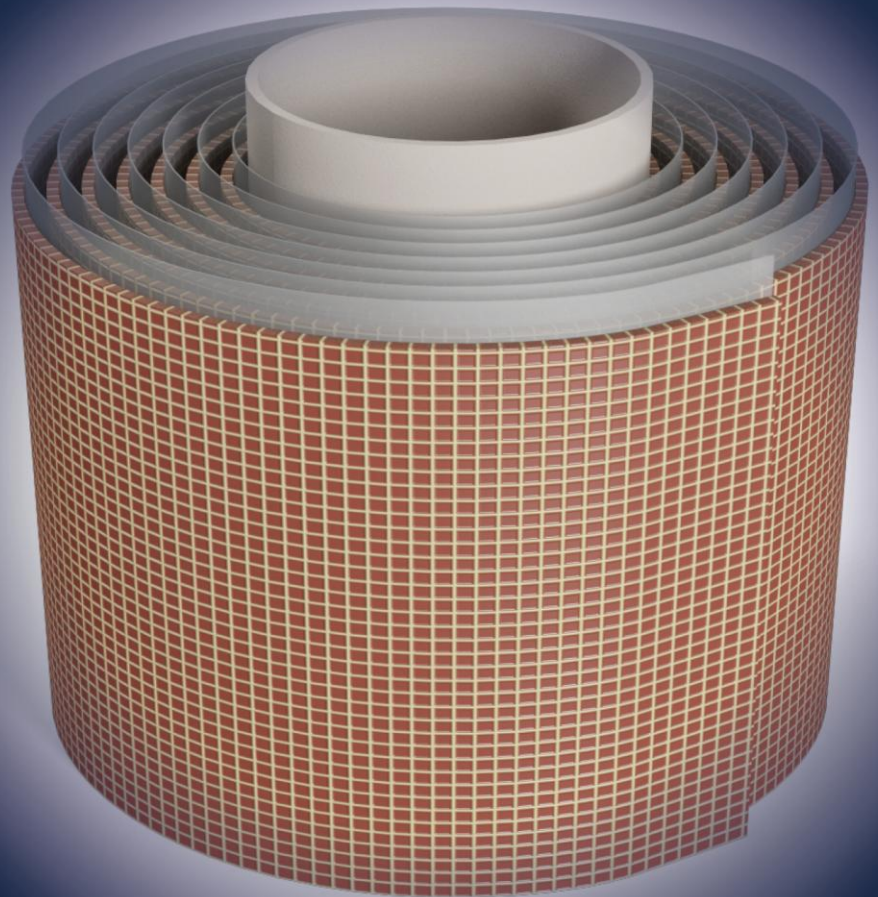


INTU FR BANDAGE

Fire protection bandage

TDS TECHNICAL DATA SHEET



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→ PRODUCT DESCRIPTION

Fire protection wrap **INTU FR BANDAGE** is a non-shrinking, solvent-free, self-adhesive, 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**
- fast and easy assembly
- mixed penetration seal
- environmentally and user-friendly
- permanently elastic
- for use in walls and floors

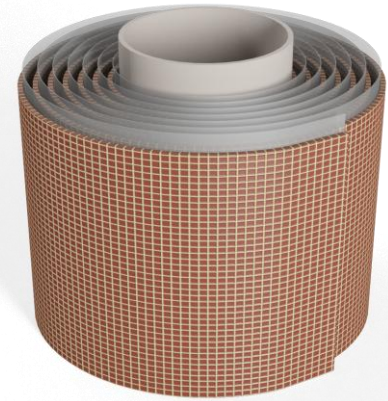
→ APPLICATION

The **INTU FR BANDAGE** fire protection wrap is used as cable wrap for fire resistance. Is intended to be easily 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).

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.
Rigid walls:	The wall must be minimum 100 mm thickness, 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. 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 $\rho \geq 450 \text{ kg/m}^3$.

→ AVAILABILITY

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



→ COMPLIANCE

- Test standard:
EN 1366-3 / EAD 350454-00-1104
- European Technical Assessment:
ETA-10/0431 and ETA-11/0206
- Declaration of Performance:
ZZ451-20220401
- Certificate of Constancy of Performance
0761-CPR-0208

→ TRANSPORT AND STORAGE

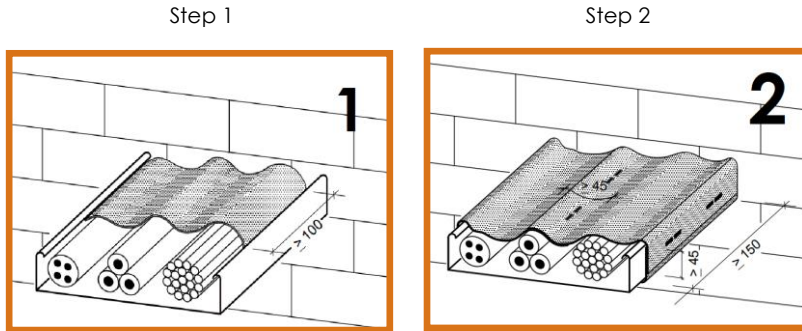
Store in dry and cool conditions at temperatures between + 5°C and + 25°C.

