Manuals+ — User Manuals Simplified.

HILTI Firestop Rectangular Cable Collar CFS-RCC Instruction Manual

Contents

HILTI Firestop Rectangular Cable Collar CFS-RCC

FIRESTOP CABLE COLLAR CFS-RCC

Applications

- Flexible solution for cables, conduits, cable trays and pipes in concrete, masonry and drywall applications
- For new and existing penetrations in floors and walls
- Especially suitable for renovation projects under difficult conditions
- Can be used to seal old/damaged fire compartment penetrations without removing the existing material

Advantages

- Broad approval range – also covers mixed penetrations and mechanical penetrations with metal pipes up to 114 mm and plastic pipes up to 50 mm
- Modular system – fast and easy to install, no mortar or mineral wool required
- Surface-mounted solution – perfect for use at openings with 100% cable fill
- Excellent solution for irregular openings
- Time-saving, dust-free solution – no need for framework for drywall applications, no chiseling work on solid walls necessary
- Preformed product – immediately functional after installation
- Reliable solution – easy to inspect
- Re-penetrable – allows easy increase in future cable capacity
- Also suitable for single-sided applications for floor and wall openings
- Green building – contains no halogens, solvents or asbestos.
- LEED information available

Technical Data

Base material	Concrete, aerated concrete, drywall, masonry
Chemical basis	Polyurethane foam
Color	Red
Complementary products	CFS-FIL, CFS-F FX, CFS-P BA, CP636
Intumescent	Yes
Expansion temperature (approx.)	200 °C
Expansion ratio (unrestricted, up to)	1:3
Application temperature range	5 – 40 °C
Storage and transportation temperature range	–5 – 40 °C
Temperature resistance range	–15 – 60 °C

Order designation	Package contents	Minimum order quantity	Item number
CFS-RCC firestop cable collar	2	2	2126526
CFS-RCC EXT firestop cable collar	2	2	2126527

FIRESTOP FILLER MASTIC CFS-FIL

Applications

- For use with Hilti Firestop Cable Collar CFS-RCC (gap filling)

Advantages

- Can be used with Hilti dispenser CFS-DISP

Order designation	Package contents	Minimum order quantity	Item number
Firestop Filler Mastic CFS-FIL	310 ml	1 pc	2052899

CFS-F FX FIRESTOP FOAM

Applications

- For use with Hilti Firestop Cable Collar RCC (gap filling)
- For use with Hilti Firestop Cable Collar (polyurethane inlay replacement on both sides)
- For use with Hilti Firestop Cable Collar (wall opening filling for single-sided application)

Advantages

- Can be used with Hilti HDM 330 Manual Dispenser and HDE 500-A22 Cordless Dispenser
- Allows rough cutting of the polyurethane inlay

Order designation	Package contents	Item number
CFS-F FX Firestop foam	incl. 1 mixing nozzle, instructions for use	429802

FIRESTOP PUTTY BANDAGE CFS-B PA

Applications

- For use with Hilti Cable Collar CFS-RCC
- For specific cable configurations, to achieve EI 120

Advantages

- Easy to cut
- Self-adhesive

Order designation	Packing content	Minimum order quantity	Item number
Firestop Putty Bandage C FS-PBA	5 m	1 pc	2062876

CP 636 FIRESTOP MORTAR

Applications

- Permanent firestopping of cables, cable trays, and noncombustible pipes in medium-to-large wall and floor openings
- Single, multiple and mixed penetrations
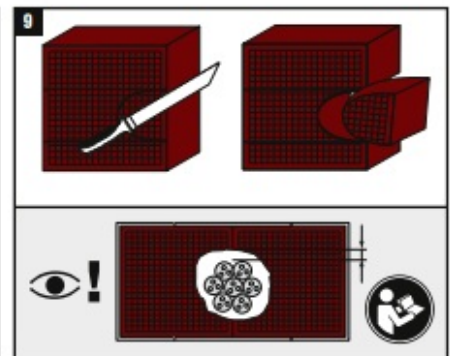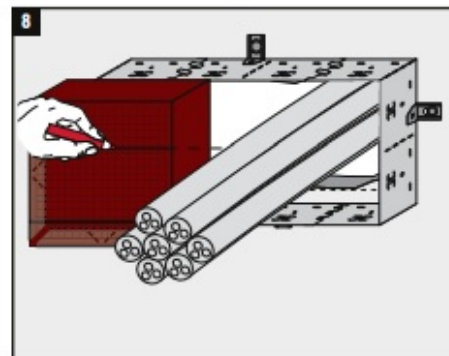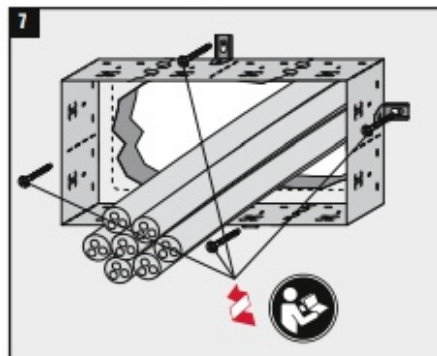- Medium-large multiple penetrations in concrete and masonry in combination with other products
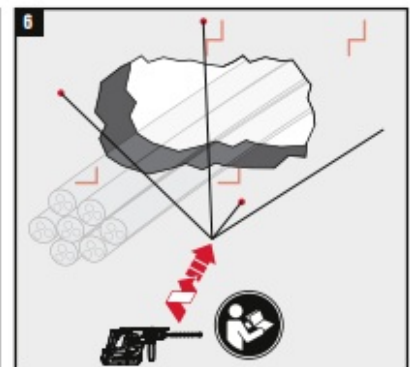
Advantages

