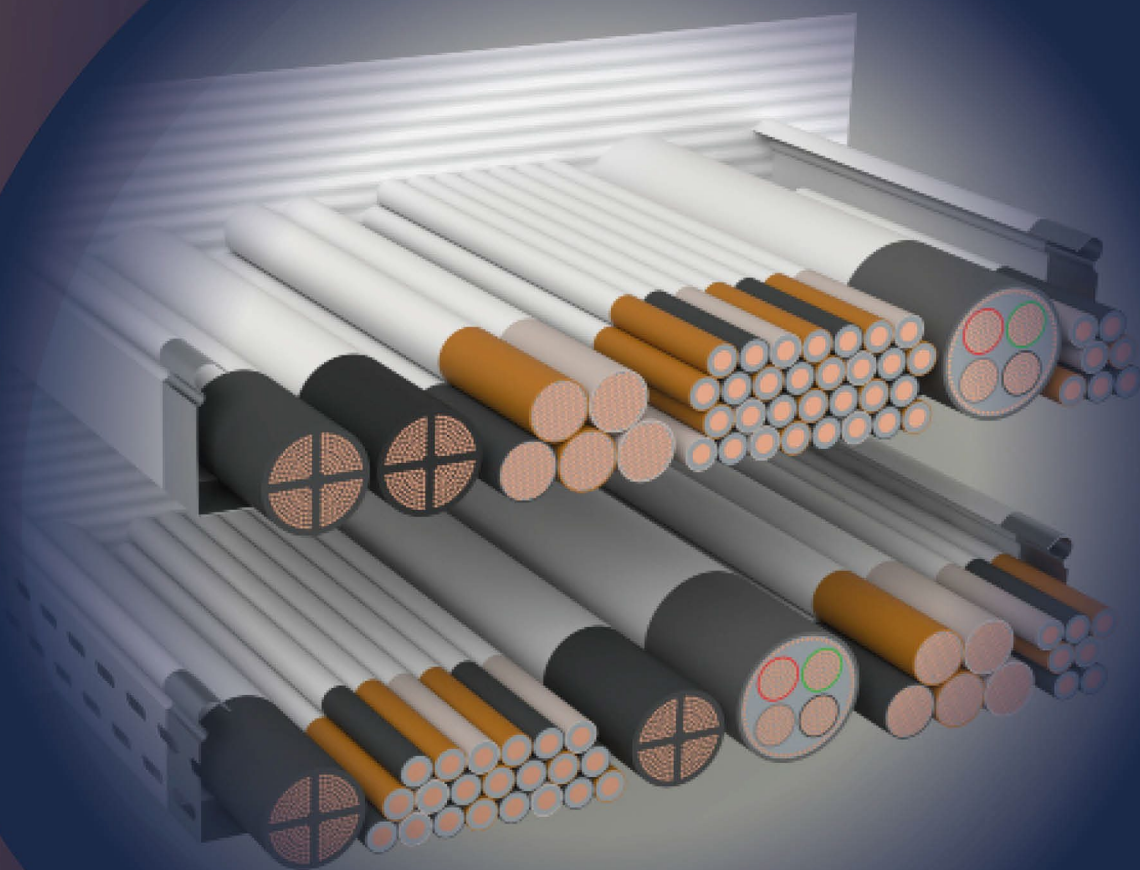


INTU FR UNIBOARD

Fire rated board

TECHNICAL DATA SHEET



PRODUCT DESCRIPTION

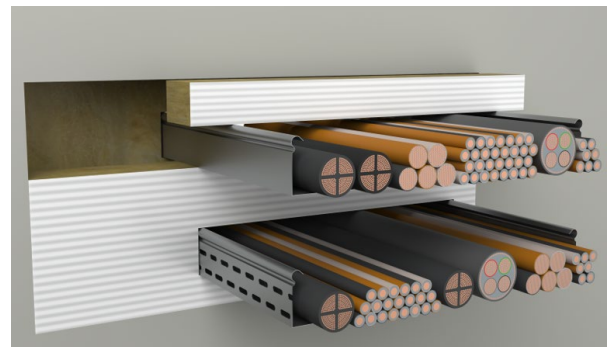
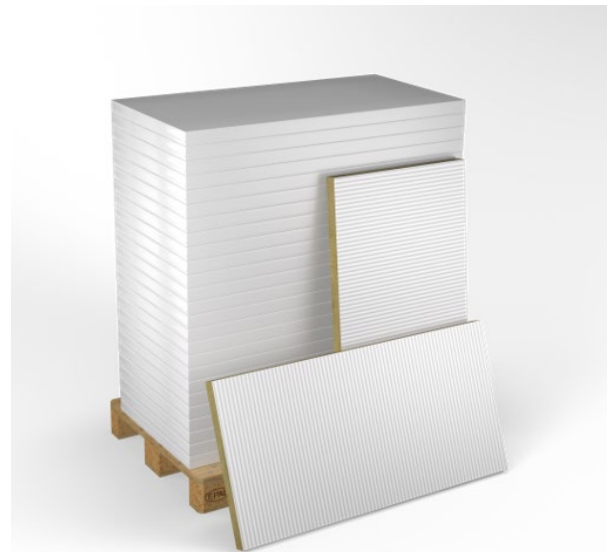
The intended use of **INTU FR UNICOAT P**, **INTU FR UNIBOARD 1S** and **INTU FR UNIBOARD 2S** products is to restore the fire resistance of flexible walls, rigid walls or rigid ceilings in areas where the following installations are present: large cable penetrations or non-combustible pipe penetrations.

INTU FR UNIBOARD is a mineral wool board with a minimum density of 140.0 kg/m³. The mineral wool board is coated with **INTU FR UNICOAT P** paint.

APPLICATION

The double board **INTU FR UNIBOARD 1S** and single board **INTU FR UNIBOARD 2S** are used for sealing large cable penetrations, as well as combustible/non-combustible pipe penetrations with or without insulation in 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 ³ .
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 ³ .



