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**European Technical
Assessment**

**ETA 15/0136
of 18/04/15**

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011:	
Trade name of the construction product	Pyroplex 200 Series Collar & Pyroplex 400 Series Collar
Product family to which the construction product belongs	Fire Stopping and Sealing Product Penetration Seals
Manufacturer	Pyroplex Limited The Furlong Droitwich Worcestershire WR9 9BG
Manufacturing plant(s)	E/033
This European Technical Assessment contains	18 pages including 3 Annex(es) which form an integral part of this assessment.
	Annex(es) A - C Contain(s) confidential information and is/are not included in the European Technical Assessment when that assessment is publicly available.
This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of	ETAG 026, edition 2011, used as European Assessment Document (EAD)

General Comments

1. This European Technical Assessment is issued by Warrington Certification Limited on the basis of ETAG 026 Fire Protective Products Part 1: General June 2013, and Part 2: Fire Stopping and Fire Sealing Products Aug 2011, Used as European Assessment Document.
2. This European Technical Assessment is not to be transferred to manufacturers or agents of manufacturers other than those indicated on page 1, or manufacturing plants other than those indicated on page 1.



1 SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical Description of the Product

(Detailed information and data are given in Annexes)

- 1) 200 & 400 Series Collars are used around combustible pipes to form a penetration seal to reinstate the fire resistance performance of wall and floor constructions, where they have been provided with apertures for the penetration of combustible pipes services.
- 2) 200 Series Collars include an intumescent component incorporated into a mild steel case to close any gaps or joints and provide closure of combustible pipes when heated and to prevent the passage of fire.
- 3) 400 Series Collars include an intumescent component incorporated into a stainless steel case to close any gaps or joints and provide closure of combustible pipes when heated and to prevent the passage of fire.
- 4) 200 & 400 Series Collars are supplied in assembled form, without fixings. The collar is wrapped around the pipe at the soffit of floors and on both faces of walls, closed and then fixed back to the separating element with the specified number of M8 sleeve anchors or 50 mm expanding bolts.
- 5) When 400 Series Collars are installed within flexible wall constructions, 8mm threaded rod should be utilised through the collar and supporting construction fixed in place with a single fastening nut either side.
- 6) The applicant 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 category of 200 & 400 Series Collars in relation to BWR 3 (Hygiene, health and environment) is IA3, S/W3

Internal use- ETAG 026-2 (used as European Assessment Document EAD) Type Z₂.



2 Specification Of The Intended Use In Accordance With The Relevant EAD

2.1 Intended Use

The intended use of system 200 Series Collar and system 400 Series Collar is to reinstate the fire resistance performance of rigid wall constructions and rigid floor constructions where they are penetrated by various combustible pipe services.

- 1) The specific elements of construction that the system 200 Series Collar and system 400 Series Collar may be used to provide a penetration seal in, are as follows:

Rigid floors: The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m³.

Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m³.

Rigid walls: The wall must have a minimum thickness of 130 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m³.

Flexible walls The wall must have a minimum thickness of 130 mm and comprise timber or steel studs lined on both faces with minimum 2 layers of 15 mm thick, 'Type F' Gypsum boards according to EN 520. In timber stud walls, no part of the penetration shall be closer than 100 mm 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.

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

- 1) The system 200 Series Collar and system 400 Series Collar may be used to provide a penetration seal with specific combustible pipes, single only (for details see Annex A & B).
- 2) Apertures in the separating element shall be maximum 5 mm diameter oversize (dependant on application) with respect to the pipe diameter for. The remaining annular space/gap shall be infilled with an acrylic mastic sealant such as Pyroplex Intumescent Mastic for the purpose of providing a smoke seal. Apertures for the penetration of pipes shall be separated by a minimum 200 mm.
- 3) Pipes shall be supported at maximum 300 mm away from both faces of the wall constructions and 320mm from the upper face of floor constructions.

2.2 Use Category

Type Z2: Intended for use at internal conditions with humidity classes other than Z1 , excluding temperatures below 0°C.



