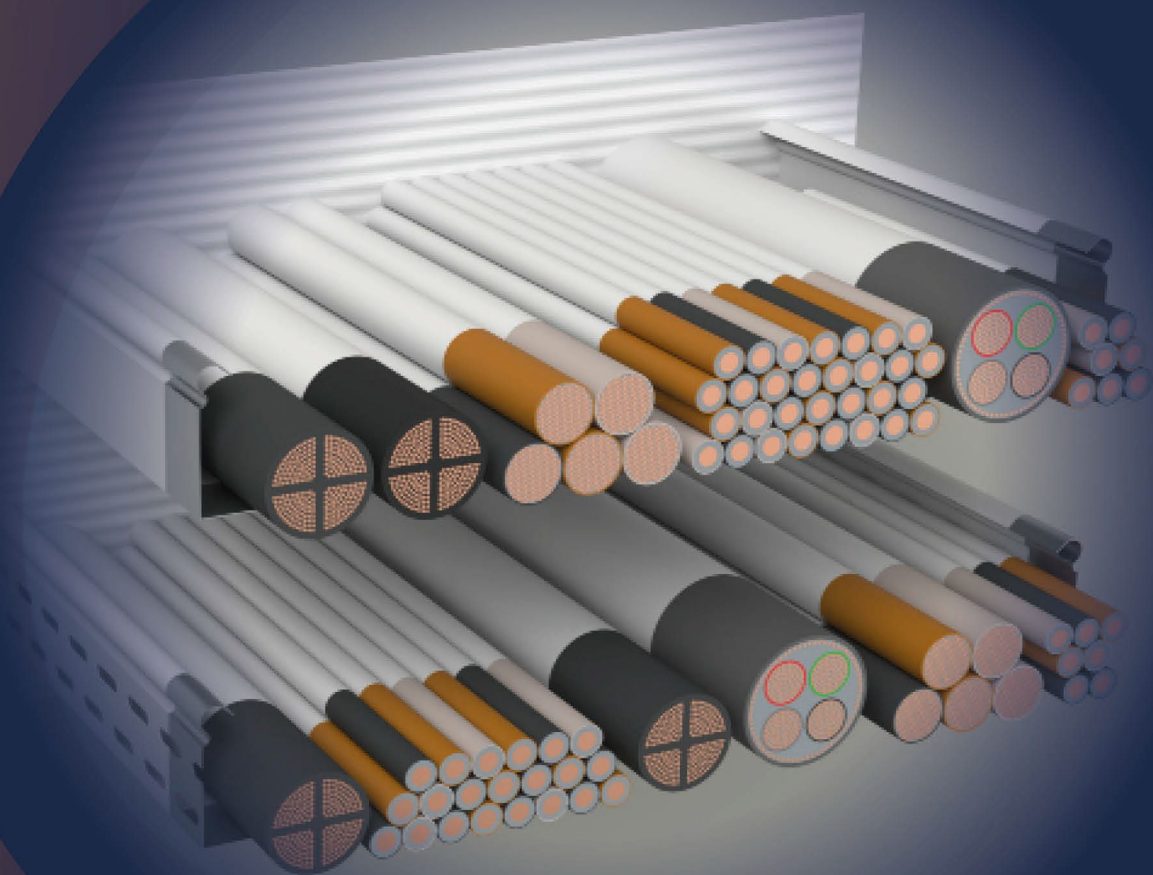


# INTU FR UNIBOARD

*Fire rated board*

TECHNICAL DATA SHEET



CE



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Fire rated board

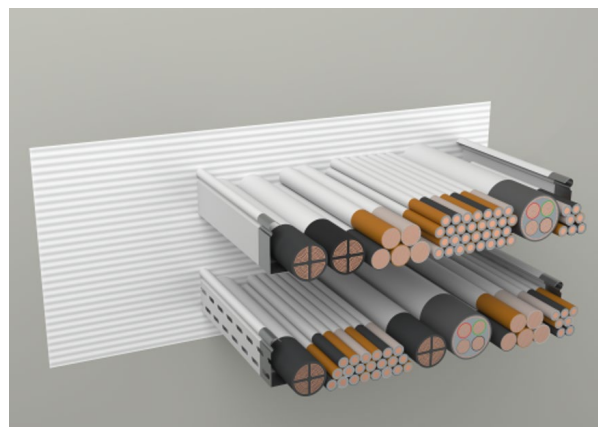
## TECHNICAL DATA SHEET

### PRODUCT DESCRIPTION

The purpose of **INTU FR UNICOAT P** ablative paint is to restore the fire resistance of flexible walls, rigid walls or rigid ceilings in areas where there are installations such as large cable penetrations or non-combustible pipe penetrations. **INTU FR UNICOAT P** paint should be applied to the required length and with the appropriate dry film thickness.

### APPLICATION

**INTU FR UNICOAT P** is an ablative paint used for sealing installation penetrations in areas where metal and combustible pipes and cables, single or in bundles, cable ladders and cable trays pass through walls and ceilings.



#### Flexible wall:

The wall should be at least 100 mm thick.  
It should be made of double-sided cladding consisting of at least two plasterboard panels.

#### Rigid wall:

The wall should be at least 100 mm thick.  
It should be made of concrete or masonry elements with a density of not less than 450 kg/m<sup>3</sup>.

#### Rigid ceiling:

The ceiling should be at least 150 mm thick.  
It should be made of concrete, reinforced concrete or aerated concrete with a density of at least 550 kg/m<sup>3</sup>.

### AVAILABILITY

| Product           | Bucket capacity | Delivery form | Article number |
|-------------------|-----------------|---------------|----------------|
