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Product Name:
Pass-It Transit System

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1. Introduction

This classification report defines the classification assigned to the element Pass-It Transit System, in accordance with the procedures given in BS EN 13501-2: 2016.

2. Details of classification product

2.1 General

The element Pass-It Transit System is defined as a fire resisting penetration sealing system to be used to reinstate the performance of walls.

2.2 Product description

The product “Pass-It Transit System” comprises a galvanised mild steel casing with a Pyropro HPE® Sealant inner lining and a plastic brush comb to the apertures on both of its faces of the transit box. The element Pass-It Transit System is fully described in the test reports provided in support of classification detailed in clause 3.1.

3. Test reports in support of classification

3.1 Summary of test reports

Name of laboratory	Name of sponsor	Test and Date	Test method
Exova Warringtonfire Holmesfield Road Warrington WA1 2DS United Kingdom	FSi Limited	WF Report No: 334037/C Issue 2 Issue, 24/01/2014	BS EN 1366-3: 2009

3.2 Results

3.2.1 Summary of report No.: WF No. 411536

A fire resistance test in accordance with BS EN 1366-3: 2009, on penetration seals installed in a 100 mm thick flexible wall (3000 mm x 3000 mm) supporting construction . The framing comprised 50 mm wide galvanised mild steel studs, at maximum 600 mm centres, friction fitted into galvanised steel head and base channels. Each side of the stud frame was faced with two layers of 12.5 mm thick 'Gypsum' Type F plasterboard. The framework was infilled with 50 mm thick mineral wool insulation having a nominal density of 100 kg/m^3. The wall was provided with a rectangular aperture of overall nominal dimensions 100 mm high by 300 mm wide, which was penetrated by a range of cables.

3.2.1.1 Description of cable penetration seal

Specimen	Penetrating services	Penetration support	Aperture	Size of transit	Fixing of transit	Sealant to gaps	Sealant to perimeter of fixing flanges
17	One type 'D1' (4 x 185 mm^2) electric cable and a Ø 100 mm bundle of 'F' (20 x 2 x 0.6 mm^2) telecom cables	260 mm on fireside and 270 mm on non-fire side	320 mm wide x 120 mm high	300 mm wide x 100 mm high x 130 mm long	Perimeter frame of steel angles fixed with self-tapping screws to the wall and transit on the non-fire side of the wall	Nom. 10 mm wide x 10 mm depth of Pyrocoustic Fire Resistant Acrylic sealant, applied to both faces of the wall	Pyrocoustic Fire Resistant Acrylic sealant is applied to the perimeter edges of the fixing frame on the wall

3.2.1.2 Result of cable penetration seal

Specimen	Integrity (minutes)			Insulation (minutes)
	Cotton pad	Sustained flames	Gap gauge	
17	132	132	132	85

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with Clause 7 of EN 13501-2: 2016.

4.2 Classification

The element, product name Pass-It Transit System is classified according to the following combinations of performance parameters and classes as appropriate.

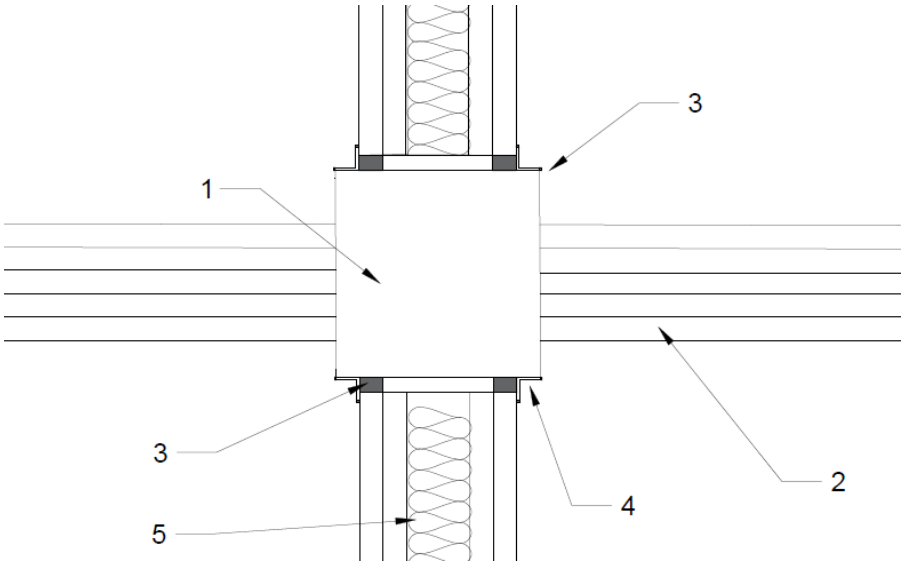
R	**E**	**I**	**W**		***t***	***t***	**-**	**M**	**C**	**S**	**IncSlow**	**sn**	**ef**	**r**

Flexible wall constructions with wall thickness of minimum 100 mm

Penetration seal with cables

Penetration Seal: Cables fitted within the aperture. Maximum distance of first service support ≤ 260 mm.

