



## 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, conduits or metal pipes with continuous combustible insulation, and may be used in drywalls, masonry or concrete walls and concrete 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. The pipe wrap is installed completely around the pipes or insulation and secured with the self-adhesive tab. The annular space around the pipe wrap is sealed with Protecta® EX Mortar or Protecta® FR Board.

### 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)
- Pipe wraps comes in two different types; ready made for most common diameters and in 25 metre rolls for all diameters
- Fire classifications up to 240 minutes for both integrity and insulation
- Certified for PVC-U, PVC-C, PE, LDPE, MDPE, HDPE, ABS, SAN+PVC and PP pipes plus numerous composite pipes
- Tested and certified for U/U pipe end applications
- Classified for fire sealing in all types of constructions
- Excellent sound insulation
- No emissions - environmentally and user friendly
- Simple to install in both Protecta® FR Board and EX Mortar
- Unlimited storage time (under correct conditions)
- 25 years working life guarantee

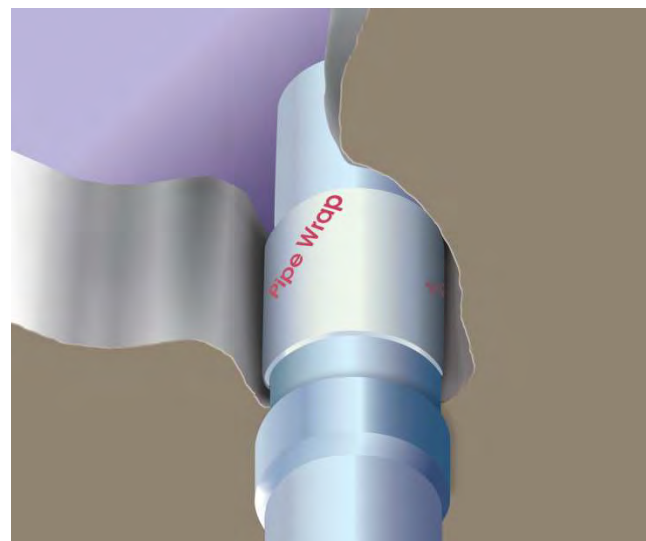
### Sound Insulation

Description	Sound reduction
Pipe Wraps installed in FR Board	Rw 52 dB
Pipe Wraps installed 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.

### Sizes and Intended Use

Pno.	Size	Qty/ Bag	Intended Use
P068	FR Pipe Wrap 55mm	25	Plastic pipes & conduits ≤ Ø55mm
P076	FR Pipe Wrap 82mm	25	Plastic pipes & conduits ≤ Ø82mm
P069	FR Pipe Wrap 110mm	25	Plastic pipes & conduits ≤ Ø110mm
P074	FR Pipe Wrap 125mm	20	Plastic pipes ≤ Ø125mm
P075	FR Pipe Wrap 160mm	12	Plastic pipes ≤ Ø160mm
P077	FR Pipe Wrap 200mm	1	Plastic pipes ≤ Ø200mm
P083	FR Pipe Wrap 250mm	1	Plastic pipes ≤ Ø250mm
P141	FR Pipe Wrap 315mm	1	Plastic pipes ≤ Ø315mm
P298	FR Pipe Wrap 400mm	1	Plastic pipes ≤ Ø400mm
P099	FR Pipe Wrap 50mmx25m	1	Pipes with combustible pipe insulation, plastic pipes & conduits
P106	FR Pipe Wrap 75mmx25m	1	



### 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 1366-3:2009 are:

Intended use of pipe	Pipe end condition <sup>4)</sup>	
Rainwater pipe, plastic	At drainage	U/U <sup>1)</sup>
	Not at drainage	C/C <sup>2)</sup>
Drainage or sewage pipe, plastic	Ventilated drain	U/U <sup>1)</sup>
	Unventilated drain	U/C <sup>1)</sup>
	Drain w/water trap	U/C <sup>1)</sup>
	Not at drainage	C/C <sup>2)</sup>
Pipe in closed circuit (water, gas, air, electricity etc.)	C/C <sup>2) 3)</sup>	
Flue gas recovery system pipe, plastic	U/C <sup>1)</sup>	
Pipe with open ends and ≥ 50cm length on both sides, plastic	U/U <sup>2)</sup>	
Pipe supported by suspension system, metal	Fire rated support	C/U <sup>1)</sup>
	Non-fire rated	U/C <sup>1)</sup>
Waste disposal shaft pipe, metal	U/C <sup>1)</sup>	

<sup>1)</sup> Suggested in EN 1366-3:2009. <sup>2)</sup> Polyseam's judgment based on tests.

<sup>3)</sup> Metal pipes should have fire rated support. <sup>4)</sup> 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.

### Technical Data

<b>Durability &amp; life</b>	Same as the product it is installed within; Protecta FR Board or EX Mortar
<b>Installation</b>	Refer to Installation Instructions for Protecta FR Board and EX Mortar
<b>Conditioning procedure</b>	EN 13238:2010
<b>Expansion ratio</b>	28:1
<b>Expansion pressure</b>	55 N
<b>Colour</b>	Anthracite
<b>Graphite weight/density</b>	1.3 kg/m <sup>2</sup> per mm thickness / 1300 kg/m <sup>3</sup>
<b>Normal expansion time</b>	Less than 10 minutes
<b>Minimum expansion temp.</b>	150 °C
<b>Storage</b>	Store in temperatures between 5 °C and 30 °C