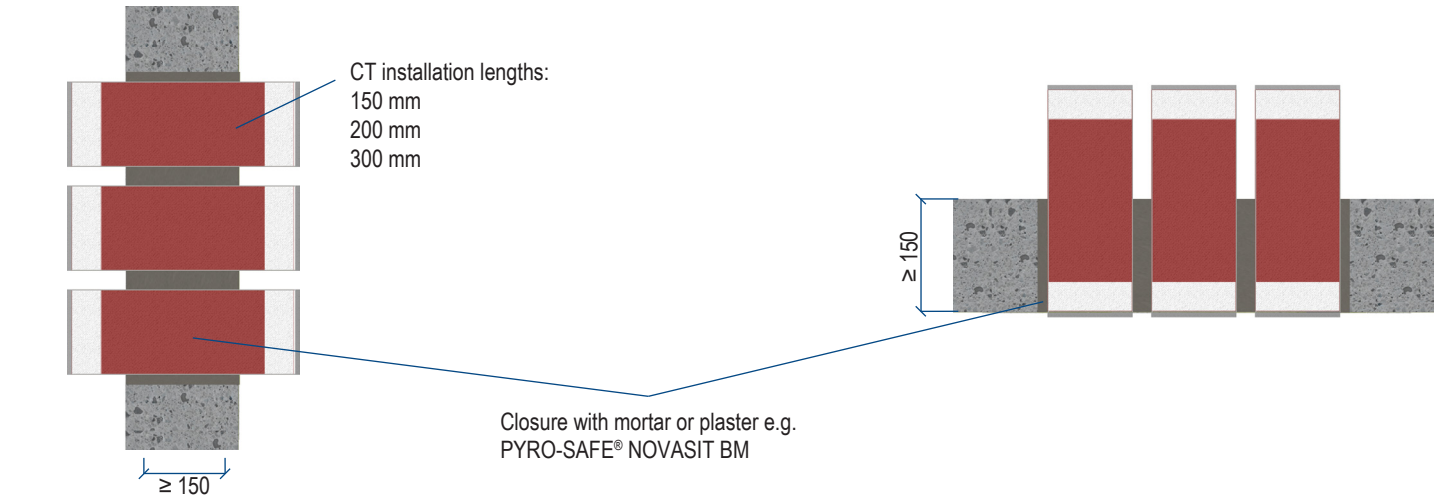
- The Cable Tube may be used to close openings without installations (reserve penetration for subsequent configurations).
- For installation in plasterboard walls with a distance of more than 50 mm between the wall coverings arranged on both sides of the steel substructure, the Cable Tubes must be secured with steel strapping/wires in the space between them.
- When installing electrical conduits in plasterboard walls, the Cable Tubes must additionally be secured on both sides with a steel strapping/wire with a protrusion > 50 mm on each side.
- For floor installation, the Cable Tubes must be installed flush with the underside of the floor and secured against loads/walking on by means of fencing or grating.

Single arrangement design variants



Dimensions in mm

Group arrangement design variants

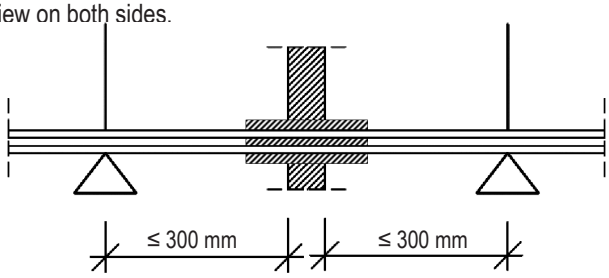


Dimensions in mm

Initial brackets (supports)

- Essential parts of the brackets/supports for the installations in front of the wall penetration sealing system must be non-combustible and must be configured with a spacing as per the overview on both sides.

Initial bracket (support) of the installations in front of the wall penetration sealing system made of steel or equivalent.

