

ETA-Danmark A/S Göteborg Plads 1 DK-2150 Nordhavn Tel. +45 72 24 59 00 Internet <u>www.etadanmark.dk</u> Authorised and notified according to Article 29 of the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011



European Technical Assessment ETA-20/1009 of 2020/12/08

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:	Pipeblock PCP
Product family to which the above construction product belongs:	Fire Stopping, Fire Sealing & Fire Protective Products. Fire Retardant Products
Manufacturer: Manufacturing plant:	FSi Ltd Westminster Industrial Estate Tamworth Rd Measham GB-Swadlincote DE12 7DS Telephone: +44 1530 515130 <u>www.FSiltd.com</u> FSi Ltd Westminster Industrial Estate Tamworth Rd Measham GB-Swadlincote DE12 7DS Telephone: +44 1530 515130 <u>www.FSiltd.com</u>
This European Technical Assessment contains:	18 pages including 1 annex which form an integral part of the document
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of: This version replaces:	EAD 350454-00-1104 Firestopping and fire sealing products, Penetration Seals, Issued September 2017

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1 Technical Description of the Product

- 1) PipeBloc PCP is installed round 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.
- 2) PipeBloc PCP include an intumescent component incorporated into a mild steel case to close any gaps and joints and provide a closure of combustible pipes when heated and to prevent the passage of fire.
- 3) PipeBloc PCP are supplied in assembled form, without fixings. The collar is wrapped around the pipe at the soffit or both faces of walls, depending on application. Fixing specifications are detailed in Annex A.
- 4) PipeBloc PCP can be used with Pyrocoustic Sealant to seal the space between the combustible pipe and the aperture to close gap sizes as specified in Annex A.

2 Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

The intended use of Pyropro HPE Sealant is to reinstate the fire resistance performance of rigid and flexible The intended use of PipeBloc PCP 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 PCP may be used is as follows:

Flexible walls:	The wall must have a minimum thickness of 100 mm and comprise timber or steel studs line on both faces with minimum 2 layers of 12.5 mm thick, 'Type F' Gypsum boards according to EN 520. In timber stud walls, no part of the penetration seal shall be closer than 100mm to a stud, and minimum 100 mm of insulation of class A1 or A2 according to EN 13501-1, is provided within the cavity between the penetration seal and the stud.
Rigid walls:	The wall must have a minimum thickness of 100 mm and comprise of concrete, aerated concrete or masonry, with a minimum density of 650 km/m ³ .

- Rigid floor: The floor must have a minimum thickness of 150 mm and comprise of concrete, aerated concrete or masonry, with a minimum density of 650 km/m³.
- 1) The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.
- 2) The system PipeBloc PCP may be used to provide a penetration seal with specific combustible pipes, single only (for details see Annex A).
- 3) Apertures in the separating element shall be maximum 10 mm diameter oversize with respect to the pipe diameter. The remaining annular space/gap shall be infilled with PipeBloc PCP. Apertures for the penetration of pipes shall be separated by a minimum of 200 mm.
- 4) The provisions made in this European Technical Assessment are based on an assumed working life of the PipeBloc PCP of 10 years, The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

5) Services in walls shall be supported at maximum 400mm from the face of the separating element for walls, and 400mm above the surface of the floor.

Use Category

Type X: Intended for use in conditions exposed to weathering.

3 Performance of The Product And References To The Methods Used For Its Assessment

Characteristic	Assessment of characteristic				
BWR 2 Safety in case of fire					
Reaction to fire See clause 1.1					
Resistance to fire	See clause 1.2				
BWR 3 Hygiene, Health and the Environment					
Release of dangerous substances	See clause 2.1				
BWR 4 Safety in use					
Durability and serviceability	See clause 3.1				
BWR 5 Protection against noise					
BWR 6 Energy, Economy and Heat Retention					
BWR 7 Sustainable use of natural resources					

3.1 Safety in case of fire

3.1.1 Reaction to fire

System Flexi Coat is classified **E** in accordance with EN 13501-1

3.1.2 Resistance to fire

See Annex A

3.2 Hygiene, Health and the Environment.

3.2.1 Release of dangerous substance

Category IA1, S/W3 Declaration of manufacturer

FSI Ltd have presented a declaration that PipeBloc PCP release no dangerous substances in compliance with Council Directive 67/548/EEC of 1st June 2015 on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (incl. All amendments and adaptations).

The manufacturer declares that the product contains no dangerous substances according to current European and National regulations.

