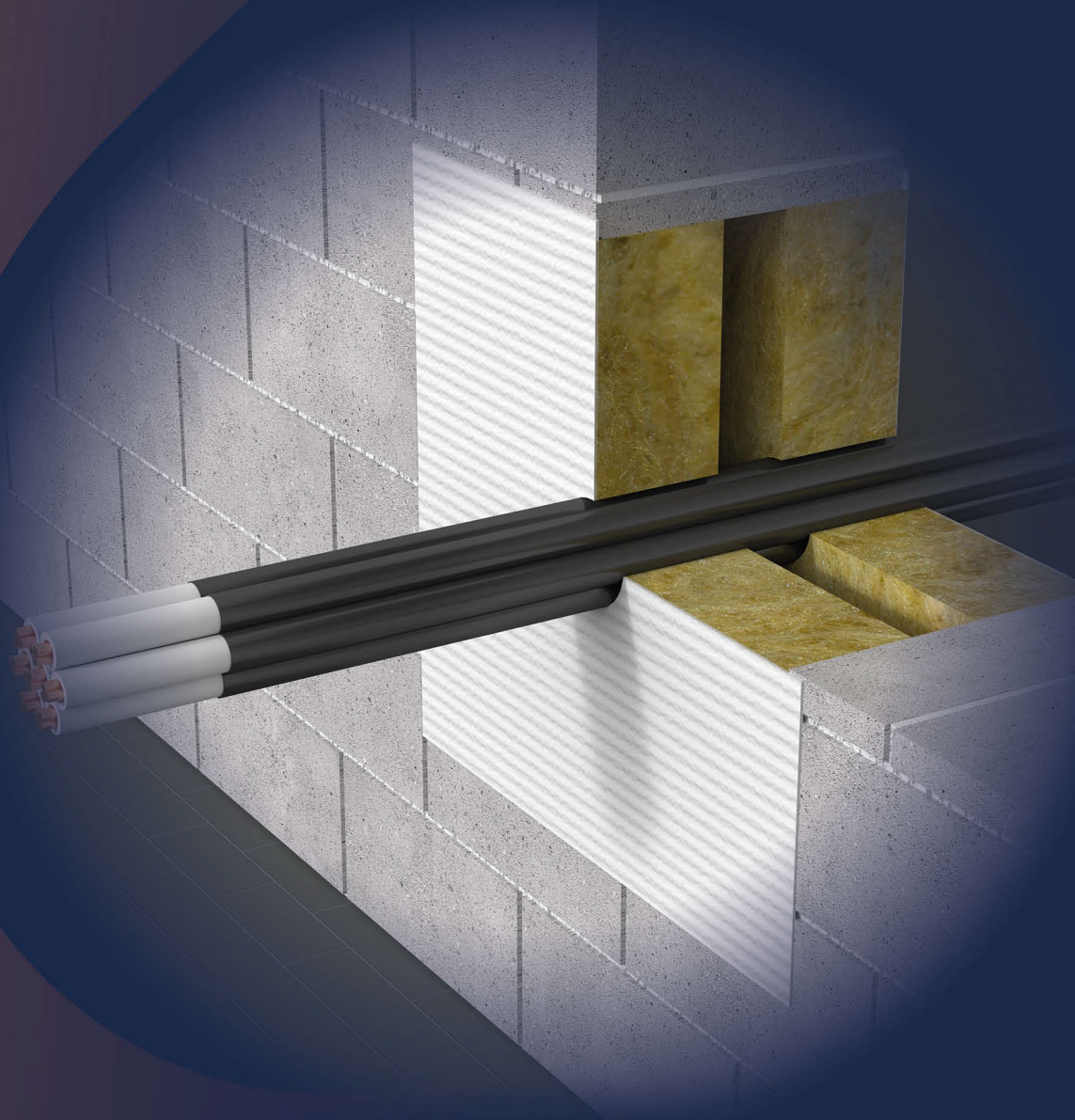


ALFA FR COAT I

Fire rated intumescent coat

TECHNICAL DATA SHEET



ALFA FR COAT I

Fire rated intumescent coat

PRODUCT DESCRIPTION

ALFA FR COAT I intumescent paint is designed for fire protection coatings. When exposed to fire, the coating expands and forms a protective layer on the surface, keeping the partition sealed and insulated up to EI 240.

