

INTU FR COAT A

Fire rated ablative coat

TDS Technical Data Sheet



INTUSEAL®
passive fire protection manufacturer

CE



www.intuseal.com

→ PRODUCT DESCRIPTION

Firestop ablative paint **INTU FR COAT A** is a one-component product designed for sealing fire protection penetrations and expansion joints with fire resistance class up to **EI 240**. Under fire conditions and the influence of high temperature, endothermic reactions take place in the product. The paint absorbs heat to a large extent, delaying the impact of fire on structural elements. The product is used in combination with a mineral wool board with a density of min. 150kg/m³ and a minimum thickness of 60mm for penetration seals and with density of min. 50kg/m³ for linear joint. The ready-made/painted firestop boards **INTU FR BOARD A** are also available for sale.

→ APPLICATION

INTU FR COAT A is designed for:

- fire protection of penetrations with single non-flammable pipes or groups of non-flammable pipes in floors or walls
- protection of expansion joints in floors or walls
- fire protection of electric cables combined with intumescent paint

INTU FR COAT I in walls

Rigid walls: The wall must be at least 150mm thick and have concrete, cellular concrete structure or masonry structure, with a minimum density of 600kg/m³

Rigid floors: The floor must be at least 150mm thick and have concrete, cellular concrete structure or masonry structure, with a minimum density of 1700kg/m³

→ INSTALLATION METHOD

- Prior to sealing, clean the surfaces of the hole and system components from grease and other contaminants thoroughly.
- Cut the mineral wool board with a density of min 150kg/m³ to the correct size. In the case of linear joint put loose mineral wool density of min. 50kg/m³ or mineral wool board in gap of 100mm depth.
- Place the wool board in the hole/gap.

In the case of non-flammable pipes:

- a) mineral wool insulation with a density of min 37kg/m³ should be placed (for exact parameters see Table 1)
- b) cover a mineral wool board and a part of the insulation with **INTU FR COAT A** according to the guidelines in the drawings.

In the case of expansion joints, cover the mineral wool board with **INTU FR COAT A** ablative paint on one side of the partition. Prepare a partition overlap min 5mm.

Approximate consumption of **INTU FR COAT A** for painting a mineral wool boards: 1,7 kg/m² – for a dry film thickness of 1mm.

→ COMPLIANCE

- Reference standard:
penetration seals: EN 1366-3 / ETAG 026-2 / EAD 350454-00-1104
linear joint seals: EN 1366-4 / ETAG 026-3 / EAD 350141-00-1106
- DoP 5/2019
- Penetration seals: ETA 19/0038
Linear joint seals: ETA 19/0037
- Penetration seals: CoC 1488-CPR-0756/W
Linear joint seals: CoC 1488-CPR-0763/W
- TDS
- SDS



→ AVAILABILITY

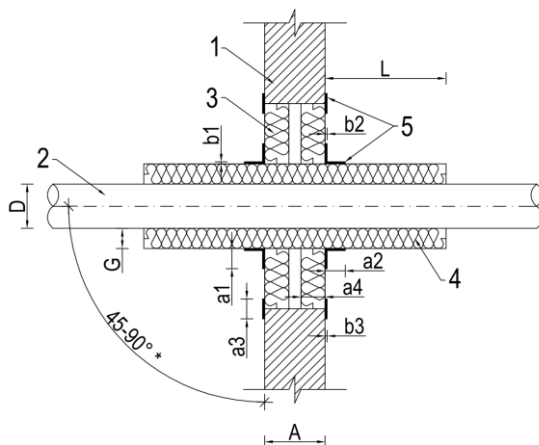
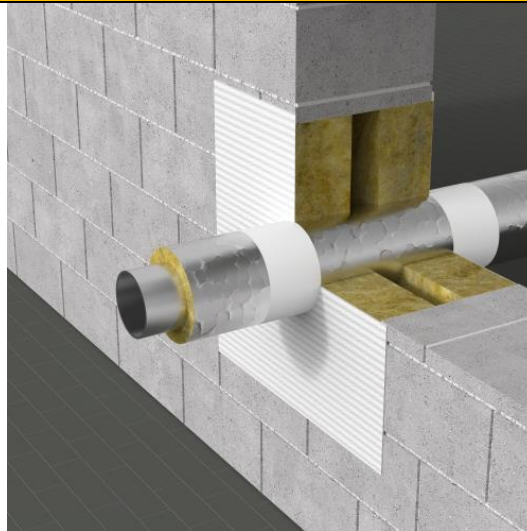
TYPE	Art. Nr.
3 kg	INCA3KG
12,5 kg	INCA125KG

→ TRANSPORT AND STORAGE

Store in dry and cool conditions at temperatures between + 5°C and + 25°C.
Shelf life 12 months from the production date shown on the packaging.