FSi Ltd has submitted a written declaration that the product and/or constituents of the product contains no substances which have been classified as dangerous according to Directive 67/548/EEC and Regulation (EC) No. 1272/2008 and listed in the 'indicative list on dangerous substances' of the EGDS – taking into account the installation conditions of the construction product and the release scenarios resulting from there.

In addition to the specific clauses relating to dangerous substances contained in this European Technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

The use catagory of PipeBloc PCP in relation to BWR 3 (Hygiene, health and environment) is IA1, S/W3.

In addition to the specific clauses relating to dangerous substances contained in this European technical approval, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations, and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

3.3 Safety and accessibility in use

3.3.1 Durability

Pipe Bloc PCP has been tested in accordance with EOTA Technical Report - TR024 – Edition November 2006, Fire Stopping and Fire Sealing Products-Penetration Seals for the type X, environmental conditions: Products for penetration seals intended for outdoor use exposed to weathering – rain, UV, high temperatures, frost and frost-thaw in winter.

4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base

According to the decision 1999/454/EC of the European Commission the system of assessment and verification of constancy of performance (see Annex V to the Regulation (EU) No 305/2011) given in the following table apply:

Products	Intended use/s	AVCP System		
Fire stopping and fire sealing products	For fire compartmentation and / or fire protection or fire performance	System 1		

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark A/S prior to CE marking

Issued in Copenhagen on 2020-12-08 by

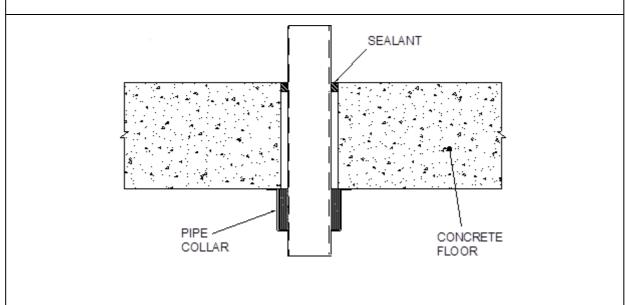
Thomas Bruun Managing Director, ETA-Danmark

Annex A Resistance to Fire Classification of PipeBloc PCP

A.1 Floor construction with thickness of minimum 150 mm

A.1.1 Penetration seal with PipeBloc PCP installed on the underside of rigid floor

Construction details: Combustible pipes installed with a single PipeBloc PCP to the underside. Maximum 10 mm annular space filled with Pyrocoustic sealant.



A.1.1.1 PVC-U pipes with PipeBloc PCP installed on the underside of rigid floor

Pi	PipeBloc PCP, Face Fixed on the Underside of Rigid Floor (min 150 mm thick) PVC-U Pipes					
Penetration Specification	Collar Reference	Intumescent Material	Annulus Space (mm)	Collar Fixing	Classification	
PVC Pipe 32 mm ø 1.8 mm wall thickness	32 mm PipeBloc PCP					
PVC Pipe 40 mm ø 1.8 mm wall thickness	40 mm PipeBloc PCP	30 mm (W) x 4 mm (T)				
PVC Pipe 50 mm ø 1.8 mm wall thickness	50 mm PipeBloc PCP					
PVC Pipe 55 mm ø 2.3- 3.0 mm wall thickness	55 mm PipeBloc PCP	30 mm (W) x 6 mm (T)				
PVC Pipe 63 mm ø 2.3- 3.0 mm wall thickness	63 mm PipeBloc PCP		10	Face fixed on the underside of rigid floor with 3No.	EI 240 U/C	
PVC Pipe 75 mm ø 3.1- 4.8 mm wall thickness	75 mm PipeBloc PCP	30 mm (W) x 8 mm (T)	10	Fischer FSA Ø8 x 60mm long, with M6 hexagon head bolts	EI 240 0/C	
PVC Pipe 82 mm ø 3.1- 4.8 mm wall thickness	82 mm PipeBloc PCP					
PVC Pipe 90 mm ø 4.2- 7.4 mm wall thickness	90mm PipeBloc PCP	30 mm (W) x 10 mm				
PVC Pipe 100 mm ø 4.2- 7.4 mm wall thickness	100 mm PipeBloc PCP	(T)				
PVC Pipe 110 mm ø 4.2- 7.4 mm wall thickness	110 mm PipeBloc PCP					
PVC Pipe 125 mm ø 6.0 mm wall thickness	125 mm PipeBloc PCP	40 mm (W) x 12 mm (T)				
PVC Pipe 140 mm ø 6.1- 7.5 mm wall thickness	140 mm PipeBloc PCP	40 mm (W) x 16 mm (T)				
PVC Pipe 160 mm ø 6.2- 9.5 mm wall thickness	160 mm PipeBloc PCP	40 mm (W) x 18 mm (T)				