AVAILABILITY

Product	Dimensions	The form provides	Item number
INTU FR UNIBOARD 1S	1200 x 600 x 50 mm	1 pcs.	2312060510
INTU FR UNIBOARD 2S	1200 x 600 x 50 mm	1 pcs.	2312060520

* 1S – single-sided painted panel, dry coating thickness: 0.5 mm
2S – double-sided painted panel, dry coating thickness: 0.5 mm

COMPLIANCE

European Technical Assessment:

ETA-24/1047

Declaration of performance:

DoP 5/2024

Certificate of constancy of performance:

1488-CPR-1149/W

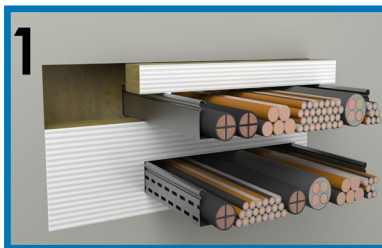
TRANSPORT AND STORAGE

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

INSTEELLATION

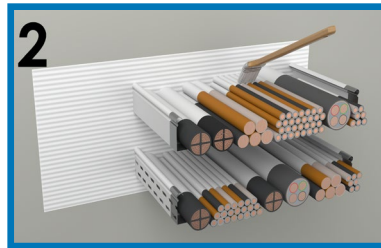
1. PREPARATION

Before applying the seal, clean the opening surfaces and inSteellations of grease and other contaminants. Fill the free space with **INTU FR UNIBOARD**.



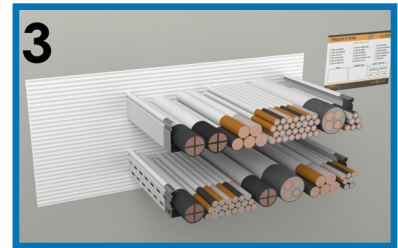
2. APPLICATION

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.



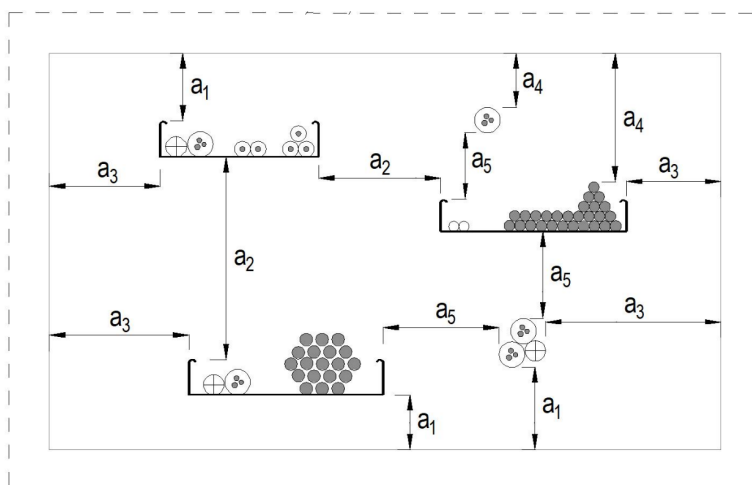
3. FINISHING

The seal is ready. Fill in the label and stick it next to the passage. Fill any leaks with **ALFA FR MASTIC** fireproof compound.



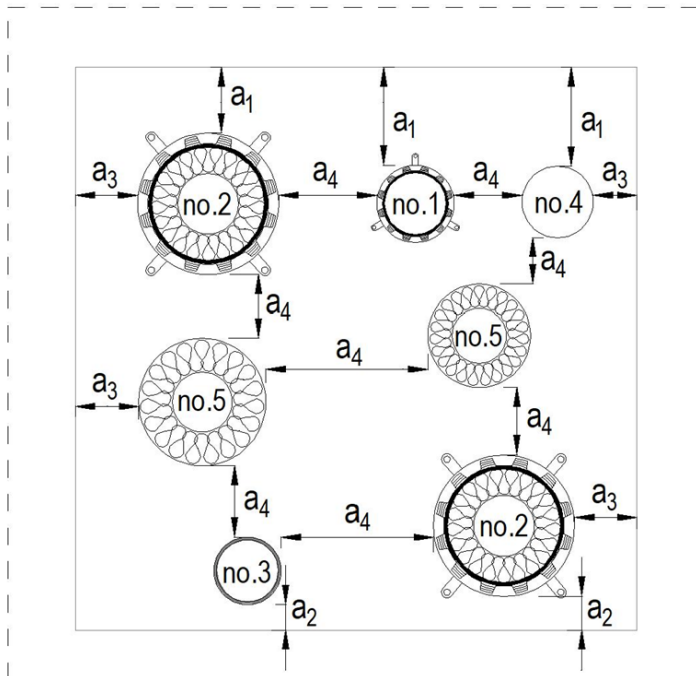
Partition filling	Support structure	Passage dimensions		
		Cable transitions Max W x H [mm]	Pipe passages (horizontal) Max W x H [mm]	Pipe passages (vertical) Max W x H [mm]
1 x INTU FR UNIBOARD 2S	Wall	600 x 600 mm	1000 x 600 mm	
	Ceiling	625 x 1000 mm	600 x 1200 mm	
X 2 x INTU FR UNIBOARD 1S	Wall	1000 x 600 mm	1000 x 600 mm	400 x 1000 mm
	Ceiling	1000 x 625mm	1200 x 625 mm	

Cable transitions



Partition filling	Support structure	Minimum distance	
		a ₁ , a ₂ , a ₃ , a ₄	a ₅
1 x INTU FR UNIBOARD 2S	Wall	0 mm	60 mm
	CEILING	0 mm	60 mm
2 x INTU FR UNIBOARD 1S	Wall	0 mm	60 mm
	CEILING	0 mm	60 mm

Pipe transitions



Partition filling	Support structure	Minimum distance	
		a_1	a_2
1 x INTU FR UNIBOARD 2S	Wall	20 mm	70 mm
lub 2 x INTU FR UNIBOARD 1S	Ceiling	50 mm	0 mm

Partition filling	Support structure	Minimum distance	
		a_3	a_4
1 x INTU FR UNIBOARD 2S	Wall	20 mm	10 mm
lub 2 x INTU FR UNIBOARD 1S	Ceiling	30 mm	100 mm