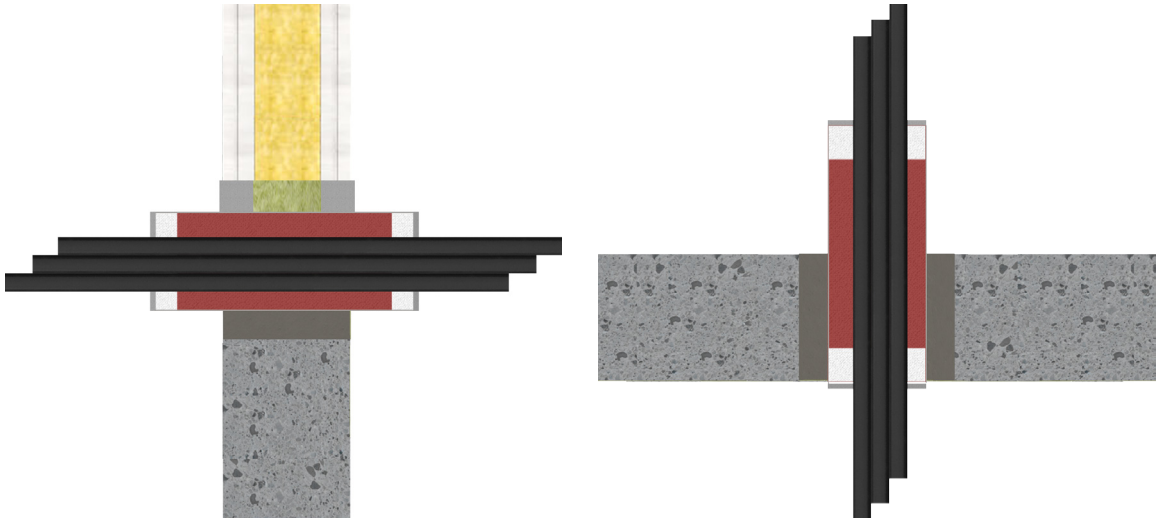


5. Fire protection measures

The fire protection measures described on the following pages also apply to retrofitting.

5.1 Cables / cable bundles

Design for wall and ceiling penetration sealing system



Implementation provisions page 10

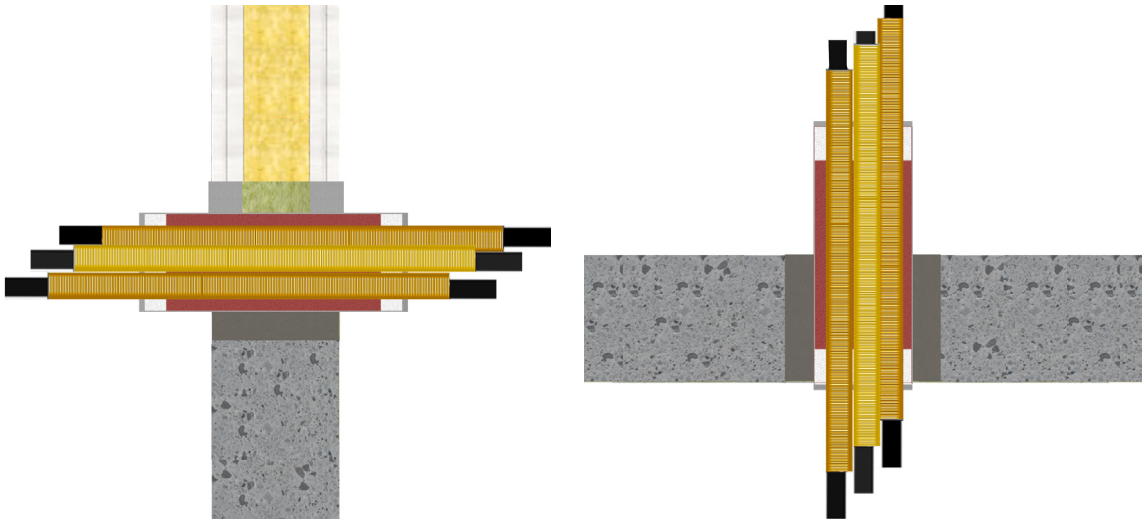
PYRO-SAFE® CT Cable Tube 150	Measure	Fire resistance classess	
		Wall	Floor
Cable Ø ≤ 21 mm	-	**EI 90 / E 120**	**EI 120**
Cable Ø ≤ 50 mm	100% Configuration	**-**	**EI 90 / E 90**
Cable bundle Ø ≤ 107 mm, with cable Ø ≤ 14 mm	-	**EI 90 / E 120**	**EI 120**
Cable bundle Ø ≤ 107 mm, with cable Ø ≤ 21 mm	-	**EI 90 / E 120**	**EI 60 / E 90**
Cable bundle Ø ≤ 107 mm, with cable Ø ≤ 21 mm	PYRO-SAFE® DG-CR 1.5, 1x 1-layer + 50 mm overlap, above and below	**-**	**EI 120**

