INTUSEAL®

passive fire protection manufacturer

PRODUCTS CATALOG

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APPLICATION OF PRODUCTS

	PRODUCT / WHERE TO USE	COMBUSTIBLE PIPES	COMBUSTIBLE PIPES WITH INSULATION	NON-COMBUSTIBLE PIPES WITH FLAMMABLE INSULATION	NON-COMBUSTIBLE PIPES	ELECTRICAL SERVICES	MIXED SERVICES PENETRATIONS	LINEAR JOINT SEALS	VENTILATION	FABRICS
1	**INTU FR MASTIC** Intumescent acrylic mastic				●	●	●	●	●	
2	**INTU FR GRAPHITE** Intumescent graphite sealant	●		●	●	●	●			
3	**INTU FR COAT A** Fire rated ablative coat				●		●	●		
4	**INTU FR BOARD A** Fire rated ablative board				●		●	●		
5	**INTU FR UNIBOARD** Fire rated board				●		●			
6	**INTU FR COAT I** Fire rated intumescent coat				●	●	●			
7	**INTU FR UNICOAT** Fire rated intumescent coat				●	●	●			
8	**INTU FR WRAP** Intumescent pipe wrap	●	●	●						
9	**INTU FR WRAP L** Intumescent pipe wrap roll	●	●	●						
10	**INTU FR FOAM 2K** Fire protection foam	●		●	●	●	●			
11	**INTU FR BANDAGE** Fire protection bandage			●		●	●			
12	**INTU FR BRICK** Intumescent fire stop brick	●		●	●	●	●			

	PRODUCT / WHERE TO USE	COMBUSTIBLE PIPES	NON--COMBUSTIBLE PIPES WITH FLAMMABLE INSULATION	NON--COMBUSTIBLE PIPES	ELECTRICAL SERVICES	MIXED SERVICES PENETRATIONS	LINEAR JOINT SEALS	VENTILATION	FABRICS	DOOR SEALS
13	**INTU FR COLLAR** Intumescent pipe collar	●								
14	**INTU FR COLLAR L** Intumescent pipe collar roll		●							
15	**INTU FR COLLAR L SLIM** Intumescent pipe collar roll	●	●			●				
16	**INTU FR DISC** Firestop intumescent disc			●	●					
17	**INTU FR SLEEVE** Intumescent internal pipe sleeve	●								
18	**INTU FR EJ SEAL** Fire rated expansion joint seal						●			
19	**INSU ROPE** Fire rated expansion joint cord						●			
20	**INTU FR GRILLE** Intumescent FR Grille							●		
21	**INTU ATP** Air transfer faceplate							●		
22	**INTU STRIP F / FC** Intumescent door seal									●
23	**INTU FR GUARD** Fire retardant impregnate								●	

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ABOUT US

INTUSEAL is a manufacturer of passive fire protection systems with headquarters and a production plant in Poland. Our solutions are dedicated to providing integrity and insulation of building structures in places where penetration by building service systems must be sealed and expansion joints must be protected.

At INTUSEAL, our aim is to offer fire and smoke containment products of the highest quality, ensuring their high performance that meets applicable legislation.

Our products stand out due to high technical parameters that make them suitable for sealing a great many types of building service systems. Together with certified products, we provide technical support by a very experienced team, active in the industrial sector for almost 20 years. We pay attention to resolution of issues jointly with our customers.

The understanding of appropriate legislation and ability to adapt the product makes us responsive to market requirements.

Thanks to our own R&D laboratories, we take care of continuous development to create new formulas offering a solid barrier against spread of fire and smoke in buildings and ultimately to protect people's lives.

Finally, our products undergo rigorous fire tests to comply with stringent standards of EU certification procedures, and to be issued with an ETA approval in the end.

INTU FR MASTIC

INTUMESCENT ACRYLIC MASTIC

24 months shelf life

EI 120-240 | **-30°C / +80°C** | **fast drying** | **non-combustible pipes** | **electrical services** | **mixed services penetrations** | **linear joint seals** | **ventilation**

PRODUCT DESCRIPTION

INTU FR MASTIC is an acrylic mastic designed to prevent spreading of fire, smoke and gases through openings in fire rated walls and floors. **INTU FR MASTIC** expands when it is subjected to fire and close openings around pipes, cables and gaps, expansion joints by creating tight barrier for fire, smoke and gas. Mass effective fills the gaps around the installation, ensuring the integrity and insulation of fire resistance class EI 120 and EI 240 (details according to compliance documents).

COMPLIANCE:

Reference standard: EN 1366-3 / ETAG026-2 / EAD 350454-00-1104
- DoP 8/2019
- ETA 19/0038
- CoC 1488-CPR-0756/W
- TDS
- SDS

APPLICATION

INTU FR MASTIC is designed for:
- fire protection of penetrations with non-flammable pipes in floors or walls,
- fire protection of single electric cables / bundle of cables in floors and walls,
- fire protection of gaps / expansion joints,
- installation / sealing of intumescent ventilation grilles **INTU FR GRILLE**.
- curing time: ≈ 1mm / 24h

Mass **INTU FR MASTIC** after hardening, can be used in the temperature range -30˚C ÷ +80˚C.

Flexible walls:
The wall must be at least 100 mm thick with a frame structure of steel or wooden sections covered on both sides with a minimum of 2 layers of panels with a thickness of min 12,5 mm.
Rigid walls: The wall must be at least 150mm thick and have concrete, cellular or masonry structure, with a minimum density of 600kg/m^3
Rigid floors: The floor must be at least 150mm thick and have concrete, cellular or masonry structure, with a minimum density of 1700kg/m^3

INSTALLATION METHOD

1. PREPARATION
a. Do not use **INTU FR MASTIC** if the ambient temperature is below 5°C.
b. Clean the surfaces thoroughly from grease and other contaminants before applying the mastic.
The **INTU FR MASTIC** should not be used on substrates that exude oils, softeners or solvents, greases and other contaminants.

2. APPLICATION – fire protection of penetration pipes and cables.
a. Insert a mineral wool primer into the hole with density of 40 kg/m^3 to a depth.
b. Fill the gap with **INTU FR MASTIC** to the required depth (for pipes or for cables).
c. Insulate the pipe from the barrier with mineral wool with a density of min 37 kg/m^3 length and thickness.

3. APPLICATION – fire protection of gaps / expansion joints.
a. Insert a mineral wool primer into the gaps / expansion joints with density of 40 kg/m^3 to a depth.
b. Fill the gap with **INTU FR MASTIC** to the required depth.

AVAILABILITY

Contents	Colour	Box	Pallet	Article number
310 ml	White	15	1260	INFRM310
310 ml	Grey	15	1260	INFRMG310
310 ml	Pure White	15	1260	INFRMPW310
600 ml	White	20	720	INFRM600
600 ml	Grey	20	720	INFRMG600
600 ml	Pure White	20	720	INFRMPW600
5 L	White	N/A	60	INFRMW5L
5 L	Grey	N/A	60	INFRMG5L

APPROXIMATE CONSUMPTION* OF INTU FR MASTIC FOR LINEAR JOINTS

Mass consumption for 1,0 linear meter joint*					
Joint width [mm]	**10**	**20**	**30**	**40**	**50**
Mass depth 15 mm	0,50	1,00	1,50	2,0	2,50

* Consumption of one 310 ml package

APPROXIMATE CONSUMPTION* OF INTU FR MASTIC FOR PIPE PENETRATIONS

Diameter [mm]	INTU FR MASTIC Width/ Depth [mm]	mass consumption*
≤ 42,4	10 / 15	0,20
≤ 48,3		0,20
≤ 60,3		0,25
≤ 76,1		0,30
≤ 88,9		0,35
≤ 108,0		0,40
< 159,0	25 / 20	1,90
≤ 219,1		2,50
≤ 6,0	25 / 20	0,35
≤ 54,0		0,90
≤ 88,9		1,30

* quantity of packages of mass (310 ml) when filled to a depth of 25 mm (on both sides)

INTU FR GRAPHITE

INTUMESCENT GRAPHITE SEALANT

up to EI 120 | fast drying | non-combustible pipes | combustible pipes | non-combustible pipes with flammable insulation | mixed services penetrations | electrical services

PRODUCT DESCRIPTION

INTU FR GRAPHITE is an insulating and intumescent mass based on graphite, designed for fire resistant sealing of combustible pipes as well as small and medium-sized openings. The types of service penetrations that can be sealed with **INTU FR GRAPHITE** are: electrical cables, coaxial cables, fibre-optic cables, bundles of copper pipes for air conditioning. The mass effectively fills the gaps around the service penetration, ensuring that the partition maintains the integrity and insulation with a fire resistance class up to EI120 (details according to the referential documents). Under a high temperature (about 140 ˚C), the mass swells and closes the opening, preventing the spread of fire.

COMPLIANCE:

- Reference standard: EN 1366-3 /EAD 350454-00-1104
- TDS
- SDS

APPLICATION

INTU FR GRAPHITE - an intumescent sealing mass is used for fire protection of penetrations of plastic pipes (PVC, PP, PE, HDPE, PP-R, PP-R/Al/PP-R, PP-R/PP-RGF/PP-R, PE-X/Al/PE-X, PE-RT/Al/PE-RT, PE-Xa), electrical cables, coaxial cables, opti-fibre cables that are led in casing pipes or without them, in gaps of area up to 225 cm^2, passing through compartment walls and floors. Fire protection of:

- combustible pipes up to a diameter of Ø110mm
- steel pipes up to a diameter of Ø16mm
- single cables diameter: Ø ≤ 21mm, cable bundles, fibre optics in casing pipes diameter: Ø ≤ 37mm
- cables in AROT type pipes up to Ø110mm diameter
- bundles of copper pipes for air conditioning
- fire resistance up to EI 120
- high swelling ratio
- perfect for installation in hard -to-reach places
- sealing of irregularly shaped penetrations
- sealing of penetrations without service installations
- curing time: ≈ 1mm / 24h

Flexible walls:
The wall must be at least 100 mm thick with a frame structure of steel or wooden sections covered on both sides with a minimum of 2 layers of panels with a thickness of min 12,5 mm.
Rigid walls:
The wall must be at least 100 mm thick made of concrete, reinforced concrete, concrete blocks, cellular concrete, ceramic brick (solid, hollow or lattice) or silicate brick (solid or hollow) with a density of min. 600 kg/m^3.
Rigid floors:
The floor must be at least 150 mm thick made of concrete, reinforced concrete or cellular concrete with a minimum density of 550 kg/m^3.

INSTALLATION METHOD

1. PREPARATION
Do not use **INTU FR GRAPHITE** mass if the ambient temperature is below 5°C. Before applying the mass, thoroughly clean the surfaces of grease and other contaminants. The mass should not be used on substrates that produce oils, softeners or solvents.
2. APPLICATION
In the opening, place a mineral wool underlay with a density of min. 35 kg/m^3 to the depth specified in the ETA.
Fill the gap with **INTU FR GRAPHITE** mass to the appropriate depth according to the European Technical Assessment.

AVAILABILITY

Contents	Colour	Box	Pallet	Article number
310 ml	Black	15	1260	INFRG310

APPROXIMATE CONSUMPTION* OF INTU FR GRAPHITE FOR CABLE PENETRATIONS

hole diameter / hole dimension W x H (mm)	Percentage part of hole area which cables inside			
	0%	20%	40%	60%
	Mass consumption*			
80	0,80	0,64	0,48	0,32
100	1,30	1,04	0,78	0,52
120	1,80	1,44	1,08	0,72
140	2,50	2,00	1,50	1,00
160	3,20	2,56	1,92	1,28
150 x 150	3,60	2,88	2,16	1,44

* Quantity of packages of mass (310 ml) when filled to a depth of 25 mm (on both sides).

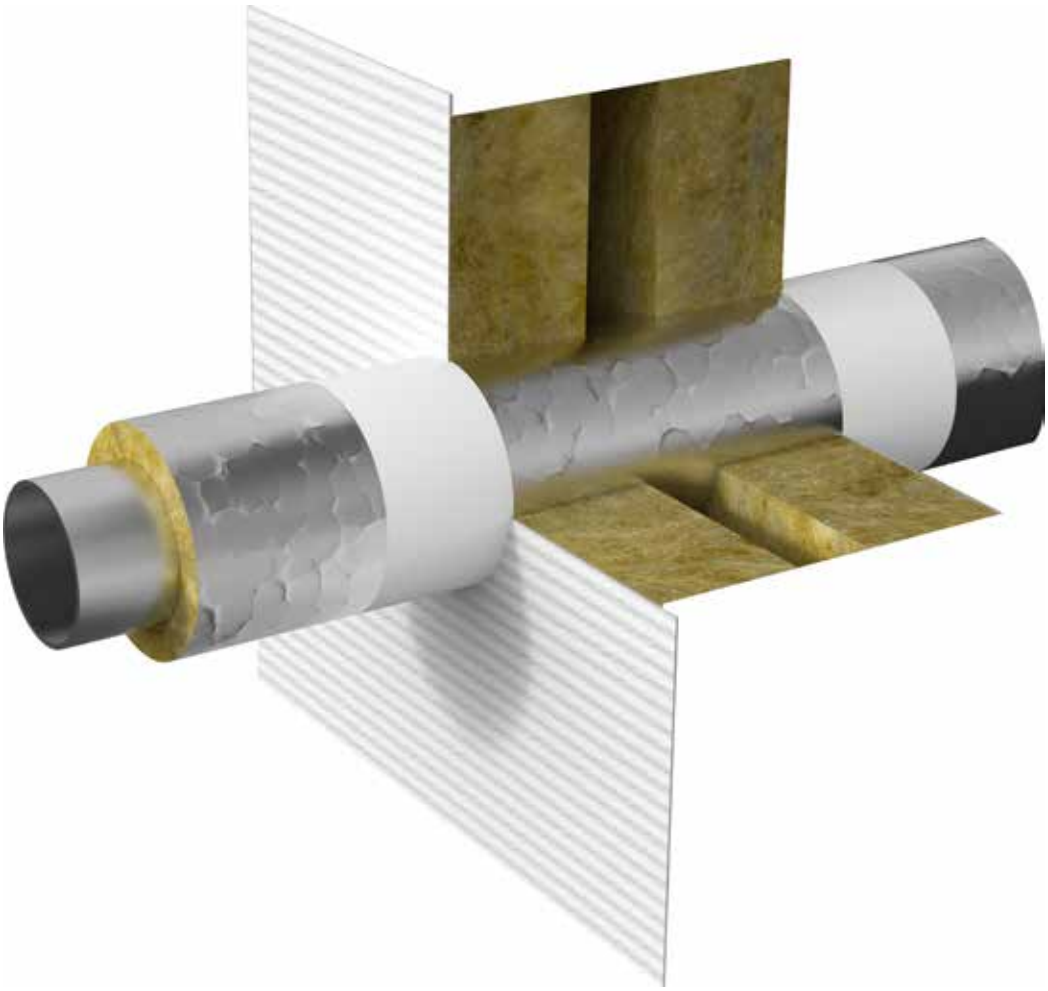
APPROXIMATE CONSUMPTION* OF INTU FR GRAPHITE FOR PIPE PENETRATIONS

Ø pipe (mm)	Ø hole (mm)	mass consumption*
20	40	0,15
32	52	0,21
50	70	0,30
63	83	0,37
75	95	0,43
90	110	0,51
110	130	0,61

* Quantity of packages of mass (310 ml) when filled to a depth of 25 mm (on both sides).