A.1.1.2 PP pipes with PipeBloc PCP installed on the underside of rigid floor

Pi	PipeBloc PCP, Face Fixed on the Underside of Rigid Floor (min 150 mm thick) PP Pipes					
Penetration Specification	Collar Reference	Intumescent Material	Annulus Space (mm)	Collar Fixing	Classification	
PP Pipe 32 mm ø 2.9 mm wall thickness	32 mm PipeBloc PCP					
PP Pipe 40 mm ø 2.9 mm wall thickness	40 mm PipeBloc PCP	30 mm (W) x 4 mm (T)				
PP Pipe 50 mm ø 2.9 mm wall thickness	50 mm PipeBloc PCP					
PP Pipe 55 mm ø 2.9- 4.4 mm wall thickness	55 mm PipeBloc PCP	30 mm (W) x 6 mm		Eaco fixed on the		
PP Pipe 63 mm ø 2.9- 4.4 mm wall thickness	63 mm PipeBloc PCP	(T)	10	Face fixed on the underside of rigid floor with 3No.	EI 240 U/C	
PP Pipe 75 mm ø 2.8- 6.7 mm wall thickness	75 mm PipeBloc PCP	30 mm (W) x 8 mm		Fischer FSA Ø8 x 60mm long, with M6 hexagon head bolts		
PP Pipe 82 mm ø 2.8- 6.7 mm wall thickness	82 mm PipeBloc PCP	(T)				
PP Pipe 90 mm ø 2.7- 10.0 mm wall thickness	90 mm PipeBloc PCP					
PP Pipe 100 mm ø 2.7- 10.0 mm wall thickness	100 mm PipeBloc PCP	30 mm (W) x 10 mm (T)				
PP Pipe 110 mm ø 2.7- 10.0 mm wall thickness	110 mm PipeBloc PCP					
PP Pipe 125 mm ø 3.1 mm wall thickness	125 mm PipeBloc PCP	40 mm (W) x 12 mm (T)				
PP Pipe 140 mm ø 3.5- 8.0 mm wall thickness	140 mm PipeBloc PCP	40 mm (W) x 16 mm (T)				
PP Pipe 160 mm ø 4.0- 14.6 mm wall thickness	160 mm PipeBloc PCP	40 mm (W) x 18 mm (T)				

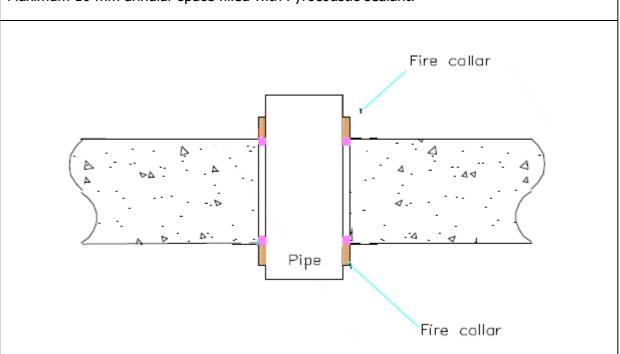
A1.1.3 PE pipes with PipeBloc PCP installed on the underside of rigid floor

PE pipes according to EN ISO 15494 with PipeBloc PCP.

