INTU FR MASTIC

Intumescent acrylic mastic

TDS Technical Data Sheet

CE

.INTUSEAL®

passive fire protection manufacturer

www.intuseal.com

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PRODUCT DESCRIPTION

The **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.

APPLICATION

The **INTU FR MASTIC** is designed for fire protection of penetrations with:

- non-flammable pipes in floors and walls
- single electric cables / bundle of cables in floors and walls
- installation / sealing of intumescent ventilation grilles **INTU FR GRILLE**

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

AVAILABILITY

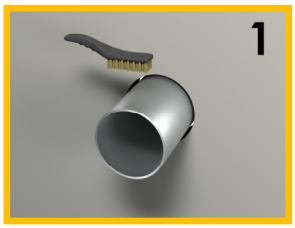
Contents	Colour	Box	Pallet	Article number
310 ml	White	15	1260	INFRM310
310 ml	Grey	15	1260	INFRMG310
310 ml	Pure White	15	1260	INFRMPW310
600 ml	White	20	720	INFRM600
600 ml	Grey	20	720	INFRMG600
600 ml	Pure White	20	720	INFRMPW600
5 L	White	N/A	60	INFRMW5L
5 L	Grey	N/A	60	INFRMG5L

COMPLIANCE

- *Test standard:*
  EN 1366-3 / EAD 350454-00-1104
- *European Technical Assessment:*
  ETA 19/0038 of 28/06/2019
- *Declaration of Performance:*
  DoP 8/2019
- *Certificate of Constancy of Performance*
  1488-CPR-0756/W

INSTALLATION METHOD

Clean the surfaces from grease and other contaminants before applying the mastic.



Place a mineral wool backfill in the hole.
Fill the gap with **INTU FR MASTIC** to the required depth.

Application conditions: mass **INTU FR MASTIC** after hardening, can be used in the temperature range: from -30˚C to +80˚C.

TRANSPORT AND STORAGE

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

- Usefulness for 310 ml capacity: 24 months from the date of production placed on the package
- Usefulness for 600 ml and 5 l capacity: 18 months from the date of production placed on the package.

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TECHNICAL DATA

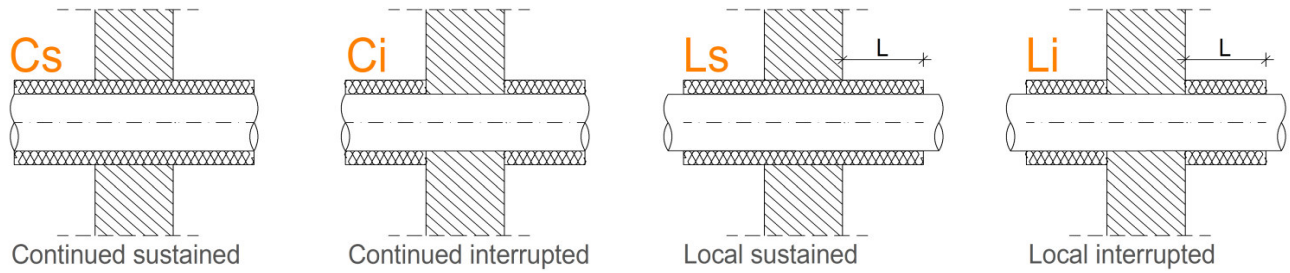
Table. 1. DETAILS - NON FLAMMABLE PIPES

	Diameter [mm]	Filling	Mineral wool pipe insulation lamella (density ≥ 37 kg/m³) min. thick x length [mm]	INTU FR MASTIC minimum width x depth [mm]	INTU FR MASTIC consumption of a 310 ml tube
Steel / Cast Iron	≤ 42,4	Mineral wool; ρ ≥ 40 kg/m³ Depth: 15mm	30 x 250	10 x 15	0,20
	≤ 48,3		50 x 250		0,20
	≤ 60,3				0,25
	≤ 76,1				0,30
	≤ 88,9				0,35
	≤ 108,0				0,40
	< 159,0	Mineral wool; ρ ≥ 40 kg/m³ Depth: 20 mm	50 x 650	25 x 20	1,90
	≤ 219,1		50 x 650	25 x 20	2,50
Copper / Steel / Cast Iron	≤ 6,0		30 x 500	25 x 20	0,35
	≤ 54,0		30 x 500		0,90
	≤ 88,9		50 x 700		1,30

Recommended **INTU FR MASTIC** mass width: from10 mm to maximum around 50 mm

FIRE RESISTANCE CLASSIFICATION

Pipe insulation configuration



STEEL/ CAST IRON PIPES/ COPPER - penetration seals

Diameter [mm]	Pipe wall thickness [mm]	WALL		FLOOR	
		C/C and C/U	Insulation configuration	C/C and C/U	Insulation configuration
Ø D ≤ 6,0	≥ 0,8	EI 240	Ci or Li	EI 180	Ci or Li
6,0 < D ≤ 15,0	≥ 1,0	EI 180		EI 90	
15,0 < D ≤ 18,0	≥ 1,1	EI 180		EI 90	
18,0 < D ≤ 22,0	≥ 1,1	EI 180		EI 90	
22,0 < D ≤ 35,0	1,4 – 14,2	EI 180		EI 90	
35,0 < D ≤ 42,0	1,5 – 14,2	EI 180		EI 90	
42,0 < D ≤ 54,0	1,7 – 14,2	EI 180		EI 90	
54,0 < D ≤ 88,9	2,2 – 14,2	EI 120		-	-

