

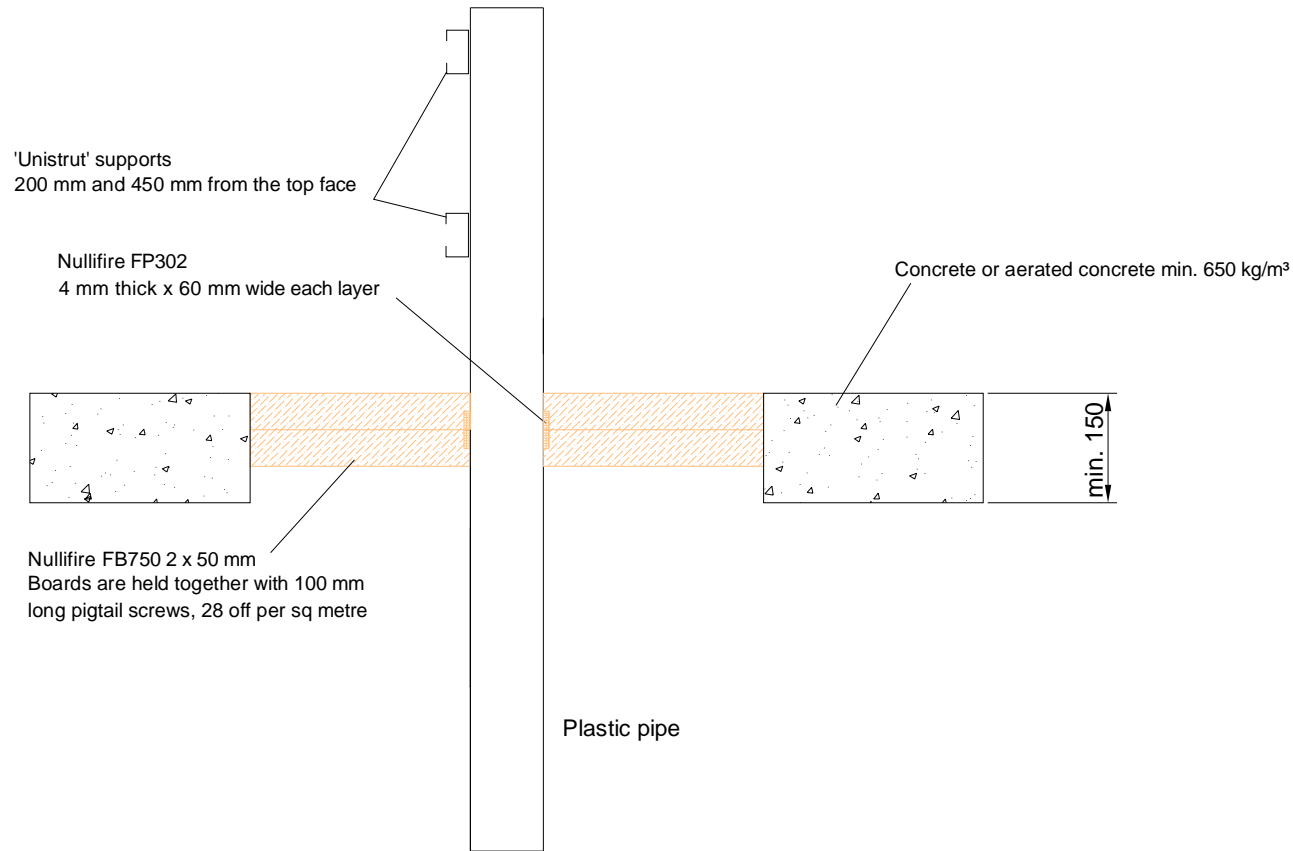
# Nullifire Technical Drawings

## FP302 Intumescent Strap and FP160 Sleeve Pipe Penetrations Through Floors

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- ▶ ABS pipes penetrating through a rigid floor construction (FP302/FP160-PL1d)
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**Nullifire  
FP302/FP160-PL1a**



**APPROVAL:**

ETA 17/0391

**Tested pipe types and max. Ø of the pipes**  
Look at the table in this detail

**Nullifire FP302/FP160-PL1a**  
Fire class; Look at the table in this detail

Additional information ETA-approval/ Annex A.

