PROTECTA® FR PIPE WRAP

TECHNICAL DATA SHEET

General Product Description

Protecta® FR Pipe Wrap is designed to maintain the fire resistance of fire separating walls and floors when these are breached by plastic pipes, composite pipes, conduits or pipes with continuous combustible insulation, and may be used in flexible or rigid walls and floors.

Each pipe wrap consists of a graphite based reactive intumescent strip, which reacts to heat and closes the opening left by the softening plastic pipe or pipe insulation in a fire.

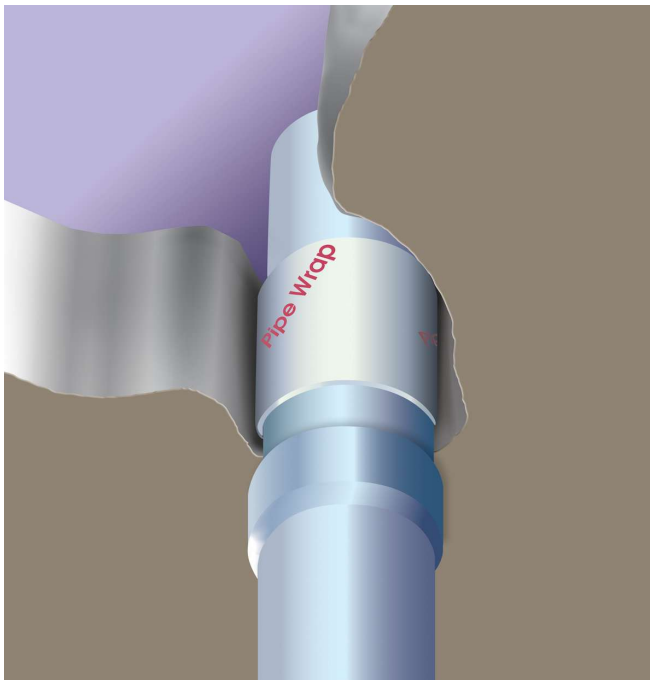
Properties

- For plastic pipe sizes from smallest pipes available to Ø400 mm with a wide range of pipe wall thicknesses
- For pipes with continuous combustible pipe insulation
- For plastic pipes with cables (conduits)
- For a wide range of composite pipes
- Simple and very quick to install
- Pipe wraps comes in two different types; ready-made for most common pipes and 25 metre rolls for all approved service penetrations
- Fire classifications up to 240 minutes for both integrity and insulation
- Pipe wraps can be cast or friction fitted, or installed in the systems Protecta® FR Board or EX Mortar seals
- Tested and certified for U/U pipe end applications
- Classified for all types of constructions
- No emissions - environmentally and user friendly
- Resists UV, humidity and frost
- Unlimited storage time (under correct conditions)
- 25 years working life guarantee

Sizes & Packaging

The pipe wraps are available as ready-made multiple layers in plastic sleeves for most common pipes, or as single layer 25 metre rolls. Always check the ready-made pipe wrap's number of layers and width are the same as specified in the installation detail. If they are not, use 25 metre rolls and build up the necessary number of layers.

Pno.	Size	Qty/ Bag	Details
P135	FR Pipe Wrap Ø 50mm	25	2 layers of 50mm wide pipe wrap
P068	FR Pipe Wrap Ø 55mm	25	2 layers of 50mm wide pipe wrap
P081	FR Pipe Wrap Ø 75mm	25	2 layers of 50mm wide pipe wrap
P076	FR Pipe Wrap Ø 82mm	25	2 layers of 50mm wide pipe wrap
P069	FR Pipe Wrap Ø 110mm	25	2 layers of 50mm wide pipe wrap
P074	FR Pipe Wrap Ø 125mm	20	4 layers of 50mm wide pipe wrap
P075	FR Pipe Wrap Ø 160mm	12	6 layers of 50mm wide pipe wrap
P077	FR Pipe Wrap Ø 200mm	1	6 layers of 75mm wide pipe wrap
P083	FR Pipe Wrap Ø 250mm	1	10 layers of 75mm wide pipe wrap
P141	FR Pipe Wrap Ø 315mm	1	10 layers of 75mm wide pipe wrap
P298	FR Pipe Wrap Ø 400mm	1	16 layers of 75mm wide pipe wrap
P276	FR Pipe Wrap 50mmx25m	1	Single layer without self-adhesive
P099	FR Pipe Wrap 50mmx25m	1	Single layer with self-adhesive
P277	FR Pipe Wrap 75mmx25m	1	Single layer without self-adhesive
P106	FR Pipe Wrap 75mmx25m	1	Single layer with self-adhesive