| INTU FR UNICOAT P | 3 kg            | 1 pcs.        | 2203000000     |
|                   | 10 kg           | 1 pcs.        | 2212000000     |

### COMPLIANCE

European Technical Assessment:

**ETA-24/1047**

Declaration of performance:

**DoP 6/2024**

Certificate of constancy of performance:

**1488-CPR-1149/W**

### TRANSPORT AND STORAGE

Transport and store (in the original, unopened packaging) in a safe, dry place at a temperature between +5°C and +35°C.

Shelf life: 12 months from the date of manufacture.

### INSTEELLATION

#### PREPARATION

Before proceeding with the protection, clean the surface of the opening and the installations from grease and other contaminants. Fill the free space with:

- 1) mineral wool boards, painted with **INTU FR UNICOAT P** paint or factory-painted, ready-made **INTU FR UNIBOARD**
- 2) cement mortar or fireproof compound **ALFA FR MASTIC**.

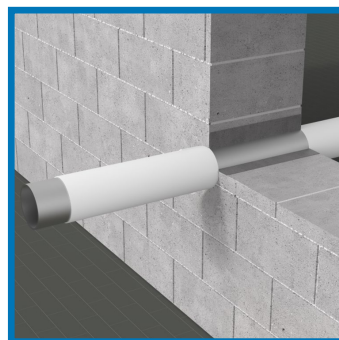
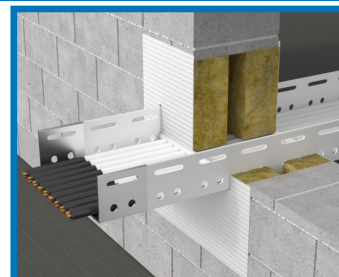
- Approximate consumption of **INTU FR UNICOAT P** ~ 0.9 - 1.0 kg/m<sup>2</sup> – for a dry film thickness of 0.5 mm.
- Drying time for a film thickness of 1.0 mm: ~80 min (touch dry), ~330 min (completely dry).

#### APPLICATION

Before use, mix the paint until it has a uniform consistency. The paint does not require dilution. Cover pipes and cables with **INTU FR UNICOAT P** paint until the required thickness and length of the dry coating is achieved.

#### FINISH

The seal is ready. Fill in the label and stick it next to the passage.