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

Product Type: Fire Collar		Intended use: Penetration Seal
Basic requirement for construction work	Basic Requirement	Performance
BWR 1 Mechanical resistance and stability		
	None	Not relevant
BWR 2 Safety in case of fire		
EN 13501-1	Reaction to fire	Class F
EN 13501-2	Resistance to fire	Annex A & B
BWR 3 Hygiene, Health and the Environment		
EN 1026:2000	Air permeability	No performance determined
ETAG 026-3 Annex C	Water permeability	No performance determined
Declaration by manufacturer	Release of dangerous substances	Use category IA3, S/W3 Declaration of manufacturer
BWR 4 Safety in use		
EOTA TR 001:2003	Mechanical resistance and stability	No performance determined
EOTA TR 001:2003	Resistance to impact/movement	No performance determined
EOTA TR 001:2003	Adhesion	No performance determined
BWR 5 Protection against noise		
EN 10140-2/ EN ISO 717-1	Airborne sound insulation	No performance determined
BWR 6 Energy, Economy and Heat Retention		
EN 12664, EN 12667 or EN 12939	Thermal properties	No performance determined
EN ISO 12572 EN12086	Water vapour permeability	No performance determined
General aspects relating to fitness for use		
EOTA TR 024:2009	Durability and serviceability	Z ₂
BWR 7 Sustainable use of natural resources		
		No performance determined



4 Assessment And Verification Of Constancy Of Performance (Hereinafter AVCP) System Applied, With References 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 uses	Level or Class	System
Fire stopping and fire sealing products	For fire compartmentation and / or fire protection or fire performance	Any	System 1

5 Technical Details Necessary For The Implementation Of The AVCP System, As Provided For In The Applicable EAD.

Tasks for the Manufacturer

Factory production control

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall ensure that the product is in conformity with this European technical assessment.

The manufacturer may only use constituent materials stated in the technical documentation of this European technical assessment.

The factory production control shall be in accordance with the Control Plan of 12/6/12 relating to the European Technical Assessment ETA– 15/0136 "Control Plan" is laid down in the context of the factory production control system operated by the manufacturer and deposited at Warrington Certification Limited.

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the Control Plan.

Other tasks of manufacturer

Additional information

The manufacturer shall provide a technical data sheet and an installation instruction with the following minimum information:

(a) Technical data sheet:

- Field of application:
 - Building elements for which the penetration seal is suitable, type and properties of the building elements like minimum thickness, density, and - in case of lightweight constructions – the construction requirements.



- Services for which the penetration seal is suitable, type and properties of the services like material, diameter, thickness etc. in case of pipes including insulation materials; necessary/allowed supports/fixings (e.g. cable trays)
- Limits in size, minimum thickness etc. of the penetration seal

(b) Installation instruction:

- Steps to be followed
- Procedure in case of retrofitting.

The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provisions of the European technical assessment ETA 15/0136.

Tasks of approved bodies

The approved body shall perform the

- initial type-testing of the product,
- initial inspection of factory and of factory production control,
- continuous surveillance, assessment and approval of factory production control,

In accordance with the provisions laid down in the "Control Plan" of 12/6/12 relating to the European Technical Assessment 15/0136.

The approved body shall retain the essential points of its actions referred to above and state the results obtained and conclusions drawn in a written report.

The approved certification body involved by the manufacturer shall issue an EC certificate of conformity of the product stating the conformity with the provisions of this European technical assessment.

In cases where the provisions of the European technical assessment and its "Control Plan" are no longer fulfilled the certification body shall withdraw the certificate of conformity and inform the Warrington Certification Limited without delay.



Signatories



Responsible Officer

C. Abbott* - Principal Certification Engineer



Approved

A. Kearns* - Technical Manager

* For and on behalf of Warrington Certification Limited.