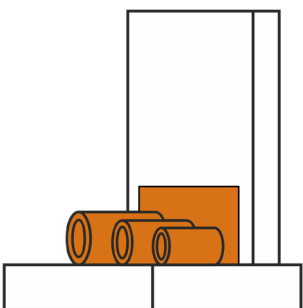
FIRE CLASSIFICATION

FIRE-RESISTANT PIPES with INTU FR COLLAR L SLIM

Combustible pipes without insulation

Pipe material	Partition filling	Outer pipe diameter Ø [mm]	FLEXIBLE / RIGID WALL			CEILING		
			• flange on both sides of the partition			• flange at the bottom of the ceiling		
			Pipe wall thickness [mm]	Number of flanges x number of tape wraps	Fire resistance class	Pipe wall thickness [mm]	Number of flanges x number of tape wraps	Fire resistance class
PP	2 x INTU FR UNIBOARD 1S	Ø ≤ 75	1,9 – 12,5	2 x 2	EI 120	1,9 – 12,5	1 x 2	EI 120
		75 < Ø ≤ 90	2,2 – 15,0	2 x 4		2,2 – 15,0	1 x 4	
		90 < Ø ≤ 110	2,7 – 18,3	2 x 5		2,7 – 18,3	1 x 5	
		110 < Ø ≤ 125				3,1 – 14,0	2 x 7	
		125 < Ø ≤ 160				3,9	2 x 9	
PVC-U / PVC-C	2 x INTU FR UNIBOARD 1S	Ø ≤ 75	1,8 – 5,6	2 x 2	EI 120	1,8 – 5,6	1 x 2	EI 120
		75 < Ø ≤ 90	1,9 – 6,7	2 x 4		1,9 – 6,7	1 x 4	
		90 < Ø ≤ 110	2,0 – 8,1	2 x 5		2,0 – 8,1	1 x 5	

Pipe material	Partition filling	Outer pipe diameter Ø [mm]	FLEXIBLE / RIGID WALL			CEILING			
			• flange on both sides of the partition			• flange at the bottom of the ceiling			
			Pipe wall thickness [mm]	Number of flanges x number of tape wraps	Fire resistance class	Pipe wall thickness [mm]	Number of flanges x number of tape wraps	Fire resistance class	
PP-R	2 x INTU FR UNIBOARD 1S	Ø ≤ 25	≥ 2,3	2 x 2	EI 120	≥ 2,3	1 x 2	EI 120	
		20 < Ø ≤ 25	≥ 2,7			≥ 2,7			
		25 < Ø ≤ 32	3,3 – 12,5			3,3 – 12,5			
		32 < Ø ≤ 40	3,9 – 12,5			3,9 – 12,5			
		40 < Ø ≤ 50	4,8 – 12,5			4,8 – 12,5			
		50 < Ø ≤ 63	5,8 – 12,5			5,8 – 12,5			
		63 < Ø ≤ 75	6,8 – 12,5			6,8 – 12,5			
		75 < Ø ≤ 90	8,2 – 15,0	2 x 4	EI 120	8,2 – 15,0	1 x 4		
		90 < Ø ≤ 110	10,0 – 18,3	2 x 5		10,0 – 18,3	1x 5		
		75 < Ø ≤ 90	1,9 – 6,7	2 x 4		1,9 – 6,7	1 x 4		
		90 < Ø ≤ 110	2,0 – 8,1	2 x 5		2,0 – 8,1	1 x 5		
PE-HD PE PE-X ABS SAN + PVC	2 x INTU FR UNIBOARD 1S	63 < Ø ≤ 75	3,0 – 6,8	2 x 2	EI 120	3,0 – 6,8	1 x 2	EI 120	
		75 < Ø ≤ 90	3,5 – 8,2	2 x 4		3,5 – 8,2	1 x 4		
		90 < Ø ≤ 110	4,2 – 10,0	2 x 5		4,2 – 10,0	1 x 5		
		110 < Ø ≤ 125				5,8 – 9,9	1 x 7		
		125 < Ø ≤ 160				9,5	1 x 9		
	1 x INTU FR UNIBOARD 2S	Ø ≤ 75	3,0 – 6,8	2 x 2	EI 60	3,0 – 6,8	1 x 2	EI 90	
		75 < Ø ≤ 90	3,5 – 8,2	2 x 4		3,5 – 8,2	1 x 4		
		90 < Ø ≤ 110	4,2 – 10,0	2 x 5		4,2 – 10,0	1 x 5		

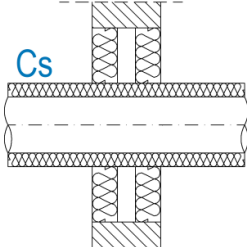
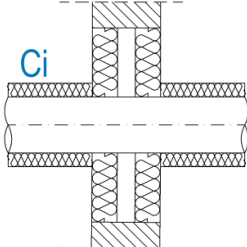
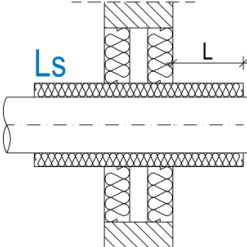
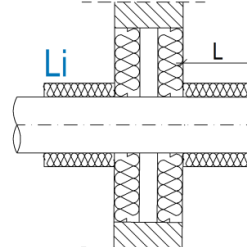
	Pipe material	Partition filling	Outer pipe diameter Ø [mm]	Maximum PE insulation thickness [mm]	RIGID WALL		
					pipes on the floor / flange on pipe insulation		
					Pipe wall thickness [mm]	Number of flanges x number of tape wraps	Fire resistance class
PP - R	2 x INTU FR UNIBOARD 1S	Ø ≤ 20		9	2,3	2 x 5	EI 120
				25	6,9		EI 90
				25	7,0 – 12,5		EI 120
		20 < Ø ≤ 50		25	6,9		EI 90
				25	7,0 – 12,5		EI 90
		50 < Ø ≤ 75		25	12,5		EI 90
Bundle: 2 x PP-R	2 x INTU FR UNIBOARD 1S	1) Ø ≤ 20		9	2,3	2 x 5	EI 120
		2) Ø ≤ 50		9	6,9		

FIRE-RESISTANT PIPES with INTU FR GRAPHITE

Pipe material	Partition filling	Outer pipe diameter Ø [mm]	FLEXIBLE / RIGID WALL		
			Pipe wall thickness [mm]	Number of application pages INTU FR GRAPHITE x depth x width [mm]	Fire resistance class
PP	2 x INTU FR UNIBOARD 1S	$\varnothing \leq 75$	1,9 – 12,4	2 x 25 x 10,0 – 20,0	EI 45
			12,5 – 18,3		EI 90
		$75 < \varnothing \leq 90$	2,2 – 14,9		EI 45
			15,0 – 18,3		EI 90
		$90 < \varnothing \leq 110$	2,7 – 18,2		EI 45
			18,3		EI 90