### FIRE CLASSIFICATION

#### CABLE ENTRY with partition filling using **INTU FR UNIBOARD**

| Pipe material     | Partition filling       | Outer diameter of the pipe<br>Ø [mm]                  | FLEXIBLE / RIGID WALLS                            |                       | CEILINGS                                          |                       |
|-------------------|-------------------------|-------------------------------------------------------|---------------------------------------------------|-----------------------|---------------------------------------------------|-----------------------|
|                   |                         |                                                       | INTU FR UNICOAT P coating thickness x length [mm] | Fire resistance class | INTU FR UNICOAT P coating thickness x length [mm] | Fire resistance class |
| Small cables      | 2 x INTU FR UNIBOARD 1S | Ø ≤ 21                                                | 1,0 x 160                                         | EI 120                | 1,0 x 160                                         | EI 120                |
| Average           |                         | 21 < Ø ≤ 50                                           |                                                   | EI 90                 |                                                   |                       |
| Large cables      |                         | 50 < Ø ≤ 80                                           |                                                   | EI 120                |                                                   |                       |
| Cable harnesses   |                         | Ø <sub>CABLE</sub> ≤ 21<br>Ø <sub>BUNDLES</sub> ≤ 100 |                                                   | EI 90                 |                                                   |                       |
| Unsheathed cables |                         | Ø ≤ 24                                                |                                                   | EI 90                 |                                                   |                       |
| Small cables      | 1 x INTU FR UNIBOARD 2S | Ø ≤ 21                                                | 1,0 x 200                                         | EI 60                 | 1,0 x 200                                         | EI 60                 |
| Average           |                         | 21 < Ø ≤ 50                                           |                                                   |                       |                                                   |                       |
| Large cables      |                         | 50 < Ø ≤ 80                                           |                                                   |                       |                                                   |                       |
| Cable harnesses   |                         | Ø <sub>CABLE</sub> ≤ 21<br>Ø <sub>BUNDLES</sub> ≤ 100 |                                                   |                       |                                                   |                       |
| Unsheathed cables |                         | Ø ≤ 24                                                |                                                   |                       |                                                   |                       |

### NON-FLAMMABLE PIPES with partition filling using **INTU FR UNIBOARD**

| Pipe material | Partition filling       | Outer diameter of the pipe Ø [mm] | FLEXIBLE / RIGID WALLS   |                                                   |                       | CEILINGS                 |                                                   |                       |
|---------------|-------------------------|-----------------------------------|--------------------------|---------------------------------------------------|-----------------------|--------------------------|---------------------------------------------------|-----------------------|
|               |                         |                                   | Pipe wall thickness [mm] | INTU FR UNICOAT P coating thickness x length [mm] | Fire resistance class | Pipe wall thickness [mm] | INTU FR UNICOAT P coating thickness x length [mm] | Fire resistance class |
| Steel         | 2 x INTU FR UNIBOARD 1S | $\varnothing \leq 42,4$           | $\geq 1,5$               | 1,0 x 500                                         | EI 60                 | $\geq 1,5$               | 1,0 x 500                                         | EI 90                 |