Annex A

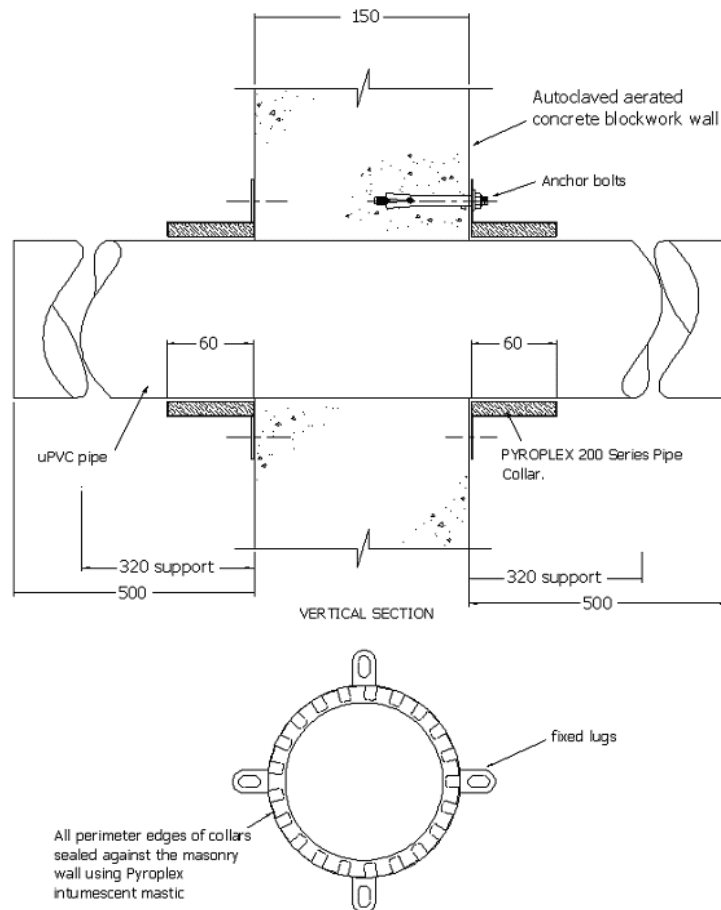
Resistance to Fire Classification of 200 Series Collar

A.1 Rigid wall constructions according to 1.2.1 with wall thickness of minimum 150 mm

A.1.1 Penetration seal with 200 Series Collar fixed to both faces of wall

Penetration Seal: Combustible pipes fitted with a single Pyroplex 200 Series Collar on both sides. The collar is fixed to the wall. Maximum 2.5 mm annular space filled with Pyroplex Intumescent Mastic.

Construction details:



A.1.1.1 Separation of services minimum 200 mm

Services	Collar	Classification
PVC-U pipe according to EN 1329-1 ¹		
Diameter 55 mm, wall thickness 3.2 mm	PPC55-2	EI 120 – U/C EI 120 – C/C
Diameter 82 mm, wall thickness 3.2 mm	PPC82-2	
Diameter 110 mm, wall thickness 3.2 mm	PPC110-2	
Diameter 160 mm, wall thickness 3.2 mm	PPC160-2	

¹ In Germany the pipes have additionally to comply with DIN 19531-10

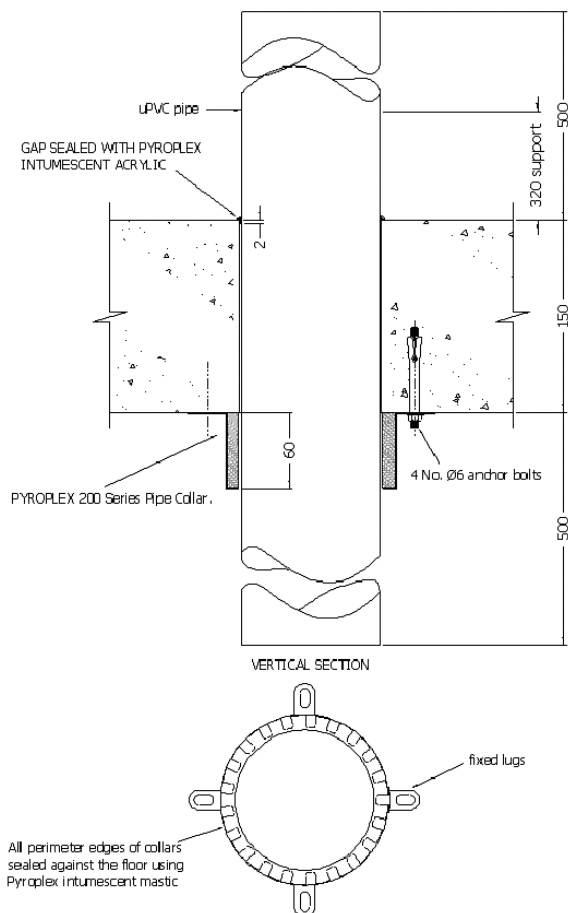


Rigid floor constructions according to 1.2.1 with floor thickness of minimum 150 mm

A.1.2 Penetration seal with 200 Series Collar fixed to soffit of floor

Penetration Seal: Combustible pipes fitted with a single Pyroplex 200 Series Collar on soffit. The collar is fixed to the wall. Maximum 2.5 mm annular space filled with Pyroplex Intumescent Mastic.