APPLICATION

ALFA FR COAT I paint is designed for fire protection of metal pipes and cables in walls and ceilings.



Flexible wall:	The wall should be at least 125 mm thick. It should be clad on both sides with at least two sheets of plasterboard.
Rigid wall:	The wall should be at least 150 mm thick. It should be made of concrete or masonry units with a density of at least 600 kg/m ³ .
Rigid FLOOR:	The ceiling should be at least 150 mm thick. It should be made of concrete, reinforced concrete or aerated concrete with a density of not less than 1700 kg/m ³ .



AVAILABILITY

Product	Bucket capacity	Delivery form	Article number
ALFA FR COAT I	2,5 kg	1 psc.	2102500000
	10,0 kg	1 psc.	2110000000

INSTALLATION METHOD

1. Clean the surfaces of the opening and the installations from contamination.
2. Mix the paint thoroughly before use. The paint does not require dilution, but water can be added if necessary.
3. Cover the pipe or cables with **ALFA FR COAT I** paint with a suitable dry layer thickness dry layer and suitable length.

Efficiency: ~1.5 ÷ 1.6 kg/m² per millimetre of coating thickness

COMPLIANCE

European Technical Assessment:

ETA-19/0503

Declaration of Performance:

AGSO – 4/2019

Certificate of Constancy of Performance:

1488-CPR-0766/W



TRANSPORT AND STORAGE

Transport and store (in original and 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.

FIRE CLASSIFICATION

SCREEN: RIGID WALL					
Tube material	External diameter of the pipe [mm]	Wall thickness of the pipe [mm]	ALFA FR COAT I length x thickness [mm]	Filling in the partition	Fire resistance class
STEEL	$\varnothing \leq 42,4$	2,0 – 14,2	500 x 1,0	Cement mortar	EI 240
	$42,4 < \varnothing \leq 48,3$	2,2 – 14,2			
	$48,3 < \varnothing \leq 60,3$	2,6 – 14,2			
	$60,3 < \varnothing \leq 76,1$	3,1 – 14,2			
	$76,1 < \varnothing \leq 88,9$	3,5 – 14,2			
	$88,9 < \varnothing \leq 108,0$	4,0 - 14,2			
	$108,0 < \varnothing \leq 159,0$	4,0 - 14,2	500 x 2,0		EI 60
$159,0 < \varnothing \leq 219,0$	4,5 - 14,2				
COPPER	$\varnothing \leq 6,0$	$\geq 0,8$	500 x 1,0	Cement mortar	EI 120
	$6,0 < \varnothing \leq 22,0$	$\geq 1,0$			
	$22,0 < \varnothing \leq 35,0$	1,3 – 14,2			
	$35,0 < \varnothing \leq 42,0$	1,5 – 14,2			
	$42,0 < \varnothing \leq 54,0$	1,7 – 14,2			
SCREEN: FLEXIBLE WALL					
STEEL	$\varnothing \leq 42,4$	2,0 – 14,2	500 x 1,0	Cement mortar	EI 90
	$42,4 < \varnothing \leq 48,3$	2,2 – 14,2			EI 60
	$48,3 < \varnothing \leq 60,3$	2,6 – 14,2			
	$60,3 < \varnothing \leq 76,1$	3,1 – 14,2			
	$76,1 < \varnothing \leq 88,9$	3,5 – 14,2			
	$88,9 < \varnothing \leq 108,0$	4,0 - 14,2			