Pipe material	Partition filling	Outer pipe diameter Ø [mm]	FLEXIBLE / RIGID WALL			CEILING		
			Pipe wall thickness [mm]	Number of application pages INTU FR GRAPHITE x depth x width [mm]	Fire resistance class	Pipe wall thickness [mm]	Number of application pages INTU FR GRAPHITE x depth x width [mm]	Fire resistance class
PP-R	2 x INTU FR UNIBOARD 1S	Ø ≤ 20	≥ 2,8	2 x 25 x 10,0 – 20,0	EI 45	≥ 2,3	1 x 50 x 10,0 – 20,0	EI 90
		20 < Ø ≤ 25	≥ 3,2			≥ 2,7		
		25 < Ø ≤ 32	≥ 3,8			3,3 –		
		32 < Ø ≤ 40	4,4 – 18,2			3,9 –		
			18,3		12,5			
		40 < Ø ≤ 50	5,2 – 18,2		EI 90	4,8 –		
			18,3		EI 45	12,5		
		50 < Ø ≤ 63	6,2 – 18,2		EI 90	5,8 –		
			18,3		EI 45	12,5		
		63 < Ø ≤ 75	7,2 – 18,2		EI 90	6,8 –		
			18,3		EI 45	12,5		
		75 < Ø ≤ 90	8,4 – 18,2		EI 90	8,2 –		
			18,3		EI 45	15,0		
		90 < Ø ≤ 110	10,0 – 18,2		EI 90	10,0 –		
			18,3		EI 45	18,3		
PVC	2 x INTU FR UNIBOARD 1S	Ø ≤ 75	1,5 – 1,9	2 x 25 x 10,0 – 20,0	EI 45	1,5 – 8,1	1 x 50 x 10,0 – 20,0	EI 90
			2,0		EI 60			
			2,1 – 8,1		EI 45			
		75 < Ø ≤ 90	1,7 – 1,9		EI 60	1,7 – 8,1		
			2,0		EI 45			
			2,1 – 8,1		EI 60			
		90 < Ø ≤ 110	2,0		EI 45	2,0 – 8,1		
			2,1 – 8,1		EI 60			

NON-FLAMMABLE PIPES with wool lamella

Insulation configuration in inSteellation passages			
CONTINUOUS INSULATION		INSULATION BROKEN	
			
Cs Ciągła Continued sustained	Ci Ciągła przerwana Continued interrupted	Ls Lokalna Local sustained	Li Lokalna przerwana Local interrupted

Pipe material	Partition filling	Outer pipe diameter Ø [mm]	FLEXIBLE / RIGID WALL			
			Pipe wall thickness [mm]	Mineral wool lamella, minimum length x thickness [mm]	Insulation configuration	Fire resistance class
Copper	2 x INTU FR UNIBOARD 1S	Ø ≤ 28,0	≥ 1,0	20 x 500	Cs, Ls	EI 120
		28,0 < Ø ≤ 33,7	≥ 1,1	50 x 700		EI 90
		33,7 < Ø ≤ 42,4	≥ 1,2			
		42,4 < Ø ≤ 54,0	≥ 1,4			
		54,0 < Ø ≤ 66,7	≥ 1,6			
		66,7 < Ø ≤ 76,1	≥ 1,8			
		76,1 < Ø ≤ 88,9	≥ 2,0			
Steel	2 x INTU FR UNIBOARD 1S	Ø ≤ 67,0	1,5 – 3,9	50 x 700	Cs, Ls	EI 60
			≥ 4,0			EI 90
		67,0 < Ø ≤ 76,1	1,6 – 3,9			EI 60
			≥ 4,0			EI 90
		76,1 < Ø ≤ 88,9	1,8 – 3,9			EI 60
			≥ 4,0			EI 90
		88,9 < Ø ≤ 108,0	2,0 – 3,9			EI 60
			≥ 4,0			EI 90
		108,0 < Ø ≤ 114,3	2,1 – 3,9			EI 60
			≥ 4,0			EI 90
		114,3 < Ø ≤ 139,7	2,6 – 3,9			EI 60
			≥ 4,0			EI 90
		139,7 < Ø ≤ 159,0	2,9 – 3,9			EI 60
			≥ 4,0			EI 90
		159,0 < Ø ≤ 168,3	3,1 – 3,9			EI 60
			≥ 4,0			EI 90
		168,3 < Ø ≤ 177,8	3,3 – 3,9			EI 60
			≥ 4,0			EI 90
		177,8 < Ø ≤ 193,7	3,5 – 3,9			EI 60
			≥ 4,0			EI 90
		193,7 < Ø ≤ 219,1	≥ 4,0			EI 90

