Technical Data Sheet Pipebloc EL **UIC** of product-type: EL



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GE Gerific Penetration Seals Movement Rigid W Metallic Pipes exible Walls Cable Trays Rigid



UAE Certificate of Compliance

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Product Technical Data

ETA 15-0491 CE-1121-CPR-JA5082

Technical Description of the Product

PipeBloc EL is designed and tested to seal service penetration apertures containing plastic and metallic pipes with insulation, using thermoplastic composites based on graphite intumescent technology. Developed to provide a high volume expansion and pressure seal during a fire the PipeBloc EL offers El120 tested to EN1366-3, the maximum diameter being 250mm, the ultra thin design of PipeBloc EL ensuring that they can be installed in to the tightest of locations.

PipeBloc EL is installed around combustible pipes to form a penetration seal used to reinstate the fire resistance performance of wall and floor constructions where they have been provided with apertures for the penetration of combustible pipe services.

PipeBloc EL can be used with Pyrocoustic Sealant to seal the space between the combustible pipe and the aperture to close any gap.

Intended Use

Product Overview

The intended use of PipeBloc EL is to reinstate the fire resistance performance of wall and floor constructions, where they are penetrated by various combustible pipe services.

The specific elements of construction that the system PipeBloc EL may be used is as follows:

- Fire resistance testing to EN 1366-3: 2009.
- Classified as EI 120 using EN 13501-2.
- Certifire 3rd Party Certification CF 5368.
- Fire resistance testing in flexible walls, rigid floors and Stopseal Batt.
- PipeBloc EL gives the users versatility when installing in a multitude of common site conditions, PipeBloc EL is supplied in a convenient 25m long, 40mm wide roll.
- Can be use with Plastic Pipes PVC, HDPE, PP, PE, ABS, PVC-C and SAN + PVC.

Key Product Points

- Can be used to close off various types of insulation around metallic pipes.
- Causes no known effects to plastic pipes.
- The product is based on an thermoplastic composite and is therefore non-toxic.
- Halogen free, contains no asbestos, ceramic or mineral fibres.
- Not affected by fungus, vermin or rodents.
- Conditioned to Type X: -20°C to +70°C with accordance with EOTR 024 and Etag 026.















Product Technical Data

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Description	Result	Test Standards
Pipe Diameter	32mm, 40mm, 50mm, 55mm, 63mm, 75mm, 82mm, 90mm, 100mm, 110mm, 125mm, 140mm, 160mm, 200mm and 250mm	
Plastic types	PVC-U, PVC-C, ABS, SAN + PVC, PE-HD, PE, PP	
Width (Nominal)	40mm	
Thickness (Nominal)	2mm at 32mm upto 10mm at 200mm	
Density	Approximately 1.2 g/cm ³	ISO 2811-1:2011
Volume Expansion at 450°C	Approximately 25 times	EOTA TR 024
Expansion Pressure N/mm²	Up to max 1.30	
Fire Resistance	Up to El 120	EN 1366-3: 2009 and EN 13501-2
Insulation	Phenolic, Elastomeric, Glass and Stone	

Installation

Ensure that the aperture and services in question are tested with Pipebloc EL, and the site conditions are within the application specification. Sufficient annular space needs to be present around the service to allow adequate installation depth.

All services and apertures need to be clean and clear of all dust and loose particles. The aperture temperature needs to at 5°C or above at time of installation.

Upon installation make sure that you install the Pipebloc EL around the pipe using the correct number of wraps needed, <u>leaving 5mm from the face of the surface</u>, <u>make sure that you fill all of the annulus with Pyrocoustic Sealant to finish of the system.</u>

Once compacted, smooth off the Pyrocoustic Sealant to produce a professional looking finish.

Intumescent Thickness			
Pipe Diameter	Wrap Size / Number		
ø 32 mm - ø 50 mm	2 off 40 mm (W) x 2 mm (T)		
ø 51 mm - ø 105 mm	3 off 40 mm (W) x 2 mm (T)		
ø 106 mm - ø 160 mm	4 off 40 mm (W) x 2 mm (T)		
ø 161 mm - ø 200 mm	5 off 40 mm (W) x 2 mm (T)		
ø 201 mm - ø 250 mm	6 off 40 mm (W) x 2 mm (T)		















Performance Data - Walls

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Substrates

The walls shall be a minimum of **100mm thick**. Drywalls shall comprise a minimum of 2 layers of 'Type F' Gypsum board on both faces, with minimum 50mm studs. Masonary / Concrete walls shall have a minimum density for concrete or brick of 780kg/m³ and for aerated concrete blocks of 600kg/m³. All walls shall have at least the same fire resistance as that required for the sealing system.