Technical installation instructions need to be followed installing the products.

The max. batt seal opening size of 600 mm x 600 mm

Services	Seal specification	Fire class
PVC# pipe up to Ø40 mm / 1.9 mm wall	1 x layer of Nullifire FP302 60 x 4 mm installed at mid-depth	EI60 U/C
PVC# pipe up to Ø82 mm / 3.4-5.4 mm wall	2 x layers of Nullifire FP302 60 x 4 mm installed at mid-depth	
PVC# pipe up to Ø90 mm / 5.4 mm wall		
PVC# pipe up to Ø125 mm / 4.8-7.4 mm wall	3 x layers of Nullifire FP302 60 x 4 mm installed at mid-depth	

#EN 1452-2

U/C = (Uncapped/Capped)

THE CONTENTS OF THE DRAWING

PVC pipes penetrating through a rigid floor construction

DESIGNER

REV

DATE

28.9.2018

SCALE

Not scaled

DETAIL MARK

**FP302/FP160-PL1a**

Nullifire has provided this specification on the basis of the data and information given to Nullifire by the customer, the Nullifire product information and level of technical knowledge this specification relates to is expected to provide the level of fire performance, should the proposed detail be subjected to the standardised fire resistance performance against which the judgment has been made.

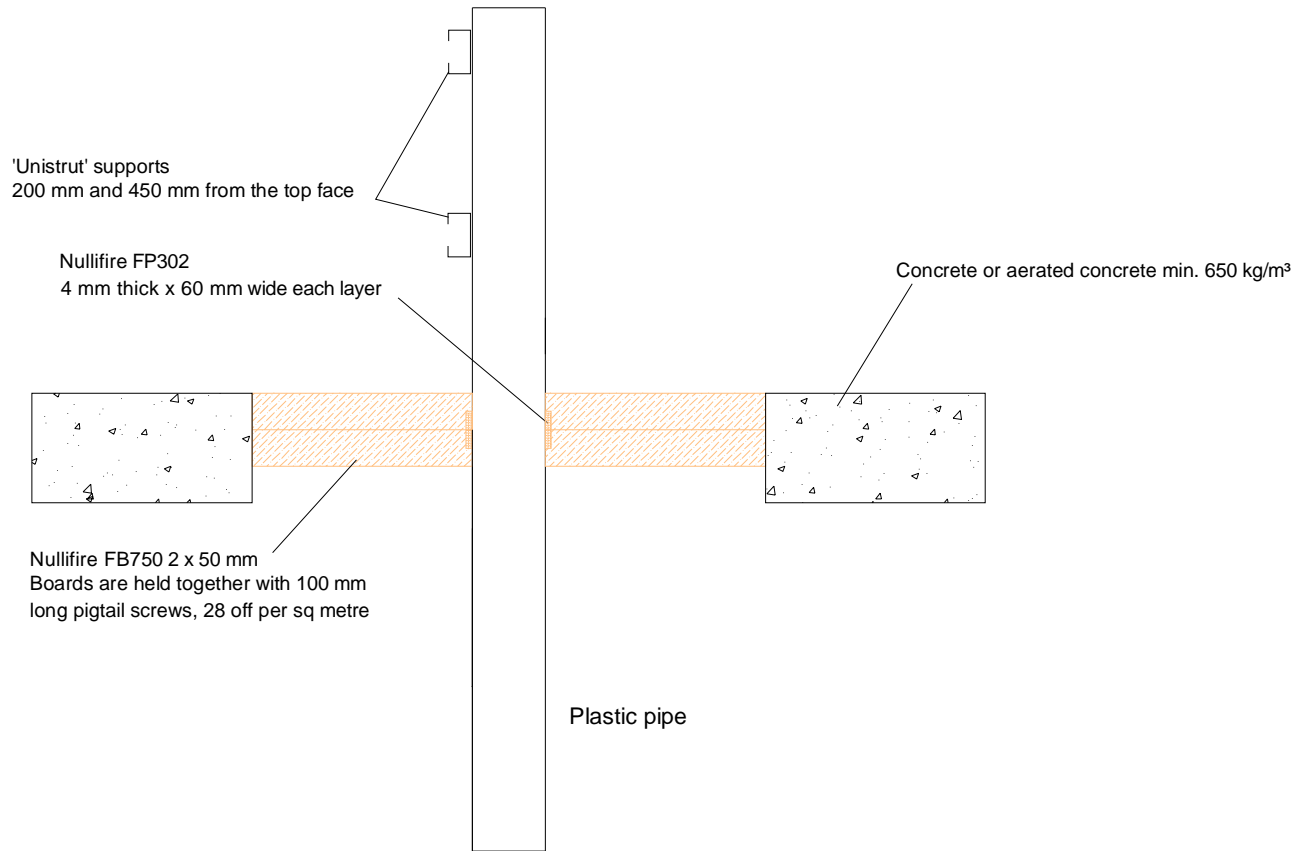
The accuracy of this specification relies on the following:

1. Only Nullifire products as defined in the specification are used.
2. The specific products are installed by a competent person, utilising Nullifire installation manual and data sheets noting limitations.
3. The proposed specification has been checked by the user.
4. For Details on CE Marked Products Refer to the CE Technical Data Sheets.

SEAL OF APPROVAL MUST BE VERIFIED IF THIS DOCUMENT HAS BEEN MODIFIED

**Nullifire**

**Nullifire  
FP302/FP160-PL1b**



**APPROVAL:**

ETA 17/0391

**Tested pipe types and max. Ø of the pipes**  
Look at the table in this detail

**Nullifire FP302/FP160-PL1b**  
Fire class; Look at the table in this detail

Additional information ETA-approval/ Annex A.

Technical installation instructions need to be followed installing the products.

The max. batt seal opening size of 600 mm x 600 mm

Services	Seal specification	Fire class
PE\$ pipe up to Ø40 mm / 3.7 mm wall	1 x layer of Nullifire FP302 60 x 4 mm installed at mid-depth	EI60 U/C
PE\$ pipe up to Ø75 mm / 3.6-6.6 mm wall	2 x layers of Nullifire FP302 60 x 4 mm installed at mid-depth	
PE\$ pipe up to Ø90 mm / 8.2 mm wall	3 x layers of Nullifire FP302 60 x 4 mm installed at mid-depth	

§ EN12201 DIN 8074/8075

U/C = (Uncapped/Capped)