SCREEN: FLOOR					
Tube material	External diameter of the pipe [mm]	Wall thickness of the pipe [mm]	ALFA FR COAT I length x thickness [mm]	Filling in the partition	Fire resistance class
STEEL	$\varnothing \leq 42,4$	2,0 – 14,2	500 x 1,0	Cement mortar	EI 240
	$42,4 < \varnothing \leq 48,3$	2,2 – 14,2			EI 180
	$48,3 < \varnothing \leq 60,3$	2,6 – 14,2			
	$60,3 < \varnothing \leq 76,1$	3,1 – 14,2			
	$76,1 < \varnothing \leq 88,9$	3,5 – 14,2			
	$88,9 < \varnothing \leq 108,0$	4,0 – 14,2			
	$108,0 < \varnothing \leq 139,7$	4,0 – 14,2	500 x 2,0	Cement mortar	EI 120
	$139,7 < \varnothing \leq 159,0$	4,0 – 14,2			EI 90
	$159,0 < \varnothing \leq 219,0$	4,5 – 14,2			
COPPER	$\varnothing \leq 6,0$	$\geq 0,8$	500 x 1,0	Cement mortar	EI 240
	$6,0 < \varnothing \leq 22,0$	$\geq 1,0$			EI 180
	$22,0 < \varnothing \leq 35,0$	1,3 – 14,2			
	$35,0 < \varnothing \leq 42,0$	1,5 – 14,2			
	$42,0 < \varnothing \leq 54,0$	1,7 – 14,2			
	$54,0 < \varnothing \leq 88,9$	2,2 – 14,2			EI 120

SCREEN: RIGID WALL					
Tube material	External diameter of the pipe [mm]	Wall thickness of the pipe	ALFA FR COAT I length x thickness [mm]	Filling in the partition	Fire resistance class
STEEL	Ø ≤ 42,4	2,0 – 14,2	500 x 1,0	2 x mineral wool board coated with ALFA FR COAT A or 2 x ALFA FR BOARD A	EI 180
	42,4 < Ø ≤ 48,3	2,2 – 14,2			EI 120 ¹⁾
	48,3 < Ø ≤ 60,3	2,6 – 14,2			
	60,3 < Ø ≤ 76,1	3,1 – 14,2			EI 60 ¹⁾
	76,1 < Ø ≤ 88,9	3,5 – 14,2			
	88,9 < Ø ≤ 108,0	4,0 - 14,2			
108,0 < Ø ≤ 159,0	4,0 - 14,2	500 x 2,0			
COPPER	Ø ≤ 6,0	≥ 0,8	500 x 1,0	2 x mineral wool board coated with ALFA FR COAT A or 2 x ALFA FR BOARD A	EI 120
	6,0 < Ø ≤ 22,0	≥ 1,0			EI 90
	22,0 < Ø ≤ 35,0	1,3 – 14,2			
	35,0 < Ø ≤ 42,0	1,5 – 14,2			
	42,0 < Ø ≤ 54,0	1,7 – 14,2			
SCREEN: FLEXIBLE WALL					
STEEL	Ø ≤ 42,4	2,0 – 14,2	500 x 1,0	2 x mineral wool board coated with ALFA FR COAT A or 2 x ALFA FR BOARD A	EI 120
	42,4 < Ø ≤ 48,3	2,2 – 14,2			EI 120 ¹⁾
	48,3 < Ø ≤ 60,3	2,6 – 14,2			
	60,3 < Ø ≤ 76,1	3,1 – 14,2			
	76,1 < Ø ≤ 88,9	3,5 – 14,2			
	88,9 < Ø ≤ 108,0	4,0 - 14,2			
SCREEN: CEILING					
STEEL	Ø ≤ 42,4	2,0 – 14,2	500 x 1,0	2 x mineral wool board coated with ALFA FR COAT A or 2 x ALFA FR BOARD A	EI 240
	42,4 < Ø ≤ 48,3	2,2 – 14,2			EI 120 ¹⁾
	48,3 < Ø ≤ 60,3	2,6 – 14,2			
	60,3 < Ø ≤ 76,1	3,1 – 14,2			
	76,1 < Ø ≤ 88,9	3,5 – 14,2			
	88,9 < Ø ≤ 108,0	4,0 - 14,2			
	108,0 < Ø ≤ 139,7	4,0 - 14,2	500 x 2,0		EI 180 ¹⁾
	139,7 < Ø ≤ 159,0	4,0 - 14,2			EI 90 ¹⁾
	159,0 < Ø ≤ 219,0	4,5 - 14,2			
COPPER	Ø ≤ 6,0	≥ 0,8	500 x 1,0	2 x mineral wool board coated with ALFA FR COAT A or 2 x ALFA FR BOARD A	EI 240
	6,0 < Ø ≤ 22,0	≥ 1,0			
	22,0 < Ø ≤ 35,0	1,3 – 14,2			
	35,0 < Ø ≤ 42,0	1,5 – 14,2			
	42,0 < Ø ≤ 54,0	1,7 – 14,2			
	54,0 < Ø ≤ 88,9	2,2 – 14,2			EI 120

