

CI/SfB

B109 DATASHEET – May 16

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

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# FIREPRO B109 & B109+ INTUMESCENT PIPE SLEEVES FOR INSULATED PIPES

Firepro B109 & B109+ Insulating Intumescent Pipe Sleeves maintain the fire-rating of walls penetrated by plastic or metal pipes. They are especially useful where insulation is required to continue uninterrupted through fire-rated walls. B109+ may also be used in walls and floors.

The sleeves consist of an intumescent fire stopping and insulation pipe section placed around the pipe where it penetrates a fire rated wall.

The B109 sleeve can be quickly and simply fitted on to a pipe and slid into the penetration without the need of support. A steel band is not required in plaster board walls.

To retrofit the B109 pipe sleeve may be slit along its length, fitted around the pipe and joint sealed with self-adhesive aluminium tape.

When a fire occurs the B109 sleeve expands to fill the space between the pipe and the penetration. It will crush plastic pipes and close off the pipe forming a solid core preventing the passage of fire and smoke.

# FIRE TESTING TO AS 1530.4 Assessed to AS 4072,1-2005

### B109 for Plasterboard lined walls or rigid walls

100mm (min) thick wall - 132mm (min) thick wall FRL FRL

PVC Water supply Pipe (not sandwich core) protected with 180mm long B109

43mm dia pipe 1.8mm wall thickness	-/60/60	-/120/120
82mm dia pipe 3.2mm wall thickness	-/60/60	-/120/120
110mm dia pipe 3.2mm wall thickness	-/60/60	-/120/120
160mm dia pipe 3.2mm wall thickness	-/60/60	-/120/120

### HDPE Water supply Pipe protected with B109 180mm long

40mm dia pipe 3.0mm wall thickness	-/60/60	-/120/120
90mm dia pipe 3.5mm wall thickness	-/60/60	-/120/120
110mm dia pipe 4.3mm wall thickness	-/60/60	-/120/120
160mm dia pipe 6.2mm wall thickness	-/60/60	-/120/120



15mm dia pipe 1.0mm wall thickness -/60/60 -/120/120 159mm dia pipe 2.0mm wall thickness -/60/60 -/120/120



**HDPE Pipe** 

110mm dia pipe 4.3mm wall thickness -/60/60 -/120/120 -/120/120 160mm dia pipe 6.2mm wall thickness -/60/60 -/120/120 -/120/120

Note: The Pipe Diameters given are for the nom. External diameter.

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. If used beyond the situations detailed on this datasheet we advise confirming their suitability before installation. All dimensions are nominal.

## **NOTES: Re AS 1530.4 FIRE TESTING**

### 1) Plasterboard lined wall Specifications:

### 60 Minute Wall Applications:

The wall shall be constructed from min 1 layer of 13mm or 16mm fire grade plaster board each side that has been tested or otherwise assessed to achieve a 1 hr FRL.

### 120 Minute Wall Applications:

The wall shall be constructed from min 2 layers of 13mm or 16mm thick fire grade plaster board each side that has been tested or otherwise assessed to achieve a 2 hr FRL.

### 2) Rigid Wall - Concrete, Masonry or AAC

For walls thinner than those stated above 13 or 16mm thick fire rated plasterboard strips at least 100mm wide are installed around the opening with the necessary number of layers to form frames of the same height on both sides of rigid walls to meet the minimum thickness.

### 3) Fire rated Sealant – Firepro M706 or M707 sealant.

Apply min 20mm deep on each side of any gap belween the B109 Fire Sleeve and wall.

### 4) Insulation

Copper pipes are continuously wrapped with 40mm Rockwool insulation and aluminium tape used to seal the joint between the Rockwool and B109 Fire Sleeve on both faces.

### 5) Installation

Fitted between wall construction and pipe penetration, extending equally from each face of wall or floor.

### 6) Floor:

150mm thick or as appropriate to the fire rating.

### 7) Sleeve Length:

Note that the sleeve length is dependent upon the situation.

# Fire Testing to BS476:20-22 in addition to AS 1530.4

B109 Fire Sleeves are fire tested to BS476:20-22 for both walls, (plasterboard , concrete or brick, and concrete floors for both 1 and 2 hour fire rating periods.

Tested on a range of PVC, Polybutylene, Copper and Steel pipes.

### Size Range Available

B109: We stock a wide range of sizes from 21mm to 169mm internal diameter sleeves.

B109+: Available in 2 sizes: 110mm & 160mm sleeves.

Typically the B109 external diameter is 56mm over its internal diameter.

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# B109 FIRE SLEEVES FIRE TESTING TO BS 476.20- 22 FOR FLOORS & WALLS

Applies for situations where BS476.20 -22 is used.

B109 insulating intumescent Pipe Sleeves are fire tested to BS476 Parts 20-22 1987 with both pipe ends capped to simulate a continuous run of pipe.

PIPES PENETRATING CONCRETE FLOORS PVC PIPES	Concrete floor 100mm thick	Concrete floor 140mm thick
Up to 82mm dia pipe wih B109 at 190mm long	-/60/60	-/120/120
110mm dia pipe with B109 at 190mm long	-/60/60	-/120/60
160mm dia pipe with B109 at 140mm long	-/60/60	-/90/90
POLYBUTYLENE		
12mm to 28mm dia pipe with B109 at 140mm long	-/60/60	-/120/120
COPPER		
12mm dia copper pipe with B109 at 132mm long	-/60/60	-/120/15
Up to 160mm dia copper pipe with B109 at 132mm long	-/60/15	-/120/15
STEEL		
Up to 22mm dia pipe with B109 at 132mm long	-/60/60	- /120/120
Up to 165mm dia pipe with B109 at 132mm long	-/60/15	-/120/15

PIPES PENETRATING WALLS	Brick or concrete wall or 1 hr plasterboard wall	Brick or concrete wall or 2 hr plasterboard wall
	100 mm thick	140mm thick
PVC .		
Up to 55mm Dia. Pipe with B190 - 160mm long	-/60/60	-/120/120
Up to 110mm Dia. Pipe with B190 - 182mm long	-/60/60	-/120/120
160mm Dia. Pipe with B190 - 182mm long	-/60/60	-/120/117
POLYBUTYLENE		
12mm Dia.pipe with B109 - 132mm	-/60/60	-/120/120
15mm Dia.pipe with B109 - 132mm lon	-/60/60	-/120/114
21mm Dia.pipe with B109 - 132mm long	-/60/60	-/120/120
28mm Dia.pipe with B109 - 132mm long	-/60/60	-/120/120
COPPER		
12mm Dia.copper pipe with B109 - 132mm long	-/60/60	-/120/120
Up to 160mm Dia.copper pipe with B109 - 132 long	-/60/15	-/120/15
STEEL		
Up to 22mm Dia.Pipe with B109 - 132mm long	-/60/60	-/120/120
Up to 165mm Dia.pipe with B109 - 132mm long	-/60/15	-/120/15

Sizes Available & Product Codes	<b>Nominal Internal Diameter</b>
Firepro B109-21	21mm
Firepro B109-27	27mm
Firepro B109-34	34mm
Firepro B109-42	42mm
Firepro B109-48	48mm
Firepro B109-60	60mm
Firepro B109-76	76mm
Firepro B109-89	89mm
Firepro B109-114	114mm
Firepro B109-169	169mm

Variations in external diameter will occur in manufacture. Check sizes before installation.

Typically external diameter is 54mm over internal (if 27mm thick wall).

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