



HILTI FIRESTOP SLEEVE CFS-SL GA

European Technical Approval
ETA N° 17/0081



FIRESTOP SLEEVE CFS-SL GA

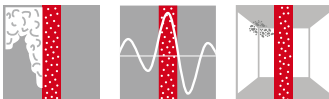


APPLICATIONS

- Sealing penetrations for single cables and cable bundles
- Suitable for small to medium-sized circular openings in walls and ceilings
- For use on drywall, concrete, masonry and sandwich panel
- Ideal solution when cable configurations are regularly changed, such as in data centers, server rooms, hospitals, event halls or production plants
- Firestop sleeves can be used together with gangplate for optimal use of space with professional designs

ADVANTAGES

- Easy to install and to inspect
- Fully functional immediately after installation
- Cable fill up to 100%
- Optimum airflow control
- Conduits up to $\varnothing \leq 63$ mm
- Easy subsequent installation of additional cables
- Fire resistance rating of up to 2 hours



Technical Data

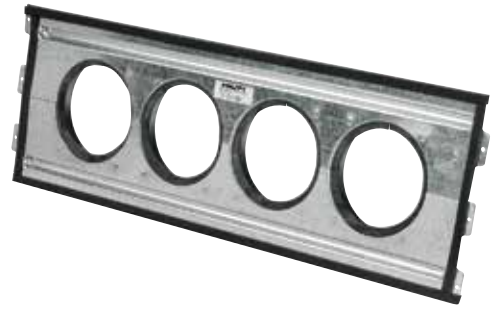
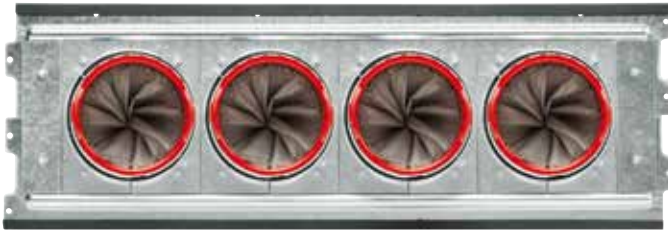
Base materials	Drywall, Concrete, Masonry, Sandwich panel
Approvals	ETA 17/0081
Repenetration	Easy
Airflow control	Test report available
Application temperature range	-5 – 50° C
Application resistance range	-30 – 100° C
Reaction to fire class (EN 13501-1)	E
Max. annular space	7 mm
Shelf life¹	Not relevant
Mould and mildew resistant	Yes

1) at 77° F/25° C and 50% relative humidity; from date of manufacture



Order designation	Outside diameter	Recommended opening size	Wall/Floor thickness	Sales pack quantity	Item number
CFS-SL GA Small	63 mm	66 – 73 mm	100-200 mm	1 pc	2178492
CFS-SL GA Medium	110 mm	113-122 mm	100-200 mm	1 pc	2178493
CFS-SL GA Long	110 mm	113-122 mm	200-300 mm	1 pc	2178494

FIRESTOP GANGPLATE CFS-SL GP



APPLICATIONS

- New and renovation construction projects, increases cable capacity and productivity
- For use on drywall, concrete, masonry and sandwich panel
- Accommodates all Hilti Firestop Sleeves M and L sizes (CFS-SL and CFS-SL GA)
- Easily surface mounted with neat appearance

ADVANTAGES

- Gangplates can be stacked in columns
- Assembling Firestop Sleeves in high cable volume environments such as data centers, hospitals and server rooms
- Pre-assembled, ready-to-use right out of the package – no assembly required
- Gangplate cap available for blank openings and future capacity

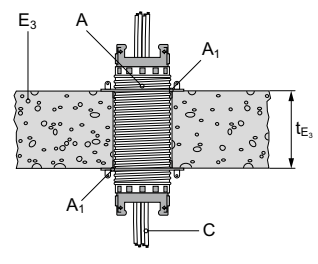
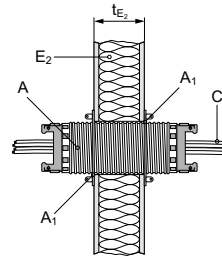
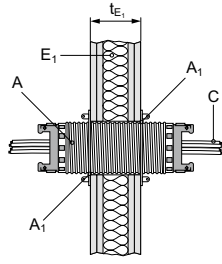
Technical Data