Construction details:



KEY:

1- Pass-it transit box

2- Cables

3- Pyrocoustic Acrylic Sealant

4- Fixing angle 15x15

5- Partition assembly

Services	Cable (bundle) size	Classification
One type "D1" electric cable (E-YCWY 4x185SM/95, MCMK 4x185/95, NYCWY 4x185SM/95, PFSP CU 4x185/95, FKKJ 4x185/95 S)	Ø 80 mm	**E 120, EI 60**
Bundle of type 'F' (20 x 2 x 0.6 mm^2) telecom cables	Ø 100 mm	**E 120, EI 60**

4.3 Field of Application

This classification is valid for the following end use applications (as defined in EN1366-3: 2009, referencing the following appropriate clauses of EN1366-3: 2009).

13.1 Orientation

Test results are only applicable to the orientation in which the penetration seals were tested, i.e. in a wall or floor.

13.2 Supporting construction

13.2.1 Rigid floor and wall constructions

Test results obtained with rigid standard supporting constructions may be applied to concrete or masonry separating elements of a thickness and density equal to or greater than that of the supporting construction used in the test. This rule does not apply to pipe closure devices positioned within the supporting construction in case of higher thickness of the supporting construction unless the length of the seal is increased by an equal amount and the distance from the surface of the supporting construction remains the same on both sides.

13.2.2 Flexible wall constructions

13.2.2.1 Test results obtained with the standard flexible wall constructions according to 7.2.2.1.2 cover all flexible wall constructions of the same fire resistance classification provided:
1) The construction is classified in accordance with EN 13501-2;

2) The construction has an overall thickness not less than the minimum thickness of the range given in Table 3 for the standard flexible wall used in the test. This rule does not apply to pipe closure devices positioned within the supporting construction unless the length of the seal is increased by an equal amount and the distance from the surface of the supporting construction remains the same on both sides;

3) In the case of penetration seals installed within the wall and where a flexible wall with insulation was used in the test an aperture framing shall be used in practice. The aperture frame and aperture lining shall be made from studs and boards of the same specification as those used in the wall in practice. The thickness of the aperture lining shall be minimum 12.5 mm. This rule does not apply in the case where the insulation was removed around the penetration seal(s) (see 7.2.2.1.2);

4) The number of board layers and the overall board layer thickness is equal or greater than that tested when no aperture framing is used

5) Flexible wall constructions with timber studs are constructed with at least the same number of layers as given in Table 3, no part of the penetration seal is closer than 100 mm to a stud, the cavity is closed between the penetration seal and the 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.

13.2.2.2 An aperture framing is considered as being part of the penetration seal. Tests without an aperture framing cover applications with aperture framing but not vice versa.

13.2.2.3 The standard flexible wall construction does not cover sandwich panel constructions and flexible walls where the lining does not cover the studs on both sides. Penetrations in such constructions shall be tested on a case by case basis.

13.2.2.4 Test results obtained with flexible supporting walls may be applied to concrete or masonry elements of an overall thickness equal to or greater than that of the element used in the tests. This rule does not apply to pipe closure devices positioned within the supporting construction unless the length of the seal is increased by an equal amount and the distance from the surface of the supporting construction remains the same on both sides.

13.3 Services

13.3.1 The direct field of application rules apply to the nominal dimensions of services.

13.3.2 For the field of direct application for cable penetration seals including small conduits see A.3, B.2, C.1.2 and C.2.3.

13.4 Service support construction

13.4.3 The distance from the surface of the separating element to the nearest support position for services shall be as tested or less.

13.5 Seal size and distances

13.5.1 The test results obtained using standard wall and floor configurations for penetration seals are valid for any penetration seal size (in terms of linear dimensions) equal to or smaller than that tested, provided the total amount of cross sections of the services (including insulation) does not exceed 60 % of the penetration area, the working clearances are not smaller than the minimum working clearances (as defined in Annexes A & B) used in the test and a blank penetration seal of the maximum seal size desired was tested in addition.

13.5.2 For floor constructions, results from tests with a penetration seal length of minimum 1000 mm apply to any length as long as the perimeter length to seal area ratio is not smaller than that of the tested penetration seal.

13.5.3 The distance between a single service and the seal edge (annular space, e.g. a1 according to Figures B.7) shall remain within the tested range.

C.2 Cable boxes

C.2.3 Field of direct application

C.2.3.1 The rules given in A.3.1 to A.3.3 and A.3.4 apply.

C.2.3.2 Test results obtained are valid for all sizes between the maximum and minimum size tested provided a blank seal according to C.2.2.2 was tested with a positive result with respect to the intended classification period.

C.3 Non-standard configuration

C.3.1 If the test is not conducted in accordance with C.1 or C.2 each of the following shall be considered and the test specimen designed accordingly:
1) the largest envisaged sealed cable penetration in walls and floors;
2) the seal with the smallest envisaged thickness;
3) the type of cables included in the test;
4) the greatest possible cable density (in relation to the overall cross section of the cables per sealed penetration and in relation to the cross sections of the conductors per cable);
5) the cable supports, where appropriate.

C.3.2 If the use of the penetration seal with waveguides is required, then all variants of these devices as defined by the test sponsor shall be included in the test using pipe end configuration U/C.
However, within a range of sizes of the same type of waveguide results of tests may be interpolated for diameters and wall thickness between those tested, based on the lowest result achieved.

5. Limitations

This classification report does not represent type approval or certification of the product.

6. Signatories

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***For and on behalf of UL International (UK) Ltd**.