Service support requirements

Services should be rigidly supported via steel angles, hangers or channels, not further than 400mm from the surface of the sealing system on both faces of wall and top face of floor unless specified otherwise in the performance data.

Terminology

Fire performance in accordance with EN1366-3, EN1366-4, Classification 13501-2:2007 + A1:2009, ETAG-026, Air Permeability EN1026, Sound EN10140. Fire resistance classes are: E = Integrity, the product can withstand the fire from the non-fire side, I =Insulation, the product can withstand the temperature travelling down the service, U/U = Uncapped inside and outside the furnace, U/C = Uncapped inside and Capped outside the furnace, C/U = Capped inside and Uncapped outside the furnace.

FLEXIBLE OR RIGID WALL

PipeBloc EL, friction fitted flush to both sides of Flexible or Rigid walls with a minimum thickness of 100 mm PVC Pipes.						
Penetration Specification	Wrap Reference	Intumescent Material	Annulus Space (mm)	Classification		
PVC Pipe 50 mm ø 1.8mm wall thickness.		40 mm (W) x 4 mm (T)	4	EI 120 U/C		
PVC Pipe 160 mm ø 6.2mm wall thickness.		40 mm (M) = 0 mm (T)	10	EI 90 U/C		
PVC Pipe 160 mm ø 9.5mm wall thickness.	25 mtr roll of PipeBloc EL	40 mm (W) x 8 mm (T)	10			
PVC Pipe 200 mm ø 7.7mm wall thickness.	·	10 (11) 10 (7)	42	EI 120 U/C		
PVC Pipe 200 mm ø 9.6mm wall thickness.		40 mm (W) x 10 mm (T)	12			

PipeBloc EL, friction fitted flush to both sides of Flexible or Rigid walls with a minimum thickness of 100 mm PP Pipes.					
Penetration Specification	Wrap Reference	Intumescent Material	Annulus Space (mm)	Classification	
PP Pipe 50 mm ø 2.9 mm wall thickness.		40 mm (W) x 4 mm (T)	4	EI 120 U/C	
PP Pipe 160 mm ø 4.0 mm wall thickness.		40 mm (W) x 8 mm (T)	10	E 120 U/C EI 90 U/C	
PP Pipe 160 mm ø 14.6 mm wall thickness.	25 mtr roll of			EI 120 U/C	
PP Pipe 200 mm ø 4.9 mm wall thickness.	PipeBloc EL	40 mm (W) x 10 mm (T)	12	E 120 U/C EI 90 U/C	
PP Pipe 200 mm ø 18.2 mm wall thickness.				EI 120 U/C	
PP Pipe 250 mm ø 10.1 mm wall thickness.		40 mm (W) x 14 mm (T)	14	E 120 U/C EI 20 U/C	















Performance Data - Walls

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FLEXIBLE OR RIGID WALL

PipeBloc EL, friction fitted flush to both sides of Flexible or Rigid walls with a minimum thickness of 100 mm PE Pipes.					
Penetration Specification	Wrap Reference	Intumescent Material	Annulus Space (mm)	Classification	
PE Pipe 50 mm ø 2.9 mm wall thickness.		40 mm (W) x 4 mm (T)	4	EI 120 U/C	
PE Pipe 160 mm ø 4.9 mm wall thickness.		40 mm (W) x 8 mm (T)	10	EI 15 U/C	
PE Pipe 160 mm ø 9.5 mm wall thickness.	25 mtr roll of PipeBloc EL	40 mm (w) x 8 mm (1)	10	EI 90 U/C	
PE Pipe 200 mm ø 4.9 mm wall thickness.	i ipebloc LL	40 mm (\\\) v 10 mm (T)	12	EI 15 U/C	
PE Pipe 200 mm ø 18.4 mm wall thickness.		40 mm (W) x 10 mm (T)	12	EI 120 U/C	















Performance Data - Batt

ETA 15-0491 CE-1121-CPR-JA5082

Substrates

The walls shall be a minimum of **100mm thick**. Drywalls shall comprise a minimum of 2 layers of 'Type F' Gypsum board on both faces, with minimum 50mm studs. Masonary / Concrete walls shall have a minimum density for concrete or brick of 780kg/m³ and for aerated concrete blocks of 600kg/m³. All walls shall have at least the same fire resistance as that required for the sealing system.