INTU FR COAT A

FIRE RATED ABLATIVE COAT



up to EI 240

fast drying

non-combustible pipes

mixed services penetrations

linear joint seals

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/m^3 and a minimum thickness of 60mm for penetration seals and with density of min. 50kg/m^3 for linear joint. The ready-made/painted firestop boards **INTU FR BOARD A** are also available for sale.

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

APPLICATION

INTU FR COAT A is designed for fire protection of:
• penetrations with single or groups non-flammable pipes in floors or walls
• expansion joints in floors or walls
• 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 or masonry structure, with a minimum density of 600kg/m^3
Rigid floors: The floor must be at least 150mm thick and have concrete, cellular or masonry structure, with a minimum density of 1700kg/m^3

Approximate consumption of **INTU FR COAT A** for painting a mineral wool boards: 1,7 kg/m^2 – for a dry film thickness of 1mm.

INTU FR COAT A DRYING TIME		
Paint condition	**Dry to the touch**	**Complete dry/total hardened**
Time	60 min	360 min

* Test was made for paint 1mm thickness. Environmental conditions (humidity and temperature) have impact on drying time.

INSTALLATION METHOD

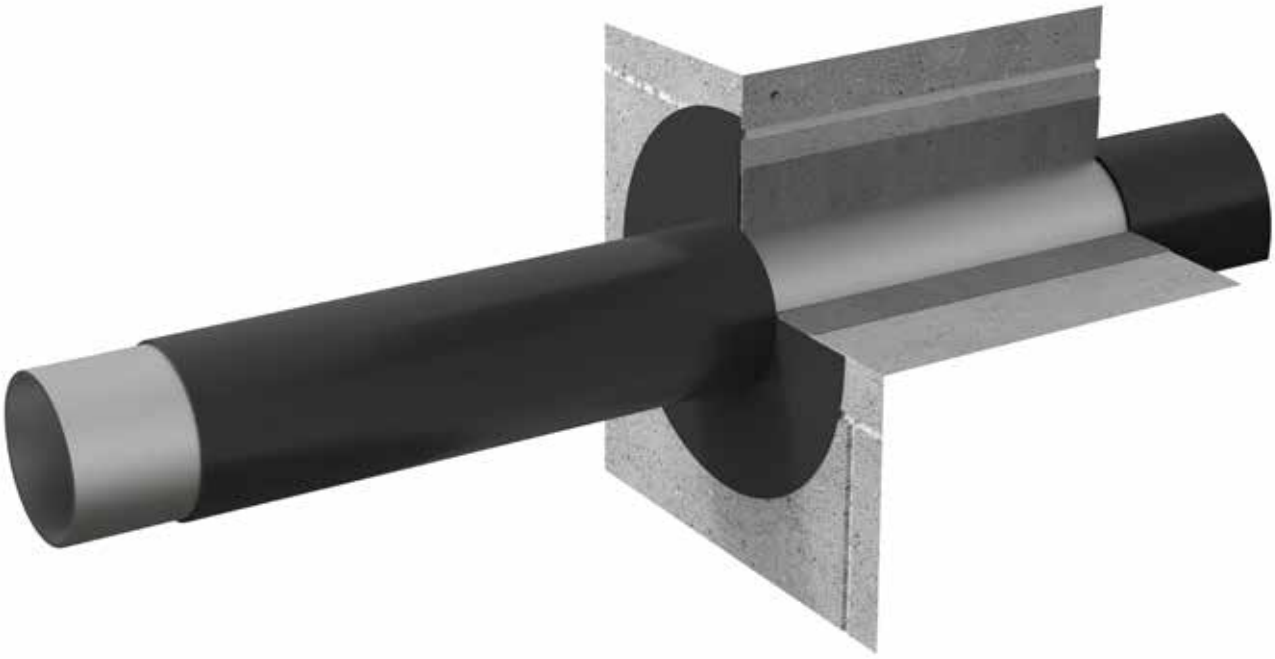
• clean the surfaces of the hole and system components from grease and other contaminants thoroughly
• cut the mineral wool board with minimum density 150kg/m^3 to the correct size. In the case of linear joint put loose mineral wool with minimum density 50kg/m^3 or mineral wool board in gap 100 mm depth
• place the wool board in the hole/gap.
In the case of non-flammable pipes:
a) mineral wool insulation with min. density 37kg/m^3 should be placed
b) cover a mineral wool board and a part of the insulation with **INTU FR COAT A**
In the case of expansion joints:
a) cover the mineral wool board with **INTU FR COAT A** ablative paint on one side of the partition.
b) prepare a partition overlap min 5mm.

AVAILABILITY

Contents	Colour	Packaging	Pallet	Article number
3 kg	White	pail	147	INCA3KG
12,5 kg	White	pail	28	INCA125KG
260 kg	White	barrel	2	INCA260KG

INTU FR COAT I

FIRE RATED INTUMESCENT COAT



up to EI 240

fast drying

non-combustible pipes

electrical services

mixed services penetrations

PRODUCT DESCRIPTION

INTU FR COAT I is a one-component intumescent paint designed for sealing fire protection penetrations with non-flammable pipes and electric cables. The coating made with this paint swells under the influence of temperature, creating a protective layer on the protected surface. The paint protects the system elements in penetrations up to fire resistance class of EI 240 (details according to reference documents).

COMPLIANCE:

- Reference standard: EN 1366-3 / ETAG 026-2 / EAD 350454-00-1104
- DoP 5/2019
- ETA 19/0038
- CoC 1488-CPR-0756/W
- TDS
- SDS

APPLICATION

INTU FR COAT I is intended for the protection of non-flammable pipes in fire partition floors and walls and electric cables / cable trays in wall.

Flexible walls:
The wall must be at least 125mm thick and have a steel profile structure covered on both sides with a minimum of 2 layers of boards with a thickness of 12.5mm.
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/m^3
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/m^3.

Approximate consumption of **INTU FR COAT I** – 1,5 kg/m^2 – for a dry film thickness of 1mm.

INTU FR COAT I DRYING TIME		
Paint condition	**Dry to the touch**	**Complete dry/total hardened**
Time	40 min	240 min

* Test was made for paint 1mm thickness. Environmental conditions (humidity and temperature) have impact on drying time.

INSTALLATION METHOD

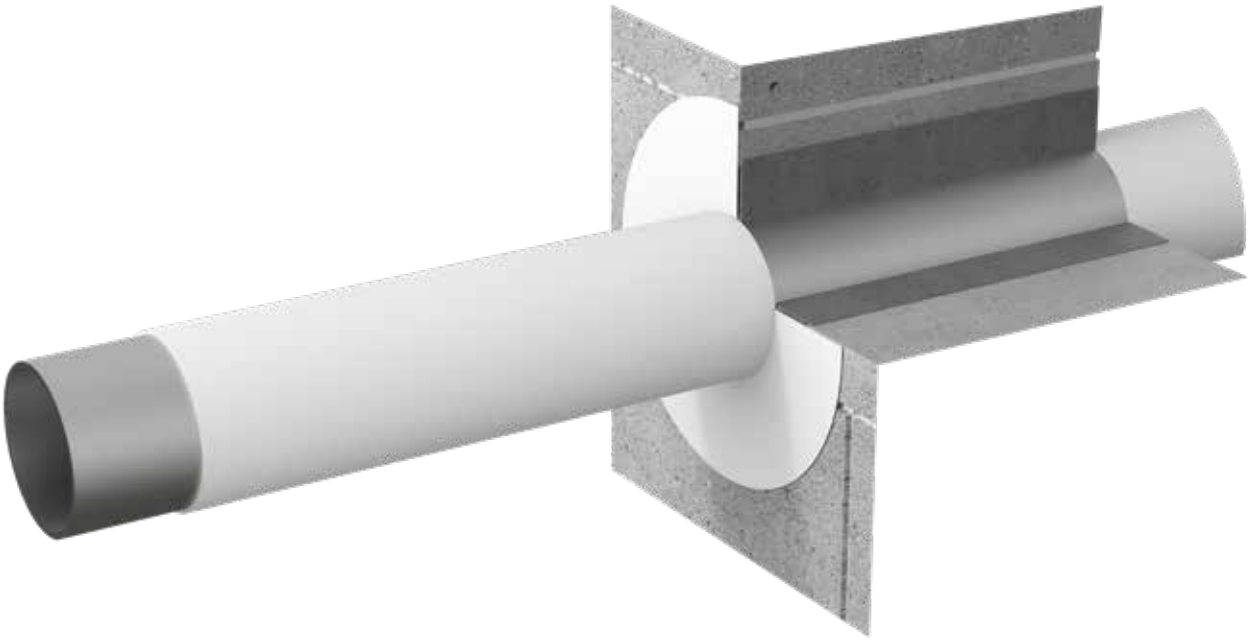
1. Clean the surfaces of the hole and system components from grease and other contaminants thoroughly.
2. Before use, mix the paint. The paint does not require thinning but you can add a water.
3. The space around the pipe should be filled with cement mortar or mineral wool, the space around cable/cable trays should be filled mineral board **INTU FR BOARD A** (or mineral wool board with proper density) flush with the face of the partition.
4. Cover the pipe with **INTU FR COAT I** with a layer of appropriate thickness and length.
5. Cover the hole filling (mineral wool/cement mortar) with **INTU FR COAT A** ablative paint, overlapping the surface of the partition.

AVAILABILITY

Contents	Colour	Packaging	Pallet	Article number
2,5 kg	White	pail	147	INCI25KG
10 kg	White	pail	48	INCI10KG

INTU FR UNICOAT

FIRE RATED INTUMESCENT COAT



up to EI 120

fast drying

non-combustible pipes

electrical services

mixed services penetrations

PRODUCT DESCRIPTION

Firestop system **UNICOAT** is consisting of firestop paint (**INTU FR UNICOAT P**) with mineral wool designed to protect penetrations of non-flammable pipes, cables, optical fibre. The cover layer that the paint creates, swells under the influence of temperature, forming a protective barrier on the surface of the mineral wool board that needs to be sealed. The coating protects service installations running through the partition up to fire resistance max. EI 120 (details according to referential documents).

COMPLIANCE:

- Reference standard: EN 1366-3 / ETAG 026-2 / EAD 350454-00-1104
- TDS

APPLICATION

INTU FR UNICOAT P paint is designed to protect non-flammable pipes in floors and compartment walls. It is suitable for electrical single or multiplied cables, fibre optics, in trays or cable ladder racks. Maximum opening in the wall: 600 x 600 mm, in floors 1000 x 625 mm (W x H).

Flexible walls:
The wall must be at least 100 mm thick with a frame structure of steel or wooden sections covered on both sides with a minimum of 2 layers of panels with minimum thickness 12,5 mm.
Rigid walls:
The wall must be at least 100 mm thick made of concrete, reinforced concrete, concrete blocks, cellular concrete, ceramic brick (solid, hollow or lattice) or silicate brick (solid or hollow) with minimum density 600 kg/m^3.
Rigid floors:
The floor must be minimum thickness 150 mm. Must be made of concrete, reinforced concrete or cellular concrete with minimum density 550 kg/m^3.

INTU FR UNICOAT DRYING TIME		
Paint condition	**Dry to the touch**	**Complete dry/total hardened**
Time	80 min	330 min

* Test was made for paint 1mm thickness. Environmental conditions (humidity and temperature) have impact on drying time.

INSTALLATION METHOD

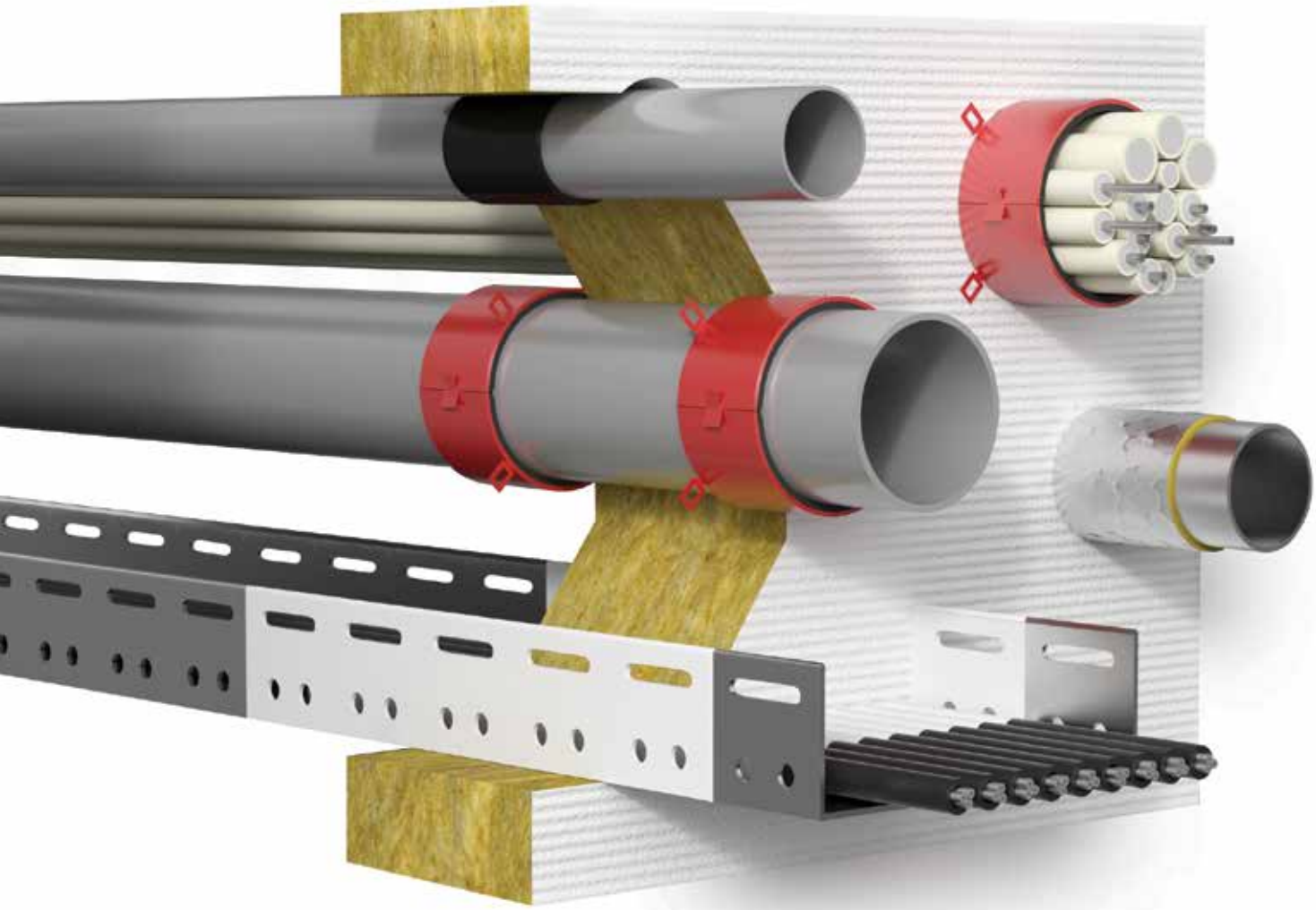
1. Surfaces of the opening and the installations must be thoroughly cleaned of grease and other contaminants before the protection is performed.
2. Before use, mix the paint to a homogeneous consistency. The paint does not require dilution.
3. Fill the space around the pipe with mineral wool with minimum density 150 kg/m^3, painted with **INTU FR UNICOAT P**. Flush with the face of the partition or mineral wool with minimum density 35 kg/m^3 and fill INTU FR MASTIC or cement mortar.
4. Cover the pipe and cables with **INTU FR UNICOAT P** with the appropriate thickness to obtain demanded dry film.

