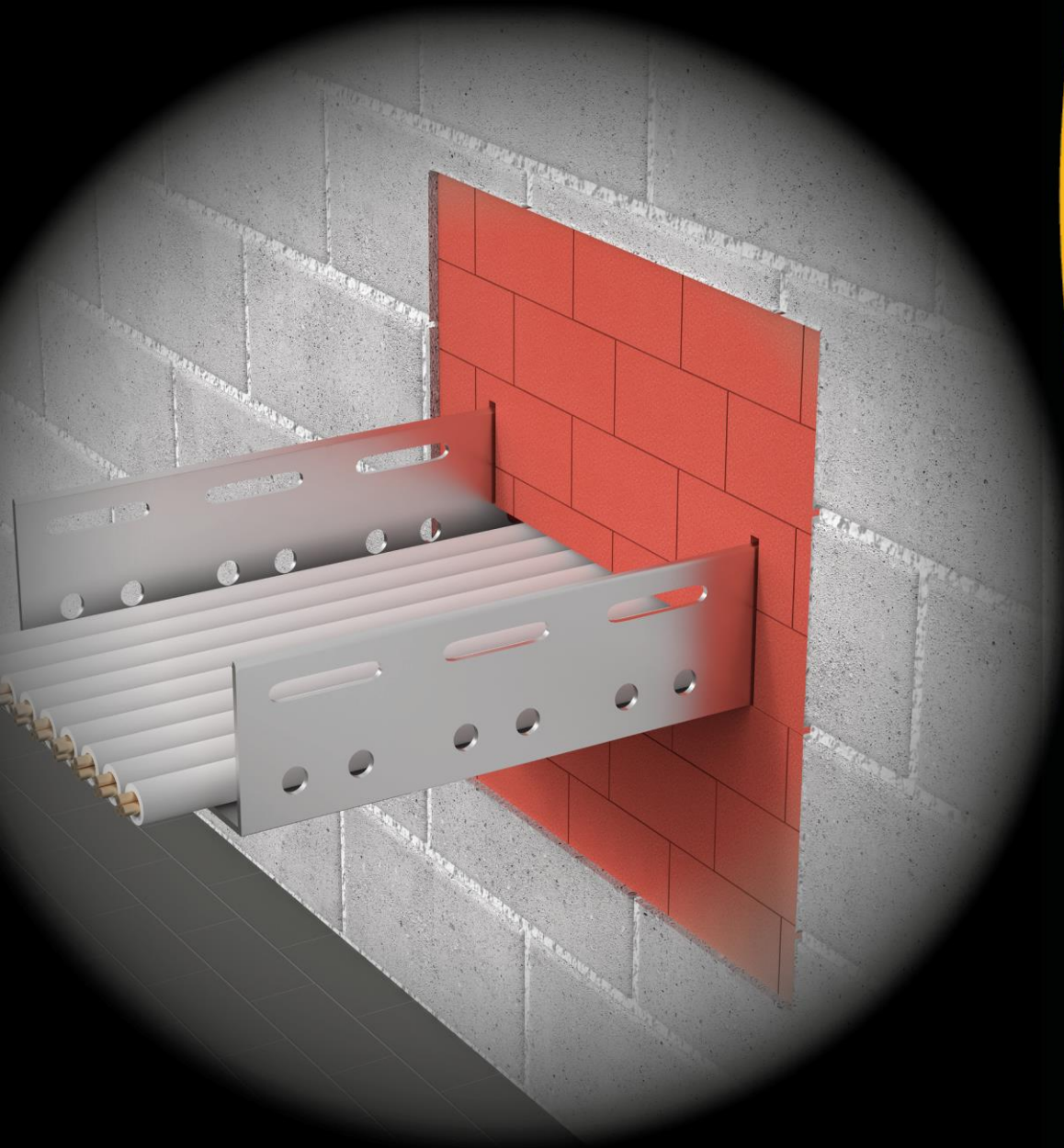


# INTU FR BRICK

*Intumescent fire stop brick*

TDS Technical Data Sheet



**•INTUSEAL®**  
*passive fire protection manufacturer*



[www.intuseal.com](http://www.intuseal.com)

## → PRODUCT DESCRIPTION

Fire protection block **INTU FR BRICK** is made of intumescent polyurethane foam with halogen-free fire safety additives. Intumescent foam close the hole during fire, preventing the spread of fire and smoke.

- fire resistance class up to **EI 120**
- mixed penetration seal
- to medium-sized and large fire protection penetration seals
- penetration seals with frequently changing pass-through installations
- for use in walls and floors

## → APPLICATION

The **INTU FR BRICK** intumescent fire stop brick is intended to be used as mixed penetration seal to temporarily or permanently reinstate the fire resistance performance of flexible wall, rigid wall and rigid floor construction where they have been provided, with apertures which are penetrated by various cables, waveguides, conduits / tubes, metal pipes, plastic pipes and cable support constructions (perforated or non-perforated steel cable trays and steel ladders).

### Rigid walls:

The wall must be 100 mm minimum thickness. Must have concrete, aerated concrete, cellular concrete, reinforced concrete or masonry structure, with min. density  $\rho \geq 450 \text{ kg/m}^3$ .