- Easier to install – consistency can be varied for application with a trowel or commercially available pumps
- Excellent thermal insulating properties
- Minimal shrinkage during curing and no spalling in event of fire

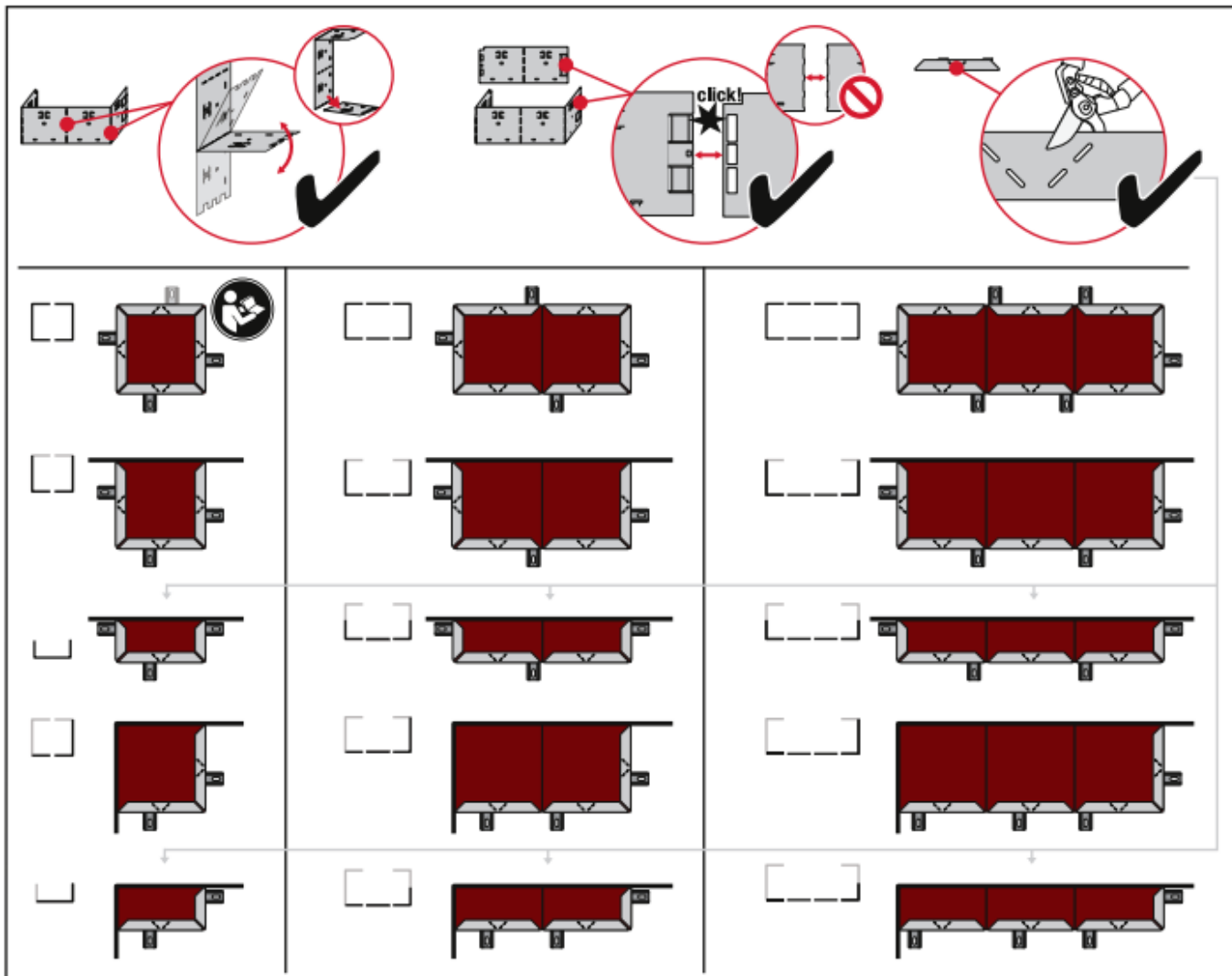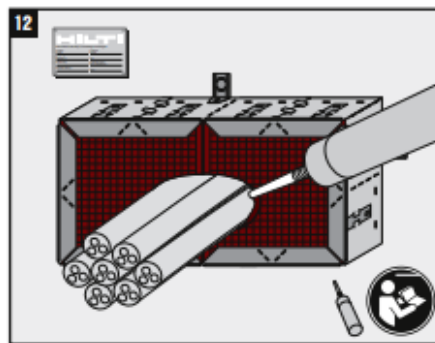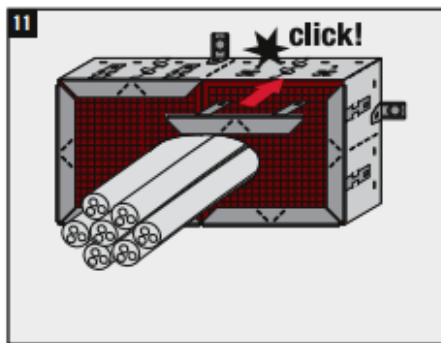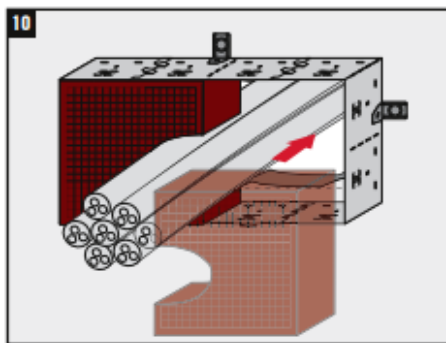| Order designation	Packing content	Minimum order quantity	Item number
CP 636 Firestop Mortar	20 kg	1	334897