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➔ INSTALLATION METHOD



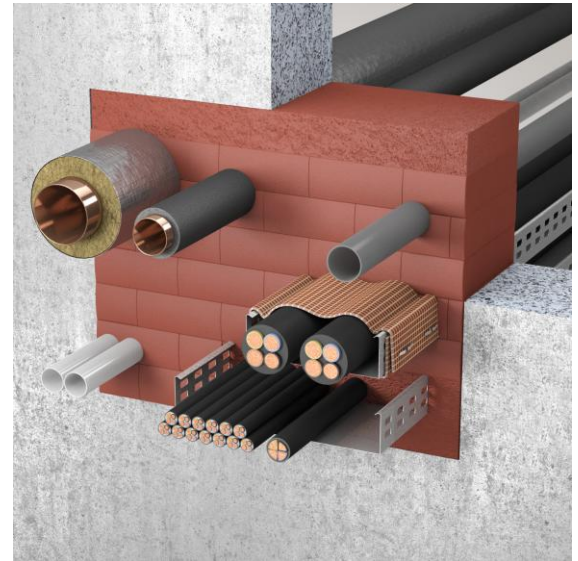
1. Place a layer of **INTU FR BANDAGE** at least 100 mm wide on the penetrating elements on both sides.
2. Then a strip minimum 150 mm of **INTU FR BANDAGE** must be wrapped around the penetrating elements on both sides. The adhesive side must lay on the cables or the cable support systems. The glass 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 (\varnothing 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.

➔ TECHNICAL DATA

Table 1 Properties of the **INTU FR BANDAGE** fire protection wrap

Colour	Red / brown with light grey topcoat*
Shelf life	Not applicable
Transportation storage temp.	+5 °C to +30 °C (store dry and dustfree in the original packaging)
Application temperature	+5 °C to +30 °C
Temperature resistance	-20 °C to +60 °C
Expansion pressure	No expansion pressure measurable
Expansion factor ¹⁾	from 6.0 x to 9.0 x
Category of use	Type Z ₁ in accordance with EAD 350454-00-1104
Recoatable ²⁾	Yes
Fire class ³⁾	E in accordance with EN 13501-1
Approvals	ETA-10/0431 and ETA-11/0206



¹⁾ 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.

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

³⁾ Influence of finishing materials and chemicals the following paints and occasional brief influences from chemicals will not change the fire protection properties:

Coating materials: Dispersion paint, alkyd paint, polyurethane acrylic paint, epoxy resin paint, silicone

Solvent/oil: Butyl acetate, butanol, trichloroethylene, xylene, acetone, turpentine

Gaseous chemicals: Brief storage with concentrated ammonium hydroxide solution

Contact with metals and plastics: The surface consistency of aluminum, stainless steel, galvanized steel and plastics of polyethylene and polyvinyl chloride is not negatively affected by contact with **INTU FR FOAM 2K** and **INTU FR BANDAGE**.

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→ FIRE RESISTANCE CLASSIFICATION

Table 2 Fire resistance classification for flexible walls / rigid walls / rigid floors for penetration seals with **INTU FR BANDAGE**

Type of penetrating element		Fire resistance class EI 120
CABLES		Foam injection depth b ≥ 200 mm
Sheathed electrical/ telecommunication/ optical fiber cables up to a max. outer diameter:	∅ ≤ 21 mm	The INTU FR BANDAGE must be applied on both surfaces of wall or floor
	∅ ≤ 50 mm	
	∅ ≤ 80 mm	
Tied bundles containing sheathed electrical / telecommunication / optical fibre cables up to a max. outer diameter:	∅ _{BUNDLE} ≤ 100 mm ∅ _{CABLE} ≤ 21 mm	

Type of penetrating element					Fire resistance classification	
PRE-INSULATED METAL PIPES			Insulation type	Insulation thickness (mm)	Additional precaution: INTU FR BANDAGE	Foam injection depth b ≥ 200 mm
Type of pipe	Outer diameter of pipe (mm)	Pipe wall thick.(mm)				
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 (length* ≥ 150 mm, nom. thickness 3 mm)	EI 90 – C/U E 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	1,0	PE	6,0	Floor: one layer on the top side of the penetration seal (length* ≥ 150 mm, nom. thickness 3 mm)	wall: EI 90 – C/U; E 120 – C/U floor: EI 90 – C/U; E 120 – C/U
	15,0					
	18,0					
	22,0					
WICU@Frio	6,0	1,0	PE	8,0		wall: EI 120 – C/U; E 120 – C/U
	10,0					
	12,0					
	15,0					
	22,0					
WICU@Clim	6,35	0,762	PE	6,0	floor: EI 120 – C/U; E 120 – C/U	
	9,52	0,813		8,0		
	12,70	0,813		10,0		
	15,87	0,889				
	19,05	0,889				
	22,22	0,889				

*Measured from the surface of the penetration seal

Note: With the **INTU FR BANDAGE** use the **INTU FR FOAM 2K** intumescent fire protection foam or / and the fire protection block **INTU FR BRICK** to seal the penetration.