



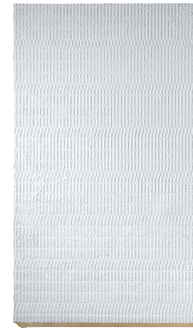
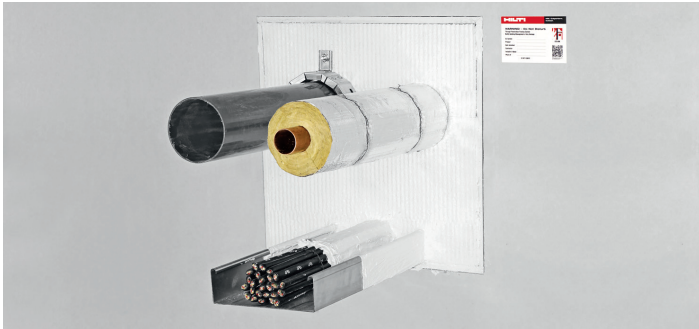
# FIRESTOP COATED BOARD SYSTEM CFS-CT (DOUBLE BOARD SYSTEM)

Technical Manual

European Technical Assessment  
ETA N° 11/0429



# FIRESTOP COATING CFS-CT



## Advantages

- EN testing for wide range of applications
- Single-layer coating – provides labor savings over multilayer coatings
- Dry film thickness 0.7 mm – up to 30% material savings compared to multilayer coatings
- Paintable, even on rough surfaces
- Flexible coating dries quickly to form an elastic protective layer

## Technical Data

<b>Color</b>	White
<b>Approx. Curing time</b>	1 mm/day
<b>Storage temperature</b>	-5 – +30 °C
<b>Application temperature</b>	+5 – +40 °C
<b>Temperature resistance</b>	-40 – +100 °C
<b>Shelf life</b>	15 months
<b>Can be painted</b>	Yes

## Applications

- Mixed penetrations in flexible and rigid walls from 100 mm and rigid floors from 150 mm
- Cables, cable bundles, cable trays and cable conduits
- Non-combustible (metal) pipes with non-combustible insulation
- Non-combustible (metal) and composite pipes with combustible insulation in combination with Firestop Bandage CFS-B or Firestop Collar CFS-C P
- Combustible pipes in combination with firestop collars CFC-C P or CFS-C or Firestop Wrap CFS-W
- Suitable for use with a wide variety of mineral wool boards

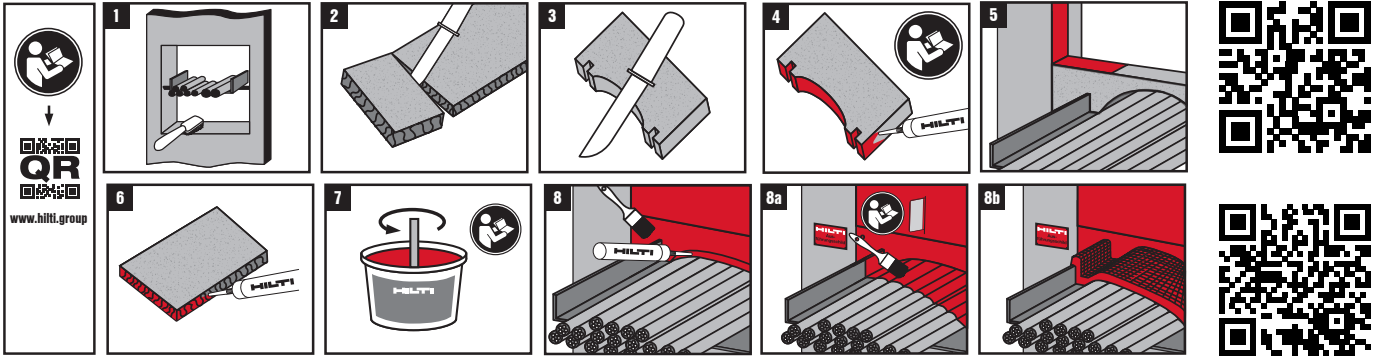


Product	Packaging	Content	Item Number
Firestop Coating CFS-CT, 18 kg, white	Pail	18 kg	2036607
Firestop Coating CFS-CT, 6 kg, white	Pail	6 kg	2036605
Firestop Acrylic Sealant CFS-S ACR CW, white	Cartridge	310 ml	435859
Firestop Acrylic Sealant CFS-S ACR PW, white	Pail	5 L	435864
Firestop Acrylic Sealant CFS-S ACR PW L, white	Pail	10 L	2046766
Firestop Board CFS-CT B 1S, white, 1000 mm × 600 mm × 50 mm	Cardboard box	5 boards	2036608

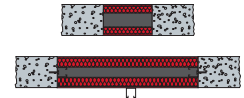
## INSTALLATION INSTRUCTIONS

### Consumption guide

Coating CFS-CT: dry film thickness of 0.7 mm (equivalent to wet film thickness of 1.1 mm): at least 1.6 kg coating per square meter.