Construction details:



A.1.2.1 Separation of services minimum 200 mm

Services	Collar	Classification
PVC-U pipe according to EN 1329-1 ¹		
Diameter 55 mm, wall thickness 3.2 mm	PPC55-2	EI 120 – U/C EI 120 – C/C
Diameter 82 mm, wall thickness 3.2 mm	PPC82-2	
Diameter 110 mm, wall thickness 3.2 mm	PPC110-2	
Diameter 160 mm, wall thickness 3.2 mm	PPC160-2	



Annex B

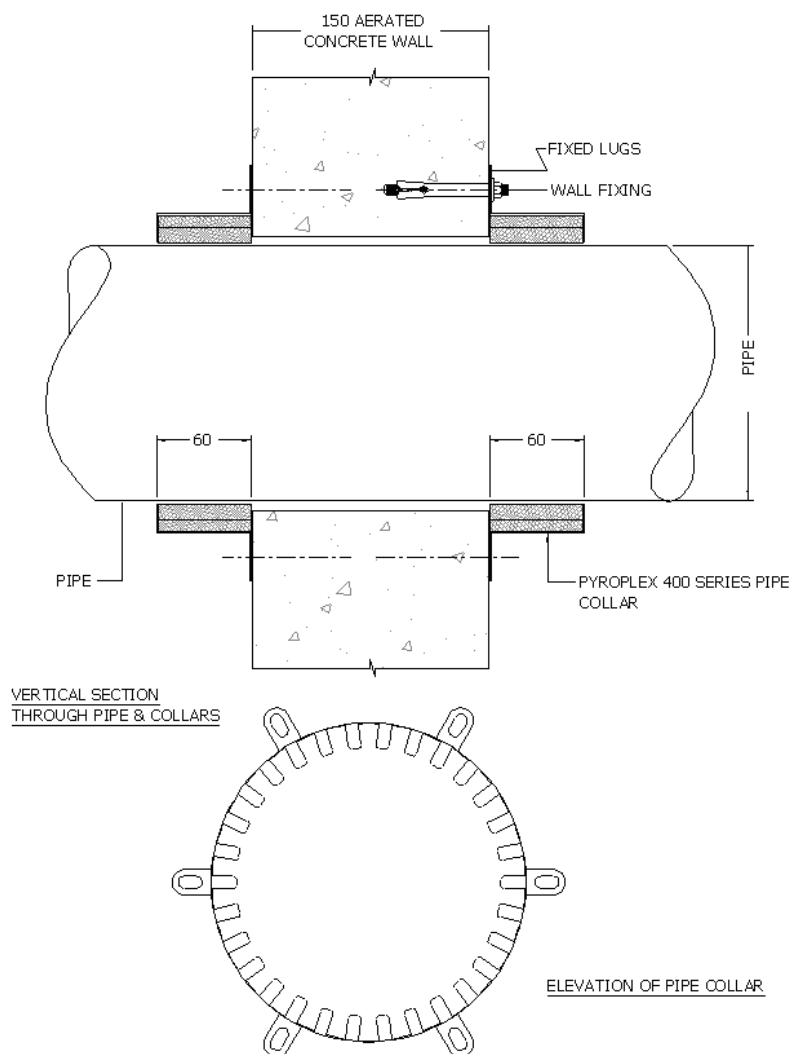
Resistance to Fire Classification of 400 Series Collar

B.1 Rigid wall constructions according to 1.2.1 with wall thickness of minimum 150 mm

B.1.1 Penetration seal with 400 Series Collar fixed to both faces of wall

Penetration Seal: Combustible pipes fitted with a single Pyroplex 400 Series Collar on both sides. The collar is fixed to the wall. Maximum 2.5 mm annular space filled with Pyroplex Intumescent Mastic.