### Rigid floors:

The floor must be 150 mm minimum thickness. Must have concrete, aerated concrete, cellular concrete, reinforced concrete or masonry structure, with min. density  $\rho \geq 450 \text{ kg/m}^3$ .

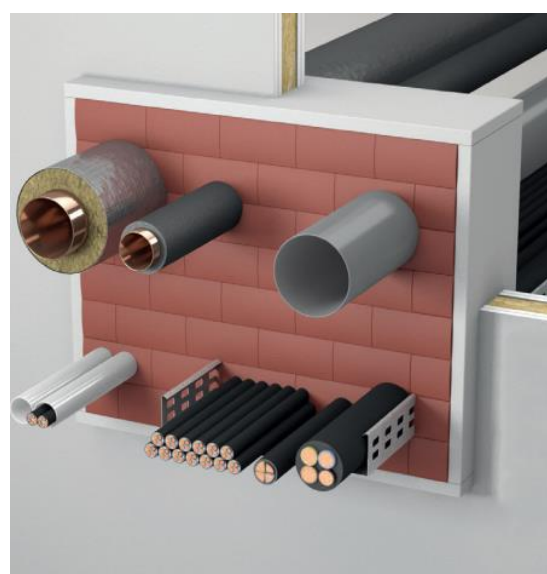
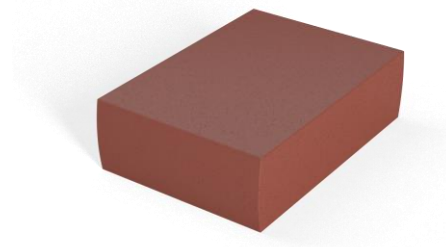
### Flexible walls:

The wall must be minimum thickness 94 mm. Must have steel or timbers profile structure covered on both sides with minimum 2 layers of boards with minimum thickness 12,5 mm or minimum one layer of boards (minimum thickness 25 mm) with classification.

- For timber stud walls there shall be a minimum distance of 100 mm of the penetration seal to any timber stud. This cavity between the penetration seal and the timber stud has to be closed with insulation.

## → AVAILABILITY

Product	Type	Unit	Pallet (pcs)	Article number
INTU FR BRICK	200x144x60 mm	BOX (18pcs)	450 (25xBOX)	INFBRK



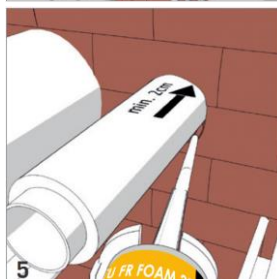
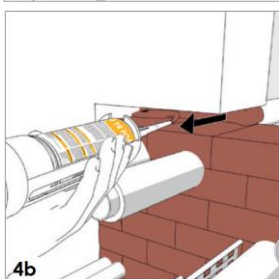
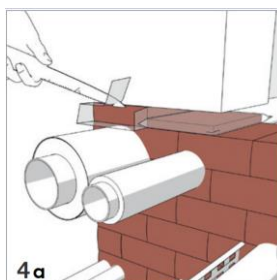
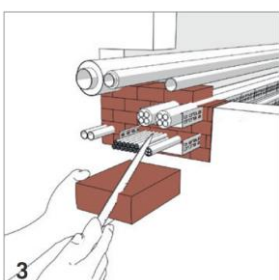
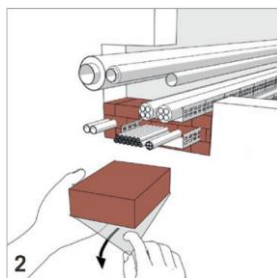
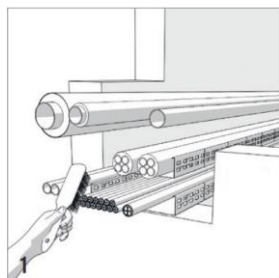
## → TRANSPORT AND STORAGE

Store in dry and cool conditions at temperatures between + 5°C and + 25°C.

## → COMPLIANCE

- ETA-10/0431, OIB
- ETA-11/0206, OIB
- CE Certificate of Conformity 0761-CPR-0208
- DoPZZ230-20180701
- TDS
- SDS

## → INSTALLATION METHOD



1. Clean the component opening.
2. Remove the protective foil of the **INTU FR BRICK** and install them in layers (like in a brick bond in masonry, i.e. layer-by-layer offset of the vertical butt joints) so that they fit tightly in the component opening.
3. In the area of penetrating elements, cut the **INTU FR BRICK** to the required size.

Narrow residual openings can be sealed with:

- **4a.** The **INTU FR BRICK** vacuum packed. Place the **INTU FR BRICK** vacuum packed unopened in the opening. After cutting open the foil the **INTU FR BRICK** expands to the standard size. The foil can remain inside the penetration seal, however it must be removed on both sides so that it is flush with the surface of the penetration seal.
- **4b.** The **INTU FR FOAM 2K**. The fill depth must equal the minimum seal thickness. The maximum area that may be filled with **INTU FR FOAM 2K** is 450 mm x 500 mm (width x height).

5. Interstices between cables and open joints must be filled with fire protection sealant e.g. **INTU FR MASTIC** 20 mm deep on both sides. But joints and horizontal joints between **INTU FR BRICK** and between the edge of the aperture and **INTU FR BRICK** do not need to be filled.