THE CONTENTS OF THE DRAWING

PE pipes penetrating through a rigid floor construction

DESIGNER

REV

DATE

28.9.2018

SCALE

Not scaled

DETAIL MARK

**FP302/FP160-PL1b**

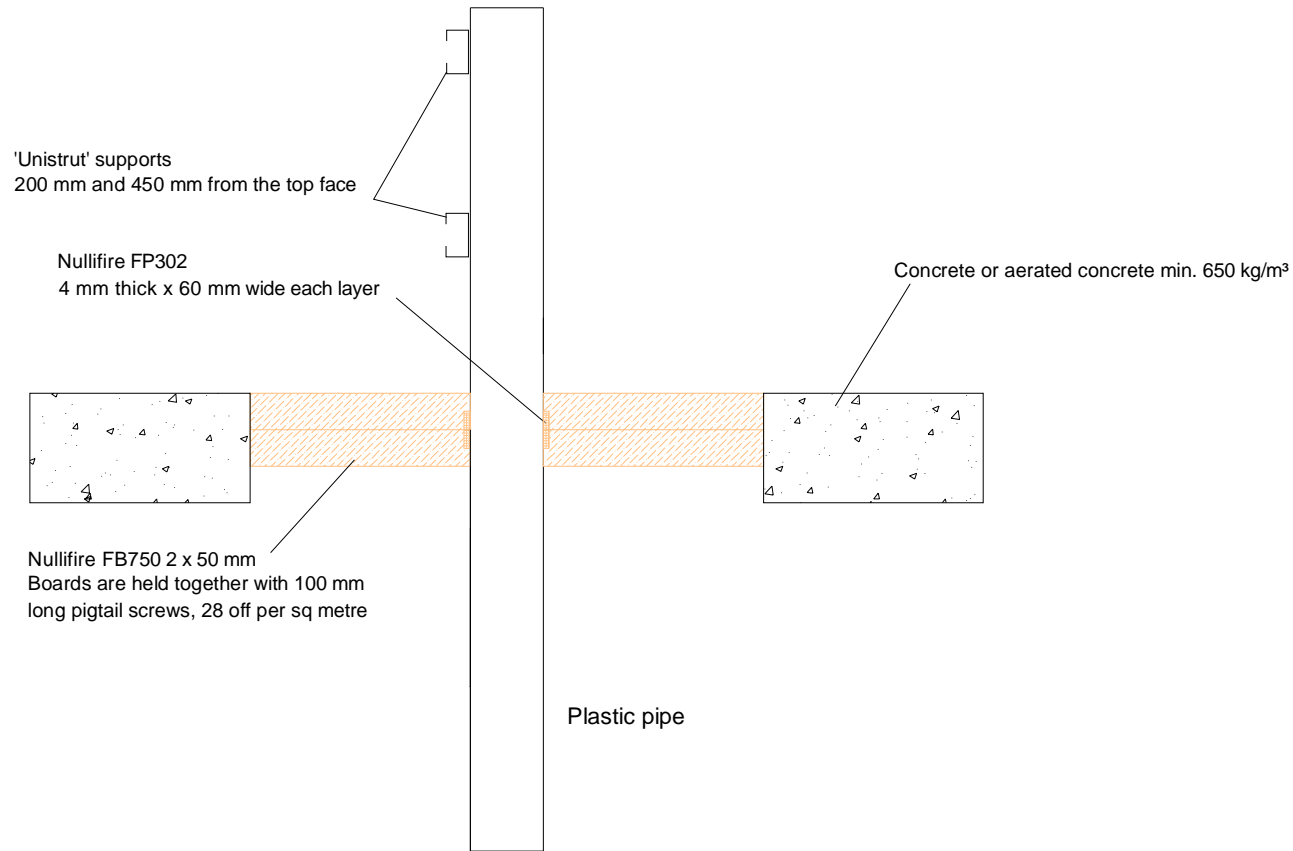
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**Nullifire  
FP302/FP160-PL1c**



**APPROVAL:**

ETA 17/0391

**Tested pipe types and max. Ø of the pipes**  
Look at the table in this detail

**Nullifire FP302/FP160-PL1c**  
Fire class; Look at the table in this detail

Additional information ETA-approval/ Annex A.

Technical installation instructions need to be followed installing the products.

The max. batt seal opening size of 600 mm x 600 mm

Services	Seal specification	Fire class
PP@ pipe up to Ø40 mm / 1.8 mm wall	1 x layer of Nullifire FP302 60 x 4 mm installed at mid-depth	E160 U/C
PP@ pipe up to Ø75 mm / 2.2-8.2 mm wall	2 x layers of Nullifire FP302 60 x 4 mm installed at mid-depth	
PP@ pipe up to Ø90 mm / 8.2 mm wall		
PP@ pipe up to Ø110mm / 2.7-10 mm wall	3 x layers of Nullifire FP302 60 x 4 mm installed at mid-depth	

@ ISO 15494 DIN 8077/8078

U/C = (Uncapped/Capped)