Construction details:



B.1.1.1 Separation of services minimum 200 mm

Services	Collar	Classification
PVC-U pipe according to EN 1329-1 ¹		
Diameter 25 mm, wall thickness 1.8 mm	PPC25-4	EI 180 – U/C EI 180 – C/C
Diameter 32 mm, wall thickness 1.8 mm	PPC32-4	
Diameter 40 mm, wall thickness 1.8 mm	PPC40-4	
Diameter 48 mm, wall thickness 3.2 mm	PPC48-4	
Diameter 55 mm, wall thickness 3.2 mm	PPC55-4	
Diameter 68 mm, wall thickness 3.2 mm	PPC68-4	
Diameter 82 mm, wall thickness 3.2 mm	PPC82-4	
Diameter 110 mm, wall thickness 3.2 mm	PPC110-4	
Diameter 125 mm, wall thickness 3.2 mm	PPC125-4	
Diameter 135 mm, wall thickness 3.2 mm	PPC135-4	
Diameter 160 mm, wall thickness 3.2 mm	PPC160-4	
Diameter 200 mm, wall thickness 5.4 mm	PPC200-4	EI 240 – C/C
Diameter 225 mm, wall thickness 7.2 mm	PPC225-4	
Diameter 250 mm, wall thickness 7.2 mm	PPC250-4	EI 180 – C/C
Diameter 315 mm, wall thickness 8.2 mm	PPC315-4	

B.1.1.2 Separation of services minimum 200 mm

Services	Collar	Classification
PVC-U pipe according to EN 1452-2 ¹		
Diameter 350 mm, wall thickness 9.8 mm	PPC350-4	EI 120 – C/C
Diameter 400 mm, wall thickness 9.8 mm	PPC400-4	

B.1.1.3 Separation of services minimum 200 mm

Services	Collar	Classification
PE-HD pipe according to EN 12201-2 ²		
Diameter 350 mm, wall thickness 23.7 mm	PPC350-4	EI 60 – C/C
Diameter 400 mm, wall thickness 23.7 mm	PPC400-4	

¹ In Germany the pipes have additionally to comply with DIN 19531-10

² In Germany the pipes have additionally to comply with DIN 19535-10

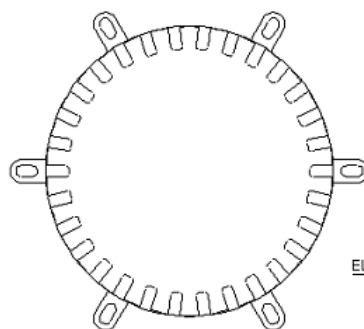
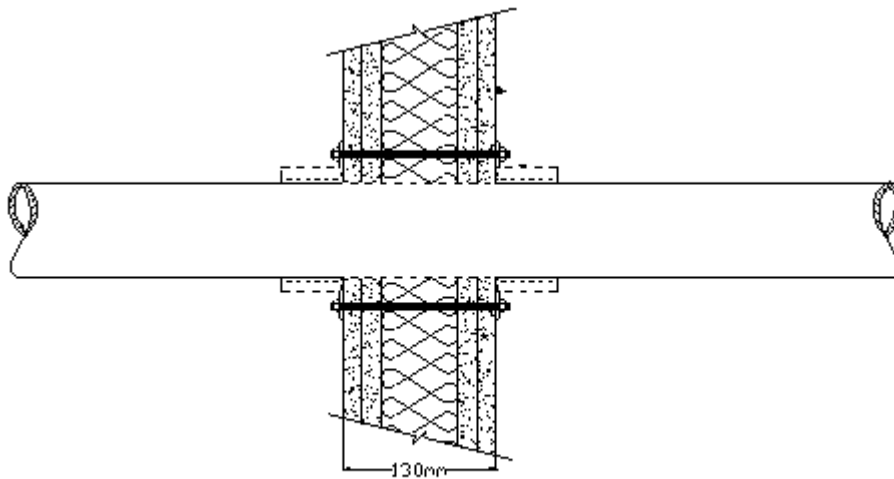


B.2 Flexible or rigid wall constructions according to 1.2.1 with wall thickness of minimum 130 mm

B.2.1 Penetration seal with 400 Series Collar fixed to both faces of wall

Penetration Seal: Combustible pipes fitted with a single Pyroplex 400 Series Collar on both sides. The collar is fixed to the wall. Maximum 1mm annular space filled with Pyroplex Intumescent Mastic.