INSTALLATION INSTRUCTIONS

CFS-RCC
#2126526

2x

4x

8x

8x

CFS-RCC EXT
#2126527

2x

4x

4x

4x

1

x

y ≤ 162 mm

y

x ≤ 162 mm 1x CFS-RCC
x ≤ 362 mm 1x CFS-RCC + 1x CFS-RCC EXT
x ≤ 562 mm 1x CFS-RCC + 2x CFS-RCC EXT

2

? x

min. 3x   min. 4x   min. 6x

3

✔ 🚫

4

1   2

3

5

>19 mm

>19 mm

6

7

8

9
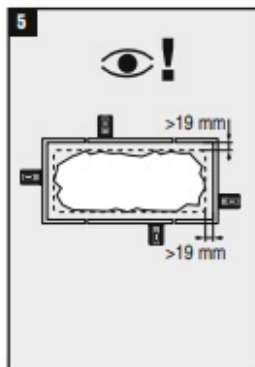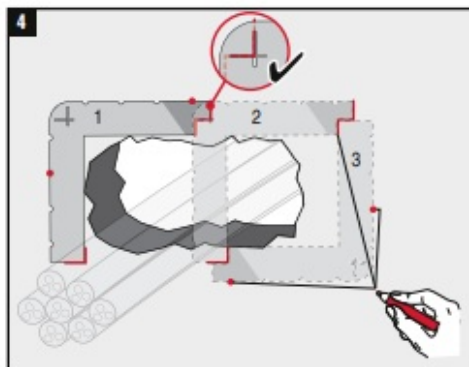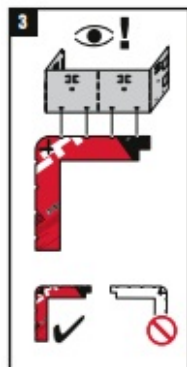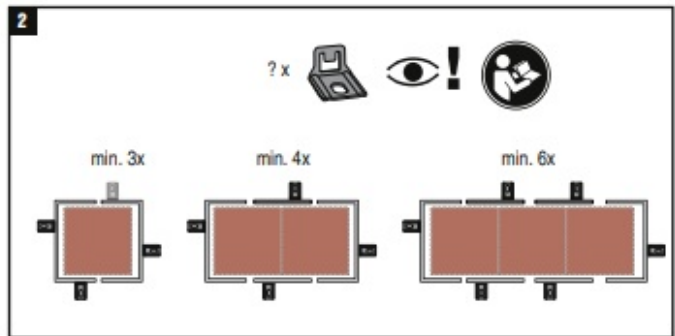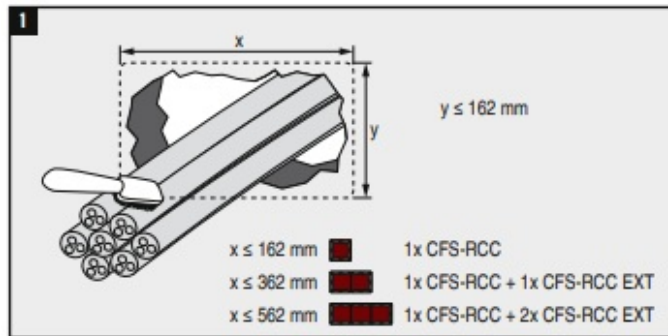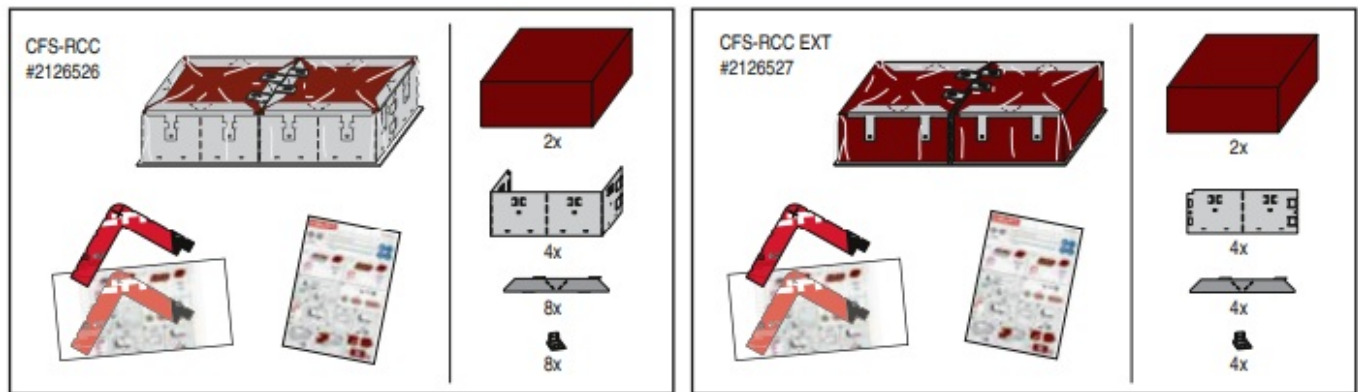
GENERAL INFORMATION
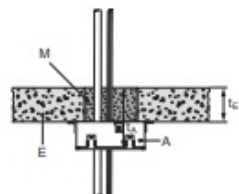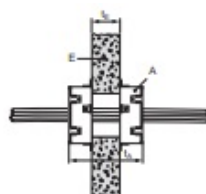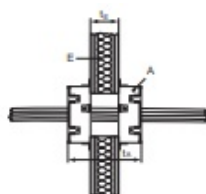
Partition	Flexible wall	Rigid wall	Floor
Base material thickness (t$_E$)	≥ 100 mm	≥ 100 mm	≥ 150 mm
Opening size*	≤ 181 x 581 mm		
Total service surface	≤ 60% of surface of the opening		
Penetration	Blank seal, cables and cable bundles, waveguides, conduits (flexible/rigid, metal/plastic), Insulated and non-insulated pipes (metal/plastic), aluminium composite pipes, mixed and special penetrations e.g. climasplit		