## → TECHNICAL DATA

Table 1 Properties of the **INTU FR BRICK** fire protection block

Colour	Red / brown*
Shelf life	12 months in unopened packaging at a temperature between 5°C and 30°C
Transportation storage temp.	+5 °C to +30 °C (store dry and dustfree in the original packaging)
Application temperature	+15 °C to +30 °C (optimally +20 °C tot +25 °C)
Temperature resistance	-20 °C to +80 °C
Cutability	Direct
VOC	< 2 µg/m³
Density	$\rho = 240 \text{ kg/m}^3 - 300 \text{ kg/m}^3$
Thermal conductivity ( $\lambda$ )	0,103 W/(m*K)
Expansion pressure	No expansion pressure measurable
Expansion factor <sup>1)</sup>	from 1.6 x to 4.5 x
Category of use <sup>2)</sup>	Type Z <sub>1</sub> in accordance with EAD 350454-00-1104
Possibility of coat	Yes
Air permeability	<ul style="list-style-type: none"> <li>• <math>Q_{50} \leq 0.82 \text{ m}^3/(\text{h} \cdot \text{m}^2) / Q_{600} = 6.61 \text{ m}^3/(\text{h} \cdot \text{m}^2)</math> (Tested measurement: 550 x 355 x 200 mm tested without penetrations)</li> </ul>

Table 2 The opening size of fire penetration seal

Partition		Penetration seal parameters		
Class minutes		EI 60	EI 120	Height H [mm]
Type	Thick. [mm]	Width W [mm]		
		For seal thick. b=144mm	For seal thick. b=200mm	
Rigid wall	b ≥ 100	600		1000
		1000		600
Partition		Penetration seal parameters		
Rigid floor	b ≥ 150	unlimited	unlimited	≤ 375
		6000	unlimited	400
		2250	4800	450
		1000	1300	600
		---	1000	700
Partition		Penetration seal parameters		
Flexible wall	b ≥ 94	600		1000
		1000		600



	<ul style="list-style-type: none"> <li>Q50 = 1.12 m³/(h*m²)/Q600 = 7.65 m³/(h*m²) (Tested measurement: 560 x 360 x 144 mm tested without penetrations) in accordance with test standard EN 1026</li> </ul>
<b>Resistance to static pressure differences</b>	<ul style="list-style-type: none"> <li>Pmax = 3700 Pa (Test part dimensions 550 x 355 x 200 mm, tested without penetration)</li> <li>Pmax = 2100 Pa (Test part dimensions 560 x 360 x 144 mm, tested without penetration) in accordance with test standard EN 12211</li> </ul>
<b>Acoustic properties</b>	RW 45 dB (test dimension 350 x 350 x 144 mm) RW 49 dB (test dimension 360 x 360 x 200 mm)
<b>Fire class</b>	E in accordance with EN 13501-1
<b>Approvals</b>	ETA-10/0431 and ETA-11/0206
<b>Function retention</b>	10 years

<sup>1)</sup> Expansion factor tested on samples at 450 °C for 25 minutes with overload. The expansion factor is a laboratory characteristic value.

The expansion factor in an installed state depends on the existing preconditions.

<sup>2)</sup> Permissible environmental conditions. Conduit seal for use in conditions with ≥ 85% RH, protected from temperatures below 0 °C, and without exposure to rain and/or UV.

➔ **FIRE RESISTANCE CLASSIFICATION** for cable penetration seals (opening size 270 mm x 270 mm or Ø300 mm)

Penetrating element		Fire classification			
		Depth of foam injection b			
		b ≥ 100 mm		b ≥ 144 mm	
CABLES	Diameter Ø (mm)	Wall	Floor	Wall	Floor
Sheathed electrical/ telecommunication/ optical fibre cables	Ø ≤ 21	EI 60 / E 120		EI 120	EI 90/ E 120
	21 < Ø ≤ 50	EI 45 /EI 60 <sup>(1)</sup> / E 120	-	EI 60 / E 120	
	50 < Ø ≤ 80	-			
Tied bundles up to 100 mm overall diameter containing sheathed electrical/ telecommunication/ optical fibre cables	Ø <sub>BUNDLE</sub> ≤ 100 Ø <sub>CABLE</sub> ≤ 21				
Steel conduits / tubes with / without cables	Ø ≤ 16			EI 60 – U/C / E 120 – U/C	
Plastic conduits with / without cables	Ø ≤ 16			EI 120 – U/C	
Plastic conduits and bundles consisting of plastic conduits with / without cables	Ø <sub>BUNDLE</sub> ≤ 80 Ø <sub>CONDUIT</sub> ≤ 40				
	Ø <sub>BUNDLE</sub> ≤ 100 Ø <sub>CONDUIT</sub> ≤ 63				
	Speed•pipe® and bundles consisting of speed•pipe® with / without optical fibre cables	Ø <sub>BUNDLE</sub> ≤ 80 Ø <sub>PIPE</sub> ≤ 12	EI 120 – U/C	EI 90 – U/C	

<sup>1)</sup> To obtain selected fire resistance class you need use **INTU FR FOAM** around the installation on both sides, minimum dimensions of 30 mm x 20 mm (length x thickness)