AVAILABILITY

Contents	Colour	Packaging	Pallet	Article number
3 kg	White	pail	147	INUP3KG
12,5 kg	White	pail	48	INUP12KG

INTU FR BOARD A

FIRE RATED ABLATIVE BOARD



EI 240

non-combustible pipes

mixed services penetrations

linear joint seals

PRODUCT DESCRIPTION

Firestop board **INTU FR BOARD A** is composed of a mineral wool board with a density 150kg/m^3 and a thickness 60mm, covered on one side with ablative paint **INTU FR COAT A**. The product set is designed for sealing fire protection penetrations and preparing fire expansion joints with fire resistance class up to EI 240. In the fire conditions, under the influence of high temperature, endothermic reactions take place in the product. The paint absorbs heat, significantly delaying the impact of fire on structural components.

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

APPLICATION

INTU FR BOARD A is use for fire protection of:
• penetrations with single or groups of non-flammable pipes in floors or walls
• expansion joints in floors or walls
• electric cables combined with intumescent paint **INTU FR COAT I** in walls

Rigid walls:
The wall must be minimum thickness 150mm and have concrete, cellular concrete or masonry structure, with minimum density 600kg/m^3.
Rigid floors:
The floor must be minimum thickness 150mm and have concrete, cellular concrete or masonry structure, with minimum density 1700kg/m^3.

INSTALLATION METHOD

1. Clean the hole surface and system components from grease and other contaminants thoroughly.
2. Cut the **INTU FR BOARD A** to the correct size.
3. Place the **INTU FR BOARD A** in the hole/gap.
4. In the case of non-flammable pipes:
a) mineral wool insulation with minimum density 50kg/m^3 should be placed
b) all gaps between system components and the junction of the partition with mineral wool should be filled with **INTU FR COAT A**
5. 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.

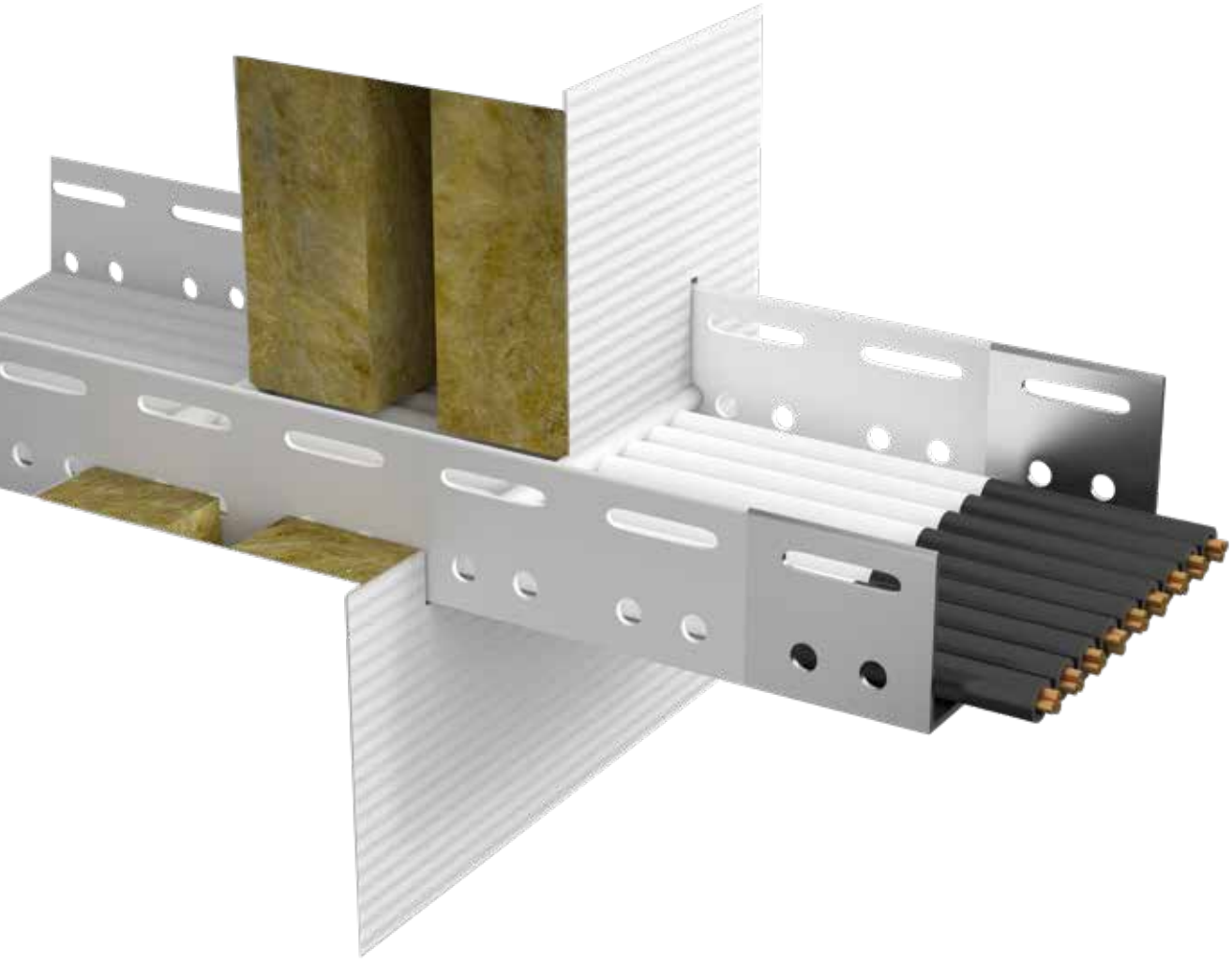
AVAILABILITY

Thickness	Dimensions	Pallet	Article number
60 mm	1200x600 mm	64	INBA601SI

* Board painted on one side

INTU FR UNIBOARD

FIRE RATED BOARD



EI 120

non-combustible pipes

mixed services penetrations

PRODUCT DESCRIPTION

INTU FR UNIBOARD - fire protection board consists of a mineral wool panel with a density 150 kg/m^3 and thickness 50mm, covered on one side (1-S) or on both sides (2-S) with an intumescent coating **INTU FR UNICOAT** with a dry film thickness of 0,5mm. The set of products is designed for sealing service installations in penetrations and sealing expansion joints up to fire resistance max. EI 120 (details according to reference documents). Under fire conditions and high temperature, endothermic reactions occur in the product. The coating expands and significantly retards the effect of fire on the protected elements.

COMPLIANCE:

- Reference standard: EN 1366-3 / ETAG 026-2 / EAD 350454-00-1104
- TDS

APPLICATION

INTU FR UNIBOARD is designed to protect non-combustible pipes, non-combustible pipes in mineral wool insulation, combustible pipes and single electrical cables of diameter ≤ Ø80 mm, bundles of electrical cables of diameter ≤ Ø100 mm made of single cables of diameter ≤ Ø21 mm, self-supporting cables or cables run in a tray or electric ladder in compartment floors and walls. Maximum opening in the wall: 600 x 600 mm, in the floor 1000 x 625 mm (W x H).

Flexible walls:
The wall must be minimum thickness 100 mm with a frame structure of steel or wooden sections covered on both sides with minimum 2 layers of panels with minimum thickness 12.5 mm.
Rigid walls:
The wall must be minimum thikness 100 mm. Must be made of concrete, reinforced concrete, concrete blocks, cellular concrete, ceramic brick (solid, hollow or lattice) or silicate brick (solid or hollow) with minimum density 600 kg/m^3.
Rigid floors:
The floor must be minimum thikness 150 mm. Must be made of concrete, reinforced concrete or cellular concrete with minimum density 550 kg/m^3.

INSTALLATION METHOD

Preperatory work (before use **INTU FR UNIBOARD** in penetration seal)
a) Clean the surfaces of the opening and installations from all contaminants
b) Cut the **INTU FR UNIBOARD** to the appropriate size
c) Place the **INTU FR UNIBOARD** in the opening / hole.

NON-COMBUSTIBLE PIPES - solution 1	
1)	put on the pipe a mineral wool insulation
2)	fill all gaps between installations / partition-mineral wool with use **INTU FR UNICOAT** fire resistant paint

NON-COMBUSTIBLE PIPES - solution 2	
1)	coat the pipe with **INTU FR UNICOAT** paint with accordance the technical data sheet (TDS)
2)	fill all gaps between installations / partition-mineral wool with use **INTU FR UNICOAT** fire resistant paint

COMBUSTIBLE PIPES	
1)	put the firestop collar **INTU FR COLLAR L SLIM** on the pipe: walls - on both sides of the partition; floors – on one side from the bottom
2)	fill all gaps between installations / partition-mineral wool with use **INTU FR UNICOAT** fire resistant paint

ELECTRICAL CABLES	
1)	coat cables / cable bundles / cables and a tray / cables and a ladder with **INTU FR UNICOAT** paint with TDS accordance
2)	fill all gaps between cables / partition-mineral wool with use **INTU FR UNICOAT** fire resistant paint

AVAILABILITY

Product	Thickness	Dimensions	Pallet	Article number
INTU FR UNIBOARD 1S	50 mm	1200x600 mm	38/76	INUB501SI
INTU FR UNIBOARD 2S	50 mm	1200x600 mm	38/76	INUB502SI

* 1-S – board painted on one side
2-S – board painted on two sides

INTU FR WRAP

INTUMESCENT PIPE WRAP

EUROPEAN TECHNICAL APPROVAL

up to EI 240

combustible pipes

combustible pipes with non-flammable insulation

mixed services penetrations

non-combustible pipes with flammable insulation

PRODUCT DESCRIPTION

Firestop wrap **INTU FR WRAP** is made of graphite-based material. The material swells under the influence of high temperature (about 140°C), and fills the entire space created after burned flammable installations.

COMPLIANCE:

- Reference standard: EN 1366-3 / ETAG 026-2 / EAD 350454-00-1104
- ETA-18/0593
- DoP 1/2019
- CoC 1488-CPR-0722/W
- TDS
- SDS

APPLICATION

INTU FR WRAPS are used for fire protection of penetrations with plastic pipes (PVC, PP, PE, HDPE, PEX/Al/PEX, PE-RT/Al/PE-RT, PP-R/Al/PP-R, PP-R GLASS) running through fire partitions.

- protection of flammable pipes
- fire resistance up to 240 minutes
- availability: from 32mm to 200mm
- high swelling ratio
- ideal for installation in very tight spaces

Rigid walls: The wall must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 600kg/m^3
Rigid floors: The floor must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 1700kg/m^3
Flexible walls: The wall must be minimum thickness 125mm. Must have a steel profile structure covered on both sides with minimum 2 layers of boards with a thickness of 12.5mm.

AVAILABILITY

Type	Box	Article number
32 mm	50	INWR32
40 mm	50	INWR40
55 mm	50	INWR55
63 mm	50	INWR63
75 mm	50	INWR75
82 mm	50	INWR82
90 mm	50	INWR90
110 mm	50	INWR110
125 mm	40	INWR125
160 mm	20	INWR160
200 mm	20	INWR200

PRODUCT SPECIFICATION

Wrap type	Art. No.	Number of inserts in a wrap [pcs.]	Insert dimensions	
			Thickness [mm]	Width [mm]
32mm	INWR32	1	2,0	60
40mm	INWR40	1	2,0	60
55mm	INWR55	1	2,0	60
63mm	INWR63	1	2,0	60
75mm	INWR75	1	2,0	60
82mm	INWR82	2	2 x 2,0	60
110mm	INWR110	2	2 x 2,0	60
125mm	INWR125	4	4 x 2,0	100
160mm	INWR160	5	5 x 2,0	100
200mm	INWR200	8	8 x 2,0	100

INTU FR WRAP L

INTUMESCENT PIPE ROLL

up to EI 240

easy to use

combustible pipes

non-combustible pipes with flammable insulation

combustible pipes with non-flammable insulation

mixed services penetrations

PRODUCT DESCRIPTION

Firestop tape **INTU FR WRAP L** is made of graphite-based material. The material swells under the influence of high temperature (about 140°C), and fills the entire space created after burned flammable systems.

COMPLIANCE:

- Reference standard: EN 1366-3 / ETAG 026-2 / EAD 350454-00-1104
- DoP 1/2019
- ETA-18/0593
- CoC 1488-CPR-0722/W
- TDS
- SDS

APPLICATION

INTU FR WRAP L is used for fire protection of penetrations with plastic pipes (PVC, PP, PE, HDPE, PEX/Al/PEX, PE-RT/Al/PE-RT, PP-R/Al/PP-R, PP-R GLASS) running through fire partitions. It is also possible to protect non-flammable pipes with insulation made of synthetic Armaflex /K-flex or PE foam, penetrating floors or walls.