Base materials	Drywall, Concrete, Masonry, Sandwich panel
Approval	ETA 17/0081
Number of ganged devices supported	3 or 4
Types of device	CFS-SL M, CFS-SL GA M, CFS-SL L, CFS-SL GA L
Application temperature range	-5 – 50° C
Application resistance range	-30 – 100° C
Reaction to fire class (EN 13501-1)	E
Shelf life	not relevant
Mold and Mildew resistant	Yes

Order designation	Outside Width	Outside Height	Recommended opening size	Numbers of openings	Wall thickness	Sales pack quantity	Item number
CFS-SL GP 16" / 40	420 mm	210 mm	113 – 122 mm	3	100 – 300 mm	2 pc	2064273
CFS-SL GP 24" / 60	620 mm	210 mm	113 – 122 mm	4	100 – 300 mm	2 pc	2064274
CFS-SL GP CAP	127 mm	140 mm	-	-	-	1 pc	2064275

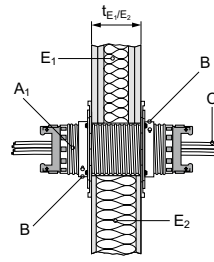
MAIN APPROVED APPLICATIONS

FIRESTOP SLEEVE CFS-SL GA



Partition	Flexible & Rigid walls	Sandwich Panels	Rigid floor
Base material thickness (t_E)	≥ 100 mm	≥ 100 mm	≥ 150 mm
Opening diameter	CFS-SL GA Small: 63 – 73 mm, CFS-SL GA Medium/Long: 113 – 122 mm		
Fixing to wall Gap filler	No fixing required. Flanges hold device in place No gap filler required, smoke gasket seals the gap. CFS-ACR can be used for higher ratings		
Penetrations	Sheathed Cables & Conduits		








FIRESTOP GANGPLATE CFS-SL GP




Partition	Flexible & Rigid walls	Sandwich Panel
Base material thickness (t_E)	≥ 100 mm	≥ 100 mm
Opening diameter	CFS-SL GA Medium/Long: 113 – 122 mm	
Fixing to wall	Drywall screws	Self drilling screws
Penetrations	Sheathed Cables	

RESISTANCE TO FIRE CLASSIFICATIONS

200 mm distance between Openings

	Penetration	Cable ø mm	Flexible wall/Rigid Wall		Sandwich Panel		Rigid floor
			100 – 200mm	200 – 300mm	100mm	150mm	150 – 200mm
	All sheathed cables		EI 90 (CFS-SL GA Small)	EI 90 ⁽¹⁾ (CFS-SL GA Long)	EI 45 (CFS-SL GA Small)	EI 60 (CFS-SL GA Small)	EI 120 (CFS-SL GA Small)
	Tied cable bundle 100% Filled	≤ 21	EI 90 ⁽¹⁾ (CFS-SL GA Medium)		EI 90 (CFS-SL GA Medium)	EI 90 ⁽⁴⁾ (CFS-SL GA Medium)	
				EI 60 ⁽²⁾ (CFS-SL GA Small)	EI 90 (CFS-SL GA Long)	EI 45 (CFS-SL GA Small)	EI 60 (CFS-SL GA Small)
	All sheathed cables	≤ 50	EI 90 (CFS-SL GA Medium)	EI 90 (CFS-SL GA Long)	EI 90 (CFS-SL GA Medium)	EI 90 (CFS-SL GA Medium)	EI 120 (CFS-SL GA Medium)
	All sheathed cables	≤ 80	EI 60 (CFS-SL GA Medium)	E60 (CFS-SL GA Long)	-	-	EI 60 (CFS-SL GA Medium)
	None (blank Seal)	-	EI 120 (CFS-SL GA Small)	EI 120 (CFS-SL GA Long)	EI 45 (CFS-SL GA Small)	EI 90 (CFS-SL GA Small)	EI 120 (CFS-SL GA Small)
			EI 120 (CFS-SL GA Medium)		EI 90 (CFS-SL GA Medium)	EI 90 ⁽⁶⁾ (CFS-SL GA Medium)	EI 120 (CFS-SL GA Medium)
	All Conduits Felx/Rigid	≤ 25	EI 120 (CFS-SL GA Small)	-	-	-	EI 120 (CFS-SL GA Small)
	All Conduits Felx/Rigid	≤ 63	EI 90 ⁽⁵⁾ (CFS-SL GA Medium)	EI 90 ⁽⁴⁾ (CFS-SL GA Long)	-	-	EI 120 (CFS-SL GA Medium)

Using Gangplate

	All sheathed cables	≤ 21	EI 120 (CFS-SL GA Medium)	EI 120 (CFS-SL GA Long)	EI 60	EI 120	-
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Excerpt of ETA document. Check the exact field of application for configuration in the ETA 17/0081 document.