Service support requirements

Services should be rigidly supported via steel angles, hangers or channels, not further than 400mm from the surface of the sealing system on both faces of wall and top face of floor unless specified otherwise in the performance data.

Terminology

Fire performance in accordance with EN1366-3, EN1366-4, Classification 13501-2:2007 + A1:2009, ETAG-026, Air Permeability EN1026, Sound EN10140. Fire resistance classes are: E = Integrity, the product can withstand the fire from the non-fire side, I =Insulation, the product can withstand the temperature travelling down the service, U/U = Uncapped inside and outside the furnace, U/C = Uncapped inside and Capped outside the furnace, C/U = Capped inside and Uncapped outside the furnace.

STOPSEAL BATT

Aperture Size	Seal Composition	Services	Capping	Seal	Classification
750mm wide by 1200mm high		Single copper or steel pipe 40 - 159mm diameter and 1 - 14.2mm wall thickness with sustained/continuous Elastomeric foam insulation 13 - 25mm thick.			E 120, EI 60
	Pattress installation of 50mm thick 140kg/m³ Stopseal Coated Batt.	Single copper or steel pipe 42mm diameter and 1mm wall thickness with sustained/continuous Elastomeric foam insulation 13 - 25mm thick.	C/U	2 Layers of 2mm thick 40mm wide C/U PipeBloc EL installed within both Batts.	EI 120
		Single copper or steel pipe 40 - 159mm diameter and 1.2 - 14.2mm wall thickness with sustained/ continuous Elastomeric foam insulation 25mm thick.	_		EI 90















Performance Data - Batt

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STOPSEAL BATT

Stopseal 50mm Batt in Rigid & Flexible Walls with a minimum thickness of 100mm both faces.					
Aperture Size	Seal Composition	Services	Capping	Seal	Classification
750mm wide by 1200mm high		Single copper or steel pipe 40 - 108mm diameter and 1 - 14.2mm wall thickness with sustained/continuous Phenolic Foam insulation 25 - 40mm thick .			EI 90
	Pattress installation of 50mm thick 140kg/m³ Stopseal Coated Batt.	Single copper or steel pipe 42mm diameter and 1mm wall thickness with sustained/continuous Phenolic Foam insulation 25 - 40mm thick.	C/U	2 Layers of 2mm thick 40mm wide PipeBloc EL installed within both Batts.	EI 120
		Single copper or steel pipe 40 - 108mm diameter and 1.2 - 14.2mm wall thickness with sustained/ continuous Phenolic Foam insulation 40mm thick.		Butts.	EI 120

Double Stopseal 50mm Batt in Rigid & Flexible Walls with a minimum thickness of 100mm both faces.						
Aperture Size	Seal Composition	Services	Seal	Classification		
750 mm wide by 1200 mm bigb	Double layer of 50mm	Single copper or steel pipe 40 - 159mm diameter and 1 - 14.2mm wall with sustained/continuous Elastomeric insulation 13 - 25mm thick.	2 Layers of 2mm thick 40mm wide	EI 60		
750mm wide by 1200mm high	thick 140kg/m³ Stopseal Coated Batt	Single copper or steel pipe 42mm diameter and 1mm wall with sustained/continuous Elastomeric insulation 13 - 25mm thick.	PipeBloc EL installed within both- Batts.	E120, El 90		















Performance Data - Batt

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STOPSEAL BATT

Double Stopseal 50mm Batt in Rigid & Flexible Walls with a minimum thickness of 100mm.						
Aperture Size	Seal Composition	Services	Capping	Seal	Classification	
750mm wide by 1200mm high	Double layer of 50mm thick 140kg/m³ Stopseal	Single copper or steel pipe 40 - 108mm diameter and 1 - 14.2mm wall thickness with sustained/continuous Phenolic Foam insulation 25 - 40mm thick .	C/U	2 Layers of 2mm thick 40mm wide	E120, EI 60	
	Coated Batt.	Single copper or steel pipe 42mm diameter and 1mm wall thickness with sustained/continuous Phenolic Foam insulation 25 - 40mm thick.	C/O	PipeBloc EL installed within both Batts.	E120, El 90	