Penetrating element		Fire classification			
		Depth of foam injection b			
		b ≥ 200 mm		b ≥ 250 mm	
CABLES	Diameter Ø (mm)	Wall	Floor	Wall	Floor
Sheathed electrical/ telecommunication/ optical fibre cables	Ø ≤ 21	EI 120		EI 120	
	21 < Ø ≤ 50	EI 90 / EI 120 <sup>2)</sup> / E 120			
	50 < Ø ≤ 80			EI 90 / E 120	
Tied bundles up to 100 mm overall diameter containing sheathed electrical/ telecommunication/ optical fibre cables	Ø <sub>BUNDLE</sub> ≤ 100 Ø <sub>CABLE</sub> ≤ 21	EI 90 / E 120	EI 90/ EI 120 <sup>2)</sup> / E 120	EI 90 / E 120	EI 120
Steel conduits / tubes with / without cables	Ø ≤ 16	EI 120 – U/U	EI 90 – U/U E 120 – U/U	EI 120 – U/U	

<sup>2)</sup> To obtain selected fire resistance class you need wrap the installation with **INTU FR BANDAGE** on both sides of the wall or floor

➔ **FIRE RESISTANCE CLASSIFICATION** for mixed penetration seals

Type of penetrating element			Fire resistance classification	
CABLES			Foam injection depth $b \geq 144$	Foam injection depth $b \geq 200$ mm
Sheathed electrical/ telecommunication/ optical fiber cables up to a max. outer diameter	$\varnothing \leq 21$ mm		EI 60	EI 90 / EI 120 <sup>(1)</sup>
	$\varnothing \leq 50$ mm		EI 60	wall: EI 90 / EI 120 <sup>(1)</sup> floor: EI 90 / EI 120 <sup>(1)</sup>
	$\varnothing \leq 80$ mm		EI 60	EI 120 <sup>(1)</sup> / E 120
Tied bundles containing sheathed electrical / telecommunication / optical fibre cables up to a max. outer diameter	$\varnothing_{\text{BUNDLE}} \leq 100$ mm $\varnothing_{\text{CABLE}} \leq 21$ mm		EI 60	EI 90 / EI 120 <sup>(1)</sup>
Non-sheathed cables up to a max. outer diameter	$\varnothing_{\text{CABLE}} \leq 24$ mm		wall: EI 45 / E60 floor: EI 60	EI 60 / E 120
Waveguides	CELLFLEX®:	$\varnothing \leq 59,9$ mm	-	EI 120 – U/C
	CELLFLEX® Lite:	$\varnothing \leq 50,2$ mm		
	RADIAFLEX®:	$\varnothing \leq 48,2$ mm		
	HELIAX®:	$\varnothing \leq 51,1$ mm		
	RADIAX®:	$\varnothing \leq 49,8$ mm		

\* The **INTU FR BANDAGE** must be applied on both surfaces of wall or floor

Type of penetrating element						Fire resistance
PRE-INSULATED METAL PIPES			Insulation type	Insulation thickness (mm)	Additional product: INTU FR BANDAGE	Foam injection depth b ≥ 200 mm
Type of pipe	Outer diameter of pipe (mm)	Pipe wall				
WICU®Eco	12,0	1,0	PUR	11,0	Wall: one layer on both sides of the penetration seal (length* ≥ 150 mm, nominal thickness 3 mm)  Floor: one layer on the top side of the penetration seal	EI 90 – C/U
	15,0			11,5		
	18,0			12,0		
	22,0			12,5		
	28,0	1,5		17,5		
	35,0			18,0		
	42,0			24,0		
	54,0			27,5		
	WICU®Flex	12,0; 15,0; 18,0; 22,0		1,0		
WICU®Frio	6,0	1,0	PE	8,0	EI 120 – C/U	
	10,0; 12,0; 15,0; 18,0; 22,0			10,0		
WICU®Clim	6,35	0,762	PE	6,0		
	9,52	0,813		8,0		
	12,70	0,813		10,0		
	15,87	0,889				
	19,05	0,889				
	22,22	0,889				
Tubolit® Split /Tubolit® DuoSplit	6,35; 9,52; 12,70	0,8	PE	9,0		-
	15,88; 19,05; 22,22	1,0				

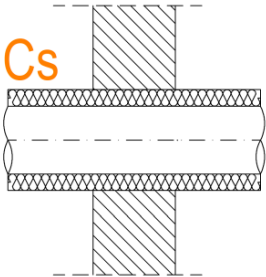
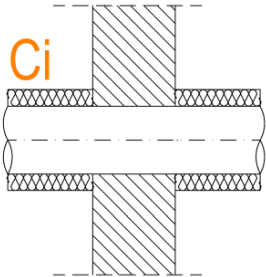
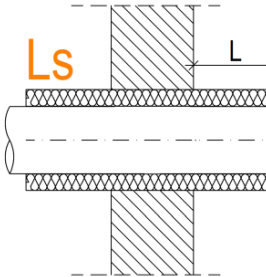
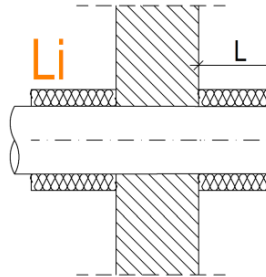
\*Measured from the surface of the penetration seal