## GENERAL INFORMATION

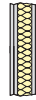


	Flexible Wall	Rigid Wall	Rigid Floor
<b>Partition</b>			
<b>Base material thickness (t<sub>E</sub>)</b>	≥ 100 mm	≥ 100 mm	≥ 150 mm
<b>Seal thickness</b>	≥ 100 mm		≥ 150 mm
<b>Max. opening size</b>	1200 mm × 1200 mm (blank seal: EI 120) 4000 mm × 800 mm (blank seal: EI 90)		600 mm × 1000 mm (blank seal: EI 120) 1200 mm × 1500 mm (reinforced) (blank seal: EI 90)
<b>Gap filler</b>	CFS-S ACR		
<b>Penetration</b>	Single cable and cable bundles, cable trays, small steel and plastic conduits, insulated steel and copper pipes (with mineral wool and foamed elastomeric insulation), plastic pipes (with and without foamed elastomeric insulation), aluminum composite pipes with foamed elastomeric insulation		

## RELATED ITEMS

Product	Packaging	Content	Item Number	Product	Packaging	Content	Item Number
Firestop Collar CFS-C 50/1.5"	Plastic bag	1 collar + 2 hooks	435417	Firestop Collar Endless CFS-C EL, 2580 mm × 52 mm × 5.6 mm	Cardboard box	2.58 m	2075120
Firestop Collar CFS-C 63/2"	Plastic bag	1 collar + 2 hooks	435418	Firestop Bandage CFS-B, 10000 mm × 125 mm × 2 mm	Cardboard box	10 m	429557
Firestop Collar CFS-C 75/2.5"	Plastic bag	1 collar + 3 hooks	435419	Firestop Wrap Strip CFS-W SG 50/1.5", 169 mm × 45 mm × 4.5 mm	Cardboard box	2 wrap strips	429549
Firestop Collar CFS-C 90/3"	Plastic bag	1 collar + 3 hooks	435420	Firestop Wrap Strip CFS-W SG 63/2", 210 mm × 45 mm × 4.5 mm	Cardboard box	2 wrap strips	429550
Firestop Collar CFS-C 110/4"	Plastic bag	1 collar + 4 hooks	435421	Firestop Wrap Strip CFS-W SG 75/2.5", 249 mm × 45 mm × 4.5 mm	Cardboard box	2 wrap strips	429551
Firestop Collar CFS-C 125/5"	Plastic bag	1 collar + 4 hooks	435422	Firestop Wrap Strip CFS-W SG 90/3", 311 mm × 45 mm × 9 mm	Cardboard box	2 wrap strips	429552
Firestop Collar CFS-C 160/6"	Plastic bag	1 collar + 4 hooks	435423	Firestop Wrap Strip CFS-W SG 110/4", 370 mm × 45 mm × 9 mm	Cardboard box	2 wrap strips	429553
Firestop Collar CFS-C P 50/1.5"	Plastic bag	1 collar + 2 hooks	435406	Firestop Wrap Strip CFS-W SG 125/5", 421 mm × 45 mm × 9 mm	Cardboard box	2 wrap strips	429554
Firestop Collar CFS-C P 63/2"	Plastic bag	1 collar + 2 hooks	435407	Firestop Wrap Strip CFS-W SG 160/6", 543 mm × 45 mm × 13.5 mm	Cardboard box	2 wrap strips	429555
Firestop Collar CFS-C P 75/2.5"	Plastic bag	1 collar + 3 hooks	435408	Firestop Wrap Strip CFS-W EL W45/1.8", 10000 mm × 45 mm × 4.5 mm	Cardboard box	1 wrap strips	429556
Firestop Collar CFS-C P 90/3"	Plastic bag	1 collar + 3 hooks	435409	Firestop Wrap Strip CFS-W P, 10000 mm × 50 mm × 2 mm	Cardboard box	10 m	2133384
Firestop Collar CFS-C P 110/4"	Plastic bag	1 collar + 4 hooks	435410	Firestop Sleeve CFS-SL GA M	Cardboard box	1 pc.	2178493
Firestop Collar CFS-C P 125/5"	Plastic bag	1 collar + 4 hooks	435411				
Firestop Collar CFS-C P 160/6"	Plastic bag	1 collar + 6 hooks	435412				
Firestop Collar CFS-C P 180/7"	Plastic bag	1 collar + 8 hooks	435413				
Firestop Collar CFS-C P 200/8"	Plastic bag	1 collar + 8 hooks	435414				
Firestop Collar CFS-C P 225/9"	Plastic bag	1 collar + 10 hooks	435415				
Firestop Collar CFS-C P 250/10"	Plastic bag	1 collar + 12 hooks	435416				