Notes:

* For higher Fire Classifications

- Seal annular gap with CFS-S ACR instead of Rubber Gasket:
 - All sheathed cables ≤ 21 mm EI 120
 - 100% filled device with cables ≤ 21 mm EI 90
 - Conduits ≤ 63 mm EI 120
- In 150mm thick Sandwich Panel, use putty behind flanges and around cables
 - All sheathed cables ≤ 21 mm EI 120
 - 100% filled device with cables ≤ 21 mm EI 120
 - Blank device EI 120

* For Zero distance classifications – see ETA

*All sheathed cable types currently and commonly used in building practice in Europe (e.g. power, control, signal, telecommunication, data, optical fiber cables)



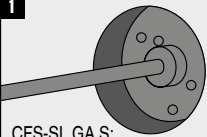
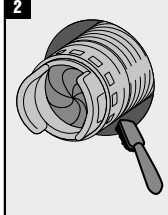
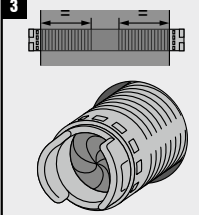
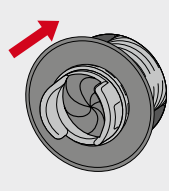
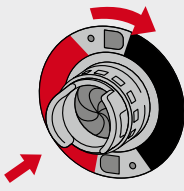
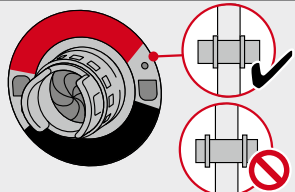
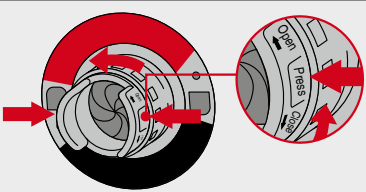
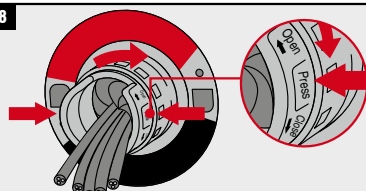
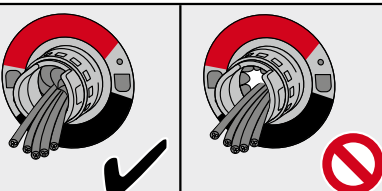
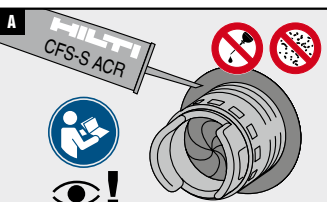
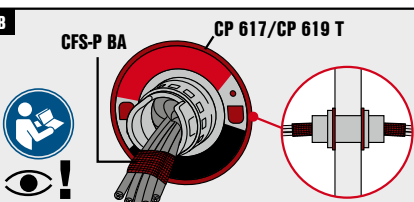
Estimated Maximum number of cables per device

Type	Dia	Example Spec	Nr of Cables	
			Small Device	Medium/Long Device
CAT Cables	5 – 8 mm	CU 7002 4P (AWG23)	19 – 56	109 – 287
Small Cables	11 – 14 mm	NYY-J 5x1,5 RE VV 5x1,5 N2XH-J 5x1,5RE N2XH-O 5x1,5RE H07RN-F 5G1,5	7	38
	15 – 17 mm	A-2YL2Y St III Bd: solid PE	3 – 5	19 – 26
	18 – 21 mm	NYY-J 1x95RM NYY-O 1x95RM VV 1x95	2 – 3	14 – 19
Medium Cables	23 – 25 mm	NYY-J 1x185RM NYY-O 1x185RM VV 1x185	1	2 – 8
	38 – 45 mm	NYCWY 4x95SM/50 H07RN-F 4G95 N2XH-J 4x95SM N2XH-O 4x95SM	1	2 – 3
Large Cables	55 – 60 mm	NYCWY 4x185SM/95 H07RN-F 4G185 N2XH-J 4x185SM N2XH-O 4x185SM	0	1