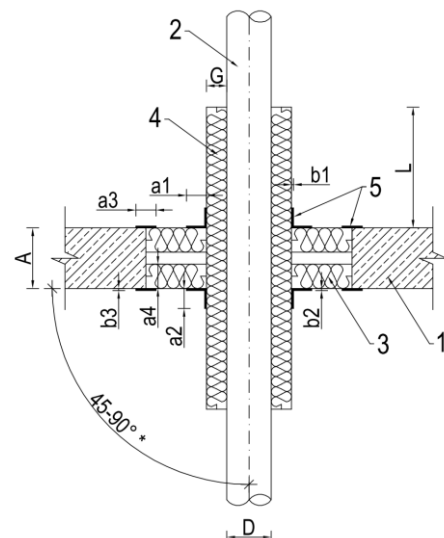
→ SOLUTION DETAILS

PROTECTION OF NON-FLAMMABLE PIPES (continuous insulation)



**Fig. 1. Wall penetration
(continuous insulation)**

- 1 – a wall with a thickness of $A \geq 150\text{mm}$ and density no less than 600 kg/m^3
- 2 – non-flammable pipe
- 3 – mineral wool board with a density of min. 150 kg/m^3 , coated with ablative paint with a dry layer thickness of 1mm
- 4 – mineral wool insulation with a density of min. 37 kg/m^3 , length L and thickness G according to Table 1
- 5 – INTU FR COAT A ablative paint,
 $a1 \geq 50\text{mm}$; $a2 \geq 50\text{mm}$; $a3 \geq 20\text{mm}$; $a4 \geq 60\text{mm}$;
 $b1 \geq 0,6\text{mm}$; $b2 \geq 0,6\text{mm}$; $b3 \geq 0,6\text{mm}$

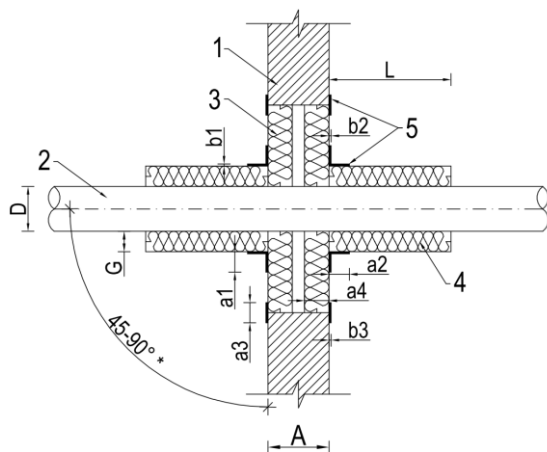
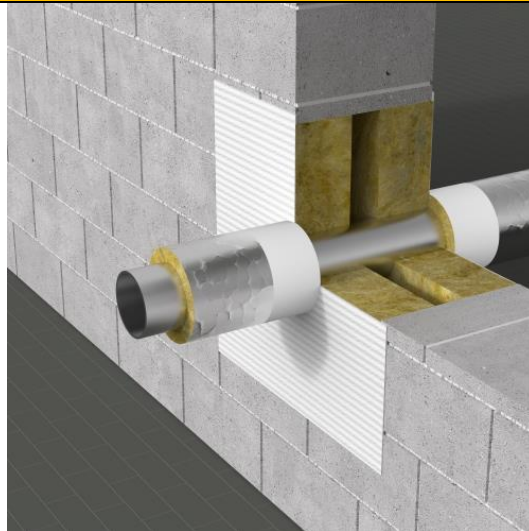