Pipe end configurations

When testing pipes, one can choose not to cap (or close) the pipe, or cap the pipe inside the furnace, or outside the furnace, or on both sides. The configuration chosen depends on the intended application of the pipe and/or the installation environment.

The code defining if a pipe is capped is stated after the fire classification. For instance, EI 60 C/U which means the pipe was capped inside the furnace, and uncapped outside the furnace. The test configuration defines the approvals possible.

Our engineering judgment based on EN 1366-3:2021 are:

Intended use of pipe		Pipe end condition [3]
Rainwater pipe, plastic	At drainage	U/U [1]
	Not at drainage	C/C [2]
Drainage or sewage pipe, plastic	Ventilated drain	C/U [1]
	Unventilated drain	U/C [2]
	Drain w/water trap	U/C [1]
	Not at drainage	C/C [2]
Metal or plastic pipe in closed system (water, gas, air etc.)		C/C [1]
Metal pipe in ventilated system (sewage etc.)		U/C [1]
Flue gas recovery system pipe, plastic		U/C [1]
Pipe with open ends and ≥ 50cm length on both sides, plastic		U/U [2]
Waste disposal shaft pipe, metal		U/C [2]

[1] Suggested in EN 1366-3:2021. [2] Polyseam' s judgment based on tests. [3] U/U classified fire seals cover C/U, U/C and C/C. C/U classified fire seals cover U/C and C/C. U/C classified fire seals cover C/C (except steel pipes, where U/C classified fire seals cover C/U and C/C. C/U classified fire seals cover C/C)

Technical Data Sheet to
ETA 24/0957 & UKTA 25/0017

PROTECTA® FR PIPE WRAP

TECHNICAL DATA SHEET

Sound Insulation

Description	Sound reduction
Pipe Wraps cast or friction fitted	As surrounding construction
Pipe Wraps installed in FR Board	Rw 52 dB
Pipe Wraps cast in EX Mortar	Rw 48 dB

The sound insulation value is only valid for the fire seal and not for other elements in the building construction. The sound insulation has been tested by the accredited laboratory Warringtonfire in Great Britain according to EN ISO 10140-2. Test report is available upon request.

Technical Data

Condition	Ready to use solid state graphite based material, 1.8 mm thick
Durability	Type X - Intended for use at temperatures below 0 °C with exposure to UV, humidity and rain. Includes lower classes Y_1, Y_2, Z_1 and Z_2
Compatibility	Can be used in contact with most building, decorating materials and service penetrations
Reaction to fire	Product characteristics not suitable for RTF test
Resistance to fire	Up to EI 240
Installation	Refer to Installation Instructions for Protecta FR Pipe Wrap, FR Board or EX Mortar (depending on its use)
Flexibility	Flexible
Conditioning procedure	EN 13238:2010
Expansion ratio	28:1
Expansion pressure	0.7 – 1.6 N/mm^2
Colour	Anthracite
Graphite weight/density	1.3 kg/m^2 per mm thickness / 1300 kg/m^3
Normal expansion time	Less than 10 minutes
Minimum expansion temp.	150 °C
VOC	0 g/l
Application temperature	-40 °C to +50 °C
Service temperature	-40 °C to +75 °C
Health & safety	No health hazard. See safety data sheet
Shelf life	Unlimited (under correct conditions)
Storage	Store in temperatures between 5 °C and 30 °C

Test Standards

This Technical Data Sheet and the Installation Instructions are based on the product's ETAs and UKTAs issued in accordance with regulation (EU) No 305/2011 on the basis of EAD 350454-00-1104, September 2017, tested to EN 1366-3 in conjunction with EN 1363-1. The product hold the following approval marks; CE-mark for Europe & UKCA-mark for UK.