Type of penetrating element			Fire resistance classification	
CONDUITS / TUBES		Pipe wall thickness	Foam injection depth b ≥ 144 mm	Foam injection depth b ≥ 200 mm
Steel conduits tubes up to a max. outer diameter (with / without cables)	Ø ≤ 16 mm	≥ 1,5 mm	EI 60 – U/C	wall: EI 90 – U/C; E I20 – U/C floor: EI 90 – U/C
Plastic conduits with / without cables	Ø ≤ 63 mm	1,0 – 3,0 mm		EI 120 – U/C
Bundles consisting of plastic conduits with / without cables ØPIPE ≤ 63 mm	ØBUNDLE ≤ 80 mm			EI 120 – U/C
	ØBUNDLE ≤ 100 mm			wall: EI 90 – U/C; E 120 – U/C floor: EI 90 – U/C
Speed•pipe®	Ø ≤ 12 mm	0,75 - 2,0 mm		
Bundles consisting of speed•pipe® with / without optical fibre cables	ØBUNDLE ≤ 80 mm ØPIPE ≤ 12 mm			
NON-INSULATED METAL PIPES		Pipe wall thickness	Foam injection depth b ≥ 144 mm	Foam injection depth b ≥ 200 mm
Copper pipes	Ø ≤ 18 mm	1,0 – 14,2 mm	EI 60 – C/U	EI 60 – C/U E 120 – C/U
Steel pipes	Ø ≤ 35 mm	1,0 – 14,2 mm		wall: EI 90 – C/U; E 120 – C/U floor: EI 90 – C/U
PLASTIC PIPES / TUBES		Pipe wall thickness	Foam injection depth b ≥ 144 mm	Foam injection depth b ≥ 200 mm
Plastic pipes	Ø ≤ 50 mm	1,8 – 5,6 mm	EI 60 – U/C	EI 120 – U/C

Table 3 Minimum working clearance depending on penetrating element

Minimum working clearance				
Penetrating element	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	
Cables/Waveguides/Cable trays/Conduits (incl. speed•pipe®)	50 mm	0 mm	<ul style="list-style-type: none"> <li>Cables/Waveguides/Cable trays/Conduits</li> <li>Cable trays (vertical)</li> <li>Non-insulated metal pipes</li> <li>Other penetrating elements</li> </ul>	0 mm 50 mm 60 mm 50 mm
Mineral wool	0 mm	0 mm	<ul style="list-style-type: none"> <li>Mineral wool insulated metal pipes</li> <li>Plastic pipes with pipe collar</li> <li>Non-insulated metal pipes</li> <li>Other penetrating elements</li> </ul>	0 mm 0 mm 60 mm 50 mm
Foamglas®-PSH insulated metal pipes	0 mm	0 mm	<ul style="list-style-type: none"> <li>Foamglas®-PSH insulated metal pipes</li> <li>Non-insulated metal pipes</li> <li>Other penetrating elements</li> </ul>	0 mm 60 mm 50 mm
AF/Armaflex insulated metal pipes	35 mm	35 mm	<ul style="list-style-type: none"> <li>AF/Armaflex (thickness &gt; 9 mm) insulated metal pipes</li> <li>AF/Armaflex (thickness = 9 mm) insulated metal pipes</li> <li>Non-insulated metal pipes</li> <li>Other penetrating elements</li> </ul>	35 mm 50 mm 60 mm 50 mm
Non-insulated metal pipes	35 mm	35 mm	<ul style="list-style-type: none"> <li>Non-insulated metal pipes</li> <li>Other penetrating elements</li> </ul>	60 mm 60 mm
Pre-insulated metal pipes	0 mm	0 mm	<ul style="list-style-type: none"> <li>Pre-insulated metal pipes</li> <li>Non-insulated metal pipes</li> <li>Other penetrating elements</li> </ul>	0 mm 60 mm 50 mm
Plastic pipes (without pipe collar)	50 mm	50 mm	<ul style="list-style-type: none"> <li>Plastic pipes (without pipe collar)</li> <li>Non-insulated metal pipes</li> <li>Other penetrating elements</li> </ul>	50 mm 60 mm 50 mm
Plastic pipes (with pipe collar)	50 mm*	50 mm*	<ul style="list-style-type: none"> <li>Plastic pipes (with pipe collar)</li> <li>Mineral wool insulated metal pipes</li> <li>Non-insulated metal pipes</li> <li>Other penetrating elements</li> </ul>	0 mm 0 mm 60 mm 50 mm

\*Measured from the surface of the pipe

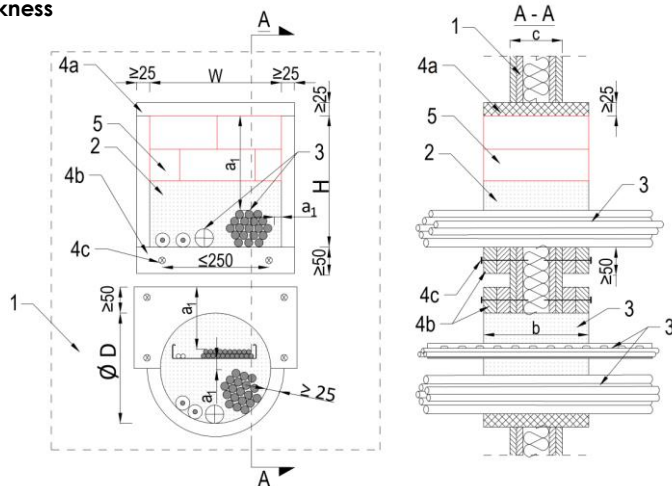
Pipe insulation configuration			
Continuous		Local	
			