**Fig. 2. Floor penetration
(continuous insulation)**

- 1 – a floor with a thickness of $A \geq 150\text{mm}$ and density no less than 1700 kg/m^3
- 2 – non-flammable pipe
- 3 – mineral wool board with a density of min. 150 kg/m^3 , coated with ablative paint with a dry layer thickness of 1mm
- 4 – mineral wool insulation with a density of min. 37 kg/m^3 , length L and thickness G according to Table 1
- 5 – INTU FR COAT A ablative coat,
 $a1 \geq 50\text{mm}$; $a2 \geq 50\text{mm}$; $a3 \geq 20\text{mm}$; $a4 \geq 60\text{mm}$;
 $b1 \geq 0,6\text{mm}$; $b2 \geq 0,6\text{mm}$; $b3 \geq 0,6\text{mm}$

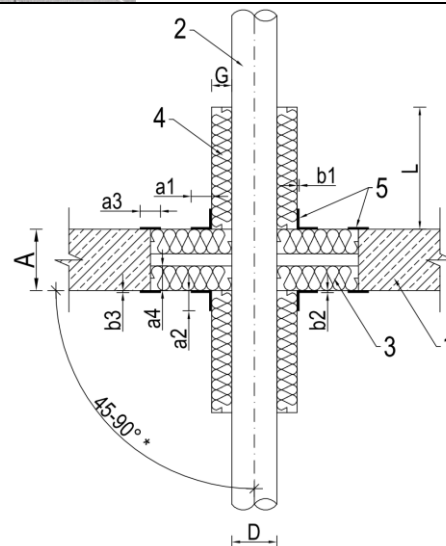
* - Installations angled $45 \div 90^\circ$ to the partition, based on PN-EN 1366-3 standard

PROTECTION OF NON-FLAMMABLE PIPES (non-continuous insulation)



**Fig. 3. Wall penetration
(non-continuous insulation)**

- 1 – a wall with a thickness of $A \geq 150\text{mm}$ and density no less than 600 kg/m^3
- 2 – non-flammable pipe
- 3 – mineral wool board with a density of min. 150 kg/m^3 , coated with ablative paint with a dry layer thickness of 1mm
- 4 – mineral wool insulation with a density of min. 37 kg/m^3 , length L and thickness G according to Table 1
- 5 – INTU FR COAT A ablative paint,
 $a1 \geq 50\text{mm}$; $a2 \geq 50\text{mm}$; $a3 \geq 20\text{mm}$; $a4 \geq 60\text{mm}$;
 $b1 \geq 0,6\text{mm}$; $b2 \geq 0,6\text{mm}$; $b3 \geq 0,6\text{mm}$



**Fig. 4. Floor penetration
(non-continuous insulation)**

- 1 – a floor with a thickness of $A \geq 150\text{mm}$ and density no less than 1700 kg/m^3
- 2 – non-flammable pipe
- 3 – mineral wool board with a density of min. 150 kg/m^3 , coated with ablative paint with a dry layer thickness of 1mm
- 4 – mineral wool insulation with a density of min. 37 kg/m^3 , length L and thickness G according to Table 1
- 5 – INTU FR COAT A ablative coat,
 $a1 \geq 50\text{mm}$; $a2 \geq 50\text{mm}$; $a3 \geq 20\text{mm}$; $a4 \geq 60\text{mm}$;
 $b1 \geq 0,6\text{mm}$; $b2 \geq 0,6\text{mm}$; $b3 \geq 0,6\text{mm}$

* - Installations angled $45 \div 90^\circ$ to the partition, based on PN-EN 1366-3 standard

PROTECTION OF FIRE RATED EXPANSION JOINTS

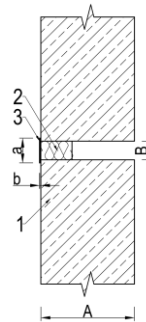
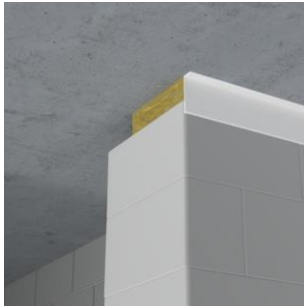