Pij	PipeBloc PCP, Face Fixed on the Underside of Rigid Floor (min 150 mm thick) PE Pipes					
Penetration Specification	Collar Reference	Intumescent Material	Annulus Space (mm)	Collar Fixing	Classification	
PE Pipe 32 mm ø 2.9 mm wall thickness	32 mm PipeBloc PCP					
PE Pipe 40 mm ø 2.9 mm wall thickness	40 mm PipeBloc PCP	30 mm (W) x 4 mm (T)				
PE Pipe 50 mm ø 2.9 mm wall thickness	50 mm PipeBloc PCP					
PE Pipe 55 mm ø 2.9- 4.4 mm wall thickness	55 mm PipeBloc PCP	30 mm (W) x 6 mm		Face fixed on the		
PE Pipe 63 mm ø 2.9- 4.4 mm wall thickness	63 mm PipeBloc PCP	(T)	10	underside of rigid floor with 3No.	EI 240 U/C	
PE Pipe 75 mm ø 2.8- 6.7 mm wall thickness	75 mm PipeBloc PCP	30 mm (W) x 8 mm		Fischer FSA Ø8 x 60mm long, with M6 hexagon head bolts		
PE Pipe 82 mm ø 2.8- 6.7 mm wall thickness	82 mm PipeBloc PCP	(T)				
PE Pipe 90 mm ø 2.7- 10.0 mm wall thickness	90 mm PipeBloc PCP					
PE Pipe 100 mm ø 2.7- 10.0 mm wall thickness	100 mm PipeBloc PCP	30 mm (W) x 10 mm (T)				
PE Pipe 110 mm ø 2.7- 10.0 mm wall thickness	110 mm PipeBloc PCP					
PE Pipe 125 mm ø 3.1 mm wall thickness	125 mm PipeBloc PCP	40 mm (W) x 12 mm (T)				
PE Pipe 140 mm ø 3.9- 5.8 mm wall thickness	140 mm PipeBloc PCP	40 mm (W) x 16 mm (T)				
PE Pipe 160 mm ø 4.9- 9.5 mm wall thickness	160 mm PipeBloc PCP	40 mm (W) x 18 mm (T)				

A.1.2 Penetration seal with PipeBloc PCP installed on both sides of rigid floor

Construction details: Combustible pipes installed with a single PipeBloc PCP to both sides. Maximum 10 mm annular space filled with Pyrocoustic sealant.



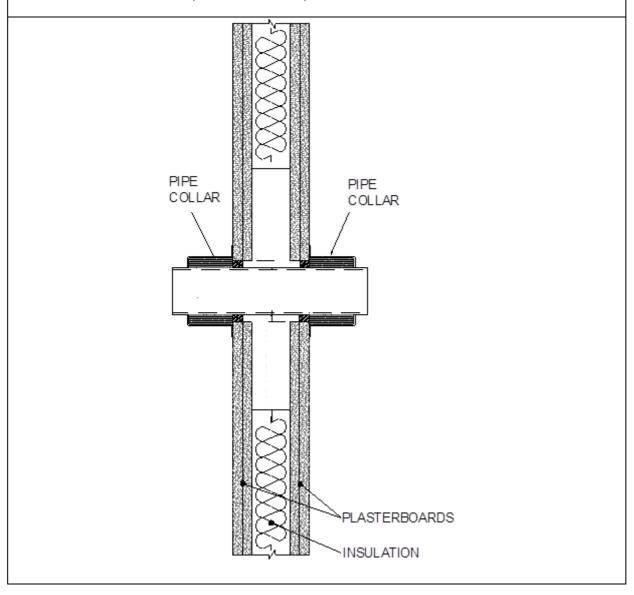
A.1.2.1 Penetration seal with PipeBloc PCP installed on both sides of rigid floor

PipeBloc PCP, Face Fixed on Both Sides of Rigid Floor (min 150 mm thick) PP Pipes						
Penetration Specification	Collar Reference	Intumescent Material	Annulus Space (mm)	Collar Fixing	Classificati on	
PP Pipe 110 mm ø 2.7 mm wall thickness	110 mm PipeBloc PCP	30 mm (W) x 10 mm (T)	10	Fixed on both faces of rigid floor with 3No. Fischer FSA Ø8	EI 120 U/U	
PP Pipe 160 mm ø 4.0 mm wall thickness	160 mm PipeBloc PCP	40 mm (W) x 16 mm (T)		x 60mm long, with M6 hexagon head bolts	EI 120 C/U	

A.2 Wall construction with thickness of minimum 100 mm

A.2.1 Penetration seal with PipeBloc PCP installed on both sides of flexible or rigid wall

Construction details: Combustible pipes installed with a single PipeBloc PCP to both sides. Maximum 10 mm annular space filled with Pyrocoustic sealant.