PYRO-SAFE® CT Cable Tube 200	Measure	Fire resistance classess	
		Wall	Floor
Cable Ø ≤ 21 mm	-	**EI 120**	**EI 120**
Cable Ø ≤ 50 mm	100% Configuration	**-**	**EI 90 / E 90**
Cable bundle Ø ≤ 107 mm, with cable Ø ≤ 14 mm	-	**EI 120**	**EI 120**
Cable bundle Ø ≤ 107 mm, with cable Ø ≤ 21 mm	-	**EI 120**	**EI 60 / E 90**
Cable bundle Ø ≤ 107 mm, with cable Ø ≤ 21 mm	PYRO-SAFE® DG-CR 1.5, 1x 1-layer + 50 mm overlap, above and below	**-**	**EI 120**

PYRO-SAFE® CT Cable Tube 300	Measure	Fire resistance classess	
		Wall	Floor
Cable Ø ≤ 21 mm	-	**EI 120**	**EI 120**
Cable Ø ≤ 50 mm	-	**EI 90 / E 120**	**EI 60 / E 120**
Cable Ø ≤ 50 mm	100% Configuration	**-**	**EI 90 / E 90**
Cable Ø ≤ 50 mm	Lamella mat ≥ 100 mm x ≥ 30 mm + PYRO-SAFE® DG-CR 1.5, 1x 1-layer, above	**-**	**EI 120**
Cable Ø ≤ 80 mm	Only in solid components	**EI 90 / E 120**	**EI 60 / E 120**
Cable bundle Ø ≤ 107 mm, with cable Ø ≤ 21 mm	-	**EI 120**	**EI 120**

5.2 Electrical installation conduits

Design for wall and ceiling penetration sealing system



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PYRO-SAFE® CT Cable Tube 150	Measure	Fire resistance classess	
		Wall	Floor
Conduit Ø ≤ 32 mm with/without cable Ø ≤ 14 mm	Max. 3 pcs.	EI 90 U/U	EI 90 U/U

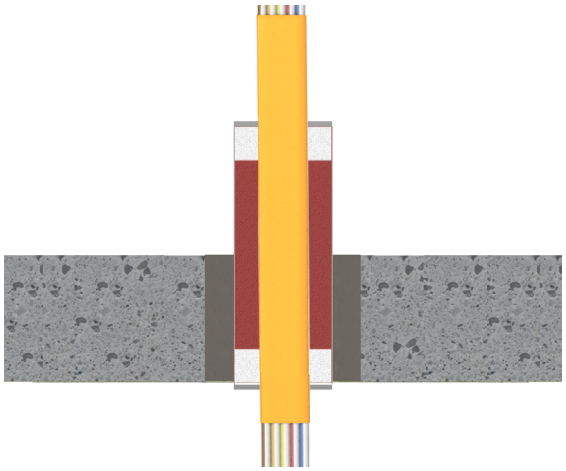
PYRO-SAFE® CT Cable Tube 200	Measure	Fire resistance classess	
		Wall	Floor
Conduit Ø ≤ 32 mm with/without cable Ø ≤ 14 mm	Max. 3 pcs.	EI 120 U/U	EI 90 U/U
Conduit bundle Ø ≤ 107 mm with conduit Ø ≤ 32 mm, with/without cable Ø ≤ 21 mm	-	EI 120 U/U	-

PYRO-SAFE® CT Cable Tube 300	Measure	Fire resistance classess	
		Wall	Floor
Conduit bundle Ø ≤ 107 mm with conduit Ø ≤ 32 mm, with/without cable Ø ≤ 21 mm	Floor ≥ 200 mm*	EI 120 U/U	EI 120 U/U
Conduit Ø ≤ 63 mm with/without cable Ø ≤ 21 mm	-	-	EI 120 U/U

* Instead of the PYRO-SAFE® CT 300, two PYRO-SAFE® CT 150s bound in fabric tape can be used.