Fig. 1. Expansion joint in a wall

- 1 – a wall with a thickness of $A \geq 150\text{mm}$ and density no less than 600 kg/m^3 , the gap with a thickness of $B \leq 100\text{mm}$
- 2 – mineral wool with a density of min. 50 kg/m^3 , min. depth 100mm , coated on one side with **INTU FR COAT A**, with a dry film thickness of 1mm
- 3 – **INTU FR COAT A** ablative paint, with a thickness of $b \geq 0.60\text{mm}$, overlap on the partition of min. 5mm

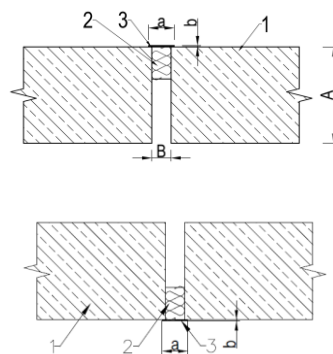
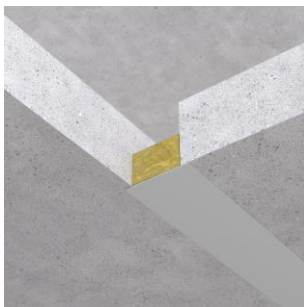
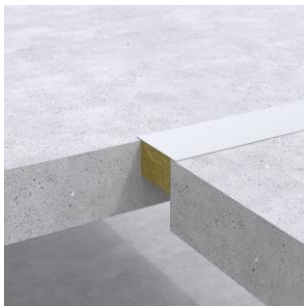


Fig. 2. Expansion joint in a floor

- 1 – a floor with a thickness of $A \geq 150\text{mm}$ and density no less than 1700 kg/m^3 , gap with a thickness of $B \leq 100\text{mm}$
- 2 – (installation from the bottom or top of the floor) mineral wool with a density of min. 50 kg/m^3 , minimum depth 100mm , coated on one side with **INTU FR COAT A**, with a dry film thickness of 1mm
- 3 – **INTU FR COAT A** ablative paint, with a thickness of $b \geq 0.60\text{mm}$, overlap on the partition of min. 5mm

Table 1. Parameters for protection of non-flammable pipes.

Diameter	Material	Filling	Insulation*
≤ 42,4 mm	steel	2 x mineral wool board with a density of min. 150kg/m ³ , 60mm thick, coated on one side with INTU FR COAT A	Thickness G: 30mm; Length L: 250mm
≤ 108,0 mm	steel		Thickness G: 50mm; Length L: 250mm
≤ 159,0 mm	steel		Thickness G: 50mm; Length L: 650mm
≤ 219,0 mm	steel		Thickness G: 50mm; Length L: 650mm
≤ 6,0 mm	copper		Thickness G: 30mm; Length L: 500mm
≤ 54,0 mm	copper		Thickness G: 30mm; Length L: 500mm
≤ 88,9 mm	copper		Thickness G: 60mm; Length L: 700mm

* Mineral wool **insulation** with aluminium wrapper, density 37 kg/m³, length L from the partition

➔ FIRE RESISTANCE CLASSIFICATION PENETRATION SEALS

TYPE	INSULATION	DN	EI WALL	EI FLOOR
STEEL PIPES	continuous	≤ 42,4 mm	EI 120	EI 120
		≤ 108,0 mm	EI 120	EI 120
		≤ 159,0 mm	EI 120	EI 120
		≤ 219,0 mm	EI 120	-
	Non-continuous	≤ 42,4 mm	EI 120	EI 120 (EI120*)
		≤ 108,0 mm	EI 120	EI 120 (EI60*)
		≤ 159,0 mm	EI 120	EI 120
		≤ 219,0 mm	EI 120	EI 120
COOPER PIPES	continuous	≤ 6,0 mm	EI 120	EI 240
		≤ 54,0 mm	EI 60	EI 180
		≤ 88,9 mm	EI 60	EI 90
	Non-continuous	≤ 6,0 mm	EI 120	EI 240
		≤ 54,0 mm	-	EI 60
		≤ 88,9 mm	-	EI60

*fire resistance using a single mineral wool board

➔ FIRE RESISTANCE CLASSIFICATION LINEAR JOINTS

GAP [mm]	EI WALL Vertical	EI WALL Horizontal	EI FLOOR
≤ 100mm	EI 240	EI 120	EI 240