Construction details:



ELEVATION OF PIPE COLLAR



B.2.1.1 Separation of services minimum 200 mm

Services	Collar	Classification
PVC-U pipe according to EN 1452-2		
Diameter 25 mm, wall thickness 1.9 – 3.0 mm	PPC25-4	EI 120 U/C, C/C
Diameter 32 mm, wall thickness 1.9 – 3.0 mm	PPC32-4	
Diameter 40 mm, wall thickness 1.9 – 3.0 mm	PPC40-4	
Diameter 48 mm, wall thickness 2.2 – 3.4 mm	PPC48-4	
Diameter 55 mm, wall thickness 3.3 – 5.2 mm	PPC55-4	
Diameter 68 mm, wall thickness 3.3 – 5.2 mm	PPC68-4	
Diameter 82 mm, wall thickness 3.3 – 5.2 mm	PPC82-4	
Diameter 90 mm, wall thickness 4.8 – 7.4 mm	PPC90-4	
Diameter 110 mm, wall thickness 4.8 – 7.4 mm	PPC110-4	
Diameter 125 mm, wall thickness 4.8 – 7.4 mm	PPC125-4	
Diameter 160 mm, wall thickness 6.2 – 9.5 mm	PPC160-4	

B.2.1.2 Separation of services minimum 200 mm

Services	Collar	Classification
HDPE pipe according to EN 1519		
Diameter 25 mm, wall thickness 2.4 – 3.7 mm	PPC25-4	EI 120 U/C, C/C
Diameter 32 mm, wall thickness 2.4 – 3.7 mm	PPC32-4	
Diameter 40 mm, wall thickness 2.4 – 3.7 mm	PPC40-4	
Diameter 48 mm, wall thickness 2.5 – 4.0 mm	PPC48-4	
Diameter 55 mm, wall thickness 3.3 – 5.2 mm	PPC55-4	
Diameter 68 mm, wall thickness 3.0 – 5.4 mm	PPC68-4	
Diameter 82 mm, wall thickness 3.0 – 5.4 mm	PPC82-4	
Diameter 90 mm, wall thickness 3.4 – 6.6 mm	PPC90-4	
Diameter 110 mm, wall thickness 3.4 – 6.6 mm	PPC110-4	
Diameter 160 mm, wall thickness 4.9 – 9.1 mm	PPC160-4	

B.2.1.3 Separation of services minimum 200 mm

Services	Collar	Classification
PP pipe according to EN 1451		
Diameter 25 mm, wall thickness 1.8 – 3.7 mm	PPC25-4	E 120 U/C, C/C EI 90 U/C, C/C
Diameter 32 mm, wall thickness 1.8 – 3.7 mm	PPC32-4	
Diameter 40 mm, wall thickness 1.8 – 3.7 mm	PPC40-4	
Diameter 48 mm, wall thickness 1.9 – 4.4 mm	PPC48-4	
Diameter 55 mm, wall thickness 2.3 – 7.5 mm	PPC55-4	
Diameter 68 mm, wall thickness 2.3 – 7.5 mm	PPC68-4	
Diameter 82 mm, wall thickness 2.3 – 7.5 mm	PPC82-4	
Diameter 90 mm, wall thickness 2.7 – 10.0 mm	PPC90-4	EI 120 U/C, C/C
Diameter 110 mm, wall thickness 2.7 – 10.0 mm	PPC110-4	
Diameter 160 mm, wall thickness 4.0 – 9.1 mm	PPC160-4	