A.2.1.1 PVC-U pipes with PipeBloc PCP installed on both sides of flexible or rigid wall

PipeBloc PCP, Face Fixed on Both Sides of Flexible or Rigid Wall (min 100 mm thick) PVC-U Pipes					
Penetration Specification	Collar Reference	Intumescent Material	Annulus Space (mm)	Collar Fixing	Classification
PVC Pipe 32 mm ø 1.8 mm wall thickness	32 mm PipeBloc PCP				
PVC Pipe 40 mm ø 1.8 mm wall thickness	40 mm PipeBloc PCP	30 mm (W) x 4 mm (T)			
PVC Pipe 50 mm ø 1.8 mm wall thickness	50 mm PipeBloc PCP	(')			
PVC Pipe 55 mm ø 2.3- 3.0 mm wall thickness	55 mm PipeBloc PCP	30 mm (W) x 6 mm (T)			
PVC Pipe 63 mm ø 2.3- 3.0 mm wall thickness	63 mm PipeBloc PCP		10	Fixed on both sides of the wall with a 6mm x 65mm long	EI 120 U/C
PVC Pipe 75 mm ø 3.1- 4.8 mm wall thickness	75 mm PipeBloc PCP	30 mm (W) x 8 mm (T)	10	Fisher HM 6x65 S, steel toggle anchor	EI 120 0/C
PVC Pipe 82 mm ø 3.1- 4.8 mm wall thickness	82 mm PipeBloc PCP				
PVC Pipe 90 mm ø 4.2- 7.4 mm wall thickness	90 mm PipeBloc PCP	30 mm (W) x 10 mm			
PVC Pipe 100 mm ø 4.2- 7.4 mm wall thickness	100 mm PipeBloc PCP	(T)			
PVC Pipe 110 mm ø 4.2- 7.4 mm wall thickness	110 mm PipeBloc PCP				
PVC Pipe 125 mm ø 6.0 mm wall thickness	125 mm PipeBloc PCP	40 mm (W) x 12 mm (T)			
PVC Pipe 140 mm ø 6.1- 7.5 mm wall thickness	140 mm PipeBloc PCP	40 mm (W) x 16 mm (T)			
PVC Pipe 160 mm ø 6.2- 9.5 mm wall thickness	160 mm PipeBloc PCP	40 mm (W) x 18 mm (T)			

A.2.1.2 PP pipes with PipeBloc PCP installed on both sides of flexible or rigid wall

Pi	PipeBloc PCP, Face Fixed on Both Sides of Flexible or Rigid Wall (min 100 mm thick) PP Pipes					
Penetration Specification	Collar Reference	Intumescent Material	Annulus Space (mm)	Collar Fixing	Classification	
PP Pipe 32 mm ø 2.9 mm wall thickness	32 mm PipeBloc PCP					
PP Pipe 40 mm ø 2.9 mm wall thickness	40 mm PipeBloc PCP	30 mm (W) x 4 mm (T)				
PP Pipe 50 mm ø 2.9 mm wall thickness	50 mm PipeBloc PCP					
PP Pipe 55 mm ø 2.9- 4.4 mm wall thickness	55 mm PipeBloc PCP	30 mm (W) x 6 mm		Fixed on both sides		
PP Pipe 63 mm ø 2.9- 4.4 mm wall thickness	63 mm PipeBloc PCP	(T)	10	of the wall with a 6mm x 65mm long	EI 120 U/C	
PP Pipe 75 mm ø 2.8- 6.7 mm wall thickness	75 mm PipeBloc PCP	30 mm (W) x 8 mm		Fisher HM 6x65 S, steel toggle anchor		
PP Pipe 82 mm ø 2.8- 6.7 mm wall thickness	82 mm PipeBloc PCP	(T)				
PP Pipe 90 mm ø 2.7- 10.0 mm wall thickness	90 mm PipeBloc PCP					
PP Pipe 100 mm ø 2.7- 10.0 mm wall thickness	100 mm PipeBloc PCP	30 mm (W) x 10 mm (T)				
PP Pipe 110 mm ø 2.7- 10.0 mm wall thickness	110 mm PipeBloc PCP					
PP Pipe 125 mm ø 3.1 mm wall thickness	125 mm PipeBloc PCP	40 mm (W) x 12 mm (T)				
PP Pipe 140 mm ø 3.5- 8.0 mm wall thickness	140 mm PipeBloc PCP	40 mm (W) x 16 mm (T)				
PP Pipe 160 mm ø 4.0- 14.6 mm wall thickness	160 mm PipeBloc PCP	40 mm (W) x 18 mm (T)				