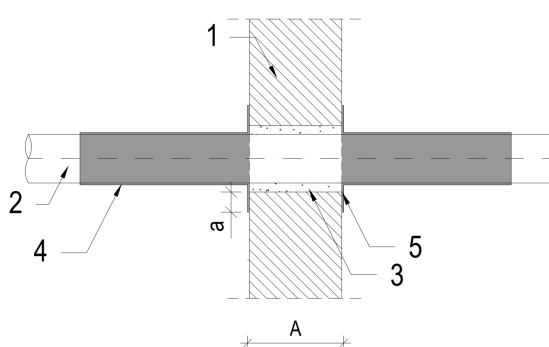
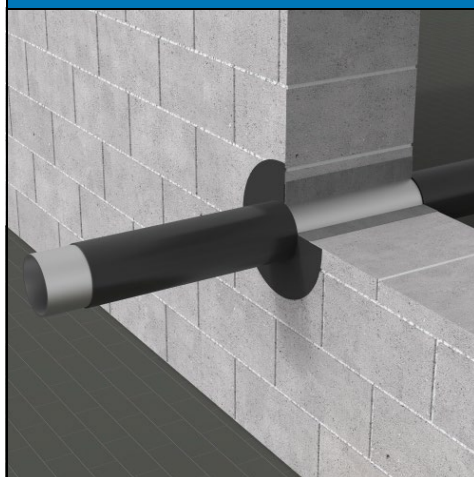
¹⁾ The pipe must also be painted along its entire length on the inside of the partition.

SCREEN: RIGID WALL				
Cable type in cable duct or without	External diameter [mm]	ALFA FR COAT I length x thickness [mm]	Filling the partition	Fire resistance class
Single cable	$\varnothing \leq 21$	300 x 1,0	2 x mineral wool board coated with ALFA FR COAT A or 2 x ALFA FR BOARD A	EI 120
Medium cable	$\varnothing \leq 50$			
Large cable	$\varnothing \leq 80$			
Bundle of cables	$\varnothing_{BUNDLES} \leq 100$ $\varnothing_{CABLES} \leq 21$			
Uninsulated cable	$\varnothing \leq 24$			

DETAILS OF THE SOLUTION

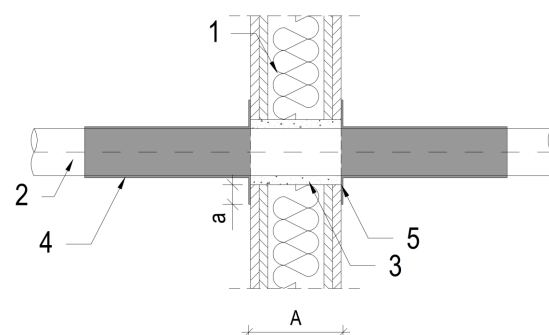
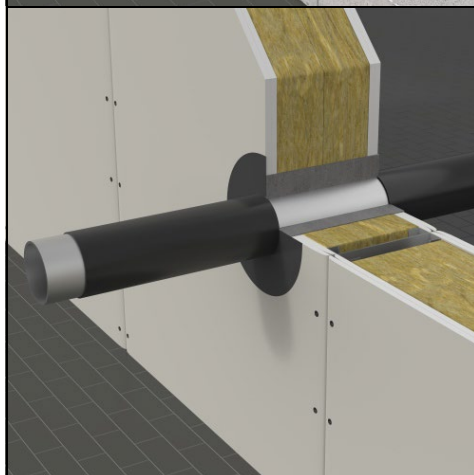
METAL PIPES WALLS