5.3 PE lines "speed pipes"

Design with ceiling penetration sealing system



Implementation provisions page 10

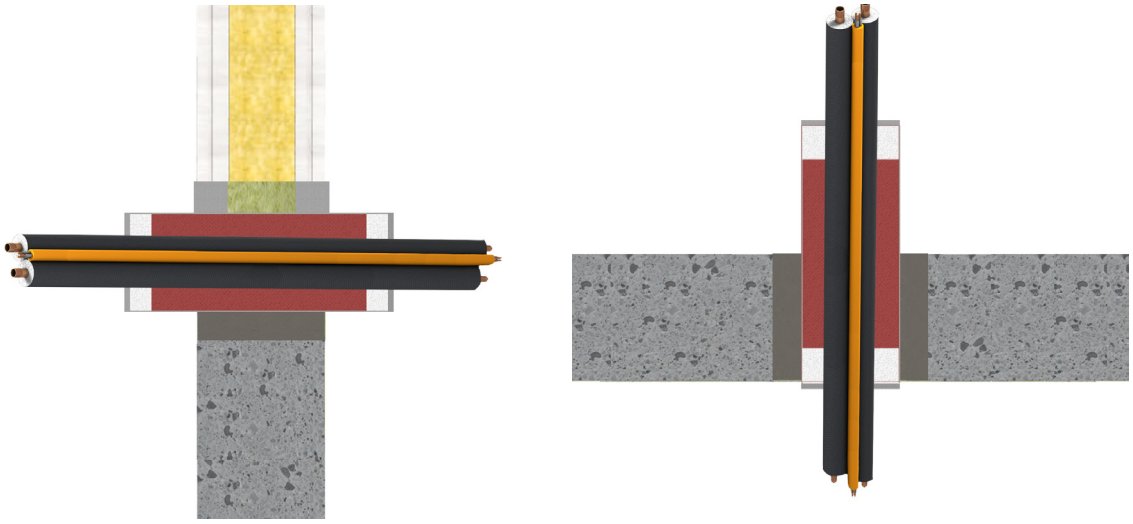
PYRO-SAFE® CT Cable Tube 150	Measure	Fire resistance classess	
		Wall	Floor
Max. 24 pcs. pipe outer Ø ≤ 7 Max. 7 pcs. pipe outer Ø ≤ 10 Max. 5 pcs. pipe outer Ø ≤ 12	-	-	EI 120 U/U

PYRO-SAFE® CT Cable Tube 200	Measure	Fire resistance classess	
		Wall	Floor
Max. 24 pcs. pipe outer Ø ≤ 7 Max. 7 pcs. pipe outer Ø ≤ 10 Max. 5 pcs. pipe outer Ø ≤ 12	-	-	EI 120 U/U

PYRO-SAFE® CT Cable Tube 300	Measure	Fire resistance classess	
		Wall	Floor
Max. 24 pcs. pipe outer Ø ≤ 7 Max. 7 pcs. pipe outer Ø ≤ 10 Max. 5 pcs. pipe outer Ø ≤ 12	-	-	EI 120 U/U

5.4 HVAC split line combinations

Design for wall and ceiling penetration sealing system



Implementation provisions page 10

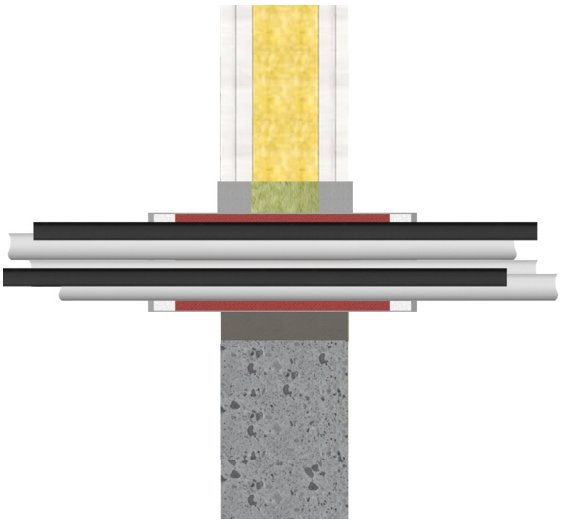
PYRO-SAFE® CT Cable Tube 150	Measure	Fire resistance classess	
		Wall	Floor
Pipe 1/pipe 2 outer-Ø 6-10 mm/ 10-18 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	-	**EI 90 U/U**	**EI 90 U/U**
Pipe 1/pipe 2 outer-Ø 6-22 mm/ 6-22 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	Lamella mat ≥ 250 mm x ≥ 30 mm above	**-**	**EI 120 U/U**