Pipe material	Partition filling	Outer pipe diameter Ø [mm]	FLEXIBLE / RIGID WALL			
			Pipe wall thickness [mm]	Mineral wool lamella, minimum length x thickness [mm]	Insulation configuration	Fire resistance class
Steel	2 x INTU FR UNIBOARD 1S	Ø ≤ 114,3	≥ 3,6	50 x 500	Ci, Li	EI 90
Copper	1 x INTU FR UNIBOARD 2S	Ø ≤ 28,0	≥ 1,0	20 x 500	Cs, Ls	EI 60
		28,0 < Ø ≤ 33,7	≥ 1,2	30 x 500	Cs, Ls	
		33,7 < Ø ≤ 42,4	≥ 1,6			
		42,4 < Ø ≤ 54,0	≥ 2,0			
Steel	1 x INTU FR UNIBOARD 2S	Ø ≤ 67,0	1,5 – 3,5	30 x 500	Cs, Ls	EI 60
			≥ 3,6	50 x 500		
		67,0 < Ø ≤ 76,1	1,9 – 3,5			
			≥ 3,6			
		76,1 < Ø ≤ 88,9	2,5 – 3,5			
			≥ 3,6			
		88,9 < Ø ≤ 108,0	3,3 – 3,5			
			≥ 3,6			
		108,0 < Ø ≤ 114,3	≥ 3,6			
Pipe material	Partition filling	Outer pipe diameter Ø [mm]	CEILING			
			Pipe wall thickness [mm]	Mineral wool lamella, minimum length x thickness [mm]	Insulation configuration	Fire resistance class
Copper	2 x INTU FR UNIBOARD 1S	Ø ≤ 28,0	≥ 1,0	20 x 500	Cs, Ls	EI 120
		28,0 < Ø ≤ 33,7	≥ 1,1	50 x 700		EI 90
		33,7 < Ø ≤ 42,4	≥ 1,2			
		42,4 < Ø ≤ 54,0	≥ 1,4			
		54,0 < Ø ≤ 66,7	≥ 1,6			
		66,7 < Ø ≤ 76,1	≥ 1,8			
		76,1 < Ø ≤ 88,9	≥ 2,0			
Steel	2 x INTU FR UNIBOARD 1S	Ø ≤ 67,0	≥ 1,5	30 x 500	Cs, Ls	EI 120
		67,0 < Ø ≤ 76,1	1,6 – 3,9	50 x 700		EI 90
			≥ 4,0			EI 120
		76,1 < Ø ≤ 88,9	1,8 – 3,9			EI 90
			≥ 4,0			EI 120
		88,9 < Ø ≤ 108,0	2,0 – 3,9			EI 90
			≥ 4,0			EI 120
		108,0 < Ø ≤ 114,3	2,1 – 3,9			EI 90
			≥ 4,0			EI 120
		114,3 < Ø ≤ 139,7	2,6 – 3,9			EI 90
			≥ 4,0			EI 120
		139,7 < Ø ≤ 159,0	2,9 – 3,9			EI 90
			≥ 4,0			EI 120
		159,0 < Ø ≤ 168,3	3,1 – 3,9			EI 90
			≥ 4,0			EI 120
		168,3 < Ø ≤ 177,8	3,3 – 3,9			EI 90
			≥ 4,0			EI 120
		177,8 < Ø ≤ 193,7	3,5 – 3,9			EI 90
			≥ 4,0			EI 120
193,7 < Ø ≤ 219,1	≥ 4,0	EI 120				

Pipe material	Partition filling	Outer pipe diameter Ø [mm]	CEILING			
			Pipe wall thickness [mm]	Mineral wool lamella, minimum length x thickness [mm]	Insulation configuration	Fire resistance class
Copper	1 x INTU FR UNIBOARD 2S	Ø ≤ 28,0	≥ 1,0	20 x 500	Cs, Ls	EI 45
		28,0 < Ø ≤ 33,7	≥ 1,2	30 x 500		
		33,7 < Ø ≤ 42,4	≥ 1,6			
		42,4 < Ø ≤ 54,0	≥ 2,0			
Steel	1 x INTU FR UNIBOARD 2S	Ø ≤ 67,0	1,5 – 3,5	30 x 500	Cs, Ls	EI 45
			≥ 3,6	50 x 500		EI 60
		67,0 < Ø ≤ 76,1	1,9 – 3,5			EI 45
			≥ 3,6			EI 60
		76,1 < Ø ≤ 88,9	2,5 – 3,5			EI 45
			≥ 3,6			EI 60
		88,9 < Ø ≤ 108,0	3,3 – 3,5			EI 45
			108,0 < Ø ≤ 114,3			≥ 3,6

NON-FLAMMABLE PIPES with INTU FR UNICOAT P

Pipe material	Partition filling	Outer pipe diameter Ø [mm]	FLEXIBLE / RIGID WALL			CEILING		
			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	2 x INTU FR UNIBOARD 1S	$\varnothing \leq 28,0$	$\geq 1,0$	1,0 x 500	EI 20	$\geq 1,0$	1,0 x 500	EI 45
		$28,0 < \varnothing \leq 33,7$	$\geq 1,2$			$\geq 1,2$		EI 30
		$33,7 < \varnothing \leq 42,4$	$\geq 1,6$			$\geq 1,6$		
		$42,4 < \varnothing \leq 54,0$	$\geq 2,0$			$\geq 2,0$		
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

CABLES with INTU FR UNICOAT P

Type Cable	Partition filling	Outer pipe diameter Ø [mm]	FLEXIBLE / RIGID WALL		CEILING	
			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	$\varnothing \leq 21$	1,0 x 150	EI 120	1,0 x 160	EI 120
Medium cables		$21 < \varnothing \leq 50$				
Large cables		$50 < \varnothing \leq 80$				
Cable harness		$\varnothing_{\text{CABLE}} \leq 21, \varnothing_{\text{BUNDLES}}$				
Cables		$\varnothing \leq 24$				
Small cables	1 x INTU FR UNIBOARD 2S	$\varnothing \leq 21$	1,0 x 200	EI 60	1,0 x 200	EI 60
Medium cables		$21 < \varnothing \leq 50$				
Large cables		$50 < \varnothing \leq 80$				
Cable harness		$\varnothing_{\text{CABLE}} \leq 21, \varnothing_{\text{BUNDLES}}$				
Cables		$\varnothing \leq 24$				

SOLUTION DETAILS

Fig. 1-3

FIRE-RESISTANT PIPES with INTU FR COLLAR L SLIM

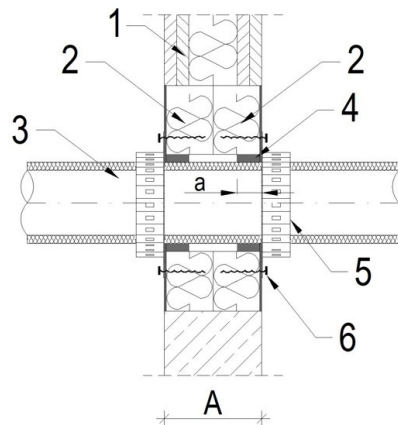
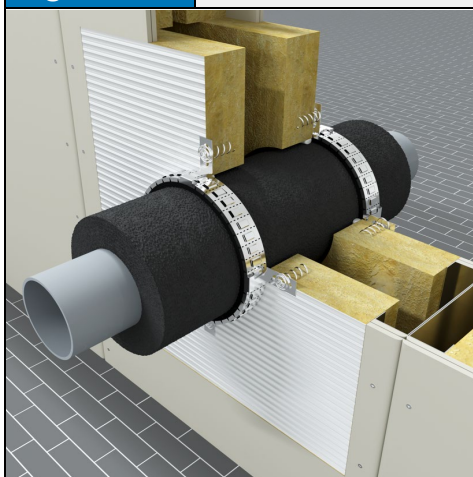