Continued sustained	Continued interrupted	Local sustained	Local interrupted

Type of penetrating element				Fire resistance classification		
MINERAL WOOL INSULATED METAL PIPES Density of mineral wool $\rho \geq 90 \text{ kg / m}^3$		Pipe wall thickness (mm)	Insulation* length (mm)	Insulation thickness [mm]	Foam inj. depth $b \geq 144 \text{ mm}$	Foam injection depth $b \geq 200 \text{ mm}$
Metal pipes with mineral wool insulation	$\varnothing \leq 35,0 \text{ mm}$	1,0 – 14,2	(insulation configuration: Ls, Cs, Li, Ci) $L \geq 428$	$\geq 30$	EI 60 – C/U	wall: EI 90 – C/U; E 120 – C/U floor: EI 120 – C/U
	$\varnothing \leq 54,0 \text{ mm}$					
	$\varnothing \leq 88,9 \text{ mm}$		(Ls, Cs, Li, Ci) $\geq 528$	$\geq 30$		
Metal pipes with mineral wool insulation	$\varnothing \leq 168,3 \text{ mm}$		(Ls, Cs, Li, Ci)  $\geq 596$	$\geq 50$		wall: EI 120 – C/U floor: EI 90 – C/U
AF/Armaflex INSULATED METAL PIPES		Pipe wall thickness (mm)	Insulation length (mm)	Insulation thickness [mm]	Foam inj. depth $b \geq 144 \text{ mm}$	Foam injection depth $b \geq 200 \text{ mm}$
Metal pipes with AF/Armaflex insulation	$\varnothing \leq 35,0 \text{ mm}$	1,0 – 14,2	(insulation config. Ls, Cs):  $\geq 500$	9,0 – 35,0	EI 60 – C/U	EI 90 – C/U
	$\varnothing \leq 42,0 \text{ mm}$	1,5 – 14,2		9,0 – 36,5		
	$\varnothing \leq 54,0 \text{ mm}$	2,0 – 14,2		9,0 – 38,0		
	$\varnothing \leq 88,9 \text{ mm}$			41,5		
Foamglas® - PSH		Pipe wall thickness (mm)	Insulation length (mm)	Insulation thickness [mm]	Foam inj. depth $b \geq 144 \text{ mm}$	Foam injection depth $b \geq 200 \text{ mm}$
Foamglas® - PSH insulated metal pipes	$\varnothing \leq 28,0 \text{ mm}$	1,0 – 14,2	(insulation config. Ls, Cs)  $\geq 500$	25,0 – 50,0	-	EI 120 – C/U
	$\varnothing \leq 54,0 \text{ mm}$			25,0 – 50,0		wall: EI 90 – C/U; E 120 – C/U floor: EI 120 – C/U
				50,0		EI 120 – C/U
	$\varnothing \leq 88,9 \text{ mm}$	1,0 – 14,2		40,0		wall: EI 120 – C/U floor: EI 90 – C/U; E 120 – C/U

## → SOLUTION DETAILS

### FLEXIBLE WALLS with thickness $c \geq 94$ mm

Fig. 1 Cable penetration seal in a flexible wall - detail with increased wall thickness

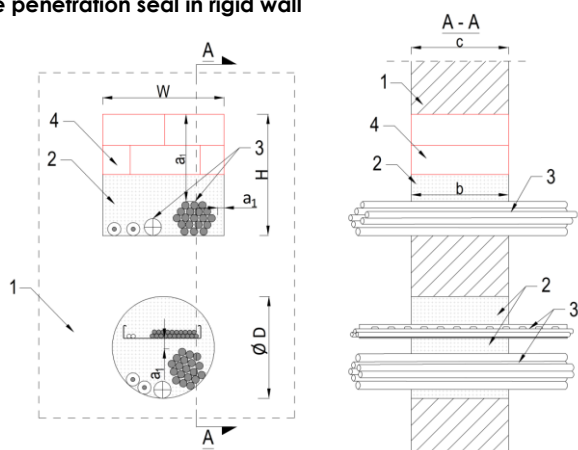


1. Flexible wall,  $c \geq 94$  mm
2. Filling with **INTU FR FOAM 2K**  
\* **INTU FR FOAM 2K** and **INTU FR BRICK** can be used interchangeably
3. Cable / cable bundles / cables in trays / mixed penetration seals
- 4a. Facing made of two layers of gypsum board (min. thickness  $2 \times 12.5$  mm) or silicate board (min. thickness 25 mm)
- 4b. Increasing the wall thickness on one / both sides to at least the min. thickness of the penetration seal (installation of the board around the opening, board width  $\geq 50$  mm)
- 4c. Fixing with screws to plaster/ silicate boards
5. Filling with **INTU FR BRICK**