PYRO-SAFE® CT Cable Tube 200	Measure	Fire resistance classess	
		Wall	Floor
Pipe 1/pipe 2 outer-Ø 6-10 mm/ 10-18 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	-	**EI 90 U/U**	**EI 90 U/U**
Pipe 1/pipe 2 outer-Ø 6-22 mm/ 6-22 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	Lamella mat ≥ 250 mm x ≥ 30 mm above	**-**	**EI 120 U/U**

PYRO-SAFE® CT Cable Tube 300	Measure	Fire resistance classess	
		Wall	Floor
Pipe 1/pipe 2 outer-Ø 6-10 mm/ 10-18 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	-	**EI 90 U/U**	**EI 90 U/U**
Pipe 1/pipe 2 outer-Ø 6-22 mm/ 6-22 mm + pipe insulation 9 mm thick made of PE foam + PE-100 outer-Ø ≤ 25 mm, depth 1.5 mm (U/U) + max 3 cables Ø ≤ 14 mm	Lamella mat ≥ 250 mm x ≥ 30 mm above	**-**	**EI 120 U/U**

5.5 Combustible pipes made of PVC-U

Design for wall penetration seal

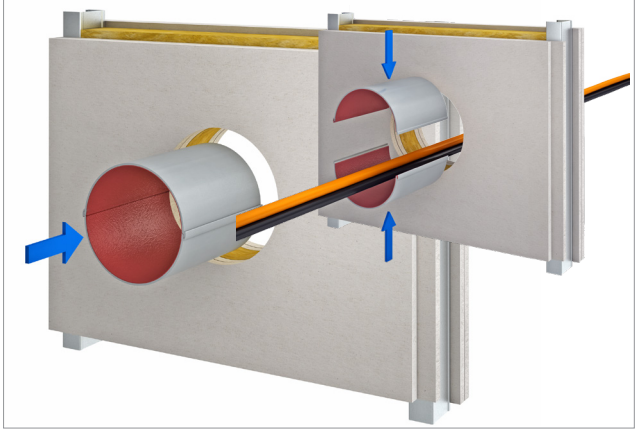


Implementation provisions page 10

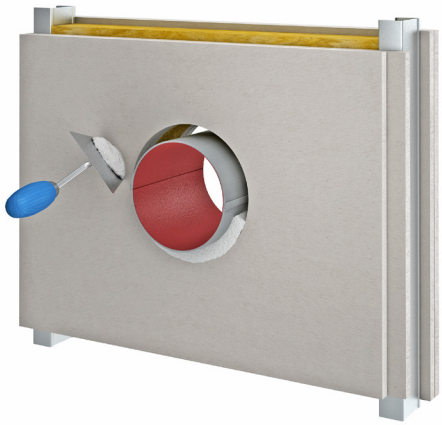
PYRO-SAFE® CT Cable Tube 300	Measure	Fire resistance classess	
		Wall	Floor
2 PVC pipes Ø ≤ 32 mm + 2 PVC pipes Ø ≤ 20 mm + 3 accompanying cables Ø ≤ 14 mm (5 x 1.5 mm²)	-	**EI 120 U/U**	**-**

6. Installation steps

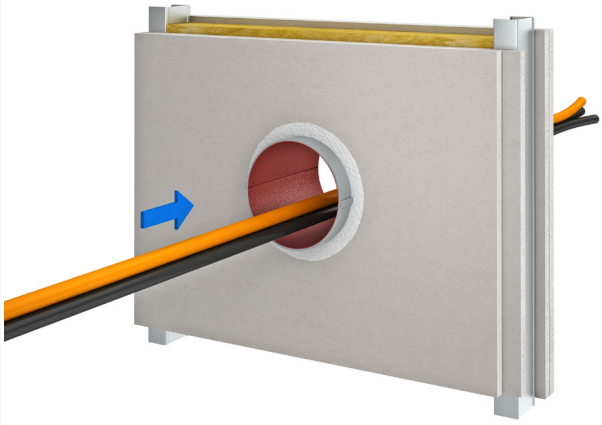
1. Insert the PYRO-SAFE® CT in the centre with the same protrusion on each side or place the half shells around the installations and connect by clicking together.



