

ETA-Danmark A/S Göteborg Plads 1 DK-2150 Nordhavn Tel. +45 72 24 59 00 Internet www.etadanmark.dk 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-21/0207 of 2021/01/15

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:

Firebreak Service Transit

Product family to which the above construction product belongs:

Fire Stopping and Sealing Product:

Penetration Seals

Manufacturer: Neutron Fire Technologies Limited

Shire Hall Quay Street Lostwithiel Cornwall PL22 0BS

www.neutronfire.com

Manufacturing plant: A/005

This European Technical Assessment contains:

19 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: EAD 350454-00-1104, September 2017

This version replaces:

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may be made, with the written consent of the issuing Technical Assessment Body. Any partial reproduction has to be identified as such.

Table of Contents

I. S	PECIFIC PA	ARTS OF THE EUROPEAN TECHNICAL ASSESSMENT	4
1	Technic	al description of the product	4
2		ation of the intended uses of the product in accordance with the applicable European Assessment Document (Her 26-2	
3	Perform	nance of the product and references to the methods used for its assessment	6
4		MENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (HEREINAFTER AVCP) SYSTEM APPLIED, WITH REFER	
5	Technic	cal details necessary for the implementation of the AVCP system, as provided for in the applicable EAD	7
ANNEX	A – Resist	ance to Fire Classification – Firebreak Service Transit	8
A.1	Flexible	or rigid wall constructions with wall thickness of minimum 100 mm	8
P	A.1.1	Firebreak Service Transit penetration seal in flexible or rigid walls min. 100 mm thick	8
P	A.1.2	Firebreak Service Transit penetration seal in flexible or rigid walls min. 100 mm thick	9
P	A.1.3	Firebreak Service Transit penetration seal in flexible or rigid walls min. 100 mm thick	10
P	A.1.4	Firebreak Service Transit penetration seal in flexible or rigid walls min. 100 mm thick	11
P	A.1.5	Firebreak Service Transit penetration seal in flexible or rigid walls min. 100 mm thick	12
A.2	Firebrea	ak Service Transit penetration seal in rigid walls min. 100 mm thick	13
P	A.2.1	Penetration seals, in concrete walls	13
A.3	Firebrea	ak Service Transit penetration seal in rigid floors min. 150 mm thick	15
A	A.3.1	Penetration seals, in concrete floors	15
P	A.3.2	Penetration seals, in concrete floors	17
A	A.3.3	Penetration seals, in concrete floors	18

I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

- 1) Firebreak Service Transit is cable box device used to form penetration seals where combustible pipes, cables and metal pipes with insulation penetrate walls and floors.
- 2) The Firebreak Service Transit is supplied with intumescent liner complete within metal steel shell, to be installed within and screw fixed back to the supporting element.
- 3) 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.

4) The use catagory of Firebreak Service Transit in relation to BWR 4 (safety in use) is IA1, S/W3

2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter EAD): ETAG 026-2

Detailed information and data is given in Annex A.

The intended use of system Firebreak Service Transit is to reinstate the fire resistance performance of flexible wall and rigid wall and floor constructions, where they are penetrated by services.

1) The specific elements of construction that the system Firebreak Service Transit may be used to provide a penetration seal in, are as follows:

Flexible walls: The wall must have a minimum thickness of 100 mm and comprise steel studs

lined on both faces with minimum 2 layers of 12.5 mm thick boards.

Rigid walls: The wall must have a minimum thickness of 100 mm and comprise concrete,

aerated concrete or masonry, with a minimum density of 650 kg/m3.

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.

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

- 2) The system Firebreak Service Transit may be used to provide a penetration seal with specific supporting constructions and substrates (for details see Annex A).
- The provisions made in this European Technical Assessment are based on an assumed working life of the Firebreak Service Transit of 10 years, provided that the conditions laid down in the manufacturers datasheet and instructions for the packaging/transport/storage/installation/ use/repair are met. The indications given on the working life cannot be interpreted as a guarantee given by the producer or the Technical Assessment Body 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.
- 4) Type Y₂: intended for use at temperatures below 0°C, but with no exposure to rain nor UV. Includes lower use categories.