Minimum mounting distance:  
 $a_1 \geq 0$  mm

### RIGID WALLS with thickness $c \geq 100$ mm

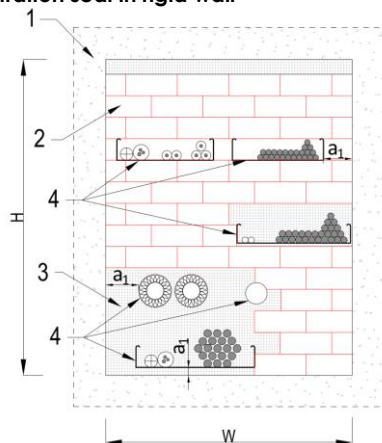
Fig.2 Cable penetration seal in rigid wall



1. Rigid wall with thickness  $c \geq 100$  mm
2. Filling with **INTU FR FOAM 2K**  
\* **INTU FR FOAM 2K** and **INTU FR BRICK** can be used interchangeably
3. Cable / cable bundles / cables in trays / mixed penetration seals
4. Filling with **INTU FR BRICK**

Minimum mounting distance:  
 $a_1 \geq 0$  mm

Fig.3 Mixed penetration seal in rigid wall



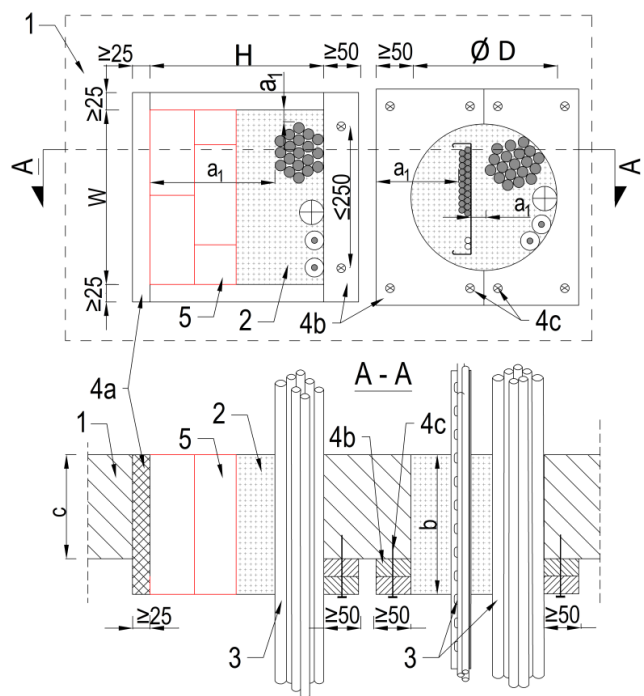
1. Rigid wall with thickness  $c \geq 100$  mm
2. Filling with **INTU FR BRICK**
3. Filling with **INTU FR FOAM 2K**  
\* **INTU FR FOAM 2K** and **INTU FR BRICK** can be used interchangeably
4. Cable / cable bundles / cables in trays / mixed penetration seals

Minimum mounting distance:  
 $a_1 \geq 0$  mm



**RIGID FLOOR with thickness  $c \geq 150$  mm**

**Fig.4 Cable penetration seal in floor - detail with increased floor thickness**

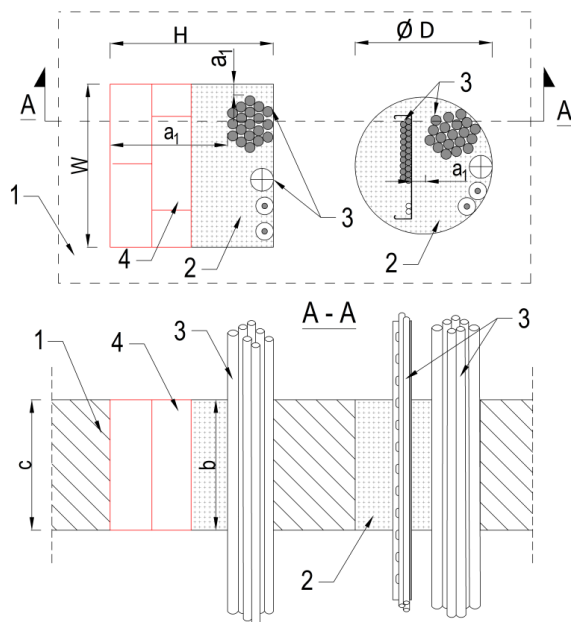


1. Rigid floor with thickness  $c \geq 100$  mm
2. Filling with **INTU FR FOAM 2K**  
\* **INTU FR FOAM 2K** and **INTU FR BRICK** can be used interchangeably
3. Cable / cable bundles / cables in trays / mixed penetration seals
- 4a. Facing made of two layers of gypsum board (min. thickness  $2 \times 12.5$  mm) or silicate board (min. thickness 25 mm)
- 4b. Increasing the wall thickness on one / both sides to at least the min. thickness of the penetration seal (installation of the board around the opening, board width  $\geq 50$  mm)
- 4c. Fixing with screws to plaster/ silicate boards
5. Filling with **INTU FR BRICK**

Minimum mounting distance:

$a_1 \geq 0$  mm

**Fig.5 Cable penetration seal in floor**

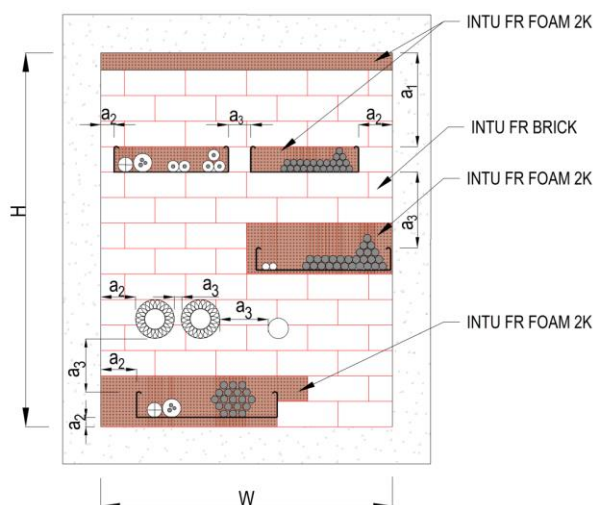


1. Rigid floor with thickness  $c \geq 100$  mm
2. Filling with **INTU FR FOAM 2K**  
\* **INTU FR FOAM 2K** and **INTU FR BRICK** can be used interchangeably
3. Cable / cable bundles / cables in trays / mixed penetration
4. Filling with **INTU FR BRICK**

Minimum mounting distance:

$a_1 \geq 0$  mm

## Example of use INTU FR BRICK in penetration seal



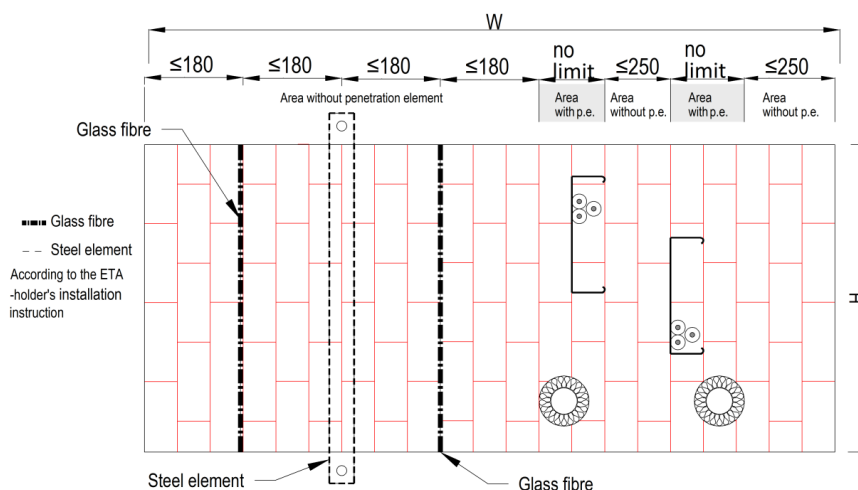
Minimum working clearances in accordance with Table 3

**a<sub>1</sub>**-penetrating element / top edge of penetration seal

**a<sub>2</sub>**-penetrating element /side or lower edge of penetration seal

**a<sub>3</sub>**-penetrating element / penetrating element

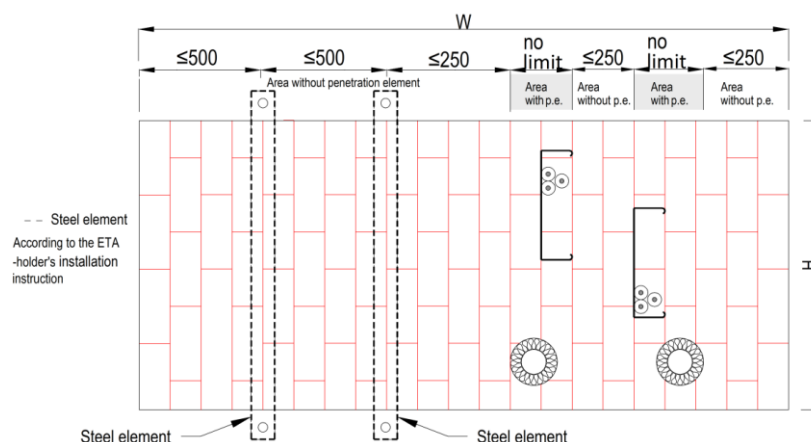
## Support for penetrations through Rigid Floors ≥ 150 mm



Top view:

Installation of glass fibre or steel element **for b = 144 mm**

In case of installation in floor openings free areas (without any elements penetrating the penetration seal) have to be supported with steel element (minimum width of 40 mm and minimum thickness of 2 mm) on the bottom side of the floor. Alternatively it is possible to install a glass fabric according to the ETA-holder's installation instruction every 180 mm between INTU FR BRICK (width of glass fabric ≥ b).



Top view:

Installation of steel elements **for b = 200 mm**

In case of installation in floor openings free areas (without any elements penetrating the penetration seal) have to be supported with steel element (minimum width of 40 mm and minimum thickness of 2 mm) on the bottom side of the floor. Alternatively it is possible to install a glass fabric according to the ETA-holder's installation instruction every 180 mm between INTU FR BRICK (width of glass fabric ≥ b).