Fig. 1. Transition in rigid wall $A \geq 150$ mm



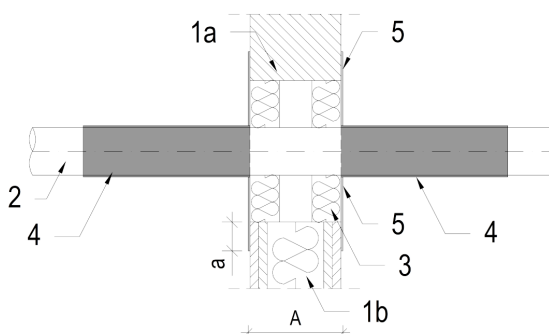
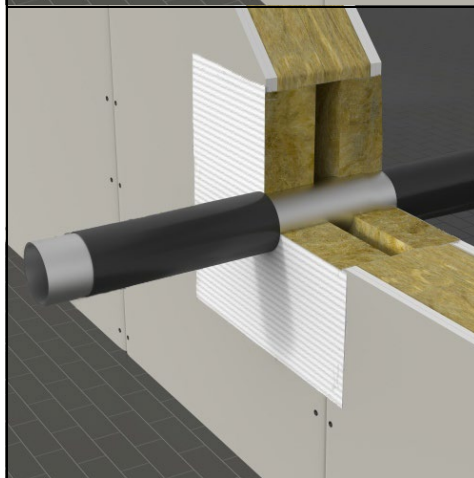
- 1: Rigid wall
- 2: Metal pipes
- 3: Filled with cement mortar
- 4: Intumescent paint **ALFA FR COAT I** on metal pipe
- 5: Intumescent paint **ALFA FR COAT I** on partition $a \geq 10$ mm

Fig. 2. Transition in a flexible wall $A \geq 125$ mm



- 1 – flexible wall
- 2 – metal pipe
- 3 – filled with cement mortar
- 4 – expanding paint **ALFA FR COAT I** on metal pipe
- 5 – expanding paint **ALFA FR COAT I** on partition $a \geq 10$ mm

Fig. 3. Wall opening $A \geq 125$ mm



- 1a – rigid wall
- 1b – flexible wall
- 2 – metal pipe
- 3 – filling 2 x **ALFA FR BOARD A** or 2 x mineral wool (minimum density 150 kg/m^3 , thickness min. 60 mm, coated on one side with **ALFA FR COAT A** with a dry film thickness ≥ 1.0 mm)
- 4. Intumescent paint **ALFA FR COAT I** on a metal pipe
- 5. Ablative coating **ALFA FR COAT A** on mineral wool filling and as an overlap on the partition $a \geq 10$ mm

METAL PIPES CEILINGS

Fig. 4. Transition in ceiling – filling with wool

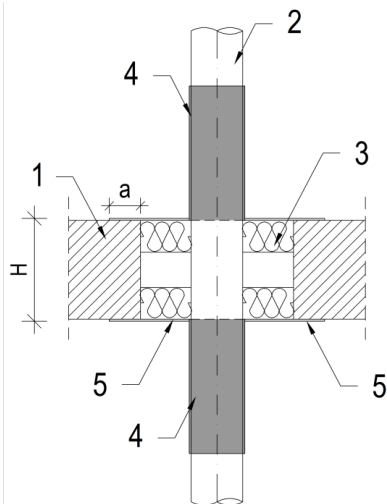
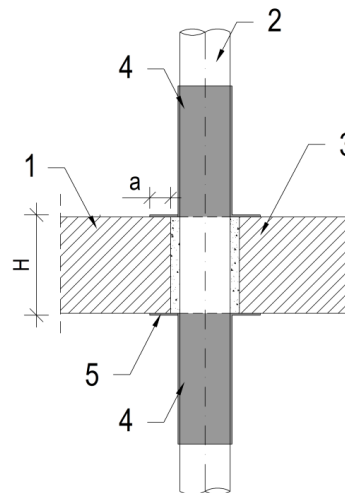