- protection of flammable and non-flammable pipes insulated with synthetic rubber Armaflex / K-Flex or PE foam
- fire resistance up to 240 minutes
- availability: roll length: 10, 25 or 50 meters; width: 60mm and 100mm
- installation on pipes with large diameters is possible
- easy to cut
- high swelling ratio
- ideal for installation in very tight spaces

Rigid walls:
The wall must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 600kg/m^3
Rigid floors:
The floor must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 1700kg/m^3
Flexible walls:
The wall must be minimum thickness 125mm. Must have a steel profile structure covered on both sides with minimum 2 layers of boards with a thickness of 12.5mm.

Approximate consumption INTU FR WRAP L60 for NON-FLAMMABLE pipes										
pipe material	steel						copper / steel			
FEF insulation thickness	25	50	25	50	50	50	9	13	25	50
pipe diameter Ø (mm)	Ø ≤ 42,4		Ø ≤ 88,9		Ø = 159	Ø = 219	Ø ≤ 15		Ø ≤ 54	
Number of wraps	3	4	3	4	4	4	1	2	3	4
Wram lenght [cm]	91	187	135	245	333	409	10	27	102	201

Approximate consumption for FLAMMABLE pipes INTU FR WRAP L60									WRAP L100		
pipe material	PVC, PP, HDPE, PE-RT/AL/PE-RT, PP-R/AL/PP-R, PP-R GLASS, PEX/AL/PEX*								PVC, PP, HDPE		PVC, HDPE
pipe diameter Ø (mm)	32	40	50	55	63	75	90	110	125	160	200
Number of wraps	1	1	1	1	1	1	2	2	4	5	8
Wrap length [cm]	10	13	16	18	20	24	58	71	165	264	538

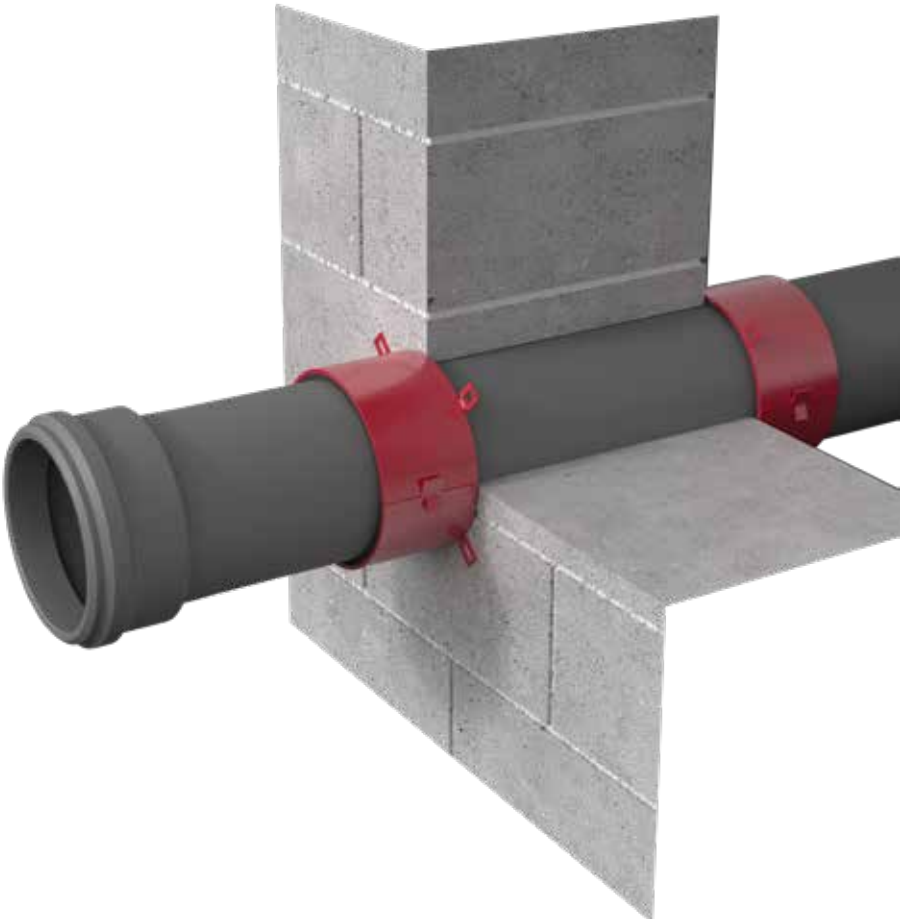
For pipes Ø ≤ 110 mm number of wraps ensure fire resistance class minimum EI120, for pipes 125 mm ≤ Ø ≤ 200 mm min. EI60. * Pipe PEX/AL./PEX is only for diameter Ø ≤ 75 mm.

AVAILABILITY

Dimensions	Type	Box	Pallet	Article number
60 mm x 10 m	without adhesive tape	1	375	INWRL60X10
100 mm x 10 m	without adhesive tape	1	225	INWRL100X10
60 mm x 10 m	with adhesive tape	1	375	INWRL60X10AT
100 mm x 10 m	with adhesive tape	1	225	INWRL100X10AT
60 mm x 25 m	without adhesive tape	1	72	INWRL60X25
100 mm x 25 m	without adhesive tape	1	72	INWRL100X25
60 mm x 25 m	with adhesive tape	1	72	INWRL60X25AT
100 mm x 25 m	with adhesive tape	1	72	INWRL100X25AT

INTU FR COLLAR

INTUMESCENT PIPE COLLAR



up to EI 240

easy to use

combustible pipes

PRODUCT DESCRIPTION

The firestop collar **INTU FR COLLAR** is composed of a flexible insert made of graphite-based material that swells under the influence of temperature above 140°C and an external casing made of 1.0 mm steel sheet protected against corrosion by a red paint coating. The steel collar casing is equipped with a lock used for strapping the ends and stabilizing it on the pipe, as well as mounting brackets fixing the collar to the partition. The collars ensure fire resistance class up to max EI 240.

COMPLIANCE:

- Reference standard: EN 1366-3 / ETAG 026-2 / EAD 350454-00-1104
- DoP 2/2019
- ETA-19/0844
- CoC 1488-CPR-0825/W
- TDS
- SDS
- Classification of fire resistance FIRES-CR-241-19-AUPE

APPLICATION

INTU FR COLLAR is used for fire protection of penetrations with plastic pipes (PVC, PP, PE, HDPE) running through fire partitions (flexible walls, rigid walls, floors)

Flexible walls:
The wall must be minimum thickness 100 mm. Must have a frame construction of steel or wooden sections covered on both sides with minimum 2 layers of panels with a thickness of min 12,5 mm.
Rigid walls:
The wall must be minimum thickness 100 mm. Must be made of concrete, reinforced concrete, concrete blocks, cellular concrete, ceramic brick (solid, hollow or lattice) or silicate brick (solid or hollow) with minimum density 600 kg/m^3.
Rigid floors:
The floor must be minimum thickness 150 mm. Must be made of concrete, reinforced concrete or cellular concrete with minimum density 1700 kg/m^3.

INSTALLATION METHOD

The gaps between the hole in a wall or a floor and the pipe wall should be filled with acrylic intumescent mastic.

1. Install **INTU FR COLLAR** on the pipe.
2. Secure **INTU FR COLLAR** using the lock.
3. Use steel wedge anchors for installation in the partition.
4. Fill the gaps with intumescent acrylic mastic.


1


2


3


4

AVAILABILITY

Type	Box	Article number
32 mm	50	INCO32
40 mm	50	INCO40
55 mm	30	INCO55
63 mm	30	INCO63
75 mm	30	INCO75
82 mm	30	INCO82
90 mm	30	INCO90
110 mm	20	INCO110
125 mm	15	INCO125
160 mm	10	INCO160
200 mm	10	INCO200
250 mm	1	INCO250
315 mm	1	INCO315

INTU FR COLLAR L

INTUMESCENT PIPE COLLAR ROLL

up to EI 240

non-combustible pipes with flammable insulation

PRODUCT DESCRIPTION

Firestop collar **INTU FR COLLAR L** is composed of:

- flexible insert (**INTU FR WRAP L**) made of graphite-based material that swells under the influence of temperature above 140°C

- external casing made of 0.5 mm stainless steel sheet delivered in 2.5 m sections. The steel collar casing is equipped with mounting brackets for attaching the collar to the partition. The universal size enables installation of the collar on various pipe diameters.

COMPLIANCE:

- Reference standard: EN 1366-3 / ETAG 026-2 / EAD 350454-00-1104
- DoP 3/2019
- ETA-19/0844
- CoC 1488-CPR-0825/W
- TDS
- SDS
- Fire classification 03777/18/Z00NZP

APPLICATION

INTU FR COLLAR L is used for fire protection of penetrations with non-combustible pipes with flammable synthetic rubber insulation running through fire partitions.

Rigid walls:
The wall must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 600kg/m^3
Rigid floors:
The floor must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 1700kg/m^3.

INSTALLATION METHOD

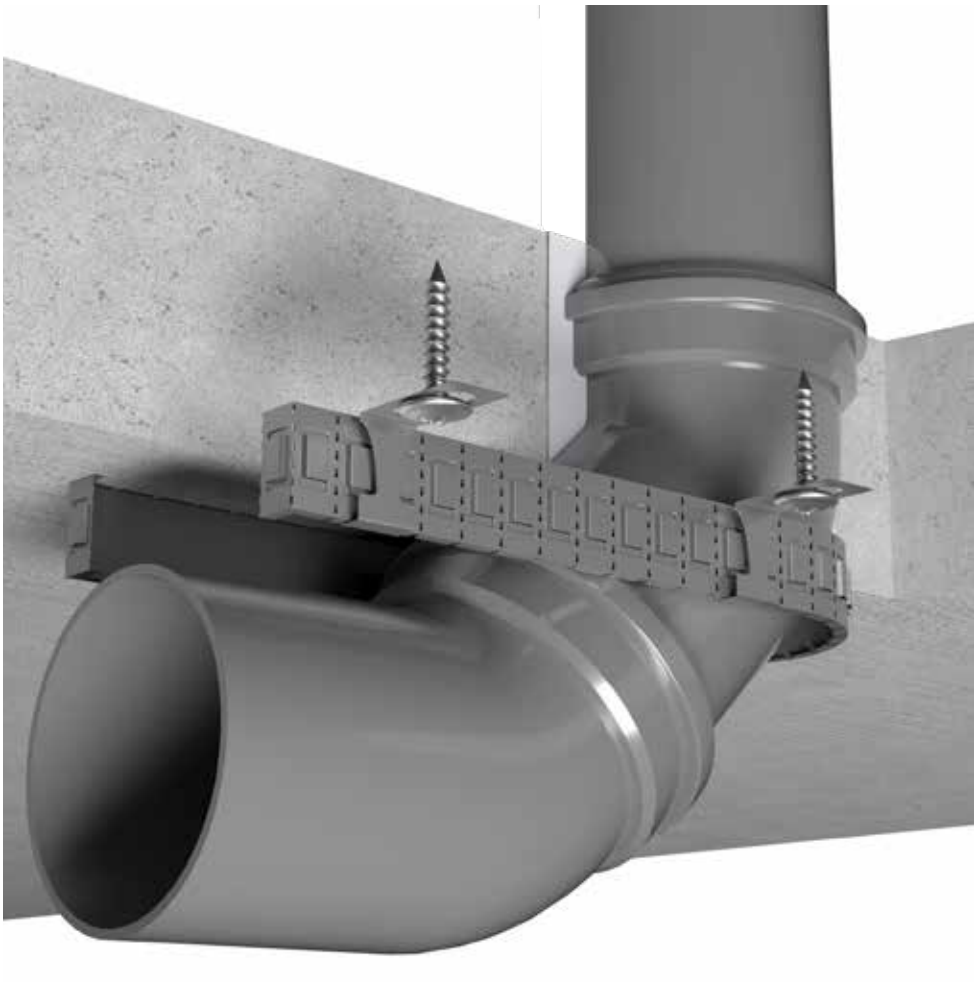
1. Set number of wraps for diameter/type of the pipe and partition parameters.
2. Fill the gaps with the fire-resistant **INTU FR MASTIC** sealant, then wrap the pipe with **INTU FR WRAP L** tape with the appropriate number of wraps.
3. Cut appropriate length of the steel casing.
4. Put the collar on the intumescent tape already placed on the pipe.
5. Attach the collar to the partition using steel screws.

AVAILABILITY

Contents	Packaging	Pallet	Article number
steel casing 2,5 m intumescent wrap 60 mm x 10 m	box	225	INCOL2500

INTU FR COLLAR L SLIM

INTUMESCENT PIPE COLLAR ROLL



U/U
pipe configuration

up to EI 120

non-combustible pipes with flammable insulation

combustible pipes

mixed services penetrations

PRODUCT DESCRIPTION

Firestop collar **INTU FR COLLAR L SLIM** is composed of:
• flexible insert (**INTU FR WRAP L**) made of graphite-based material that swells under the influence of temperature above 140°C

• external casing made of 0.5 mm stainless steel sheet delivered in 2.5 m sections. The steel collar casing is equipped with mounting brackets for attaching the collar to the partition. T he universal size enables installation of the collar on various pipe diameters.

COMPLIANCE:

- Reference standard: EN 1366-3 / EAD 350454-00-1104
- TDS

APPLICATION

The **INTU FR COLLAR L SLIM** collar is designed for sealing service penetrations of non-combustible pipes in synthetic rubber insulation (FEF), combustible pipes without insulation and bundles of copper pipes for air conditioning in PE or FEF insulation, that run through fire compartment walls and floors. **INTU FR COLLAR L SLIM** provides fire protection of installations running perpendicularly to the partition as well as at an angle.

Flexible walls:
The wall must be minimum thickness 100 mm. Must have a frame construction of steel or wooden sections covered on both sides with minimum 2 layers of panels with a thickness of min 12,5 mm.
Rigid walls:
The wall must be minimum thickness 100 mm. Must be made of concrete, reinforced concrete, concrete blocks, cellular concrete, ceramic brick (solid, hollow or lattice) or silicate brick (solid or hollow) with minimum density 600 kg/m^3.
Rigid floors:
The floor must be minimum thickness 150 mm. Must be made of concrete, reinforced concrete or cellular concrete with minimum density 550 kg/m^3.