Fig. 1 Insulated combustible pipe, double mineral wool board

- 1 – rigid/flexible wall $A \geq 100$ mm
- 2 – 2 x INTU FR UNIBOARD 1S board
- 3 – insulated combustible pipe
- 4 – ALFA FR MASTIC compound applied to a minimum depth of $a \geq 25$ mm on both sides of the partition
- 5 – INTU FR COLLAR L SLIM installed on both sides of the partition
- 6 – SPRING-W wool screws

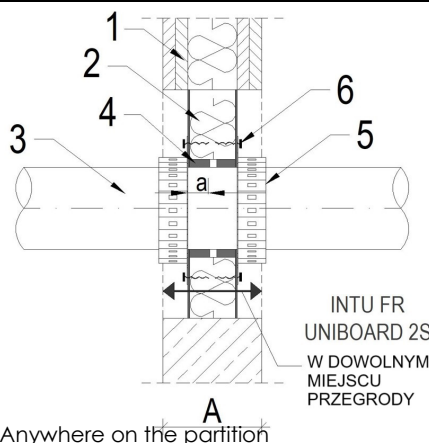
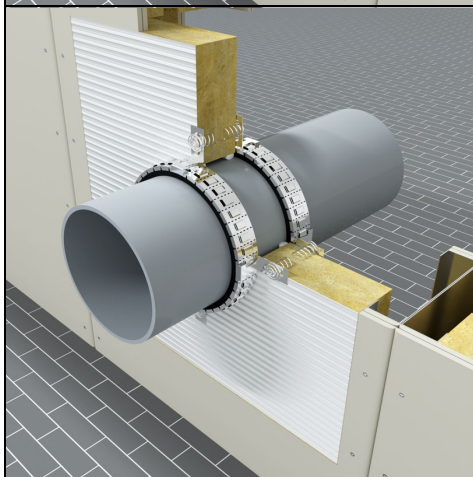


Fig. 2 Combustible pipe, single mineral wool board

- 1 – rigid/flexible wall $A \geq 100$ mm
- 2 – 1 x INTU FR UNIBOARD 2S board in any place of the partition
- 3 – combustible pipe
- 4 – ALFA FR MASTIC compound applied to a minimum depth of $a \geq 25$ mm on both sides of the wool board
- 5 – INTU FR COLLAR L SLIM installed on both sides of the wool board
- 6 – SPRING-W wool screws

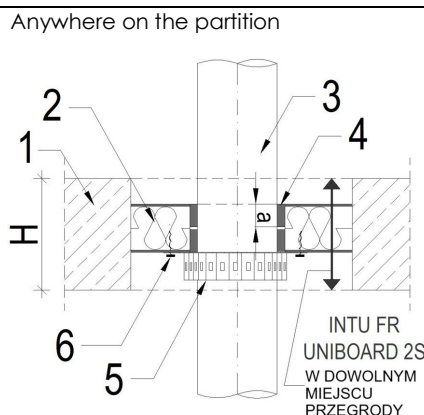
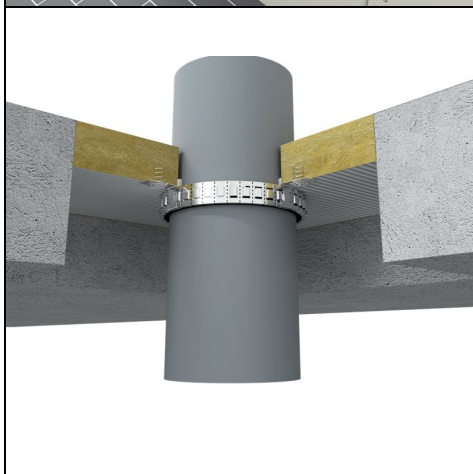


Fig. 3 Combustible pipe, single mineral wool board

- 1 – CEILING rigid $H \geq 150$ mm
- 2 – 1 x INTU FR UNIBOARD 2S board in any place of the partition
- 3 – combustible pipe
- 4 – ALFA FR MASTIC compound applied to a minimum depth of $a \geq 25$ mm on both sides of the wool board
- 5 – INTU FR COLLAR L SLIM installed on both sides of the wool board
- 6 – SPRING-W wool screws

Fig.4

FIRE-RESISTANT PIPES with INTU FR GRAPHITE

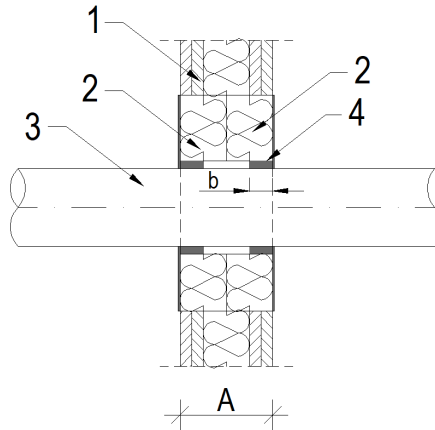
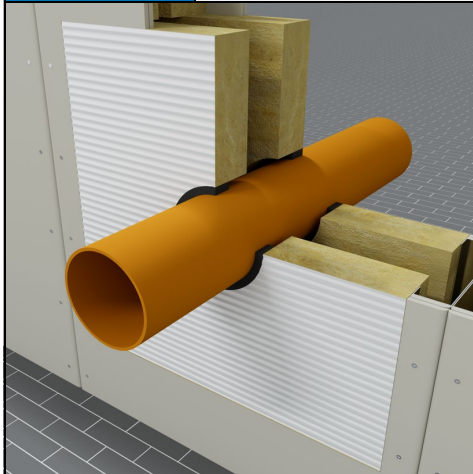


Fig. 4 Fire tube, double mineral wool plate and graphite mass

- 1 – rigid/flexible wall $A \geq 100$ mm or CEILING $H \geq 150$ mm
- 2 – 2 x INTU FR UNIBOARD 1S board
- 3 – combustible pipe
- 4 – INTU FR GRAPHITE to a minimum depth:
- $b \geq 25$ mm on both sides of the wall
- $b \geq 50$ mm from the bottom of the CEILING