### NON-FLAMMABLE PIPES with partition filling using **ALFA FR MASTIC** or cement mortar

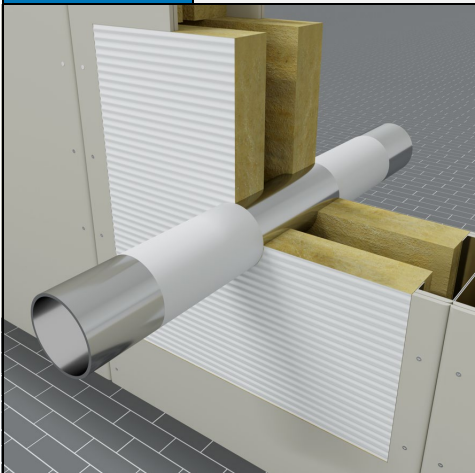
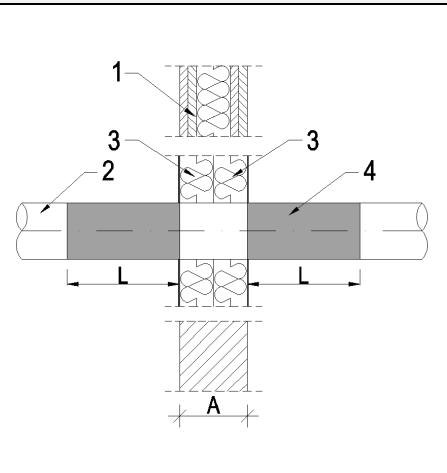
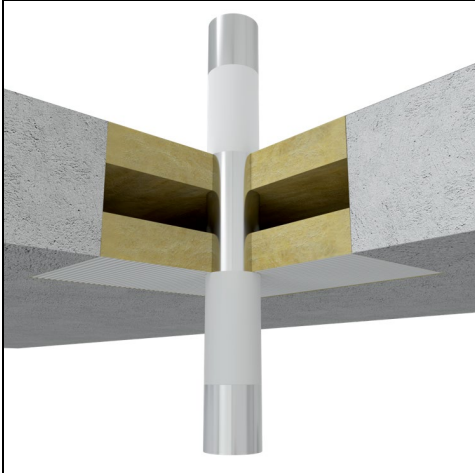
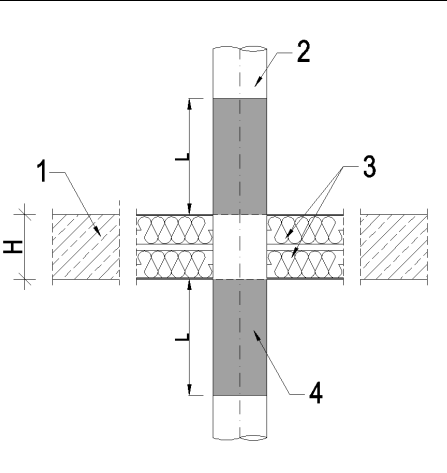
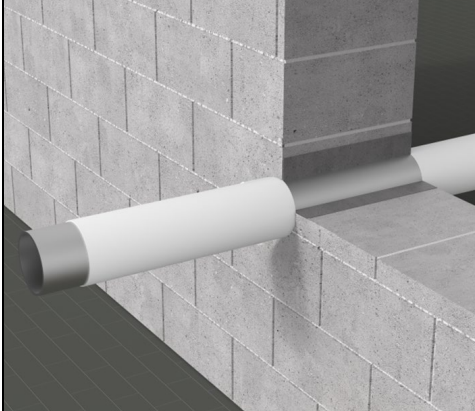
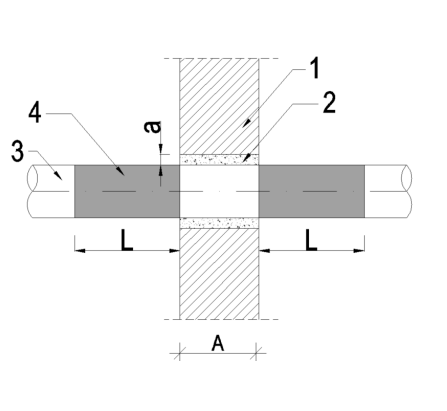
| Pipe material | Partition filling              | Outer diameter of the pipe Ø [mm]   | FLEXIBLE / RIGID WALLS   |                                                   |                       | CEILINGS                 |                                                   |                       |
|---------------|--------------------------------|-------------------------------------|--------------------------|---------------------------------------------------|-----------------------|--------------------------|---------------------------------------------------|-----------------------|
|               |                                |                                     | Pipe wall thickness [mm] | INTU FR UNICOAT P coating thickness x length [mm] | Fire resistance class | Pipe wall thickness [mm] | INTU FR UNICOAT P coating thickness x length [mm] | Fire resistance class |
| Copper        | ALFA FR MASTIC                 | $\varnothing \leq 54,0$             | $\geq 2,0$               | 1,0 x 500                                         | EI 120                |                          |                                                   |                       |
| Steel         | ALFA FR MASTIC / cement mortar | $\varnothing \leq 42,0$             | $\geq 1,5$               | 1,0 x 500                                         | EI 120                | $\geq 1,5$               | 1,0 x 500                                         | EI 120                |
|               |                                | $42,0 < \varnothing \leq 54,0$      | $\geq 2,0$               | 1,0 x 500                                         | EI 120                | $\geq 1,5$               | 1,0 x 500                                         | EI 60                 |
|               |                                | $54,0 < \varnothing \leq 66,7$      | $\geq 2,0$               | 1,0 x 500                                         | EI 60                 | $\geq 1,5$               | 1,0 x 500                                         | EI 60                 |
|               |                                | $66,7 \leq \varnothing \leq 76,1$   | $\geq 2,3$               | 1,0 x 500                                         | EI 60                 | $\geq 1,5$               | 1,0 x 500                                         | EI 60                 |
|               |                                | $76,1 \leq \varnothing \leq 88,9$   | $\geq 2,7$               | 1,0 x 500                                         | EI 60                 | $\geq 1,5$               | 1,0 x 500                                         | EI 60                 |
|               |                                | $88,9 \leq \varnothing \leq 108,0$  | $\geq 3,4$               | 1,0 x 500                                         | EI 60                 | $\geq 3,4$               | 1,0 x 500                                         | EI 45                 |
|               |                                | $108,0 \leq \varnothing \leq 114,3$ | $\geq 3,6$               | 1,0 x 500                                         | EI 60                 | $\geq 3,6$               | 1,0 x 500                                         | EI 45                 |
|               |                                | $114,3 \leq \varnothing \leq 139,7$ | $\geq 3,8$               | 1,0 x 500                                         | EI 60                 | $\geq 3,8$               | 1,0 x 500                                         | EI 45                 |
|               |                                | $139,7 \leq \varnothing \leq 159,0$ | $\geq 3,9$               | 1,0 x 500                                         | EI 60                 | $\geq 3,9$               | 1,0 x 500                                         | EI 45                 |
|               |                                | $159,0 \leq \varnothing \leq 168,3$ | $\geq 4,0$               | 1,0 x 500                                         | EI 60                 | $\geq 4,0$               | 1,0 x 500                                         | EI 45                 |