MAIN APPROVED APPLICATIONS

Penetration	Penetration Ø	Flexible wall	Rigid wall	Rigid floor
Blank seal		EI120		EI180
Small cables	≤ 21mm	EI120		EI180
	21 ≤ Ø ≤ 80 mm	EI90		EI180
Cable bundle	Ø ≤ 150 mm	EI120		
Waveguides	Ø ≤ 59.9 mm	EI120		EI180
Conduits	Ø ≤ 16 mm	EI120		EI180
	Ø ≤ 50 mm	EI120		EI120
Conduit bundle	Ø ≤ 80 mm	EI120		EI120
Special penetration bundle	Ø ≤ 80 mm	EI120		
Plastic pipes	Ø ≤ 50 mm	EI120		EI180
Copper pipes with combustible insulation	Ø ≤ 42 mm	EI120		EI180
Copper pipes with non-combustible insulation	Ø ≤ 42 mm	EI120		EI120
	Ø ≤ 28 mm			EI180
Steel pipes with combustible insulation	Ø ≤ 108 mm	EI120		EI120
	Ø ≤ 114 mm	EI90		
Steel pipes with non-combustible insulation	Ø ≤ 108 mm	EI120		
	Ø ≤ 114 mm	EI90		
Aluminum composite pipes with combustible insulation	Ø ≤ 42 mm	EI120		EI180
Mixed seals without electrical cables	View ETA please	EI60 / EI90 / EI120		
Mixed seals with large electrical cables		EI90		