INSTALLATION METHOD

1. Fill the gaps between the installation and the partition with **INTU FR MASTIC** fire resistant sealant.
2. Adjust and cut an appropriate length of the intumescent insert.
3. Wrap the intumescent insert on the pipe.
4. Adjust and cut an appropriate length of steel casing for the type of installation to be protected.
5. Put the casing on the intumescent insert.
6. Fix the collar to the partition with steel anchors.

Approximate consumption INTU FR COLLAR L SLIM due to the length of the intumescent insert

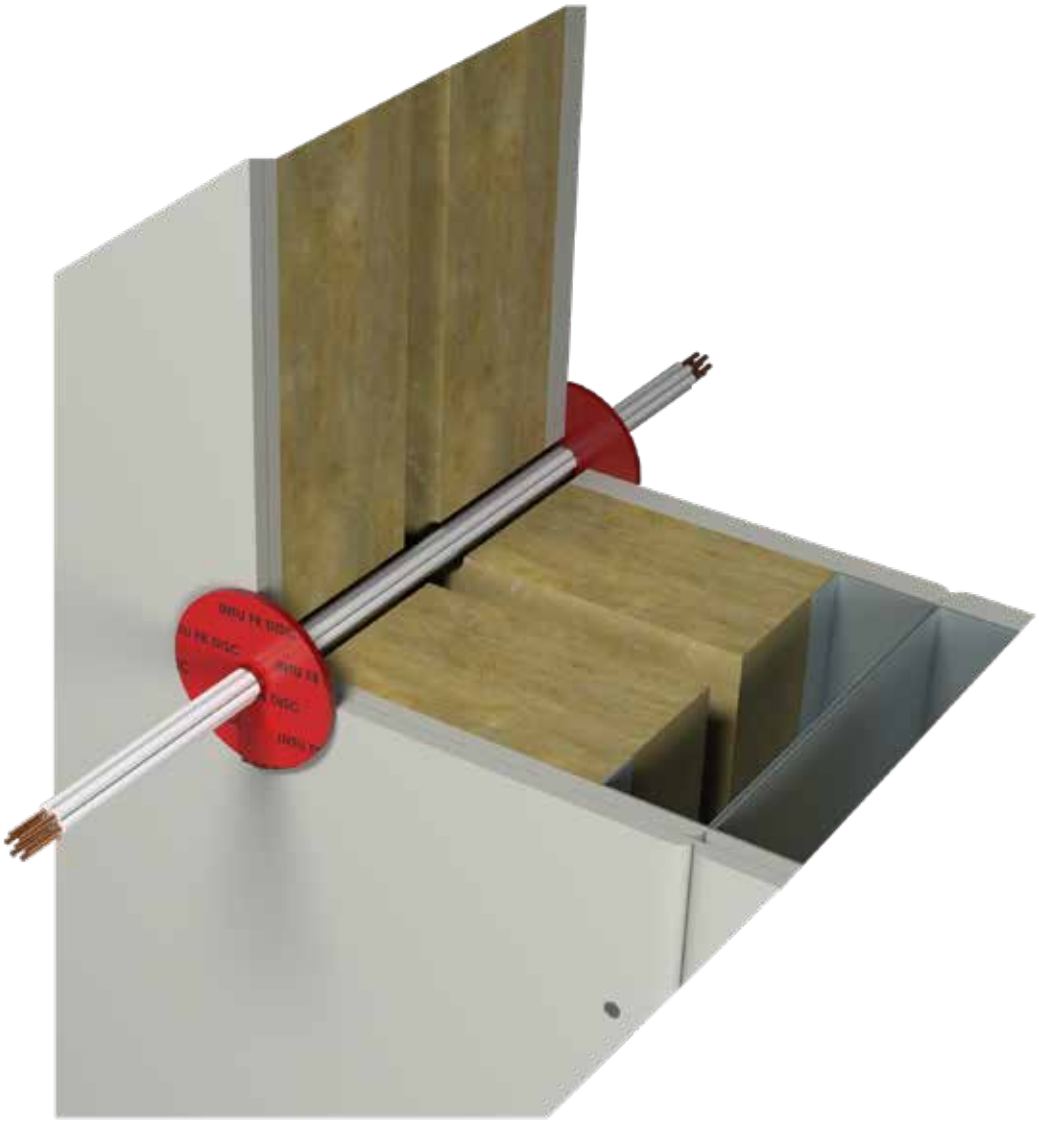
pipe diameter Ø (mm)	32	40	50	63	75	82	90	110	125	125 (2x)	160	160 (2x)	200	225	250	315
Fixing points for one penetration seal (pcs.)	2 X S				3 X S				4 X S				1 X S, 4 X L	1 X S, 5 X L		1 X S, 6 X L
Consumption	0,02	0,02	0,03	0,04	0,04	0,09	0,11	0,16	0,26	0,51	0,43	0,85	1,17*	2*	2,2*	2,7*
of 1 box INTU FR COLLAR SLIM	51	42	33	28	23	10	9						*Need more than 1 box to make one penetration seal			
Number of penetration seals for pipe with diameter Ø - can do of 1 box use	Must have addition short fixing type S - (INTU FR COLLAR L SLIM CLIP S)							6	3	1	2	1	Must have long fixing type L - (INTU FR COLLAR L SLIM CLIP L)			

AVAILABILITY

Product	Contents	Packaging	Pallet	Article number
INTU FR COLLAR L SLIM	steel casing 2,52 m intumescent wrap 12 m short fixings type S - 20 pcs.	1 box	375	INCOLS
INTU FR COLLAR L SLIM CLIP S	20 pcs.	1 foil	N/A	ICOLSCS
INTU FR COLLAR L SLIM CLIP L	20 pcs.	1 foil	N/A	INCOLSCL

INTU FR DISC

FIRESTOP INTUMESCENT DISC



up to EI 120

140°C

easy to use

non-combustible pipes

electrical services

PRODUCT DESCRIPTION

INTU FR DISC is a Ø65 x 3 mm self-adhesive fireproof intumescent disc that is applied to the partition and can be plastically shaped around installations in small openings up to Ø25 mm in diameter. INTU FR DISC swells when exposed to temperature and forms a fire-resistant seal for installations passing through the partition in fire resistance class up to EI120.

COMPLIANCE:

• Reference standard:
sealing of penetrations: EN 1366-3 / EAD 350454-00-1104
• TDS

APPLICATION

Fire resistant system **INTU FR DISC** is designed for application in openings of diameter Ø ≤ 25 mm, and used to fire protection:

- Electric cables Ø ≤ Ø21 mm
- Fibre-optic cables and cable bundles with diameter Ø ≤ 25 mm
- Single steel pipes with diameter Ø ≤ Ø16 mm.

Flexible walls:
The wall with a frame structure of steel or wooden sections covered on both sides with a minimum of 2 layers of panels, with thickness ≥ 12,5 mm. Total flexible wall thickness must be minimum 100 mm.
Rigid walls:
The wall made of concrete, reinforced concrete, concrete blocks, cellular concrete, ceramic brick (solid, hollow or lattice) or silicate brick (solid or hollow) with density min. 550 kg/m^3. The wall thickness must be minimum 100 mm.
Rigid floors:
The floor made of concrete, reinforced concrete or cellular concrete with minimum density 550 kg/m^3. The floor thickness must be minimum 150 mm.

INSTALLATION METHOD

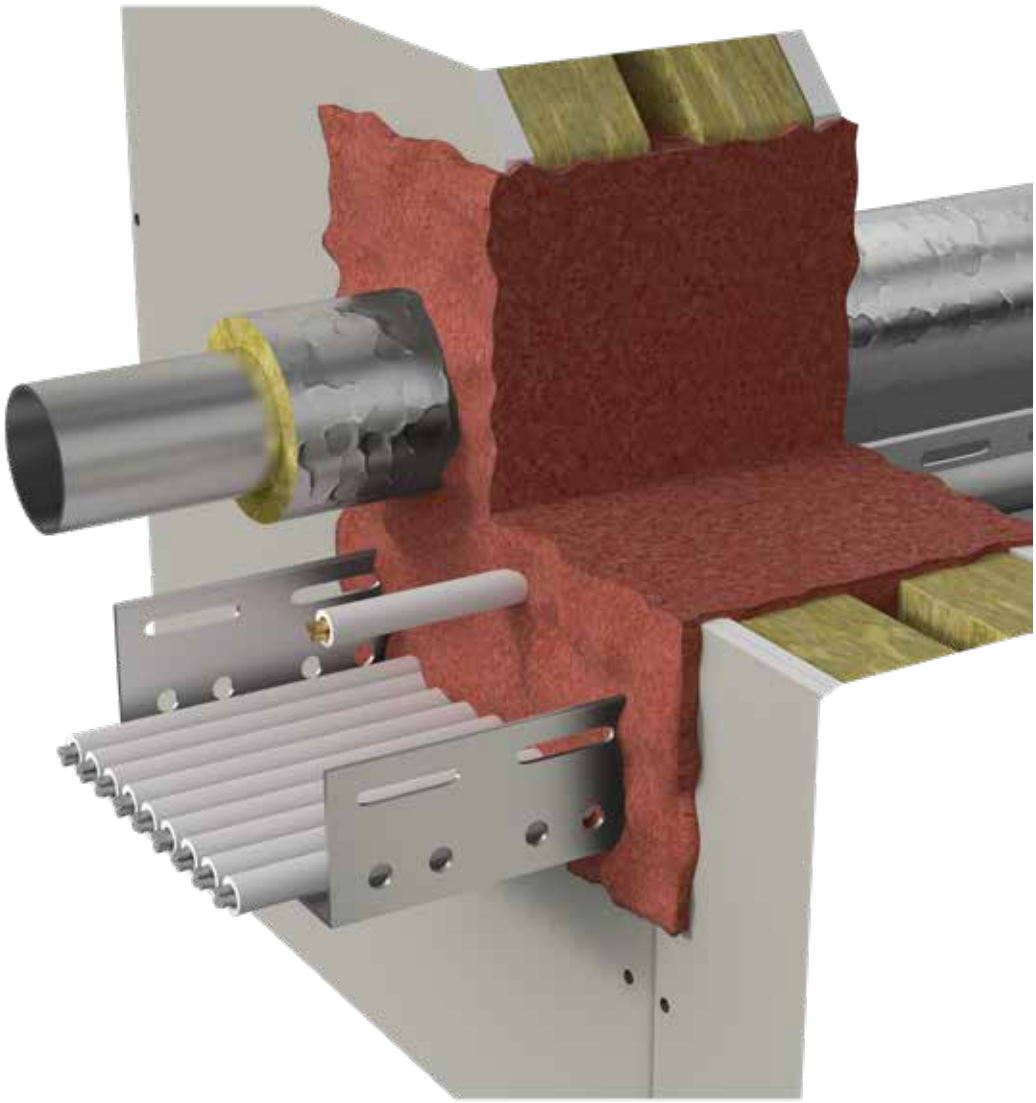
• Clean the surfaces of the partition of all contaminants before sealing is performed.
• Stick the self-adhesive intumescent disk at the installation site with an overlap of 10mm,
in case of protection penetration seal in the:
- Wall, apply intumescent discs from both sides of the partition,
- Floor, apply intumescent disc from the bottom of the floor.

AVAILABILITY

Dimensions	Box	Outer box	Pallet	Article number
65 mm x 3mm	32	384	12288	INFRDC32

INTU FR FOAM 2K

FIRE PROTECTION FOAM



up to EI 120 | easy to use | combustible pipes | non-combustible pipes | non-combustible pipes with flammable insulation | mixed services penetrations | electrical services

PRODUCT DESCRIPTION

The **INTU FR FOAM 2K** intumescent fire protection foam is on the basis polyurethane with fire-retardant additives for the fire-resistant sealing of openings around cable trays, cable bundles, flammable and non-flammable pipes. After application it reacts and increases its volume. During a fire, the two-component foam prevents fire and smoke from spreading through fireresistant partitions.

- fire resistance class up to EI 120
- installation from one side possible
- excellent adhesion to surface
- plastic, aluminium composite and metal pipes
- quick installation and sealing hard-to-reach penetrations
- very efficient processing
- mixed penetration seal, cable ladders, cable bundles
- for use in walls and floors

COMPLIANCE:

- ETA-10/0431, OIB
- ETA-11/0206, OIB
- EC Certificate of Conformity 0761-CPD-0187
- EC Certificate of Conformity 0761-CPD-0208
- DoPZZ330-20180701
- TDS
- SDS

APPLICATION

The **INTU FR FOAM 2K** intumescent fire protection foam is cartridges on the basis of polyurethane. Is intended to be easy used as mixed penetration seal to 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 $\rho \geq 450$ 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 $\rho \geq 450$ 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.

INSTALLATION METHOD

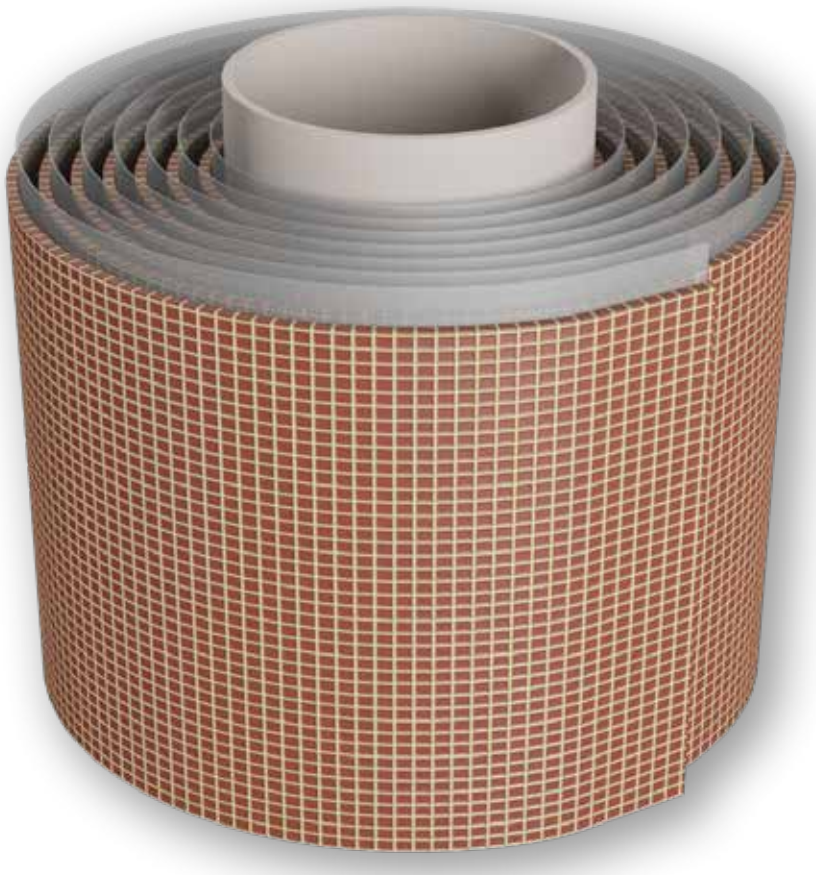
1. Clean the installations from dust, dirt and grease.
2. Hold the cartridge vertically with the tip pointing upward, unscrew the cap and firmly screw on the provided mixing nozzle.
3. Insert the cartridge into the intended dispensing gun.
4. Start pressing out and discard non-uniform initial material.
5. Fill the opening from back to front. In this process build up the foam from bottom to top, always guide the tip of the mixing nozzle above the foam so that the material does not stick or clog. After a work interruption longer than approximately 50 seconds the foam hardens in the mixing nozzle, which then must be replaced. Prior to changing the mixing nozzle, offload the dispensing gun, and carefully replace the mixing nozzle.
6. After approx. 2 minutes projecting foam residues can be cut off with a suitable knife in compliance with the necessary protective measures and safety regulations.
7. Cables that will be installed retroactively can be routed through the existing foam.
8. The fire protection penetration seal is finished. Complete any important information on the penetration seal label.