### NON-FLAMMABLE PIPES + additional mineral wool lamella

| Pipe material | Partition filling | Outer diameter of the pipe Ø [mm]   | CEILINGS                 |                                                  |                                                   |                       |
|---------------|-------------------|-------------------------------------|--------------------------|--------------------------------------------------|---------------------------------------------------|-----------------------|
|               |                   |                                     | Pipe wall thickness [mm] | Wool lamella thickness $g_w$ x length $L_w$ [mm] | INTU FR UNICOAT P coating thickness x length [mm] | Fire resistance class |
| Steel         | Cement mortar     | $108,0 \leq \varnothing \leq 114,3$ | $\geq 3,6$               | 20 x 200                                         | 1,0 x 500                                         | EI 90                 |
|               |                   |                                     |                          | 20 x 350                                         |                                                   | EI 120                |
|               |                   | $114,3 \leq \varnothing \leq 139,7$ | $\geq 3,8$               | 20 x 200                                         | 2,0 x 500                                         | EI 60                 |
|               |                   | $139,7 \leq \varnothing \leq 159,0$ | $\geq 3,9$               | 20 x 200                                         |                                                   |                       |
|               |                   | $159,0 \leq \varnothing \leq 168,3$ | $\geq 4,0$               | 20 x 200                                         |                                                   |                       |