## MAIN APPROVED APPLICATIONS



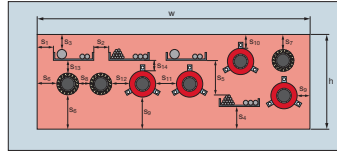
Penetration: cables	Cable Ø mm	Flexible wall	Rigid wall	Rigid floor
All sheathed cables	≤ 80	EI 90 with additional protection of 2 mm CFS-CT coating (200 mm length on both sides)  EI 120 with additional protection of 30 mm mineral wool mat, Al-facing outside (200 mm length on both sides)		EI 120 with additional protection of 30 mm mineral wool mat, Al-facing outside (200 mm length on both sides)
Tied cables* bundles Ø 100 mm	≤ 21		EI 120 with additional protection of 30 mm mineral wool mat, Al-facing outside (200 mm length on both sides)	
Non-sheathed cables	≤ 24	EI 120 with additional protection of 20 mm mineral wool mat, Al-facing outside (200 mm length on both sides)		EI 60 with additional protection of 1 mm CFS-CT coating (200 mm length on both sides)
Penetration: conduits	Conduit Ø mm	Flexible wall	Rigid wall	Rigid floor
Plastic conduits and tubes with or without cables	≤ 16			EI 90-U/U with additional protection of 30 mm mineral wool mat, Al-facing outside (200 mm length on both sides)
Steel conduits and tubes with or without cables	≤ 16	EI 120-U/U with additional protection of 30 mm mineral wool mat, Al-facing outside (200 mm length on both sides)		EI 90-C/U with additional protection of 30 mm mineral wool mat, Al-facing outside (200 mm length on both sides)

Excerpt of ETA document. Check the exact field of application for each penetration (type, diameter) in the ETA 11/0429 document.  
 For wall installation, maximum distance of 1st service support is 250 mm.  
 For floor installation, maximum distance of 1st service support is 100 mm.

No penetration	Max. opening size (mm)	Flexible walls	Rigid walls	Rigid floors
Blank seal – wall	1200 x 1200	EI 120	EI 120	-
Blank seal – rigid wall ≥ 250 mm thick	1200 x 2000	-	EI 90	-
Blank seal – rigid wall ≥ 250 mm thick	4000 x 800	-	EI 90	-
Blank seal – floor	600 x 1000	-	-	EI 180
Blank seal – floor with support	1200 x 1500	-	-	EI 90

## OTHER APPROVED APPLICATIONS

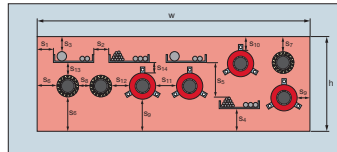
### Distance requirements for walls



Minimum distance between services and edges is 0 mm, except:

- 50 mm between cables and cable supports above them (S<sub>5</sub>)
- 3 mm between metal pipes and seal edge (S<sub>6</sub>) and upper seal edge (S<sub>7</sub>), respectively
- 17 mm between plastic pipes/pipe closure device and seal edge (S<sub>8</sub>) and upper seal edge (S<sub>10</sub>), respectively
- 30 mm between metal pipes and plastic pipes/pipe closure device (S<sub>12</sub>)
- 3 mm between cables/cable supports and metal pipes
- 40 mm between cables/cable supports and plastic pipes/pipe closure device