3 Performance of the product and references to the methods used for its assessment

Product-type: Cable box/transit	Intended use: Penetration Seal			
Basic Requirement	Performance			
BWR 1 Mechanic	cal resistance and stability			
None	Not relevant			
BWR 2 Sa	afety in case of fire			
Reaction to fire	No performance assessed			
Resistance to fire	Annex A			
BWR 3 Hygiene,	health and environment			
Air permeability (material property)	No performance assessed			
Water permeability (material property)	No performance assessed			
Release of dangerous substances	Use categories: IA1, S/W3			
Release of dangerous substances	Declaration of manufacturer			
BWR 4 Safety in use				
Mechanical resistance and stability	No performance assessed			
Resistance to impact/movement	No performance assessed			
Adhesion	No performance assessed			
BWR 5 Prot	tection against noise			
Airborne sound insulation	No performance assessed			
BWR 6 Energy ec	onomy and heat retention			
Thermal properties	No performance assessed			
Water vapour permeability	No performance assessed			
General aspects	General aspects relating to fitness for use			
Durability and serviceability	Y ₂			
BWR 7 Sustainable use of natural resources				
-	No performance assessed			

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 – Commission Decision of date 22nd June 1999 on on the procedure for attesting the conformity of construction products pursuant to Article 20(2) of Council Directive 89/106/EEC as regards fire stopping, fire sealing and fire protective products, published in the Official Journal of the European Union (OJEU) L178/52 of 14/07/1999, see http://eur-lex.europa.eu/JOIndex.do) of the European Commission¹, as amended, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) given in the following table(s) applies (apply).

Product(s)	Intended use(s)	Level(s) or class(es)	System(s)
Fire stopping and Fire Sealing Products	For fire compartmentation and/or fire protection or fire performance	Any	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 2021-01-15 by

Thomas Bruun

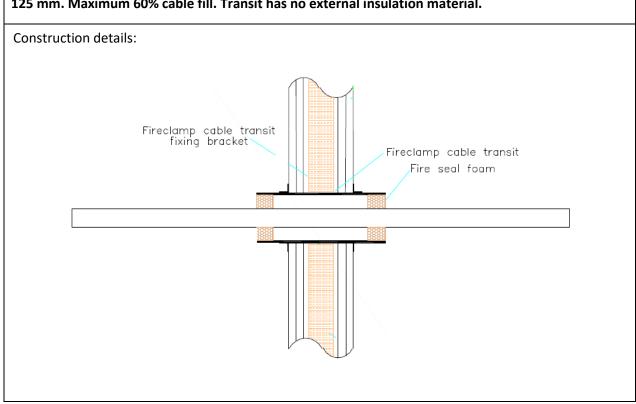
Managing Director, ETA-Danmark

¹ Official Journal of the European Communities L178/52 of 14/7/1999

ANNEX A - Resistance to Fire Classification - Firebreak Service Transit

- A.1 Flexible or rigid wall constructions with wall thickness of minimum 100 mm
- A.1.1 Firebreak Service Transit penetration seal in flexible or rigid walls min. 100 mm thick

Penetration Seal: Cables fitted through single cable Transit of dimensions, 125 x 125 mm to 1100 x 125 mm. Maximum 60% cable fill. Transit has no external insulation material.



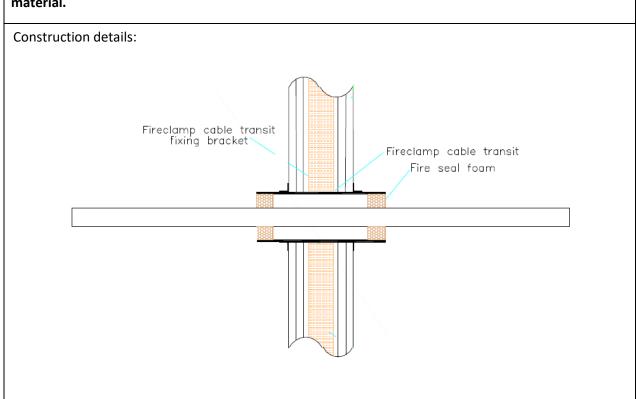
A.1.1.1

Services	Service Insulation	Classification
Electrical cables up to 80 mm diameter, single or in a bundle	None	E 120, EI 30
Electrical cables up to 80 mm diameter, single or in a bundle	300 mm long insulwrap to services, 5 mm thick	E 120, El 60
Up to 21 mm diameter telecoms , single or in bundles up to 100 mm diameter	None	E 120, El 60
Unsheathed wire up to 24 mm diameter	None	E 120, EI 30
	300 mm long insulwrap to services, 5 mm thick	E 120, EI 60

Specific cables	Service Insulation	Classification
Type C2, C3, D1, D2 electrical cables, single or in a bundle	None	E 120, El 45
Type A1, A2, C1, A3 electrical cables, single or in a bundle	None	E 120, El 60

A.1.2 Firebreak Service Transit penetration seal in flexible or rigid walls min. 100 mm thick

Penetration Seal: Cables fitted through single cable Transit of dimensions, 65 x 65 mm to 102 x 102 mm and 50 to 100 mm diameter. Maximum 60% cable fill. Transit has no external insulation material.