AVAILABILITY

Product	Unit	Pallet (pcs)	Article number
INTU FR FOAM 2K 380 ml	BOX (6 pcs)	360 (60xBOX)	INUB501SI
Additional equipment	**Unit**	**Pallet (pcs)**	**Article number**
INTU FR FOAM 2K HandyMax	pcs	N/A	INFO2KHM
INTU FR FOAM 2K PowerMax	pcs	N/A	INFO2KHMPM

INTU FR BANDAGE

FIRE PROTECTION BANDAGE



up to EI 120

easy to use

electrical services

mixed services penetrations

non-combustible pipes with flammable insulation

PRODUCT DESCRIPTION

Fire protection wrap INTU FR BANDAGE is a non-shrinking, solvent-free, selfadhesive, plastic butyl sealing tap. The INTU FR BANDAGE is intumescent during fire, preventing the spread of fire and smoke. It is used as a cable wrap for fire resistance class EI 120.

- fire resistance class up to EI 120
- mixed penetration seal
- permanently elastic
- fast and easy assembly
- environmentally and user-friendly
- for use in walls and floors

COMPLIANCE:

- ETA-10/0431, OIB
- ETA-11/0206, OIB
- EC Certificate of Conformity 0761-CPD-0187
- EC Certificate of Conformity 0761-CPD-0208
- DoPZZ451-20180701
- TDS
- SDS

APPLICATION

The **INTU FR BANDAGE** fire protection wrap is used as cable wrap for fire resistance. Is intended to be easy used as mixed penetration seal to 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 $\rho \geq 450$ kg/m^3.

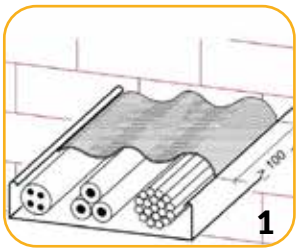
Rigid floors:
The floor must be 150 mm minimum thickness. Must have concrete, aerated concrete, cellular concrete, reinforced concrete or masonry structure, with min. density $\rho \geq 450$ kg/m^3.

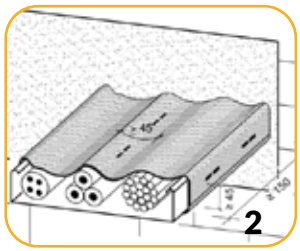
Flexible walls:
The wall must be minimum thickness 94 mm. Must have steel or timbers profile structure covered on both sides with minimum 2 layers of boards with minimum thickness 12,5 mm or minimum one layer of boards (minimum thickness 25 mm) with classification.

- 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.

INSTALLATION METHOD

1. Place a layer of **INTU FR BANDAGE** at least 100 mm wide on the penetrating elements on both sides.
2. Then a strip minimum 150 mm of **INTU FR BANDAGE** must be wrapped around the penetrating elements on both sides. The adhesive side must lay on the cables or the cable support systems. The glass fabric that serves as protection is on the outside.
3. The beginning and end of **INTU FR BANDAGE** must be connected with at least two steel clips or steel wire (Ø 1 mm). The length of overlap must be at least 45 mm. Multiple strips can also be arranged one after the other with an overlap of at least 45 mm. The butt joints must also be connected with steel clips or steel wire.



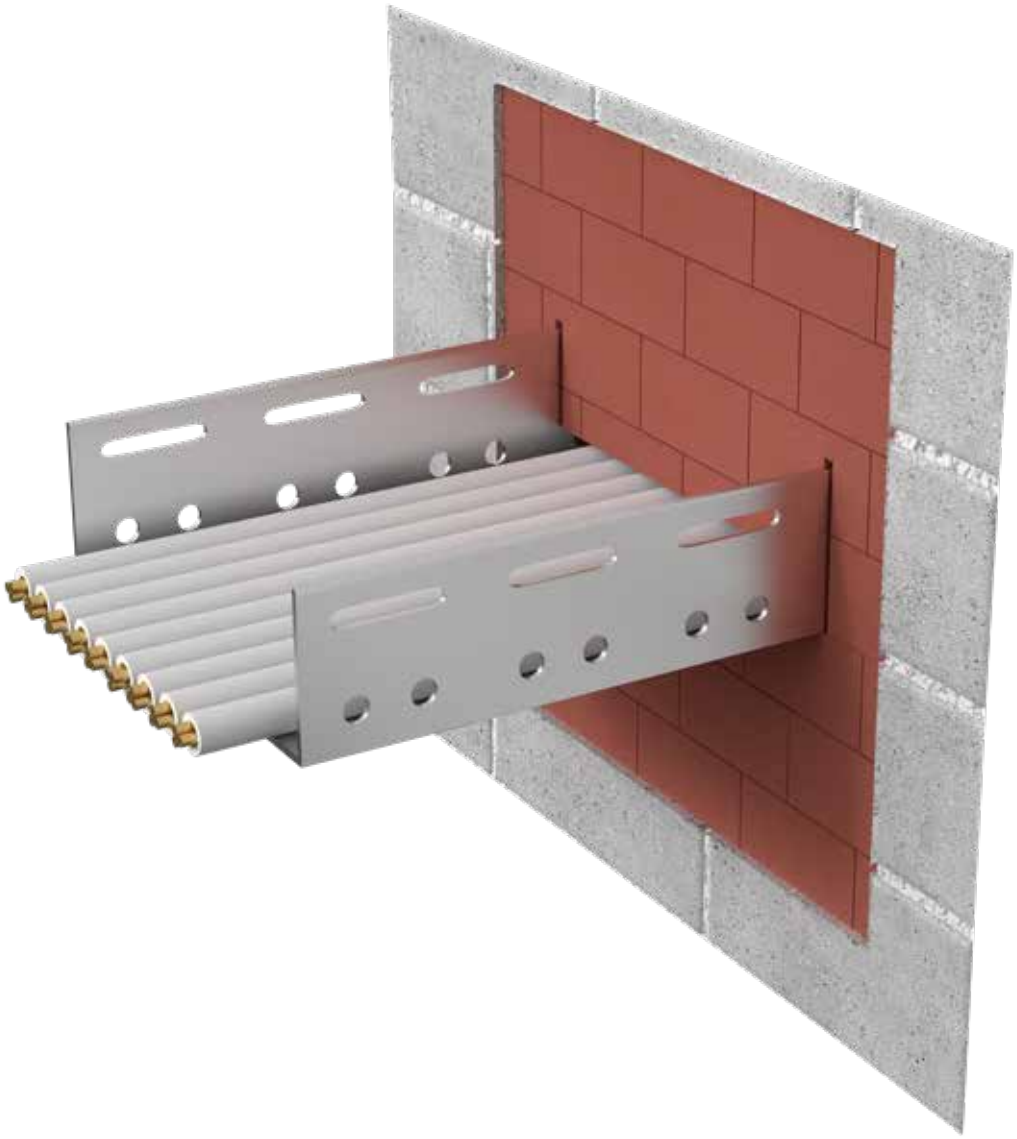


AVAILABILITY

Product	Type	Unit	Article number
INTU FR BANDAGE	150 mm / 5 m	BOX (1pcs)	INFBAND

INTU FR BRICK

INTUMESCENT FIRE STOP BRICK



up to EI 120

easy to use

combustible pipes

non-combustible pipes

non-combustible pipes with flammable insulation

mixed services penetrations

electrical services

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

COMPLIANCE:

- ETA-10/0431, OIB
- ETA-11/0206, OIB
- EC Certificate of Conformity 0761-CPD-0187
- EC Certificate of Conformity 0761-CPD-0208
- DoPZZ230-20180701
- TDS
- SDS

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 $\rho \geq 450$ kg/m^3.

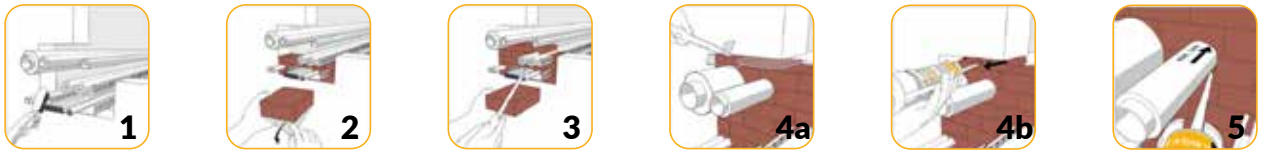
Rigid floors:
The floor must be 150 mm minimum thickness. Must have concrete, aerated concrete, cellular concrete, reinforced concrete or masonry structure, with min. density $\rho \geq 450$ kg/m^3.

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.

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-bylayer 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.



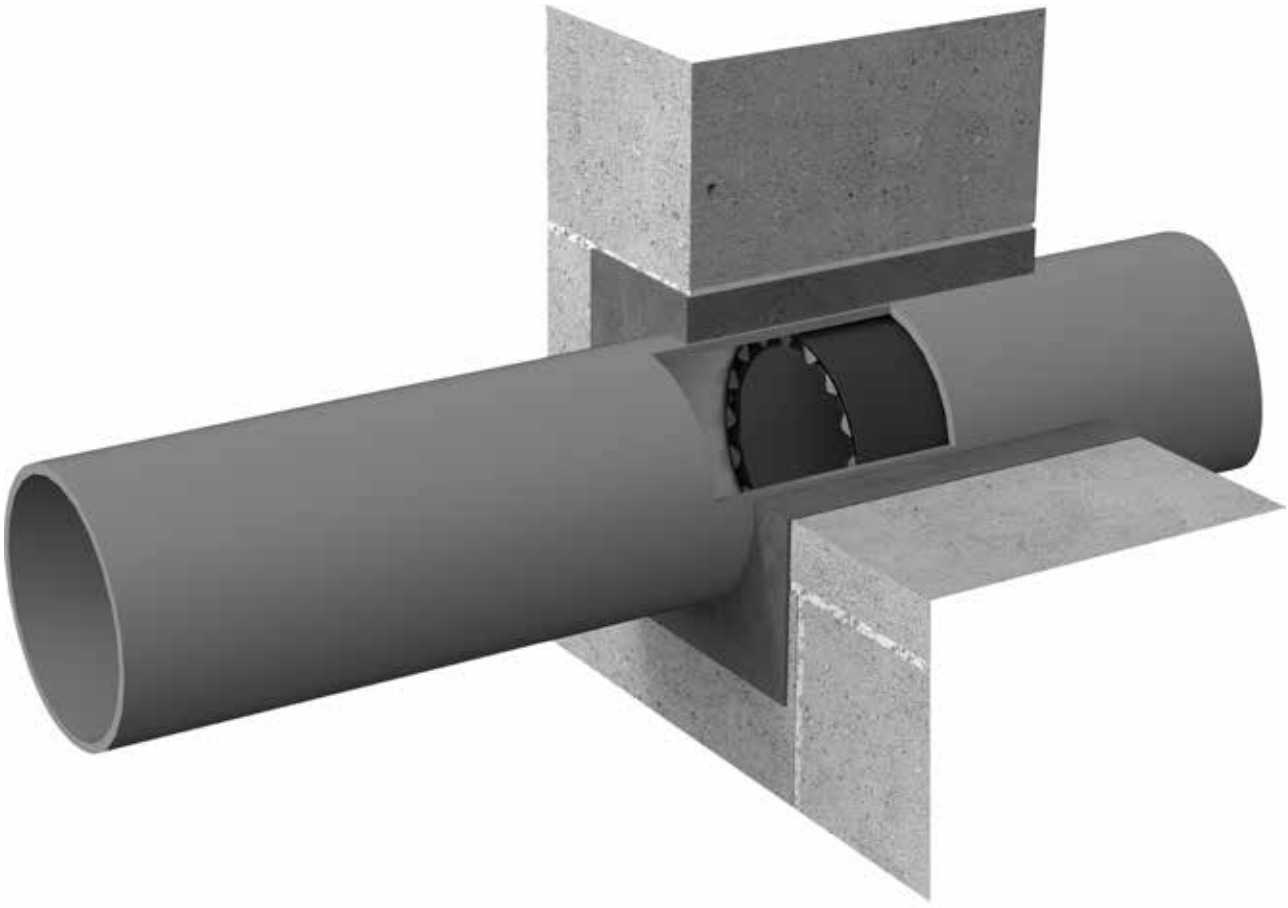
AVAILABILITY

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

INTU FR SLEEVE

INTUMESCENT INTERNAL PIPE SLEEVE

EUROPEAN TECHNICAL APPROVAL



combustible pipes

PRODUCT DESCRIPTION

Internal sleeve **INTU FR SLEEVE** is composed of a flexible insert made of graphitebased material that swells under the influence of temperature above 140°C and a metal ring-shaped cartridge made of 1.0 mm thick sheet metal protected with anti-corrosion coating.

COMPLIANCE:

- Reference standard: EN 1366-3 / ETAG 026-2 / EAD 350454-00-1104
- DoP 4/2019
- ETA-19/0844
- CoC 1488-CPR-0825/W
- TDS
- SDS
- Fire classification 03777/18/Z00NZP

APPLICATION

INTU FR SLEEVE is used for fire protection of penetrations with plastic pipes (PVC, PP, PE, HDPE) running through fire partitions. For installation inside the pipe.

