

FIREPRO

FIRE PROTECTIVE BUILDING PRODUCTS

CI/SfB

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B305 & B306 DATASHEET - AUG08

Product specifications can change. Contact us to ensure you have our latest datasheet

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FIREPRO B305 & B306

Pipe Wraps Fire Stopping Wraps For Plastic or Insulated Plumbing Pipes. Up to 4 hours fire resistance. For maintaining fire resistance where pipes penetrate fire walls and floors.

B305 and B306 pipe wraps are flexible intumescent seals for fire protection of fire walls and floors penetrated by plastic pipes and insulated plastic or metal pipes. When a fire occurs the intumescent material swells, crushing the plastic pipe or insulation and filling the gap with fire resistant material.

B305 and B306 provide up to four hours fire resistance for PVC and PE pipes up to 150mm nominal I.D. in concrete floors, three hours in concrete and brick walls, and two hours in plasterboard walls. See tables 1 & 2 for correct wrap to use. They are installed within the wall or floor.

PB pipes and PP-R pipes, (see over).

Quick and easy to install even in restricted areas. B305 and B306 Pipe Wraps consist of a flexible intumescent strip sealed in a protective sleeve. The sleeve is complete with self adhesive sealing strip for simple installation.

Water resistant and unaffected by high humidity.

Unlike intumescent assisted mechanical damper type fire collars, Firepro B3305 & B306 contain no fusible links or moving parts to require servicing. As the fire stopping intumescent material in our product is around the outside of the uninterrupted pipe it does not affect the performance of the pipe.

Diagram A - FLOOR SEALS
 10mm deep Bead of Firepro M707 Acoustic & Fire Sealant.
 Install Pipe Wrap flush with underside of floor slab. See Installation note 4.

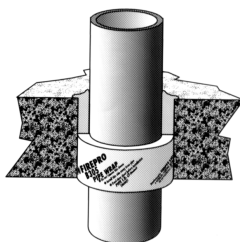


Diagram B - WALL SEALS
 All sizes B306 and B305-65 & larger sizes B305 use single wrap in solid wall or in conjunction with B303 Bands in hollow walls. (See note 2, Table 1 for hollow wall construction.)

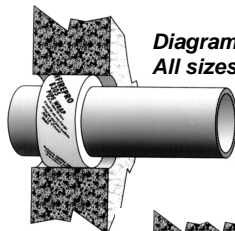


Diagram C - WALL SEALS
 B305 32mm, 40mm, 50mm (See note 2, Table 1 for hollow wall construction).

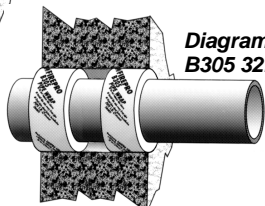


Table 1.

Non Insulated Pipes (see over for PP-R and PB pipes) FRL B305 and B306 fire stopping wraps when installed in fire walls and floors of appropriate fire rating.

Nominal Pipe ID (mm)	PVC & PE				
	Floors		Walls		
	Up to 3 hours FRL ³	Up to 4 hours FRL ³	Up to 2 hours FRL plasterboard, concrete, brick, masonry ²	Up to 3 hours FRL concrete, brick or masonry ²	4 hours integrity concrete, brick or masonry /240/180
32	B306-32 ¹ B305-32	B306-32 ¹ B305-32	B306-32 ¹ B305-32 ⁵	B305-32 ^{1.5}	B305-32 ^{1.5}
40	B306-40 ¹ B305-40	B306-40 ¹ B305-40	B306-40 ¹ B305-40 ⁵	B305-40 ^{1.5}	B305-40 ^{1.5}
50	B306-50 ¹ B305-50	B306-50 ¹ B305-50 ⁴	B306-50 ¹ B305-50 ⁵	B305-50 ^{1.5}	B305-50 ^{1.5}
65	B306-65 ¹ B305-65	B306-65 ¹ B305-65	B306-65 ¹ B305-65	B305-65 ¹	B305-65 ¹
80	B306-80 ¹ B305-80	B306-80 ¹ B305-80	B306-80 ¹ B305-80	B305-80 ¹	N/A
100	B306-100F ¹ B305-100	B306-100F ¹ B305-100	B306-100W ¹ B306-100F B305-100	B305-100 ¹	N/A
150	B305-150F ¹	B305-150F ¹	B306-150W ¹	N/A	N/A

Notes:

1. Preferred option.

- In hollow core walls such as gypsum plasterboard, concrete block, etc, a B303 pipe band must be used.
- In hollow concrete floor construction a B304 pipe band to be used if the concrete does not fully support the wrap sides. Steel fixings must be used to hold the band in place.
- When using B305-50 wraps for 4 hour FRL floors, two wraps must be used placed side by side, so that the two 50mm wide wraps cover 100mm of pipe.
- When using B305 wraps in hollow concrete or plasterboard walls for 32mm, 40mm, and 50mm ID pipes two wraps are used as shown in Diagram C, plus steel pipe bands to suit.

Table 2 Insulated and Non-Standard Pipes.

Product Code	Maximum Outside Diameter of Pipe or Insulation
B305 or B306-32	up to 36 mm
B305 or B306-40	up to 43 mm
B305 or B306-50	up to 56 mm
B305 or B306-65	up to 70 mm
B305 or B306-80	up to 83 mm
B305 or B306-100	up to 111 mm
B305 or B306-150	up to 160 mm

Where combustible insulation, or products such as Glasswool, must remain on PVC or metal pipes where they pass through fire partitions, the use of intumescent wraps can be used to maintain integrity to the maximum as set out in table 2.