A.1.2.1

Services	Service Insulation	Classification
Electrical cables up to 80 mm diameter, single or in a bundle, Unsheathed wire up to 24 mm diameter	None	E 120, El 30
Up to 21 mm diameter telecoms , single or in bundles up to 100 mm diameter	None	E 120 ELCO
Electrical cables up to 80 mm diameter, single or in a bundle, Unsheathed wire up to 24 mm diameter	300 mm long insulwrap to services, 5 mm thick	E 120, El 60
82mm dia. x 3.2mm wall PVC Pipe to EN 1329-1, EN 1453-1 or EN 1452-1	None	E 120 U/U, C/U, U/C, CC EI 60 U/U, C/U, U/C, CC
54mm dia. Copper Pipe	19 mm Armaflex CS or K-Flex ST	E 120 U/U EI 60 U/U

Specific cables	Service Insulation	Classification
Type C2, D1, D2 electrical cables, single or in a bundle	Name	E 120, El 45
Type A1, C1, D3, A3 electrical cables, single or in a bundle	None	F 420 FL CO
Type C2, C3, E, D1, D2 electrical cables, single or in a bundle	300 mm long insulwrap to services, 5 mm thick	E 120, El 60

A.1.3 Firebreak Service Transit penetration seal in flexible or rigid walls min. 100 mm thick

Penetration Seal: Cables fitted through single cable Transit of dimensions, 125 x 125 mm to 1100 x 125 mm. Maximum 60% cable fill. Exposed surfaces of transit insulated with 5 mm thick insulwrap.

Construction details:

Fireclamp cable transit fixing bracket

Fire seal foam

A.1.3.1

Services	Insulation	Classification
Electrical cables up to 80 mm diameter,	None	E 120, El 30
single or in a bundle		
Electrical cables 22 to 80 mm diameter,		E 120, El 90
single or in a bundle	300 mm long insulwrap to services,	L 120, Li 30
Electrical cables up to 21 mm diameter,	5 mm thick	
single or in a bundle		EI 120
Up to 21 mm diameter telecom cables, single or in bundles up to 100 mm diameter	None	E120, El 90
Unsheathed wire up to 24 mm diameter	None	E 120, EI 30
	300 mm long insulwrap to services, 5 mm thick	E 120, El 60

Specific cables	Insulation	Classification
Type C2, C3, D1 or D2 electrical cables, single or in a bundle		E120, EI 45
Type A1, A2, D3 or C1 electrical cables, single or in a bundle	None	E120, El 60
Type A3 electrical cables, single or in a bundle		E120, EI 90
Type E or D2 electrical cables, single or in a bundle	300 mm long insulwrap to services, 5 mm thick	EI 120

A.1.4 Firebreak Service Transit penetration seal in flexible or rigid walls min. 100 mm thick

Penetration Seal: Cables fitted through single cable Transit of dimensions, 65 x 65 mm to 102 x 102 mm and 50 to 100 mm diameter. Exposed surfaces of transit insulated with 5 mm thick insulwrap.

Construction details:

Fireclamp cable transit fixing bracket

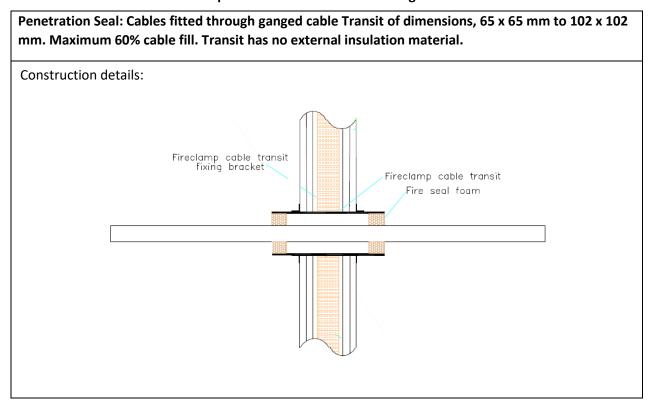
Fireclamp cable transit Fire seal foam

A.1.4.1

Services	Service Insulation	Classification
Electrical cables up to 80 mm diameter,	None	E 120, El 30
single or in a bundle		,
Electrical cables up to 80 mm diameter,	300 mm long insulwrap to services,	EI 120
single or in a bundle	5 mm thick	LI 120
Up to 21 mm diameter telecom cables,		
single or in bundles up to 100 mm	None	E120, EI 90
diameter		
Unsheathed wire up to 24 mm diameter	None	E 120, EI 30
	300 mm long insulwrap to services,	E 120, El 60
	5 mm thick	E 120, El 60
82mm dia. x 3.2mm wall PVC Pipe to EN	None	E 120 U/U, C/U, U/C, CC
1329-1, EN 1453-1 or EN 1452-1		EI 90 U/U, C/U, U/C, CC
54mm dia. Copper Pipe	19 mm Armaflex CS or K-Flex ST	E 120 U/U
		EI 90 U/U

Specific cables	Service Insulation	Classification
Type C2, C3, D1 or D2 electrical cables, single or in a bundle		E120, EI 45
Type A1, A2, D3 or C1 electrical cables, single or in a bundle	None	E120, EI 60
Type A3 electrical cables, single or in a bundle		E120, El 90

A.1.5 Firebreak Service Transit penetration seal in flexible or rigid walls min. 100 mm thick



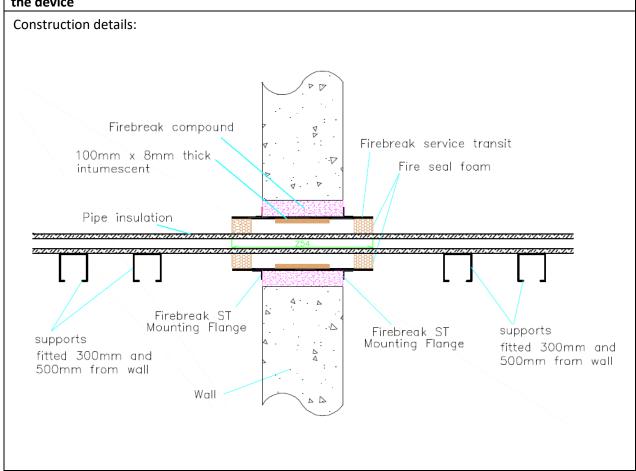
A.1.5.1

Services	Service Insulation	Classification
Type D3 electrical cables, single		
Up to 21 mm diameter telecoms , single		E 120, EI 20
or in bundles up to 100 mm diameter	None	
Unsheathed wire up to 24 mm diameter		E 90, EI 20
82mm dia. x 3.2mm wall PVC Pipe to EN		E 120 U/U, C/U, U/C, CC
1329-1, EN 1453-1 or EN 1452-1		EI 20 U/U, C/U, U/C, CC
54mm dia. Copper Pipe	19 mm Armaflex CS or K-Flex ST	E 120 U/U
		EI 20 U/U

A.2 Firebreak Service Transit penetration seal in rigid walls min. 100 mm thick

A.2.1 Penetration seals, in concrete walls

Penetration Seal: Metal pipes fitted through single cable Transit of dimensions, 125 x 125 mm to 1100mm long x 125mm wide x 254mm deep. Maximum 60% service fill. Transit fitted with 50mm foam plugs to both sides and mortared in with 100 mm thick Firebreak compound to all voids around the device



A.2.1.1

Services	Insulation	Classification
Steel pipes 10 mm diameter / 1.0-14.2 mm wall	6 to 19 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 90 C/C
Steel pipes 25 mm diameter / 1.2-14.2 mm wall	9 to 25 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 60 C/C
Steel pipes 25 mm diameter / 1.2-14.2 mm wall	25 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Steel pipes 25 mm diameter / 1.2-14.2 mm wall	13 to 25 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 90 C/C
Steel pipes 40 mm diameter / 1.5-14.2 mm wall	13 to 40 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Steel pipes 40 mm diameter / 1.5-14.2 mm wall	25 to 40 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 180 C/C
Steel pipes 63.5 mm diameter / 1.6-14.2 mm wall	9 to 32 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 60 C/C
Steel pipes 63.5 mm diameter / 1.6-14.2 mm wall	13-32 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 90 C/C
Steel pipes 63.5 mm diameter / 1.6-14.2 mm wall	19-32 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Steel pipes 63.5 mm diameter / 1.6-14.2 mm wall	32 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 180 C/C
Steel pipes 88.9 mm diameter / 1.6-14.2 mm wall	13 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 90 C/C
Copper pipes 10 mm diameter / 1.2-14.2 mm wall	6 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 90 C/C
Copper pipes 28 mm diameter / 1.5-14.2 mm wall	9 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 90 C/C
Copper pipes 42 mm diameter / 1.5-14.2 mm wall	13 to 40 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 90 C/C
Copper pipes 42 mm diameter / 1.5-14.2 mm wall	19 to 40 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Copper pipes 42 mm diameter / 1.5-14.2 mm wall	32-40 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 180 C/C