Aperture Size	Seal Composition	Services	Capping	Seal	Classification
600mm wide by 600mm high Double layer of 50mm thick 140kg/m³ Stopseal Coated Batt.		PVC-U Pipes 40mm diameter with Armaflex Insulation 'Class O' 9-32mm thickness (Continuous/ Sustained).			
	Double layer of 50mm	PVC-U Pipes 40mm - 110mm diameter with Armaflex Insulation 'Class O' 13-32mm thickness (Continuous/Sustained).		100mm separation	
	PVC-U Pipes 40mm diameter with Kingspan Phenolic Insulation 15-25mm thickness (Continuous/ Sustained).	U/C	between services.	EI 90	
		PVC-U Pipes 40mm - 110mm diameter with Kingspan Phenolic Insulation 20-25mm thickness			















Performance Data - Floor

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Substrates

The floors shall be a minimum of **150mm thic**k. Masonary / Concrete floors shall have a minimum density for concrete or brick of 780kg/m³ and for aerated concrete blocks of 600kg/m³. All floors shall have at least the same fire rating as that required for the sealing system.

Service support requirements

Services should be rigidly supported via steel angles, hangers or channels, not further than 400mm from the surface of the sealing system on both faces of wall and top side of the floor unless specified otherwise in the performance data.

Terminology

Fire performance in accordance with EN1366-3, EN1366-4, Classification 13501-2:2007 + A1:2009, ETAG-026, Air Permeability EN1026, Sound EN10140. Fire resistance classes are: E = Integrity, the product can withstand the fire from the non-fire side, I =Insulation, the product can withstand the temperature travelling down the service, U/U = Uncapped inside and outside the furnace, U/C = Uncapped inside and Capped outside the furnace, C/U = Capped inside and Uncapped outside the furnace.

RIGID FLOOR

PipeBloc EL, friction fitted flush to both sides (top and bottom) of Rigid Floor with a minimum thickness of 150 mm PP Pipes.						
Penetration Specification	Wrap Reference	Intumescent Material	Annulus Space (mm)	Classification		
PP Pipe 50 mm ø 2.9 mm wall thickness.	25 mtrs of	1 Layer of 40 mm (W) x 2 mm (T) 1 Layer of 40 mm (W) x 2 mm (T) Combined Thickness 40 mm (W) x 4 mm (T)	4	EI 120 U/C		
PP Pipe 200 mm ø 4.9 mm wall thickness.	PipeBloc EL	40 mm (M/) v 10 mm (T)	10	E 20 U/C EI 15 U/C		
PP Pipe 200 mm ø 18.2 mm wall thickness.		40 mm (W) x 10 mm (T)	10	E 120 U/C EI 90 U/C		

PipeBloc EL, friction fitted flush to both sides (top and bottom) of Rigid Floor with a minimum thickness of 150 mm HDPE Pipes.				
Penetration Specification	Wrap Reference	Intumescent Material	Annulus Space (mm)	Classification
HDPE Pipe 50 mm ø 2.9 mm wall thickness.	25 mtrs of PipeBloc EL	1 Layer of 40 mm (W) x 2 mm (T) 1 Layer of 40 mm (W) x 2 mm (T) Combined Thickness 40 mm (W) x 4 mm (T)	4	EI 120 U/C
HDPE Pipe 200 mm ø 4.9 mm wall thickness.		25 mtrs of PipeBloc EL 40 mm (W) x 10 mm (T)	12	EI 120 U/C
HDPE Pipe 200 mm ø 11.4 mm wall thickness.				EI 120 U/C