Fig.5

FIRE-RESISTANT PIPES with INTU FR GRAPHITE

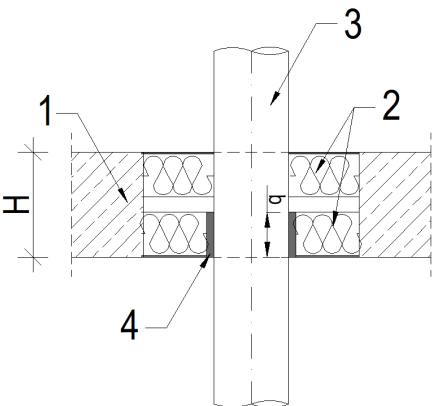
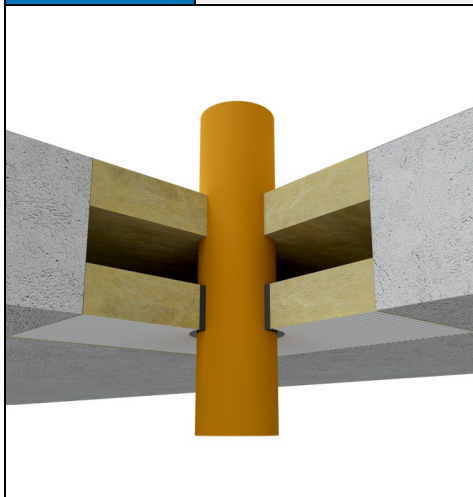


Fig. 5 Fire tube, double mineral wool plate and graphite mass

- 1 – rigid/flexible wall $A \geq 100$ mm or CEILING $H \geq 150$ mm
- 2 – 2 x INTU FR UNIBOARD 1S board
- 3 – combustible pipe
- 4 – INTU FR GRAPHITE to a minimum depth:
- $b \geq 25$ mm on both sides of the wall
- $b \geq 50$ mm from the bottom of the CEILING

Fig.6

NON-FLAMMABLE PIPES with wool lamellae

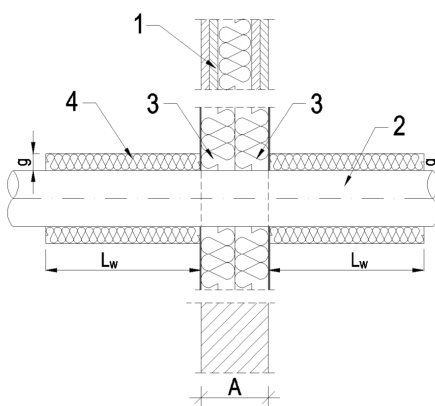
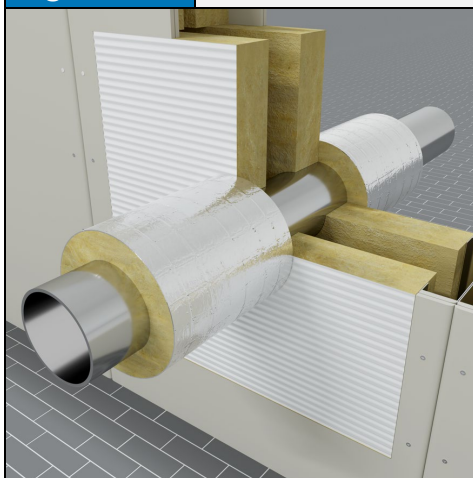


Fig. 6 Non-combustible pipe, double mineral wool board and wool lamella

- 1 – rigid/flexible wall $A \geq 100$ mm
- 2 – non-combustible pipe
- 3 – 2 x INTU FR UNIBOARD 1S board
- 4 – mineral wool lamella with a density of ≥ 35 kg/m³

Fig.7-8

NON-FLAMMABLE PIPES with wool lamellae

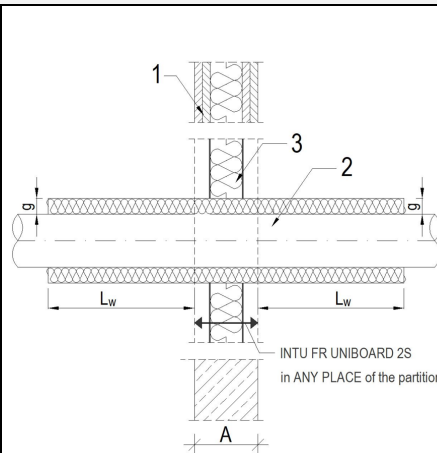
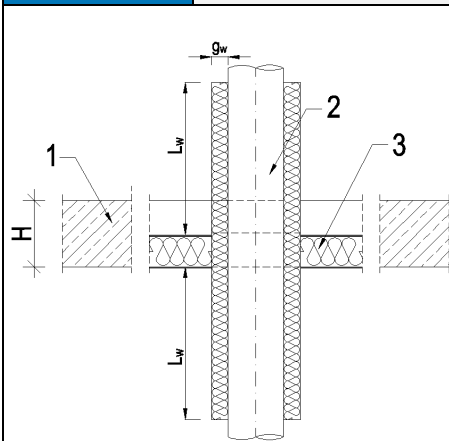


Fig. 7-8 Non-combustible pipe, single mineral wool board and wool lamella

- 1 – rigid/flexible wall $A \geq 100$ mm and rigid CEILING $H \geq 150$ mm
- 2 – non-combustible pipe insulated with mineral wool with a density of ≥ 35 kg/m³
- 3 – 1 x **INTU FR UNIBOARD 2S** board

Fig.9

NON-FLAMMABLE PIPES with INTU FR UNICOAT P

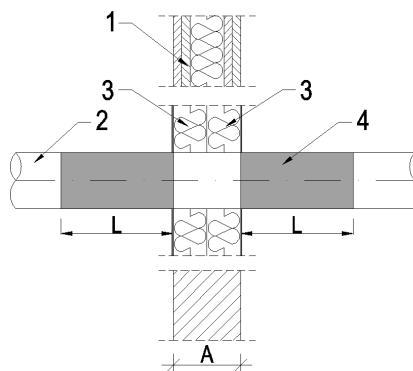
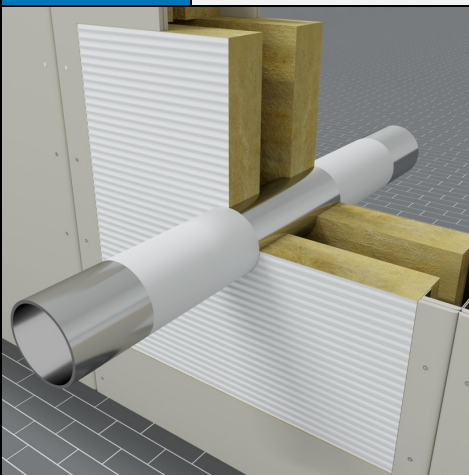