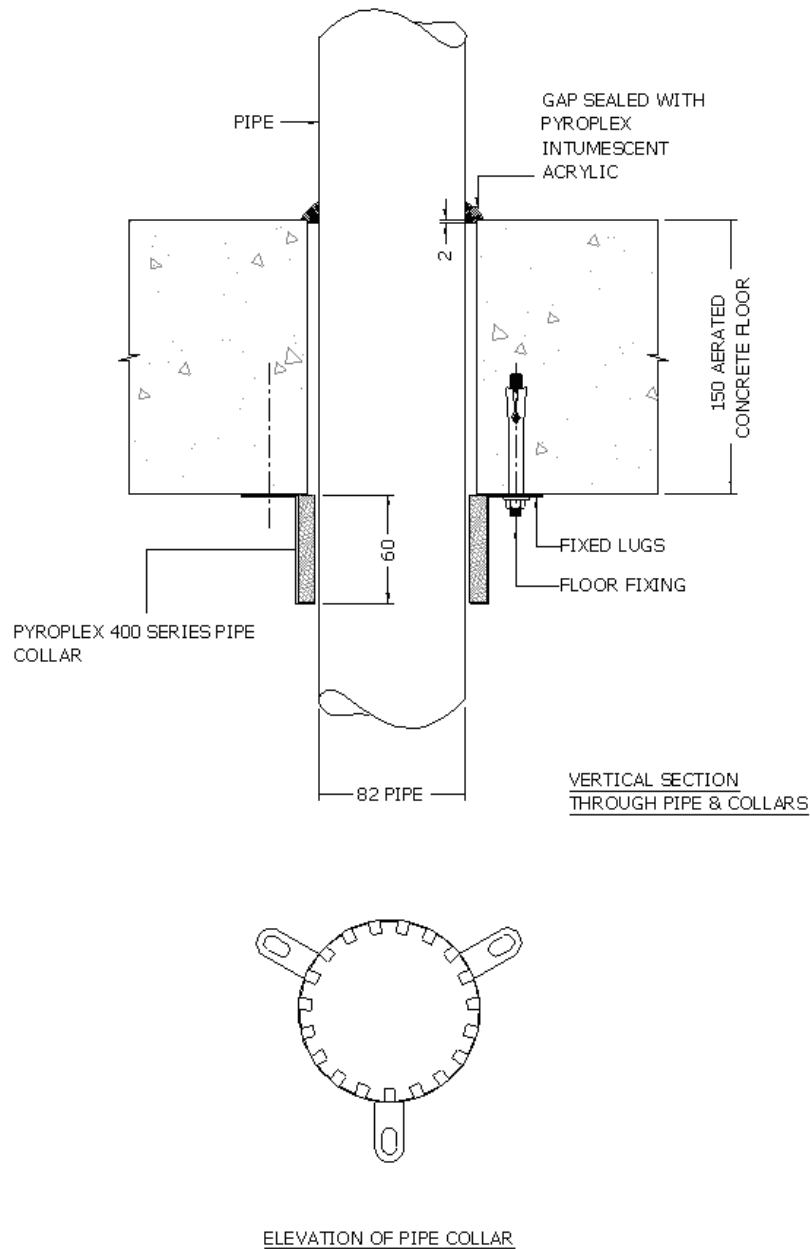


B.3 Rigid floor constructions according to 1.2.1 with floor thickness of minimum 150 mm

B.3.1 Penetration seal with 400 Series Collar fixed to soffit of floor

Penetration Seal: Combustible pipes fitted with a single Pyroplex 400 Series Collar on soffit. The collar is fixed to the floor. Maximum 2.5 mm annular space filled with Pyroplex Intumescent Mastic.

Construction details:



B.3.1.1 Separation of services minimum 200 mm

Services	Collar	Classification
PVC-U pipe according to EN 1329-1 ¹		
Diameter 25 mm, wall thickness 1.8 mm	PPC25-4	EI 180 – U/C EI 180 – C/C
Diameter 32 mm, wall thickness 1.8 mm	PPC32-4	
Diameter 40 mm, wall thickness 1.8 mm	PPC40-4	
Diameter 48 mm, wall thickness 3.2 mm	PPC48-4	
Diameter 55 mm, wall thickness 3.2 mm	PPC55-4	
Diameter 68 mm, wall thickness 3.2 mm	PPC68-4	
Diameter 82 mm, wall thickness 3.2 mm	PPC82-4	
Diameter 110 mm, wall thickness 3.2 mm	PPC110-4	
Diameter 125 mm, wall thickness 3.2 mm	PPC125-4	
Diameter 135 mm, wall thickness 3.2 mm	PPC135-4	
Diameter 160 mm, wall thickness 3.2 mm	PPC160-4	
Diameter 200 mm, wall thickness 5.4 mm	PPC200-4	EI 180 – C/C
Diameter 225 mm, wall thickness 7.2 mm	PPC225-4	
Diameter 250 mm, wall thickness 7.2 mm	PPC250-4	EI 120 – C/C
Diameter 315 mm, wall thickness 8.2 mm	PPC315-4	