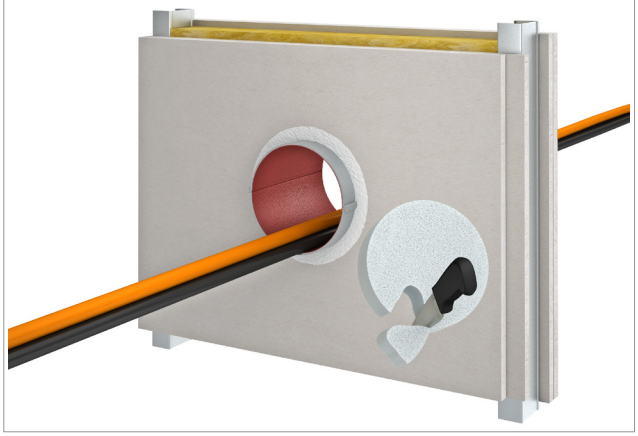
2. Seal annular gap with PYRO-SAFE® NOVASIT BM / K2 or PYRO-SAFE® GFM. In plasterboard walls at a depth of 25 mm on each side, in solid components at full depth.



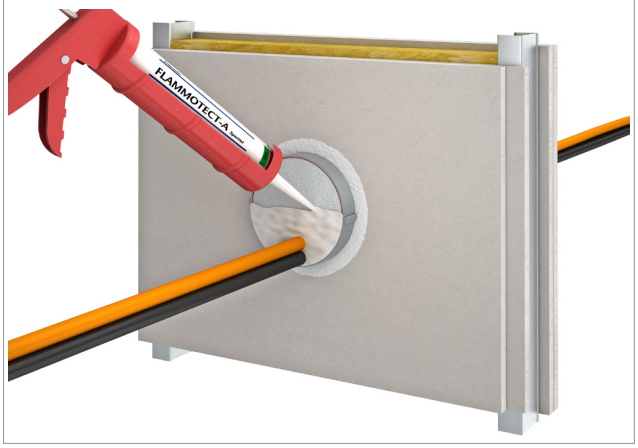
3. Perform installations.



4. Cut plugs to size and fit on both sides.



5. Completely seal plugs at a thickness of ≥ 2 mm (TSD ≥ 1 mm) with PYRO-SAFE® FLAMMOTECT-A.



6. Label penetration if necessary or required.

Declaration of Performance

No. 0128-PYRO-SAFE-CT
PYRO-SAFE® CT/ CT ML Cable Tube

Unique identification code of the product type
PYRO-SAFE® CT/ CT ML Cable Tube

Intended use
Product for cable penetration seal

Manufacturer
svt Brandschutz Vertriebsgesellschaft mbH International,
Gluesinger Strasse 86, D - 21217 Seevetal

System for assessing and verifying constancy of performance
System 1

European Assessment Document
ETAG 026-2:2011

European Technical Assessment
ETA-16/0016 dated 18.01.2016

Cerificate of constancy of performance
0761-CPR-0460

Technical Assessment Body
Deutsches Institut für Bautechnik (DIBt), Berlin

The notified body
Civil Engineering Materials Testing Institute (MPA BS) in Braunschweig, code number 0761

Declared performance

Essential characteristics	Performance	Harmonised technical specifications
Reaction to fire	Classification according to appendix of ETA-16/0016	EN 13501-1
Fire resistance	Depending on the type of installation, the type of building element and the penetrating services, classes EI 30, EI 45, EI 60, EI 90, EI 120 - see ETA-16/0016	EN 13501-2
Emission of dangerous substances	No dangerous substances	ETAG 026-2
Durability and serviceability	Use category type X	EOTA TR 024

The performance of the product identified above is in conformity with the set of declared performances.
This declaration of performance is issued, in accordance with Regulation (EU) No. 305/2011, under the sole responsibility of the manufacturer identified above. DoP online available at www.svt.de
Signed for and on behalf of the manufacturer by:

p.p. Christian Meyer-Korte
Head of Product Management / Private Label

p.p. Andree Schober
Head of chemical department

Protect your values.

Fire protection worldwide

svt Brandschutz Vertriebsgesellschaft mbH International

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