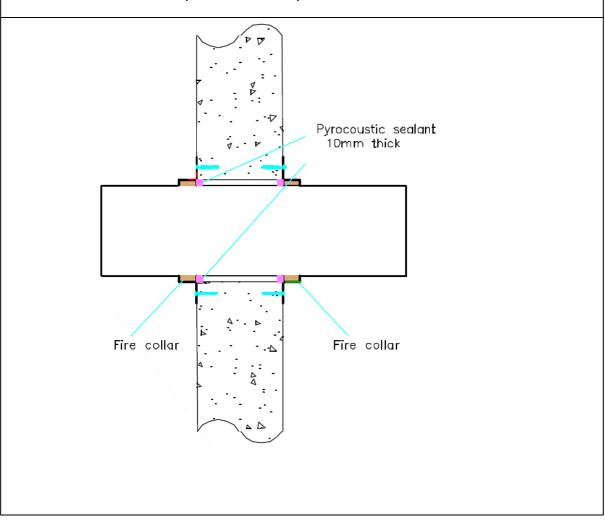
A.2.1.3 PE pipes with PipeBloc PCP installed on both sides of flexible or rigid wall

PE pipes according to EN ISO 15494 with PipeBloc PCP.

Pip	PipeBloc PCP, Face Fixed on Both Sides of Flexible or Rigid Wall (min 100 mm thick) PE Pipes					
Penetration Specification	Collar Reference	Intumescent Material	Annulus Space (mm)	Collar Fixing	Classification	
PE Pipe 32 mm ø 2.9 mm wall thickness	32 mm PipeBloc PCP	20 (11) 4				
PE Pipe 40 mm ø 2.9 mm wall thickness	40 mm PipeBloc PCP	30 mm (W) x 4 mm (T)				
PE Pipe 50 mm ø 2.9 mm wall thickness	50 mm PipeBloc PCP					
PE Pipe 55 mm ø 2.9- 4.4 mm wall thickness	55 mm PipeBloc PCP	30 mm (W) x 6 mm		Fixed on both sides		
PE Pipe 63 mm ø 2.9- 4.4 mm wall thickness	63 mm PipeBloc PCP	(T)	10	of the wall with a 6mm x 65mm long	EI 120 U/C	
PE Pipe 75 mm ø 2.8- 6.7 mm wall thickness	75 mm PipeBloc PCP	30 mm (W) x 8 mm		Fisher HM 6x65 S, steel toggle anchor		
PE Pipe 82 mm ø 2.8- 6.7 mm wall thickness	82 mm PipeBloc PCP	(T)				
PE Pipe 90 mm ø 2.7- 10.0 mm wall thickness	90 mm PipeBloc PCP					
PE Pipe 100 mm ø 2.7- 10.0 mm wall thickness	100 mm PipeBloc PCP	30 mm (W) x 10 mm (T)				
PE Pipe 110 mm ø 2.7- 10.0 mm wall thickness	110 mm PipeBloc PCP					
PE Pipe 125 mm ø 3.1 mm wall thickness	125 mm PipeBloc PCP	40 mm (W) x 12 mm (T)				
PE Pipe 140 mm ø 3.9- 5.8 mm wall thickness	140 mm PipeBloc PCP	40 mm (W) x 16 mm (T)				
PE Pipe 160 mm ø 4.9- 9.5 mm wall thickness	160 mm PipeBloc PCP	40 mm (W) x 18 mm (T)				

A.2.2 Penetration seal with PipeBloc PCP installed on both sides of rigid wall

Construction details: Combustible pipes installed with a single PipeBloc PCP to both sides. Maximum 10 mm annular space filled with Pyrocoustic sealant.



A.2.2.1 PP pipes with PipeBloc PCP installed on both sides of rigid wall

PipeBloc PCP, Face Fixed on Both Sides of Rigid Wall (min 100 mm thick) PP Pipes						
Penetration Specification	Collar Reference	Intumescent Material	Annulus Space (mm)	Collar Fixing	Classificati on	
PP Pipe 110 mm ø 2.7 mm wall thickness	110 mm PipeBloc PCP	30 mm (W) x 10 mm (T)	10	Fixed on both faces of the wall with 3No. 40mm Fischer pins	EI 120 U/U	
PP Pipe 160 mm ø 4.0 mm wall thickness	160 mm PipeBloc PCP	40 mm (W) x 18 mm (T)		Fixed on both faces of the wall with 3No. Ø4 x 70mm wood	EI 120 U/U	
PP Pipe 250 mm ø 6.2 mm wall thickness	250 mm PipeBloc PCP	40 mm (W) x 24 mm (T)		screws and penny washers	EI 120 U/C	