B.3.1.2 Separation of services minimum 200 mm

Services	Collar	Classification
PE-HD pipe according to EN 12201-2 ²		
Diameter 350 mm, wall thickness 23.7 mm	PPC350-4	EI 60 – C/C
Diameter 400 mm, wall thickness 23.7 mm	PPC400-4	

¹ In Germany the pipes have additionally to comply with DIN 19531-10

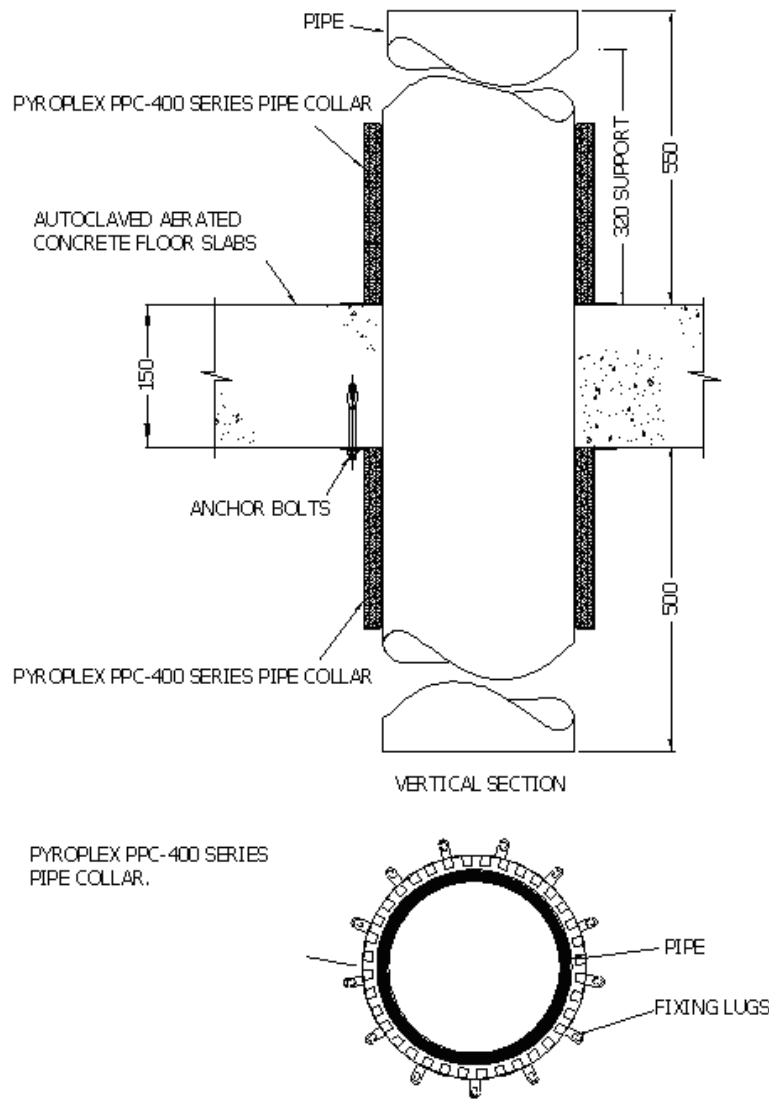
² In Germany the pipes have additionally to comply with DIN 19535-10



B.3.2 Penetration seal with 400 Series Collar fixed to both faces of floor

Penetration Seal: Combustible pipes fitted with a single Pyroplex 400 Series Collar on both faces. The collar is fixed to the floor. Maximum 2.5 mm annular space filled with Pyroplex Intumescent Mastic.

Construction details:



B.3.2.1 Separation of services minimum 200 mm

Services	Collar	Classification
PVC-U pipe according to EN 1452-2 ¹		
Diameter 350 mm, wall thickness 9.8 mm	PPC350-4	EI 180 – C/C
Diameter 400 mm, wall thickness 9.8 mm	PPC400-4	

¹ In Germany the pipes have additionally to comply with DIN 19531-10