Rigid walls:
The wall must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 600kg/m^3
Rigid floors:
The floor must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 1700kg/m^3

INSTALATION METHOD

1. Install **INTU FR SLEEVE**:
- rigid wall - in the wall axis
- rigid floor - 1cm from the floor bottom

2. Filling the gap with use of cement mortar

AVAILABILITY

Type	Box	Article number
110 mm	20	ININS110
125 mm	15	ININS125
160 mm	10	ININS160

INTU FR EJ SEAL

FIRE RATED EXPANSION JOINT SEAL

up to
EI 120

easy to use

weatherproof

linear joint
seals

PRODUCT DESCRIPTION

The flexible gap filler **INTU FR EJ SEAL** is composed non-flammable foams of different thicknesses, with layers of Graphite-based intumescent material. During fire, the material increases volume and forms firestop foam filling the gap. The system is very flexible, making it ideal for gaps with a high degree of displacement.

- fire resistance class up to EI 120
- installation in walls and floors
- easy installation without the use of special tools
- high flexibility
- resistance to difficult weather conditions

COMPLIANCE:

- Reference standard: EN 1366-4 / ETAG 026-3 / EAD 350141-00-1106
- DoP 10/2019
- ETA-20/0330
- CoC 1488-CPR-0865/W
- TDS
- SDS

APPLICATION

Fire rated expansion joint seal gaps in walls and floors. Fire resistance class max EI 120 up to 50mm gap width.

Rigid walls:
The wall must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 600kg/m^3.
Rigid floors:
The floor must minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 1700kg/m^3.

INSTALLATION METHOD

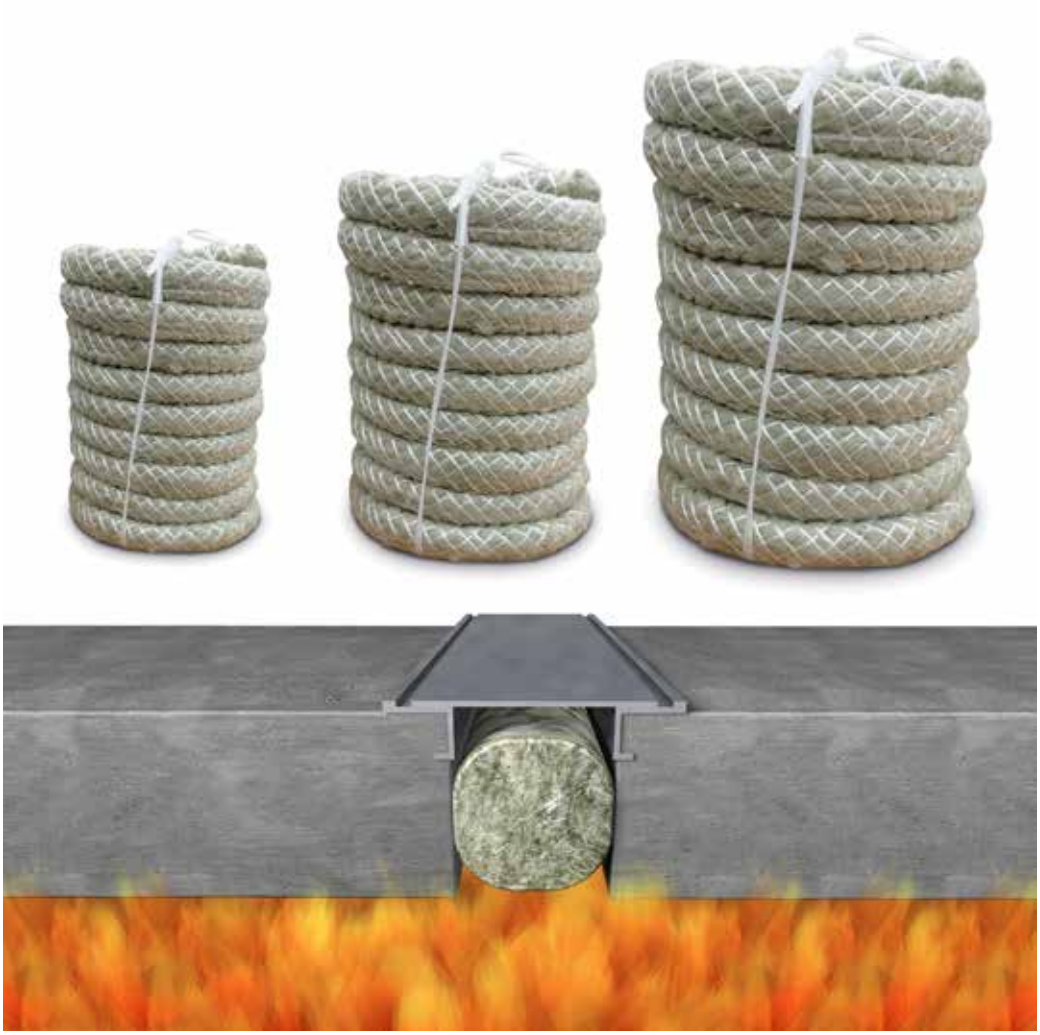
1. The surface of the joint must be clean, dry and free of dust before installation.
2. Choose the right size of the filler, depending on the width of the gap.
3. Compress the **INTU FR EJ SEAL** flexible filler and insert into the gap, the intumescent material adheres to the partition.
4. Fill the remaining gap with mineral wool with minimum density 50 kg/m^3.
5. INTU FR EJ SEAL should be placed on either side of wall or floor, flush with the partition.

AVAILABILITY

Type	Box	Article number
10 mm / 1 m	100	INEJS10/120
20 mm / 1 m	80	INEJS20/120
30 mm / 1 m	80	INEJS30/120
40 mm / 1 m	60	INEJS40/120
50 mm / 1 m	50	INEJS50/120
60 mm / 1 m	40	INEJS60/120
70 mm / 1 m	40	INEJS70/120
80 mm / 1 m	30	INEJS80/120
90 mm / 1 m	25	INEJS90/120
100 mm / 1 m	25	INEJS100/120

INSU-ROPE

FIRE RATED LINEAR JOINT SEALS ROPE



up to EI 240

easy to use

linear joint seals

PRODUCT DESCRIPTION

INSU-ROPE fire rated linear joint seals rope is made of mineral wool.

- fire resistance EI 240 min
- horizontal and vertical installation
- thermal insulation
- non-flammability
- acoustic insulation
- Low thermal conductivity coefficient
- biological stability
- stability of dimensions and volumes
- chemically neutral
- highly flexible

COMPLIANCE:

- Declaration of Performance: 1404-CPR-3055/2018
- Certificate of Constancy of Performance: 1404-CPR-3055
- ETA – 17/0061
- TDS
- SDS

APPLICATION

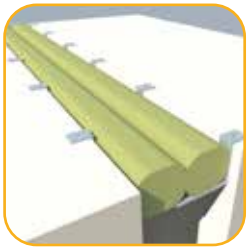
INSU-ROPE is used for linear sealing: horizontal and vertical.

Rigid walls: The wall made of concrete, cellular concrete, reinforced concrete or masonry construction with minimum density: 700kg/m^3. The wall thickness must be minimum 150 mm.
Rigid floors: The floor made of concrete, cellular concrete, reinforced concrete or masonry construction with minimum density: 700kg/m^3. The floor thickness must be minimum 150 mm.

INSTALLATION METHOD

1. Clean the linear gap/hole surface and make sure they are free of dust and other dirt.
2. Select the diameter of **INSU-ROPE** according to the availability table and the number.
3. Place the **INSU-ROPE** in the linear joint element flush with the face or below. The **INSU-ROPE** must be totally fit in area where the adhesive has been applied and the **INSU-ROPE** ends must adhere to each other without leaving gap.
4. The **INSU-ROPE** should be installed gradually for one or two layers. Lay the edge of the installed rope to the edge of the previously laid rope layer.



AVAILABILITY

Type	Packaging	Article number
12 mm / 30 m	ROLL (30m)	INIR12/30
20 mm / 30 m	ROLL (30m)	INIR20/30
30 mm / 30 m	ROLL (30m)	INIR30/30
40 mm / 30 m	ROLL (30m)	INIR 40/30
50 mm / 25 m	ROLL (25m)	INIR50/25
60 mm / 25 m	ROLL (25m)	INIR60/25
70 mm / 20 m	ROLL (20m)	INIR70/20
80 mm / 20 m	ROLL (20m)	INIR80/20
90 mm / 18 m	ROLL (18m)	INIR90/18
100 mm / 10 m	ROLL (10m)	INIR100/10
120 mm / 2 m	ROLL (2m)	INIR120/2
150 mm / 2 m	ROLL (2m)	INIR150/2
170 mm / 2 m	ROLL (2m)	INIR170/2
180 mm / 2 m	ROLL (2m)	INIR180/2

INTU FR GRILLE

INTUMESCENT FR GRILLE

up to EI 240

140°C

high airflow

ventilation

door seals

PRODUCT DESCRIPTION

Firestop ventilation grilles **INTU FR GRILLE** are made from material that expands under the influence of temperature above 140°C. Intumescent inserts close the ventilation holes during a fire, preventing the spread of flame and smoke.

- fire resistance: 60, 120 and 240 minutes
- air flow up to 80%
- maximum dimensions:

single round grille - Ø 400 [mm];
single rectangular grille - 600 x 600 [mm]

- not standard sizes

COMPLIANCE:

- Reference standard: ETAG 026-4
- Fire classification: 01245/18/Z00NZP
- TDS
- SDS

APPLICATION

INTU FR GRILLES are installed in the ventilation holes in walls and floors. The material swelling during a fire fills the hole completely, preventing flame and smoke from entering adjacent rooms.

Rigid walls:
The wall must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 600kg/m^3
Rigid floors:
The floor must be minimum thickness 150mm. Must have concrete, cellular concrete or masonry structure, with minimum density 1700kg/m^3

AVAILABILITY

Height [mm]	R40A / Width [mm] / Art. No.											
	100	150	200	225	250	300	350	400	450	500	550	600
100	NGRR60/ 100x100	INGRR60/ 150x100	INGRR60/ 200x100	INGRR60/ 225x100	NGRR60/ 250x100	INGRR60/ 300x100	INGRR60/ 350x100	INGRR60/ 400x100	INGRR60/ 450x100	INGRR60/ 500x100	INGRR60/ 550x100	INGRR60/ 600x100
150		INGRR60/ 150x150	INGRR60/ 200x150	INGRR60/ 225x150	INGRR60/ 250x150	INGRR60/ 300x150	INGRR60/ 350x150	INGRR60/ 400x150	INGRR60/ 450x150	INGRR60/ 500x150	INGRR60/ 550x150	INGRR60/ 600x150
200			INGRR60/ 200x200	INGRR60/ 225x200	INGRR60/ 250x200	INGRR60/ 300x200	INGRR60/ 350x200	INGRR60/ 400x200	INGRR60/ 450x200	INGRR60/ 500x200	INGRR60/ 550x200	INGRR60/ 600x200
225				INGRR60/ 225x225	INGRR60/ 250x225	INGRR60/ 300x225	INGRR60/ 350x225	INGRR60/ 400x225	INGRR60/ 450x225	INGRR60/ 500x225	INGRR60/ 550x225	INGRR60/ 600x225
250					INGRR60/ 250x250	INGRR60/ 300x250	INGRR60/ 350x250	INGRR60/ 400x250	INGRR60/ 450x250	INGRR60/ 500x250	INGRR60/ 550x250	INGRR60/ 600x250
300						INGRR60/ 300x300	INGRR60/ 350x300	INGRR60/ 400x300	INGRR60/ 450x300	INGRR60/ 500x300	INGRR60/ 550x300	INGRR60/ 600x300
350							INGRR60/ 350x350	INGRR60/ 400x350	INGRR60/ 450x350	INGRR60/ 500x350	INGRR60/ 550x350	INGRR60/ 600x350
400								INGRR60/ 400x400	INGRR60/ 450x400	INGRR60/ 500x400	INGRR60/ 550x400	INGRR60/ 600x400
450									INGRR60/ 450x450	INGRR60/ 500x450	INGRR60/ 550x450	INGRR60/ 600x450
500										INGRR60/ 500x500	INGRR60/ 550x500	INGRR60/ 600x500
550											INGRR60/ 550x550	NGRR60/ 600x550
600												INGRR60/ 600x600

Height [mm]	R80 / Width [mm] / Art. No.											
	100	150	200	225	250	300	350	400	450	500	550	600
100	INGRR240/ 100x100	INGRR240/ 150x100	INGRR240/ 200x100	INGRR240/ 225x100	INGRR240/ 250x100	INGRR240/ 300x100	INGRR240/ 350x100	INGRR240/ 400x100	INGRR240/ 450x100	INGRR240/ 500x100	INGRR240/ 550x100	INGRR240/ 600x100
150		INGRR240/ 150x150	INGRR240/ 200x150	INGRR240/ 225x150	INGRR240/ 250x150	INGRR240/ 300x150	INGRR240/ 350x150	INGRR240/ 400x150	INGRR240/ 450x150	INGRR240/ 500x150	INGRR240/ 550x150	INGRR240/ 600x150
200			INGRR240/ 200x200	INGRR240/ 225x200	INGRR240/ 250x200	INGRR240/ 300x200	INGRR240/ 350x200	NGRR240/ 400x200	INGRR240/ 450x200	INGRR240/ 500x200	INGRR240/ 550x200	INGRR240/ 600x200
225				INGRR240/ 225x225	INGRR240/ 250x225	INGRR240/ 300x225	INGRR240/ 350x225	INGRR240/ 400x225	INGRR240/ 450x225	INGRR240/ 500x225	INGRR240/ 550x225	INGRR240/ 600x225
250					INGRR240/ 250x250	INGRR240/ 300x250	INGRR240/ 350x250	INGRR240/ 400x250	INGRR240/ 450x250	INGRR240/ 500x250	INGRR240/ 550x250	INGRR240/ 600x250
300						INGRR240/ 300x300	INGRR240/ 350x300	INGRR240/ 400x300	INGRR240/ 450x300	INGRR240/ 500x300	INGRR240/ 550x300	INGRR240/ 600x300
350							INGRR240/ 350x350	INGRR240/ 400x350	INGRR240/ 450x350	INGRR240/ 500x350	INGRR240/ 550x350	INGRR240/ 600x350
400								INGRR240/ 400x400	INGRR240/ 450x400	INGRR240/ 500x400	INGRR240/ 550x400	INGRR240/ 600x400
450									INGRR240/ 450x450	NGRR240/ 500x450	INGRR240/ 550x450	INGRR240/ 600x450
500										INGRR240/ 500x500	INGRR240/ 550x500	INGRR240/ 600x500
550											INGRR240/ 550x550	INGRR240/ 600x550
600												INGRR240/ 600x600