THE CONTENTS OF THE DRAWING

PP pipes penetrating through a rigid floor construction

DESIGNER

REV

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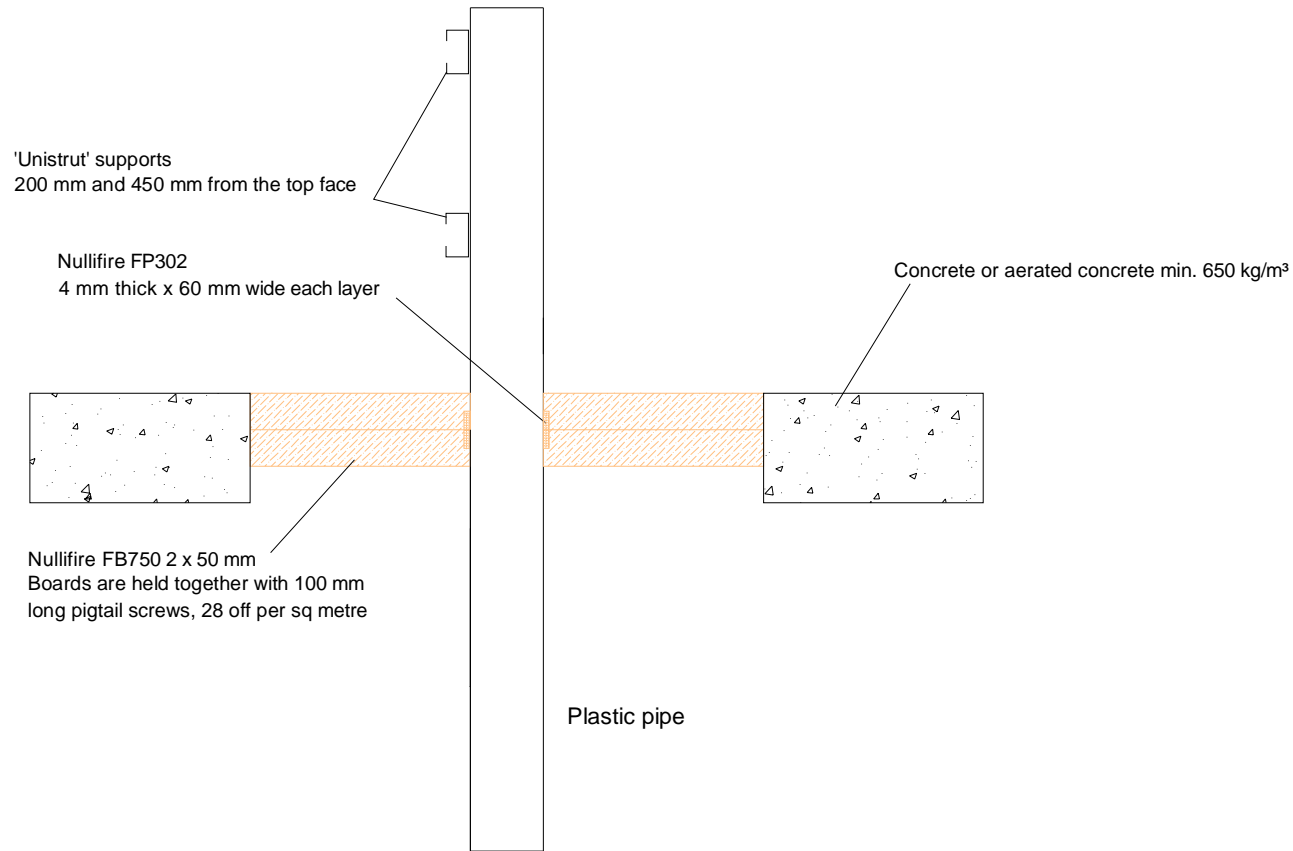
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DETAIL MARK

**FP302/FP160-PL1c**

**Nullifire  
FP302/FP160-PL1d**



**APPROVAL:**

ETA 17/0391

**Tested pipe types and max. Ø of the pipes**  
Look at the table in this detail

**Nullifire FP302/FP160-PL1d**  
Fire class; Look at the table in this detail

Additional information ETA-approval/ Annex A.

Technical installation instructions need to be followed installing the products.