## SOLUTION DETAILS

|              |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fig.1</b> | <b>Wall filling: 2 x INTU FR UNIBOARD</b>    |   <p>Fig. 1 Non-combustible pipe painted with <b>INTU FR UNICOAT P</b> in the wall, double mineral wool board</p> <p>1 – rigid/flexible wall <math>A \geq 100</math> mm<br/>                 2 – non-combustible pipe<br/>                 3 – 2 x <b>INTU FR UNIBOARD 1S</b><br/>                 4 – painting with <b>INTU FR UNICOAT P</b> paint on both sides of the partition to the required length 'L'</p>          |
| <b>Fig.2</b> | <b>Ceiling filling: 2 x INTU FR UNIBOARD</b> |   <p>Fig. 2 Non-combustible pipe painted with <b>INTU FR UNICOAT P</b> in the ceiling, double mineral wool board</p> <p>1 – rigid ceiling <math>H \geq 150</math> mm<br/>                 2 – non-combustible pipe<br/>                 3 – 2 x <b>INTU FR UNIBOARD 1S</b><br/>                 4 – painted with <b>INTU FR UNICOAT P</b> paint on both sides of the partition to the required length 'L'</p>          |
| <b>Fig.3</b> | <b>Partition filling: cement mortar</b>      |   <p>Fig. 3 Non-combustible pipe painted with <b>INTU FR UNICOAT P</b>, Partition filling: cement mortar</p> <p>1 – rigid/flexible wall <math>A \geq 100</math> mm<br/>                 2 – cement mortar, <math>a \leq 30</math> mm<br/>                 3 – non-combustible pipe<br/>                 4 – painting with <b>INTU FR UNICOAT P</b> paint on both sides of the partition to the required length 'L'</p> |

**Fig.4-5**

Partition filling: **ALFA FR MASTIC** or cement mortar

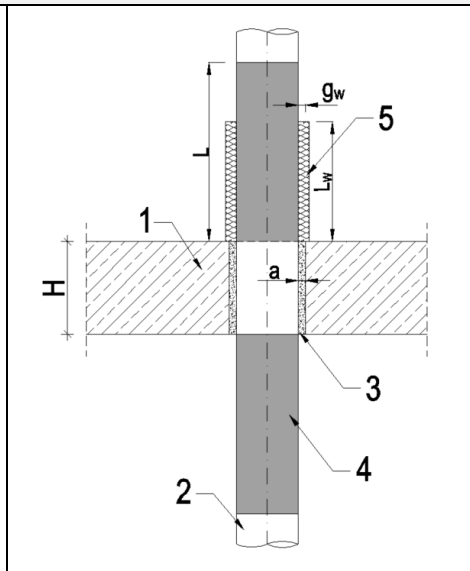
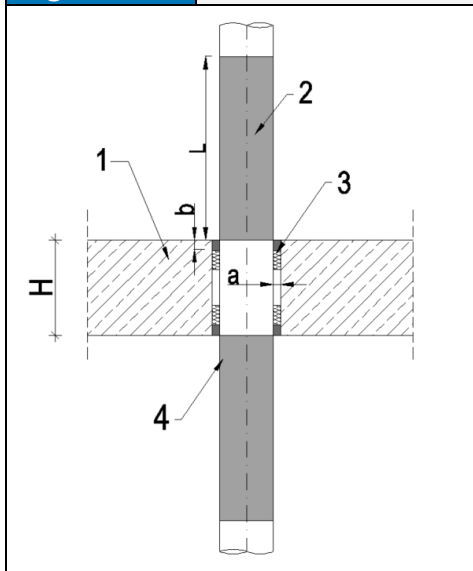


Fig. 4-5 Non-combustible pipe painted with **INTU FR UNICOAT P**, Partition filling: **ALFA FR MASTIC** or cement mortar

- 1 – rigid ceiling  $H \geq 150$  mm
- 2 – non-combustible pipe
- 3 – fire protection compound **ALFA FR MASTIC** – surfaces between the pipe and the partition:  
 $a \leq 20$  mm, minimum depth:  
 $b \geq 25$  mm on both sides of the ceiling,  
 base material – mineral wool density  $\geq 35$  kg/m<sup>3</sup>, depth  $\geq 25$  mm or cement mortar,  
 $a \leq 30$  mm
- 4 – painting with **INTU FR UNICOAT P** paint on both sides of the partition to the required length 'L'
- 5 – mineral wool lamella with a minimum thickness 'g<sub>w</sub>' and a minimum length 'L<sub>w</sub>'