STEEL / CAST IRON PIPES - penetration seals					
Diameter [mm]	Pipe wall thickness [mm]	WALL		FLOOR	
		C/C and C/U	Insulation configuration	C/C and C/U	Insulation configuration
D ≤ 42,4	2,0 – 14,2	EI 240	Ci or Li	EI 240	Ci or Li
42,4 < D ≤ 48,3	2,2 – 14,2	EI 180		EI 180	
48,3 < D ≤ 60,3	2,6 – 14,2	EI 180		EI 180	
60,3 < D ≤ 76,1	3,1 – 14,2	EI 180		EI 180	
76,1 < D ≤ 88,9	3,5 – 14,2	EI 180		EI 180	
88,9 < D ≤ 108,0	4,0 – 14,2	EI 180		EI 180	
108,0 < D ≤ 159,0	4,0 – 14,2	EI 120		EI 120	
159,0 < D ≤ 219,1	4,5 – 14,2	EI 90		-	-

NON FLAMMABLE PIPES - penetration seals

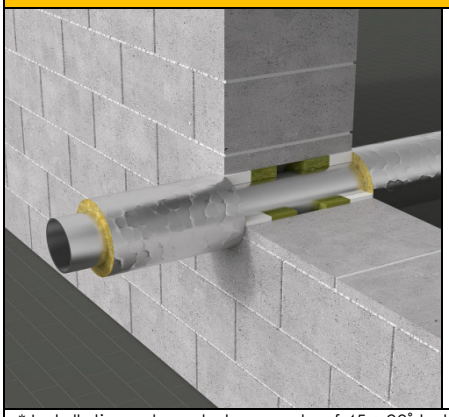


Fig. 1 Penetration seal in wall A ≥ 150 mm

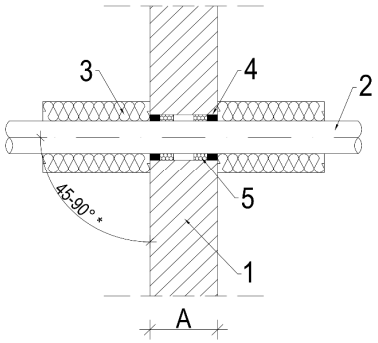
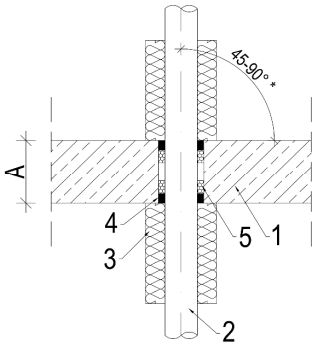


Fig. 2 Penetration seal in floor A ≥ 150 mm



* Installations placed at an angle of 45 ÷ 90° to the partition, based on PN-EN 1366-3 standard
1 – wall/floor (A – thickness)
2 – non-flammable pipe
3 – mineral wool insulation with a density (ρ) of min 37 kg/m³
4 – **INTU FR MASTIC** (details according Table 1)
5 – mineral wool backfill material with minimum density ρ ≥ 40 kg/m³.

ELECTRICAL CABLES			
Installation type	Diameter [mm]	Fire resistance classification	
		WALL	FLOOR
Single cable	Ø ≤ 21	EI 240	EI 120
Cables in bundle (made of cables Ø ≤ 21)	Ø ≤ 100	EI 90	EI 120

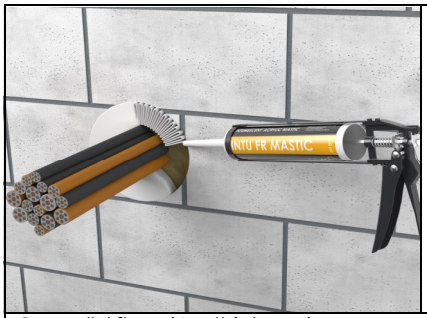


Fig. 1 Penetration seal in wall A ≥ 150 mm

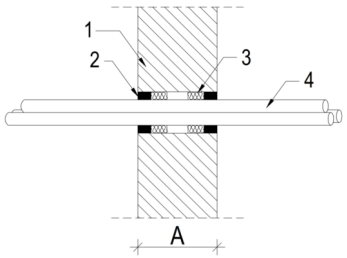
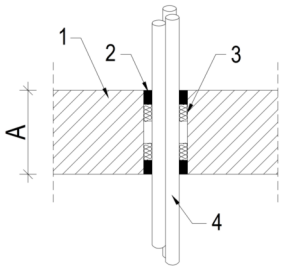


Fig. 2 Penetration seal in floor A ≥150mm



1 – wall / floor (A – thickness);
2 – mineral wool ρ ≥ 40 kg/m³ depth 15 mm;
3 – **INTU FR MASTIC** depth min 20 mm;
4 – single electric cable ≤ Ø 21mm or cables in bundle ≤ Ø 100 mm.