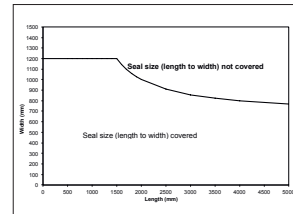
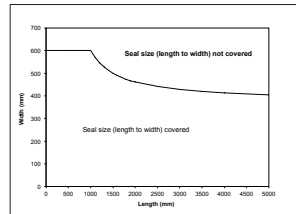
### Distance requirements for floors



Minimum distance between services and edges is 0 mm, except:

- 50 mm between cable and cable support above them (S<sub>5</sub>)
- 10 mm between metal pipes and seal edge (S<sub>6</sub>)
- 20 mm between metal pipes
- 30 mm between metal pipes and plastic pipes/pipe closure device (S<sub>12</sub>)
- 30 mm between cables/cable supports and metal pipes
- 32 mm between cables/cable supports and plastic pipes/pipe closure device

### Maximum seal size for floors



### Metal pipes with mineral wool insulation

Copper pipes up to Ø 88.9 mm, Steel pipes up to Ø 323.9 mm

### Metal pipes with foamed elastomeric insulation with Firestop Bandage CFS-B

Copper pipes up to Ø 88.9 mm, Steel pipes up to Ø 159.0 mm

### Plastic pipes with Firestop Collar CFS-C and CFS-C P

Plastic pipes up to diameter Ø 160 mm

### Plastic pipes with Firestop Wrap CFS-C W

Plastic pipes up to diameter Ø 125 mm

### Plastic pipes with Firestop Collar Endless CFS-C EL

Plastic pipes up to diameter Ø 110 mm

### Aluminum composite pipes with mineral wool insulation

Aluminum composite pipes up to diameter Ø 75 mm

### Aluminum composite pipes with foamed elastomeric insulation with Firestop Collar CFS-C P

Aluminum composite pipes up to diameter Ø 63 mm

### Aluminum composite pipes with foamed elastomeric insulation with Firestop Collar CFS-C P

Aluminum composite pipes up to diameter Ø 63 mm

### Aluminum composite pipes with foamed elastomeric insulation with Firestop Bandage CFS-B

Aluminum composite pipes up to diameter Ø 63 mm

### Cables with Firestop Sleeve CFS-SL M

All sheathed cables up to Ø 21 mm

## CHARACTERISTICS OF CFS-CT

Characteristics	Assessment of characteristics	Norm, standard, test
<b>Air permeability</b>	Tested for gas permeability using air, nitrogen (N <sub>2</sub> ), carbon dioxide (CO <sub>2</sub> ) and methane (CH <sub>4</sub> ). See ETA 11/0429 for detailed results.	EN 1026
<b>Water permeability</b>	Watertight to 1000 mm head of water or 9806 Pa. for 0.7 mm dry film thickness.	ETAG 026-2
<b>Health and the environment</b> Dangerous substances	Below any respective occupational exposure limits as far as such limits exist (compared with the list of dangerous substances of the European Commission)	Material safety data sheet
<b>Protection against noise</b> Airborne sound insulation	Detailed test results, see ETA 11/0429.	EN ISO 140-3 EN ISO 20140-10 EN ISO 717-1
<b>Safety in use</b> Mechanical resistance and stability Resistance to impact/movement	Highest risk zone type has been fulfilled (Type IV) <b>Safety in use:</b> Soft body impact: energy 500 Nm. Hard body impact: energy 10 Nm <b>Serviceability:</b> Soft body impact: energy 120 Nm. Hard body impact: energy 6 Nm. Maximum dimension of the penetration seal is 1.0 × 1.5 m. In case of horizontal penetrations, precautions have to be taken to prevent a person stepping onto the penetration seal.	EOTA Technical Report TR001: A1
<b>Adhesion</b>	It is assumed that verification of adequate adhesion is covered by the impact test (see above).	
<b>Thermal properties</b>	CFS-CT B 1S: $\lambda_{10} = 0.039 \text{ W/mK}$ . Insulation performance of mineral wool slab slightly reduced by the coating.	EN 12667
<b>Durability and servicability</b>	Category Y <sub>2</sub> (suitable for penetration seals intended for use at internal dry conditions with temperatures between -20 °C and +70 °C with no exposure to rain nor UV. Y <sub>2</sub> (-20/+70) °C.	EOTA Technical Report TR 024 ETAG 026-2
<b>Reaction to fire</b>	Coating: Class D-s2 d0 Precoated Board: Class A1	EN 13501-1



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