Fig. 9 Non-combustible pipe coated with **INTU FR UNICOAT P**, double mineral wool board in the wall

- 1 – rigid/flexible wall $A \geq 100$ mm
- 2 – non-combustible pipe
- 3 – 2 x **INTU FR UNIBOARD 1S** board
- 4 – painting with **INTU FR UNICOAT P** paint on both sides of the partition to the required length 'L'

Fig.10

NON-FLAMMABLE PIPES with INTU FR UNICOAT P

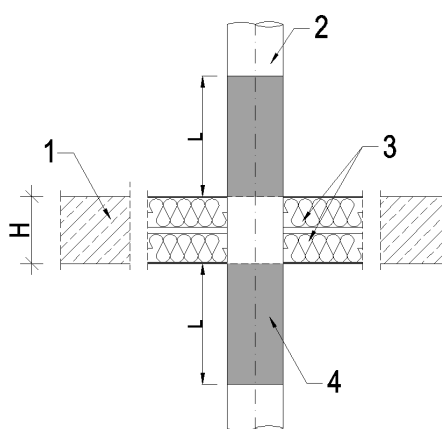


Fig. 10 Non-combustible pipe coated with **INTU FR UNICOAT P**, double mineral wool board in CEILING

- 1 – CEILING rigid $H \geq 150$ mm
- 2 – non-combustible pipe
- 3 – 2 x **INTU FR UNIBOARD 1S**
- 4 – painted with **INTU FR UNICOAT P** paint on both sides of the partition to the required length 'L'

Fig.11 Cable transitions using **INTU FR UNICOAT P**

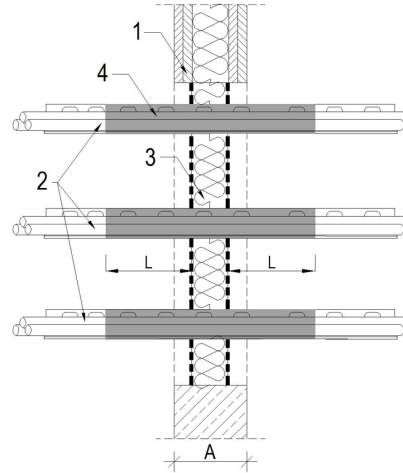
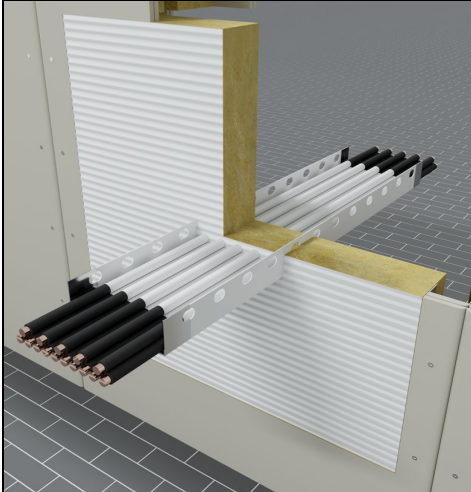


Fig. 11 Cable penetrations in the wall, single mineral wool board

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

Fig.12 Cable transitions using **INTU FR UNICOAT P**

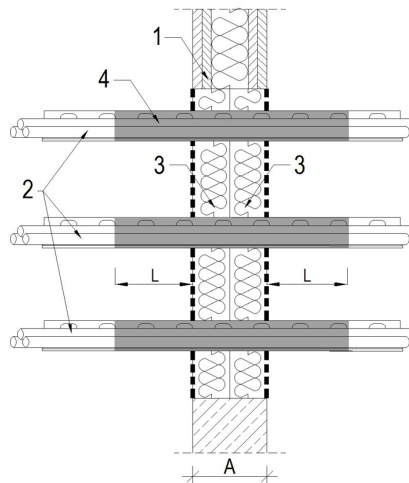
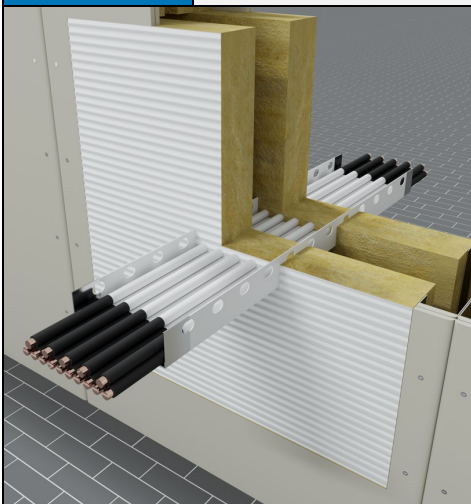


Fig. 12 Large cable penetrations in the wall, double mineral wool board

- 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.13-14 Cable transitions using **INTU FR UNICOAT P**

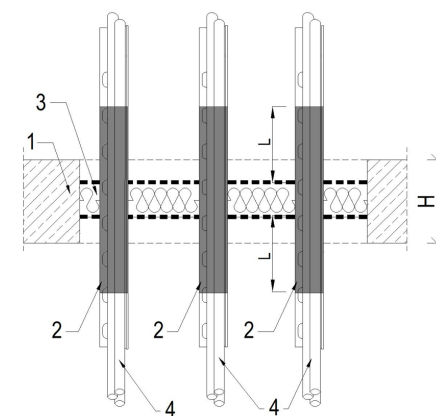
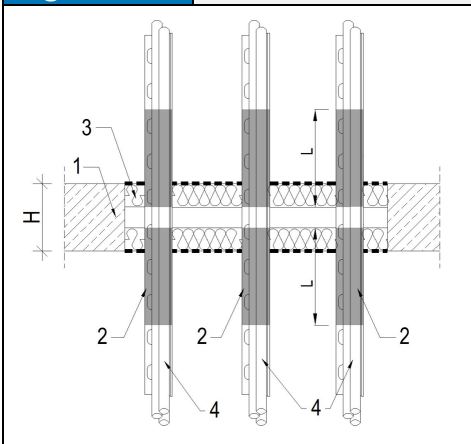


Fig. 13-14 Cable transitions in CEILING, double or single mineral wool board

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