RELEVANT CONSIDERATIONS

Configuration types: basic, side, corner				

Seal and opening sizes

Dimensions [mm × mm]	Basic configuration	Corner configuration	Side configuration
Seal	200 × 200 (single), 200 × 400 (double), 200 × 800 (triple)		
Opening [W₁ × W₂]	162 × 162 (single)	181/81 × 181 (single)	181/81 × 162 (single)
	162 × 362 (double)	181/81 × 381 (double)	181/81 × 362 (double)
	162 × 562 (triple)	181/81 × 581 (triple)	181/81 × 562 (triple)

Number of fastening points

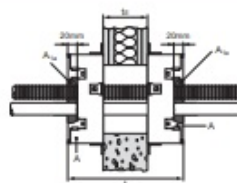|	Basic	Corner	Side
Basic configuration	3	4	6
Side configuration	3	3	4
Corner configuration	2	3	4

Seal types

Both sides at the end wall/floor
Both sides + foam inlay at the end wall/floor
Single-sided application with FX foam
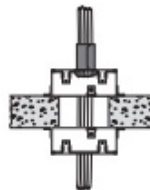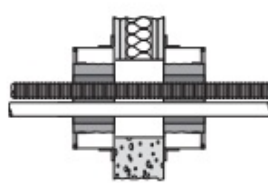
Filling gaps in penetration seals

Gaps between services and the Hilti Firestop Cable Collar are to be filled with Hilti CFS-FIL Firestop Filler.

**Application with existing firestop installations or in renovation**

Old materials can remain inside opening between two Hilti cable collars. These have no negative influence on the fire resistance performance of the collar system.
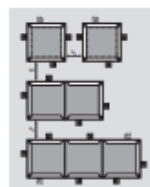
Angle of penetrating services

Cables must lie perpendicular to the seal surface. In this case, up to 2 metal segments can be removed to make space for cable penetration. Three fixing hooks must be used to fasten the collar.
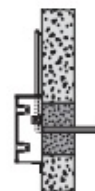
Distances between cluster arrangements, distances for penetrations and distances to support structures

Special penetrations e.g. Climasplit, mixed penetrations
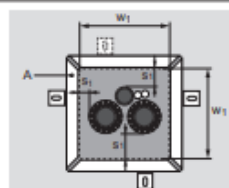
CHARACTERISTICS OF FIRESTOP CABLE COLLAR CFS-RCC

Hilti firestop products are comprehensively tested and individually tailored to the technical requirements of a

building's mechanical and electrical installations. In addition to their superior behavior in passive fire protection, Hilti firestop products also meet the requirements in building technology that continue to gain significance and also help the designer and installer to meet these additional requirements. The assessment of fitness for use has been made in accordance with EOTA ETAG No 026 – Part 2.

Characteristics	Assessment of characteristics	Norm, standard, test
Health and the environment 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)	VOC test report in accordance with AgBB (2015) and AFSSET (2009). French VOC regulation (2011). French CMR components (2011). Belgian Regulation (2015). Indoor Air Comfort® (2015). BREEAM International. LEED 4
Protection against noise (airborne sound insulation)	CFS-RCC=Rw (C; Ctr)=63 (-3; –9) dB	EN ISO 140-1. EN 10140-2. EN ISO 717-1
Thermal properties	Thermal conductivity λ = 0.089 W/mK and thermal resistance r = 0.55 m2K/W	EN 12667
Electrical properties	Electrical volume resistivity: approx. 2.23E+9 Ω cm Electrical surface resistivity: approx. 47.1E+9 Ω cm	IEC 60093 (VDE 0303 Part 30): 1993-12
Durability and serviceability	Overall: Category Z2 (for internal use at low humidity)	EOTA TR 024:2009
Reaction to fire	Class E	EN 13501-1

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Documents / Resources

HILTI Firestop Rectangular Cable Collar CFS-RCC [pdf] Instruction Manual
Firestop Rectangular Cable Collar CFS-RCC, Firestop Cable Collar, Rectangular Cable Collar CFS-RCC, CFS-RCC

References

- **HILTI Country selector**
- **Power Tools, Fasteners and Software for Construction - Hilti USA**

Manuals+,