Performance Data - Floor

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RIGID FLOOR

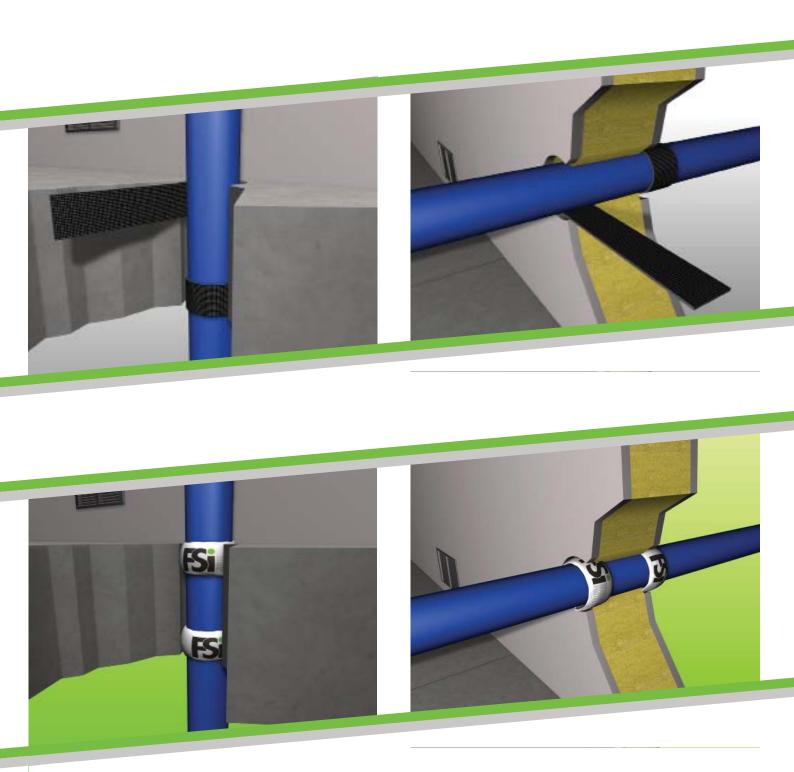
PipeBloc EL, friction fitted flush to both sides (top and bottom) of Rigid Floor with a minimum thickness of 150 mm PVC Pipes.				
Penetration Specification	Wrap Reference	Intumescent Material	Annulus Space (mm)	Classification
Pipe 50 mm ø 1.8 mm wall thickness.	50 mm PipeBloc EL	1 Layer of 40 mm (W) x 2 mm (T) 1 Layer of 40 mm (W) x 2 mm (T) Combined Thickness 40 mm (W) x 4 mm (T)	4	EI 120 U/C
Pipe 200 mm ø 7.7 mm wall thickness.	200 mm PipeBloc EL	40 (M) (T)	12	EI 120 U/C
Pipe 200 mm ø 9.6 mm wall thickness.	200 mm PipeBloc EL	40 mm (W) x 10 mm (T)	12	EI 60 U/C

PipeBloc EL, friction fitted in centre of seal of Rigid Floor with a minimum thickness of 150mm PVC-U, PVC-C.				
Penetration Specification	Wrap Reference	Intumescent Material	Annulus Space	Classification
Pipe 50mm ø 2.4mm wall thickness.	40mm PipeBloc EL	40 () 4 (T)		EI 240 U/C
Pipe 50mm ø 3.7mm wall thickness.	50mm PipeBloc EL	40mm (w) x 4mm (T)	6mm	E 240 , EI 120 U/C
Pipe 200mm ø 9.6mm wall thickness.	200mm PipeBloc EL	40 ma ma () 20 ma ma (T)	22mm	E 240 , EI 180 U/C
Pipe 200mm ø 9.6mm wall thickness.	200mm PipeBloc EL	40mm (w) x 20mm (T)		EI 60 U/C

PipeBloc EL, Friction fitted in centre of seal of Rigid Floor with a minimum thickness of 150mm PE, ABS & SAN-PVC.				
Penetration Specification	Wrap Reference	Intumescent Material	Annulus Space	Classification
Pipe 50mm ø 3mm wall thickness.	40mm PipeBloc EL	40mm (w) x 4mm (T)	40	
Pipe 50mm ø 4.6mm wall thickness.	50mm PipeBloc EL		6mm	EL 240
Pipe 200mm ø 4.9mm wall thickness.	200mm PipeBloc EL	40mm (w) x 20mm (T)	22	EI 240
Pipe 200mm ø 18.2mm wall thickness.	200mm PipeBloc EL		22mm	

PipeBloc EL, friction fitted in centre of seal of Rigid Floor with a minimum thickness of 150mm PP.				
Penetration Specification	Wrap Reference	Intumescent Material	Annulus Space	Classification
Pipe 50mm ø 2mm wall thickness.	40mm PipeBloc EL	40 () 4 (T)	C	mm EI 240
Pipe 50mm ø 6.9mm wall thickness.	50mm PipeBloc EL	40mm (w) x 4mm (T)	6mm	
Pipe 200mm ø 4.9mm wall thickness.	200mm PipeBloc EL	10 () 20 (7)		
Pipe 200mm ø 18.2mm wall thickness.	200mm PipeBloc EL	40mm (w) x 20mm (T)	22mm	EI 120





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