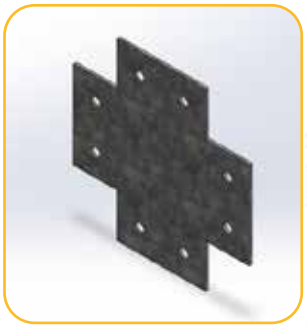
Height [mm]	R40B / Width [mm] / Art. No.				
	100	150	200	250	300
100	INGRR120/ 100x100	INGRR120/ 150x100	INGRR120/ 200x100	INGRR120/ 250x100	INGRR120/ 300x100
150	INGRR120/ 100x150	INGRR120/ 150x150	INGRR120/ 200x150	INGRR120/ 250x150	INGRR120/ 300x150
200	INGRR120/ 100x200	INGRR120/ 150x200	INGRR120/ 200x200	INGRR120/ 250x200	INGRR120/ 300x200
250	INGRR120/ 100x250	INGRR120/ 150x250	INGRR120/ 200x250	INGRR120/ 250x250	INGRR120/ 300x250
300	INGRR120/ 100x300	INGRR120/ 150x300	INGRR120/ 200x300	INGRR120/ 250x300	INGRR120/ 300x300

Grille type	Grille dimensions [mm]	Grille thickness [mm]	Fire resistance class	Scope of application
INTU FR GRILLE C50	Ø100 ÷ Ø400	50	EI 60	wall and floor
INTU FR GRILLE C80	Ø100 ÷ Ø400	80	EI 120	wall and floor

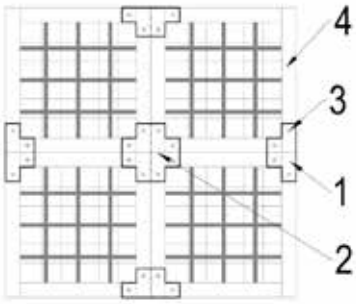
Fire resistance class	Diameter [mm] / Art. No.										
	100	125	150	160	200	225	250	300	315	350	400
C50	INGRC 60/100	INGRC 60/125	INGRC 60/150	INGRC 60/160	INGRC 60/200	INGRC 60/225	INGRC 60/250	INGRC 60/300	INGRC 60/315	INGRC 60/350	INGRC 60/400
C80	INGRC 120/100	INGRC 120/125	INGRC 120/150	INGRC 120/160	INGRC 120/200	INGRC 120/225	INGRC 120/250	INGRC 120/300	INGRC 120/315	INGRC 120/350	INGRC 120/400

CONNECTOR FOR INTU FR GRILLE

Connector – model T



Connector – model X



Method of connection
INTU FR GRILLE
1 – connector – model T
2 – connector – model X
3 – steel rivet – Ø3mm
4 – intumescent grille
INTU FR GRILLE

Apply a small amount of intumescent acrylic mastic (eg. **INTU FR MASTIC**) for a grill along edge.
Fill all other joints and cavities with intumescent acrylic mastic
(eg. **INTU FR MASTIC**)

AVAILABILITY

INTU FR GRILLE CONNECTOR		
Contents	**Packaging**	**Article number**
CONNECTOR T	PCS	INFRGCT
CONNECTOR X	PCS	INFRGCX

INTUSEAL CERTIFICATION

The training is free of charge.

Trainings are conducted:
- at the seat of INTUSEAL (room for 10-15 peoples)
- at your location
- on-line (SKYPE. MS TEAMS)

You will learn about the leading solutions in the field of passive fire protection.

After the training, you will receieve a certificate adapted to the local language.

INTU ATP

AIR TRANSFER FACEPLATE

easy to use

ventilation

door seals

PRODUCT DESCRIPTION

Louver masking grille **INTU AIR TRANSFER PLATE** is use for aesthetic protection of ventilation inlets/outlets. **INTU AIR TRANSFER PLATE** is manufactured using modern production techniques and precision stamping machines. The material is 0.9 mm thick steel. The louvres are placed every 8.5mm, with a 30% downward slant.

APPLICATION

With installed intumescent ventilation grilles (eg **INTU FR GRILLE**) in:

- walls
- floors
- doors

INSTALLATION METHOD

INTU AIR TRANSFER PLATE is installed using commonly available steel screws through the holes in the flange.

AVAILABILITY

Colors:
Standard color: satin.
Color on request (no extra cost): white.
Color on request (extra cost): any RAL; the price is agreed individually.

Dimensions:
The standard size [WIDTH x HIGHT] where the width is larger than the height [LARGER x SMALLER]. It is possible to order a „reverse dimension" i.e. height is larger than the width; in this case, please provide additional information in the order.

[Width] / [Height]	INTU AIR TRANSFER PLATE									
	100	150	200	250	300	350	400	450	500	600
100	INATP/ S102x102	INATP/ S152x102	INATP/ S203x102	INATP/ S254x102	INATP/ S305x102	INATP/ S356x102	INATP/ S406x102	INATP/ S457x102	INATP/ S508x102	INATP/ S610x102
150		INATP/ S152x152	INATP/ S203x152	INATP/ S254x152	INATP/ S305x152	INATP/ S356x152	INATP/ S406x152	INATP/ S457x152	INATP/ S508x152	INATP/ S610x152
200			INATP/ S203x203	INATP/ S254x203	INATP/ S305x203	INATP/ S356x203	INATP/ S406x203	INATP/ S457x203	INATP/ S508x203	INATP/ S610x203
250				INATP/ S254x254	INATP/ S305x254	INATP/ S356x254	INATP/ S406x254	INATP/ S457x254	INATP/ S508x254	INATP/ S610x254
300					INATP/ S305x305	INATP/ S356x305	INATP/ S406x305	INATP/ S457x305	INATP/ S508x305	INATP/ S610x305
350						INATP/ S356x356	INATP/ S406x356	INATP/ S457x356	INATP/ S508x356	INATP/ S610x356
400							INATP/ S406x406	INATP/ S457x406	INATP/ S508x406	INATP/ S610x406
450								INATP/ S457x457	NATP/ S508x457	INATP/ S610x457
500									INATP/ S508x508	INATP/ S610x508
600										INATP/ S610x610

INTU STRIP F

INTUMESCENT SEALS

up to
EI 60

door seals

PRODUCT DESCRIPTION

The firestop seal **INTU STRIP F** is made of graphite-based material. The material swells under the influence of high temperature, increasing its volume 35 times. The expanding product prevents the spread of fire through joints and gaps in the fire door. Fire resistance class up to EI 60.

- rolls with a length of 50/100 m
- thickness from 2 to 2.5 mm
- width from 10 to 58 mm

COMPLIANCE:

- Tested to EN1364-1:2014-03 + Ap1:2016 10P
- Door fire test report LZP43-02580/16/Z00NZP
- Swell pressure report LZP08-2580/16/Z00NZP
- Swell height report LZP09-2580/16/Z00NZP
- Thermal conductivity test report LZF00-03116/20/Z00NZF
- TDS
- SDS

APPLICATION

The **INTU STRIP F** is designed for sealing gaps in fire doors.

INSTALLATION METHOD

The seal is installed around the door in previously prepared grooves. In order to install the seal, use your own gluing technology; fit it exactly to the milled groove along its entire length. Seals should not be cut after applying to surface.

AVAILABILITY

INTU FR STRIP F - Intumescent door seal (without adhesive tape)		
Type (thicnkess/width/length)	**Packaging**	**Article number**
2mm/10mm/50m	ROLL	INSTF10x2/50
2mm/10mm/100m	ROLL	INSTF10x2/100
2mm/15mm/50m	ROLL	INSTF15x2/50
2mm/15mm/100m	ROLL	INSTF15x2/100
2mm/20mm/50m	ROLL	INSTF20x2/50
2mm/20mm/100m	ROLL	INSTF20x2/100
2mm/22mm/50m	ROLL	INSTF22x2/50
2mm/22mm/100m	ROLL	INSTF22x2/100
2mm/25mm/50m	ROLL	INSTF25x2/50
2mm/25mm/100m	ROLL	INSTF25x2/100
2mm/30mm/50m	ROLL	INSTF30x2/50
2mm/30mm/100m	ROLL	INSTF30x2/100
2mm/40mm/50m	ROLL	INSTF40x2/50
2mm/40mm/100m	ROLL	INSTF40x2/100
2mm/58mm/50m	ROLL	INSTF58x2/50
2mm/58mm/100m	ROLL	INSTF58x2/100

Color	black
Self-adhesive tape	NO
Thickness [mm]	2,0; 2,5
Width [mm]	10 ÷ 58
Length [m]	50; 100
Density [g/cm3]	1,2 ± 15%
Swelling temperature [°C]	Ca. 150
Swelling ratio	≤ 35,97
Swelling pressure [N/mm2]	Ca. 0,815
Fire resistance	Max 60 minutes
Thermal conductivity λ [W/mK]	0,4049

INTU STRIP FC

INTUMESCENT SEALS

up to
EI 60

door seals

PRODUCT DESCRIPTION

The firestop seal **INTU STRIP FC** is made of graphite-based material. The material swells under the influence of high temperature, increasing its volume 35 times. The expanding product prevents the spread of fire through joints and gaps in the fire door. Fire resistance class up to EI 60.

- rolls with a length of 50/100/200 m
- thickness 2.0 mm
- width from 15 to 58 mm

COMPLIANCE:

- Tested to EN1364-1:2014-03 + Ap1:2016 10P
- Door fire test report LZP43-02580/16/Z00NZP
- Swell pressure report LZP08-2580/16/Z00NZP
- Swell height report LZP09-2580/16/Z00NZP
- Thermal conductivity test report LZF00-03116/20/Z00NZF
- TDS
- SDS

APPLICATION

The **INTU STRIP FC** is designed for sealing gaps in fire doors.

INSTALLATION METHOD

The seal is mounted around the door in previously prepared grooves. In order to install the seal, dust off the bonding surface and then degrease it with IPA (isopropyl alcohol/isopropanol min. 90%); remove the protective layer of the adhesive tape, align the seal and press it exactly at the milled groove along its entire length. Seals should not be cut after applying to surface.

AVAILABILITY

INTU FR STRIP F - Intumescent door seal		
Type (thicnkess/width/length)	**Packaging**	**Article number**
2mm/10mm/50m	ROLL	INSTFC10x2/50
2mm/10mm/100m	ROLL	INSTFC10x2/100
2mm/15mm/50m	ROLL	INSTFC15x2/50
2mm/15mm/100m	ROLL	INSTFC15x2/100
2mm/20mm/50m	ROLL	INSTFC20x2/50
2mm/20mm/100m	ROLL	INSTFC20x2/100
2mm/22mm/50m	ROLL	INSTFC22x2/50
2mm/22mm/100m	ROLL	INSTFC22x2/100
2mm/25mm/50m	ROLL	INSTFC25x2/50
2mm/25mm/100m	ROLL	INSTFC25x2/100
2mm/30mm/50m	ROLL	INSTFC30x2/50
2mm/30mm/100m	ROLL	INSTFC30x2/100
2mm/40mm/50m	ROLL	INSTFC40x2/50
2mm/40mm/100m	ROLL	INSTFC40x2/100
2mm/58mm/50m	ROLL	INSTFC58x2/50
2mm/58mm/100m	ROLL	INSTFC58x2/100

Color	black
Self-adhesive tape	YES
Type of glue	modified acrylic
Thickness [mm]	2,0
Width [mm]	15 ÷ 58
Length [m]	50; 100; 200
Density [g/cm3]	1,2 ± 15%
Swelling temperature [°C]	Ca. 140
Swelling ratio	≤ 35,97
Swelling pressure [N/mm2]	Ca. 0,815
Fire resistance	Max 60 minutes
Thermal conductivity λ [W/mK]	0,4049

INTU FR GUARD

FIRE RETARDANT IMPREGNATE

fabrics

PRODUCT DESCRIPTION

The impregnate **INTU FR GUARD** is intended for fire protection of fabrics, decorations and clothing not exposed to wetting. The product gives cotton, wool, polyester, polyamide, polypropylene and decorative mosses a non-flammability feature.
INTU FR GUARD is in form white-gray powder granulate. The impregnate is use in the form of an aqueous solution. It contains phosphorus and ammonium compounds and surfactants that help wetting impregnated fabrics.

COMPLIANCE:

- DoP 14/2019
- Fire classification: 01928/18/Z00NZP
- Fire classification: 02957/19/Z00NZP
- TDS
- SDS

APPLICATION

- Schools, kindergartens
- Public administration buildings
- Residential buildings, companies
- Theaters, cinemas, hotels
- Congress centers
- Shopping centers
- Other objects

INSTALLATION METHOD

Preparation for impregnation:
INTU FR GUARD LIQUID - is a ready to use preparation containing phosphorus and ammonium compounds and surfactants that help wetting impregnated fabrics. The works should be carried out in temp. range 15-30°C.
INTU FR GUARD GRANULATE – the product should be poured gradually into heated water up to approx. 50°C. In the proportion: 1kg of impregnate to 4 liters of water – stirring constantly, until the granules dissolve completely. The solution should be prepared a few hours before use.

Impregnation:
- Method of bath - the expanded fabric should be immersed in impregnation for a period of 5 minutes. After removal, the fabric dried. You can not impregnate materials rolled into bales.
- Spray or lubrication method - fabrics that can not be soaked (carpers, pavements, decorative mosses) are impregnated by spraying or lubricating the fabric for complete hydration.

Drying fabrics after impregnation:
Impregnated fabrics should be dried at room temperature. The process can be accelerated by raising the temperature to max 50°C.
Cleaning fabrics after impregnation:
After washing or soaking the fabric should be impregnated again because the impregnation is washable.

AVAILABILITY

Contents	Type	Packaging	Box	Pallet	Article number
500 ml	liquid	atomizer	44	1056	INGU500ML
5 l	liquid	can	N/A	108	INGU5L
0,8 kg	granulate	pail	27	300	INGU1G
6,4 kg	granulate	pail	N/A	48	INGU8G

Type of fabric	Approximate consumption	
	granulate [g / m2]	liquid [l / m2]
Wool	≥ 100	≥ 0,50
Cotton	≥ 50	≥ 0,25
Polyamide	≥ 15	≥ 0,08
Polyester	≥ 10	≥ 0,05
Polypropylene	≥ 120	≥ 0,60
Moss	≥ 150	≥ 0,75

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