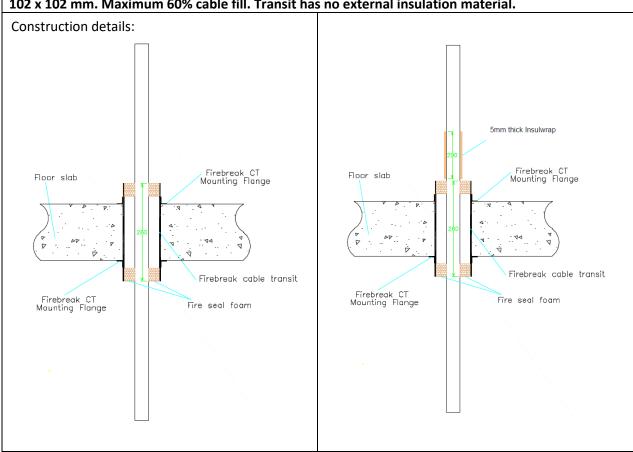
CS – Continuous Sustained insulation

C/C – Capped/Capped

A.3 Firebreak Service Transit penetration seal in rigid floors min. 150 mm thick

A.3.1 Penetration seals, in concrete floors

Penetration Seal: Cables fitted through single and ganged cable Transit of dimensions, 65 x 65 mm to 102 x 102 mm. Maximum 60% cable fill. Transit has no external insulation material.



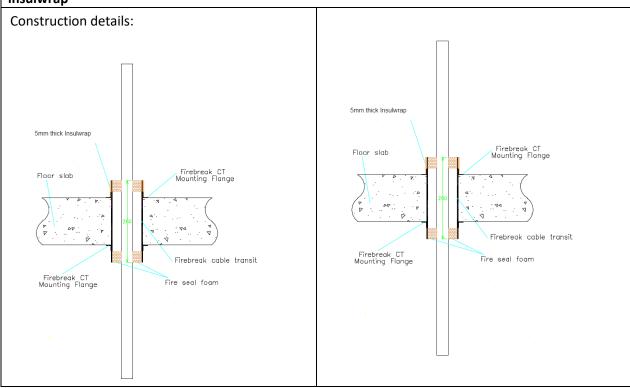
A.3.1.1

Services	Service Insulation	Classification
Electrical cables up to 80 mm diameter, single or in a bundle	None	E 180, El 30
Electrical cables up to 21 mm diameter, single or in a bundle		F 240 FLC0
Telecom cables up to 21 mm diameter, single or in a bundle		E 240, EI 60
Electrical cables up to 80 mm diameter, single or in a bundle	300 mm long insulwrap to services, 5 mm thick	E 180, EI 45
Electrical cables up to 21 mm diameter, single or in a bundle		E 240, El 60
Telecom cables up to 21 mm diameter, single or in a bundle		L 240, El 60
82mm dia. x 3.2mm wall PVC Pipe to EN 1329- 1, EN 1453-1 or EN 1452-1	None	E 240 U/U, C/U, U/C, C/C EI 60 U/U, C/U, U/C, C/C

Specific cables	Service Insulation	Classification
Type C3 electrical cables, single or in a bundle	None	E 240, El 30
Type D3 or C2 electrical cables, single or in a bundle		E 240, EI 45
Type C1 or B electrical cables, single or in a bundle		E240, EI 60

A.3.2 Penetration seals, in concrete floors

Penetration Seal: Cables fitted through single and ganged cable Transit of dimensions, $65 \times 65 \text{ mm}$ to 102 x 102 mm. Maximum 60% cable fill. Exposed surfaces of transit insulated with 5 mm thick insulwrap