The max. batt seal opening size of 600mm x 600mm

Services	Seal specification	Fire class
ABS* pipe up to Ø40 mm / 2.7 mm wall	1 x layer of Nullifire FP302 60 x 4 mm installed at mid-depth	E160 U/C
ABS* pipe up to Ø90 mm / 6.0-11.2 mm wall	2 x layers of Nullifire FP302 60 x 4 mm installed at mid-depth	
ABS* pipe up to Ø115 mm / 7.3-11.2 mm wall	3 x layers of Nullifire FP302 60 x 4 mm installed at mid-depth	

\* BS 5391-1:2006

U/C = (Uncapped/Capped)

THE CONTENTS OF THE DRAWING

**ABS pipes penetrating through a rigid floor construction**

DESIGNER

REV

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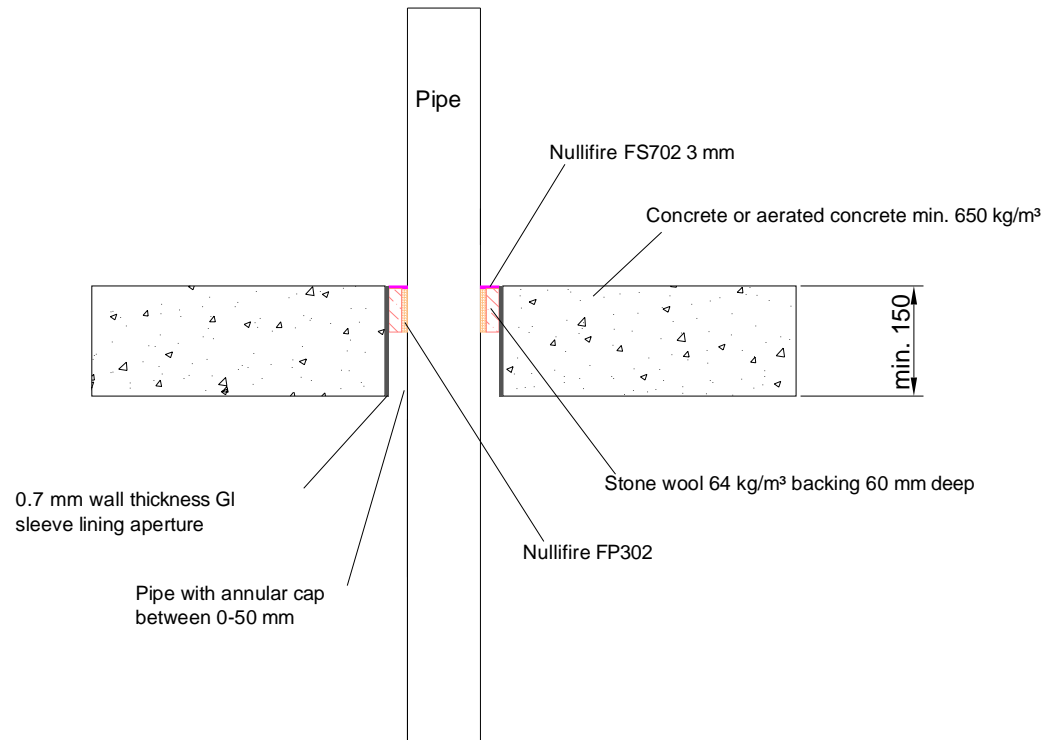
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DETAIL MARK

**FP302/FP160-PL1d**

**Nullifire  
FP302/FP160-PL2**



**APPROVAL:**

ETA 17/0391

**Tested pipe types and max. Ø of the pipes**  
Look at the table in this detail

**Nullifire FP302/FP160-PL2**  
Fire class; Look at the table in this detail

Additional information ETA-approval/ Annex A.

Technical installation instructions need to be followed installing the products.

Oversize (up to 50 mm annular space) steel sleeve installed into the opening with annular space filled to 60 mm depth with stone wool insulation min 64 kg/m³ capped with 3 mm of FS702 sealant.