**Fig.6-7**

Cable transitions using **INTU FR UNICOAT P**

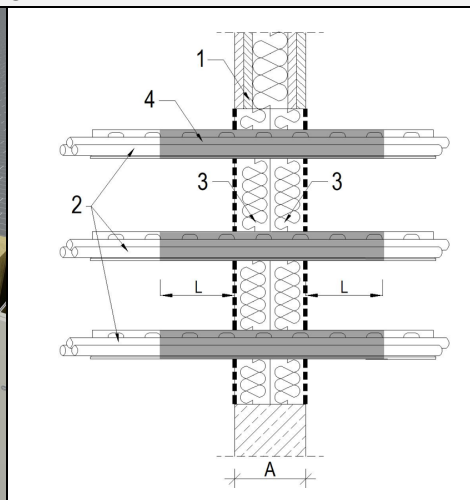
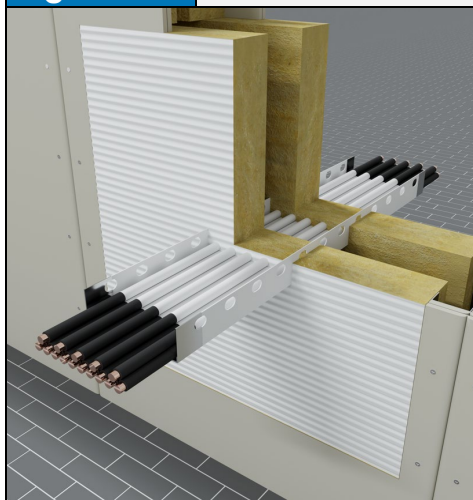


Fig. 6 Large cable penetrations in the wall, double mineral wool board

- 1 – rigid/flexible wall  $A \geq 100$  mm
- 2 – cables, cable bundles, cables in a cable tray/ cable ladder
- 3 – 2 x **INTU FR UNIBOARD 1S**
- 4 – painting with **INTU FR UNICOAT P** paint on both sides of the partition to the required length 'L'

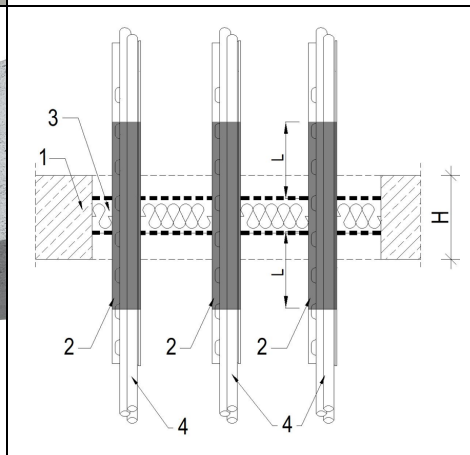
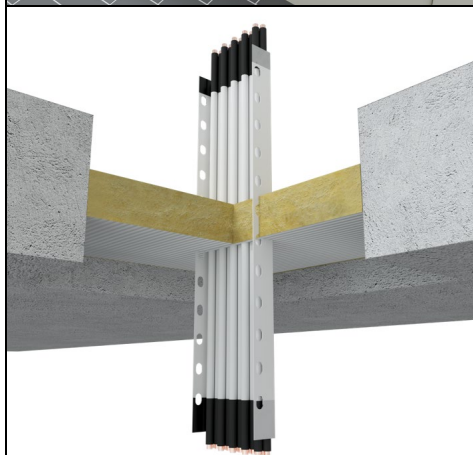


Fig. 7 Large cable passages in the ceiling, single mineral wool board

- 1 – rigid ceiling  $H \geq 100$  mm
- 2 – cables, cable bundles, cables in a cable tray / cable ladder
- 3 – 1 x **INTU FR UNIBOARD 2S** board
- 4 – painting with **INTU FR UNICOAT P** paint on both sides of the partition to the required length 'L'