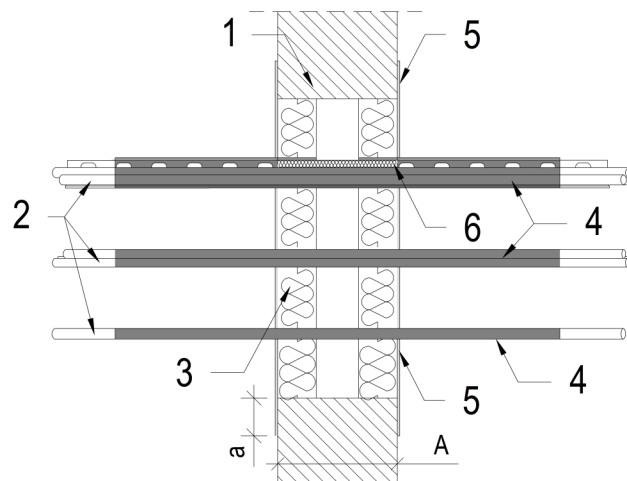
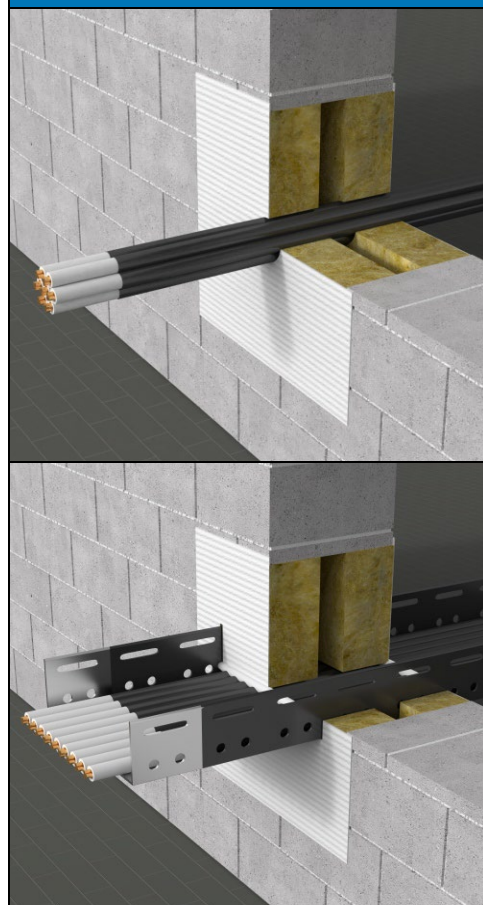
Fig. 5. Transition in ceiling – mortar filling



- 1 – rigid ceiling
- 2 – metal pipe
- 3 – Fig. 5 – filling with cement mortar / Fig. 4 – filling 2 x **ALFA FR BOARD A**
- 4 – intumescent paint **ALFA FR COAT I** on metal pipe
- 5 – Fig. 5 – intumescent paint **ALFA FR COAT I** overlap on the partition $a \geq 10$ mm / Fig. 4 - ablative coating **ALFA FR COAT A** on mineral wool filling and overlap on the partition $a \geq 10$ mm

CABLE PASS-THROUGHS WALLS

Fig. 6. Transition in rigid wall $A \geq 150$ mm



- 1 – rigid wall
- 2 – cables, BUNDLES of cables, cables in cable trays or cable ladders
- 3 – filling 2 x **ALFA FR BOARD A** or 2 x mineral wool (density ≥ 150 kg/m³, min. 60 mm thick, coated on one side with **ALFA FR COAT A** with a dry film thickness of ≥ 1.0 mm)
- 4 - Installations coated with **ALFA FR COAT I** intumescent paint
- 5 - Ablative coating **ALFA FR COAT A** on mineral wool filling and as a plant on a partition $a \geq 10$ mm
- 6 - Gaps filled with loose mineral wool or **ALFA FR MASTIC** fire protection compound