CS - Continuous sustained

Services	Seal specification	Fire class
uPVC# pipe up to Ø50 mm / 2.4 mm wall thickness	1 x layer of Nullifire FP302 60 x 4 mm to both faces	EI120 U/C
uPVC# pipe up to Ø160 mm / 3.0 mm wall thickness	4 x layers of Nullifire FP302 60 x 4 mm to both faces	
Copper or steel pipe Ø15 mm / 0.8 mm wall thickness, insulated with 50 mm glass wool insulation CS	2 x layers of Nullifire FP302 60 x 4 mm to both faces	EI120 C/U

# PVC-U pipe according to EN 1329-1, EN 1452-2 and EN 1453-1

U/C = (Uncapped/Capped)

THE CONTENTS OF THE DRAWING

**Plastic and metal pipes penetrating through a rigid floor construction**

DESIGNER

REV

DATE

28.9.2018

SCALE

Not scaled

DETAIL MARK

**FP302/FP160-PL2**

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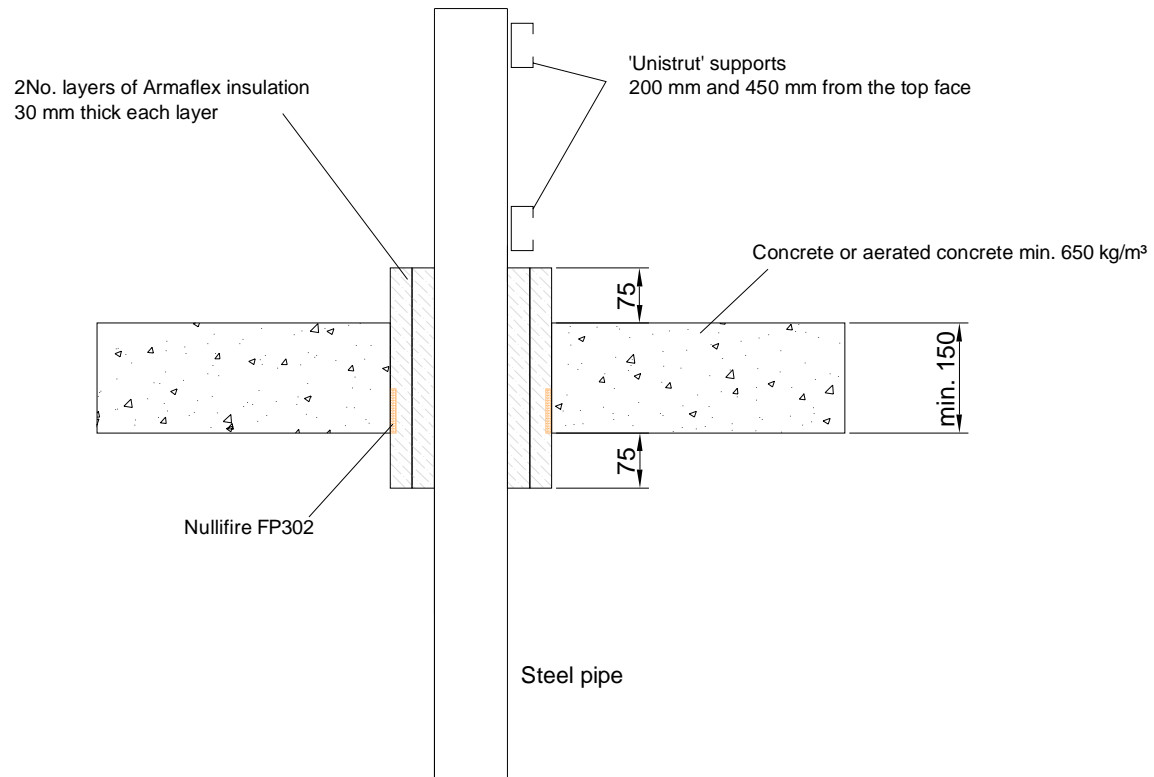
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**Nullifire**

**Nullifire  
FP302/FP160-PL3**



**APPROVAL:**

ETA 17/0391

**Tested pipe types and max. Ø of the pipes**  
Look at the table in this detail

**Nullifire FP302/FP160-PL3**  
Fire class; Look at the table in this detail

Additional information ETA-approval/ Annex A.

Technical installation instructions need to be followed installing the products.