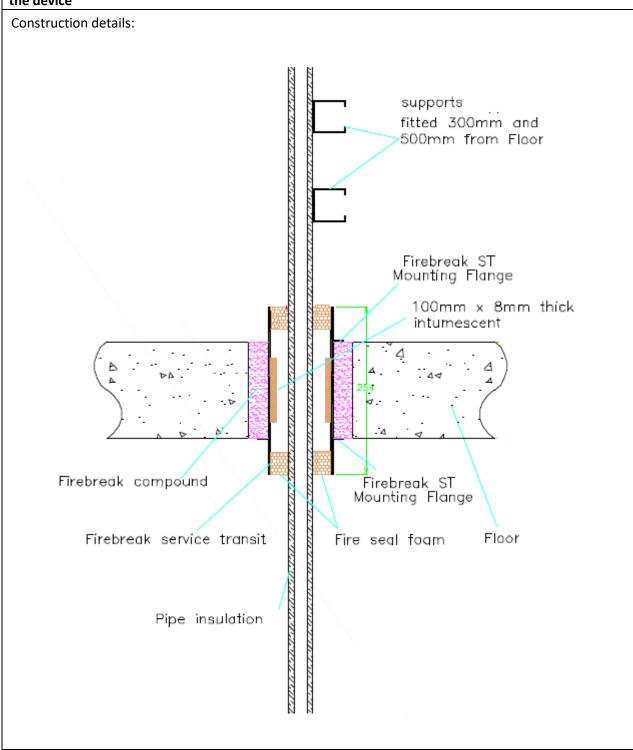


A.3.2.1

Services	Insulation	Classification
Electrical cables 51 to 80 mm diameter, single	None	E 240, El 30
Electrical cables 22 to 50 mm diameter, single		E 180, EI 30
Electrical cables up to 21 mm diameter, single or in a bundle		E 240, EI 60
Telecom cables up to 21 mm diameter, single or in a bundle		E 240, EI 60
Electrical cables 51 to 80 mm diameter, single	300 mm long insulwrap to services, 5 mm thick	E 180, EI 90
Electrical cables 22 to 50 mm diameter, single		E 240, EI 90
Electrical cables up to 21 mm diameter, single or in a bundle Telecom cables up to 21 mm diameter, single or in a bundle		E 240, EI 120
82mm dia. x 3.2mm wall PVC Pipe to EN 1329-1, EN 1453-1 or EN 1452-1	None	E 240 U/U, C/U, U/C, C/C EI 120 U/U, C/U, U/C, C/C
Specific cables	Service Insulation	Classification
Type C1, C2, C3, D2, D3 electrical cables, single or in a bundle	300 mm long insulwrap to services, 5 mm thick	E 240, EI 120

A.3.3 Penetration seals, in concrete floors

Penetration Seal: Metal pipes fitted through single cable Transit of dimensions, 125 x 125 mm to 1100mm long x 125mm wide x 254mm deep. Maximum 60% service fill. Transit fitted with 50mm foam plugs to both sides and mortared in with 100 mm thick Firebreak compound to all voids around the device



A.3.3.1

Services	Insulation	Classification
Steel pipes 10 mm diameter / 1.0-14.2 mm wall	6 to 19 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Steel pipes 25 mm diameter / 1.2-14.2 mm wall	9 to 25 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Steel pipes 40 mm diameter / 1.5-14.2 mm wall	13 to 40 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 180 C/C
Steel pipes 40 mm diameter / 1.5-14.2 mm wall	19 to 40 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Steel pipes 40 mm diameter / 1.5-14.2 mm wall	40 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Steel pipes 63.5 mm diameter / 1.6-14.2 mm wall	9 to 32 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 90 C/C
Steel pipes 63.5 mm diameter / 1.6-14.2 mm wall	13-32 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Steel pipes 88.9 mm diameter / 1.6-14.2 mm wall	13 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Copper pipes 10 mm diameter / 1.2-14.2 mm wall	6 to 19 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C*
Copper pipes 10 mm diameter / 1.2-14.2 mm wall	19 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Copper pipes 28 mm diameter / 1.5-14.2 mm wall	9 to 25 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C
Copper pipes 42 mm diameter / 1.5-14.2 mm wall	13 to 40 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 90 C/C
Copper pipes 42 mm diameter / 1.5-14.2 mm wall	40 mm K-flex ST or Armaflex insulation (CS)	E 240 C/C, EI 120 C/C

CS – Continuous Sustained insulation

C/C – Capped/Capped

^{*} No insulation classification obtained due to test instrument failure