NOTE: The technical information and suggestions for use and application presented herein represent the best information available to us and are believed to be reliable. They should not however be construed as controlling suggestions and there is no warranty of performance of our materials either expressed or implied. We urge that users of our materials conduct confirmatory tests to determine final suitability for their specific end uses. All dimensions are nominal. We reserve the right to make changes or to withdraw designs and products without notice.

PolyButylene Pipes (P.B.) complying with AS/NZ2642:2

P.B. pipes of 15mm and 20mm nominal internal diameter passing through fire-rated walls or floors may be fire stopped using B305 or B306 Fire Wraps of either 32mm or 40mm size.

PP-R Polypropylene Pipes

Including Fusiotherm/ Fusiolen/Aquatherm PP-R/ etc.

PP-R pipes in some cases are used in place of many traditional pipes used in construction, including polyvinyl chloride (PVC), polyethylene (PE), copper, and other types of polypropylene (PP).

PP-R pipes typically have higher softening temperatures and often thicker walls than more common "plastic" pipes. However, they still need fire stopping when they penetrate fire-rated walls and floors.

We have carried out a fire test programme to meet client needs as they have arisen and offer the following system fire tested to AS1530:4 and BS476.20:22.

For PP-R pipes through floors see our B311 datasheet.

WALLS - Gypsum Plasterboard or Concrete

FRR/FRL Achieved	Pipe Outside Diameter	Pipe Wall Thickness	Firepro Pipe Wrap Identification	Pipe Band Used on Gypsum Plasterboard Walls	Recommended Bore of Wall Hole (diameter)
2 Hr	16mm	2.2mm	B306-32	B303/140C-54	30mm
2 Hr	20mm	2.8mm	B306-32	B303/140C-54	35mm
2 Hr	25mm	3.5mm	B306-32	B303/140C-54	40mm
2 Hr	32mm	4.4mm	B306-32	B303/140C-54	45mm
2 Hr	40mm	5.5mm	B306-40	B303/140C-68	65mm
2 Hr	50mm	6.9mm	B306-50	B303/140C-68	70mm
2 Hr	63mm	8.6mm	B306-65	B303/140C-83	85mm
2 Hr	75mm	10.3mm	B306-80	B303/140C-100	100mm
2 Hr	90mm	12.3mm	B306-100	B303/140C-132	125mm
2 Hr	125mm	11.4mm	B306-125	B303/140C-160	160mm
1 Hr	110mm	15.1mm	B307-100	B303/140C-132	132mm

Fire Test data

B305 & B306 are fire-tested with uPVC pipes in floors and walls to AS1530:4, AS4072:1 1992 section 3, and BS476.20:22 as set out in Table 1, with 2 metre long pipes uncapped at end outside the furnace to maximise test severity. Also PP-R pipes as set out in Table 3. PE pipes complying with AS 4130, fire laboratory assessed and approved as set out in Table 1. PB pipes with 15mm and 20mm internal diameter complying with AS/NZ2642:2 fire laboratory assessed and approved as set out above.

STORAGE

To avoid damage store flat under cover in a dry environment between 3°C and 40°C.

INSTALLATION - SOLID CONSTRUCTION

The pipe wrap is factory sealed in a plastic sleeve to suit the pipe diameter - DO NOT REMOVE THIS OUTER SLEEVE

1. Position the Pipe Wrap firmly around the circumference of the pipe with printed side facing outwards and remove the backing from the self adhesive strip.
2. Press the adhesive strip firmly onto the adjoining face of the Wrap and slide into position.
3. If the space between the concrete and the outer side of the wrap is more than 5mm, backfill the space with Firepro GPG or Firepro M707. If the gap is 5mm or smaller apply a 10mm deep bead of Firepro M707 Fire & Acoustic Sealant at the joint of the pipe with the upper side of the floor. In wall applications any gaps between the wrap and the wall must be sealed with M707 to prevent the passage of smoke and gases.
4. The Pipe Wrap must be located entirely within the depth of the wall or floor. The wrap should be flush with the underside of the floor or in the centre of the wall, except where two wraps are required, when each should be flush with the outside of the wall.

INSTALLATION - HOLLOW CORE WALLS

Apply B305 or B306 Pipe Wraps in the same method as for solid construction, with the addition of a B303 or B304 Steel Band. B303 Steel Bands are 140mm wide, B304 Steel Bands are 120mm or 200mm wide. Apply a bead of Firepro M707 Fire & Acoustic Sealant to the joints between the outside of the B303 or B304 Steel Band and the wall.

INSTALLATION IN HOLLOW CORE FLOORS AND OTHER "SPECIALITY" FLOORS.

The standard methods of fire testing pipes and other items penetrating floors use solid concrete slab construction. Other types of floors such as hollow core concrete, concrete with permanent timber formwork, and timber floors protected by gypsum plasterboard, and a large number of other variations are sometimes used.

We are happy to discuss properties of our products with specifiers, fire engineers, and certifying authorities to assist them in finding a practical fire rating solution.

HEALTH, SAFETY & FIRE

B305 and B306 Pipe Wraps are a flexible intumescent seal for use in fire protection around plastic pipes and insulation of metal pipes penetrating fire compartment walls and floors.

The intumescent material is a blend of latex binder, graphite and mineral mat. The intumescent material is contained in a protective polythene sleeve which under normal conditions of use poses no risk to health or safety. No special protective measures are normally required when handling this product. In case of ingestion, do not induce vomiting. Seek medical advice. Keep away from sources of ignition. Extinguish using water, foam, powder, carbon dioxide. Smoke contains typical products of combustion, any residue should be treated with appropriate caution. Waste must be disposed of in accordance with Local Authority Regulations.

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