LS - Local Sustained

Services	Seal specification	Fire class
Steel pipe Ø160 mm / 6.9 mm wall thickness, insulated with 2 layers of 30 mm Armaflex nitrile insulation LS extending 75 mm from both faces of the floor	1 x layer of Nullifire FP302 60 x 4 mm to both faces	EI30 C/U

U/C = (Uncapped/Capped)

THE CONTENTS OF THE DRAWING

Steel pipe Ø160 mm penetrating through a rigid floor construction and wrapped with FP302

DESIGNER

REV

DATE

28.9.2018

SCALE

Not scaled

DETAIL MARK

**FP302/FP160-PL3**

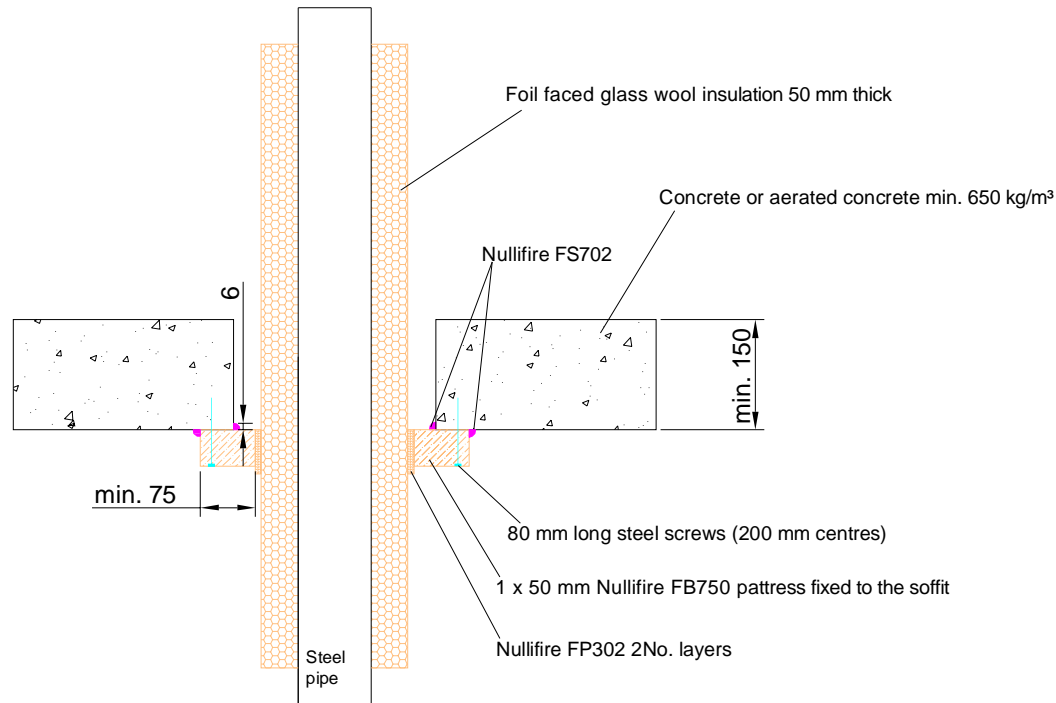
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**Nullifire  
FP302/FP160-PL4**



**APPROVAL:**

ETA 17/0391

**Tested pipe types and max. Ø of the pipes**  
Look at the table in this detail

**Nullifire FP302/FP160-PL4**  
Fire class; Look at the table in this detail

Additional information ETA-approval/ Annex A.

Technical installation instructions need to be followed installing the products.

The max. batt seal opening size Ø50 mm and floor opening of 400x400 mm

Services	Seal specification	Fire class
Steel pipe Ø220 mm / 6.0-14.2 mm wall, insulated with Foil faced glass wool insulation 50 mm thick CS	2No. layers 4 x 60 mm Nullifire FP302	E145 C/U

CS - Continuous sustained

U/C = (Uncapped/Capped)

THE CONTENTS OF THE DRAWING

**Steel pipe Ø220 mm penetrating through a rigid floor construction**

DESIGNER	REV
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DATE

28.9.2018

SCALE

Not scaled

DETAIL MARK

**FP302/FP160-PL4**