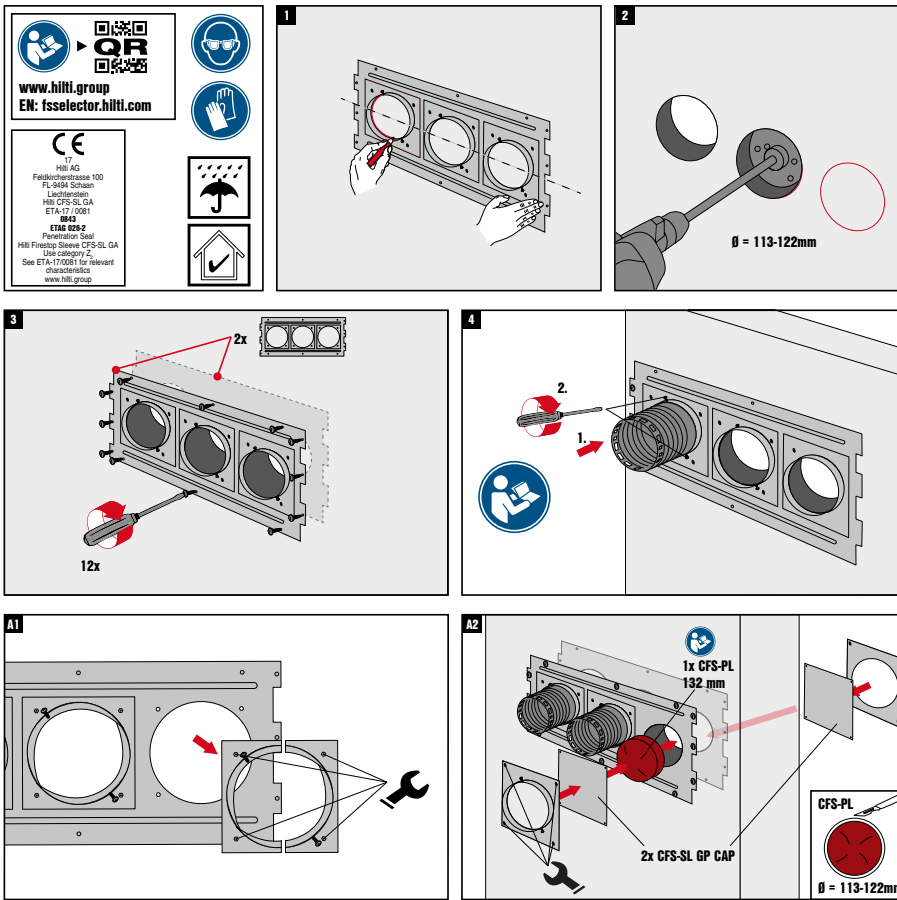
CHARACTERISTICS OF CFS-SL GA

Characteristics	Assessment of characteristics	Norm, standard, test
Health and the environment Dangerous substances	According to the Manufacturer's Declaration, the product specification has been compared with the list of dangerous substances of the European Commission to verify that that it does not contain such substances above the acceptable limits. CFS-SL GA is in compliance concerning the registration, evaluation, authorisation and restriction of Chemicals (REACH).	Material safety datasheet
Durability and serviceability	Hilti Firestop Sleeve CFS-SL GA has been assessed for the Z2 use category, and the results of the tests have demonstrated suitability for penetration seals intended for use at internal conditions with humidity classes other than Z1, excluding temperatures below 0 °C ("internal dry conditions").	ETAG 026-2
Reaction to fire	Class E	EN 13501-1
Air permeability (Device 0% Filled) (CFS-SL GA M/L)	Pressure	Leakage
	10 Pa	0.24 m ³ /(h)
	50 Pa	0.83 m ³ /(h)
	100 Pa	1.38 m ³ /(h)
	150 Pa	1.83 m ³ /(h)
	200 Pa	2.21 m ³ /(h)
	250 Pa	2.59 m ³ /(h)
	300 Pa	2.95 m ³ /(h)
	450 Pa	3.94 m ³ /(h)
600 Pa	4.79 m ³ /(h)	
		EN 1026:2000

INSTRUCTIONS FOR USE FIRESTOP SLEEVE CFS-SL GA

 <p>www.hilti.group EN: fsselector.hilti.com</p> 	<p>1</p>  <p>CFS-SL GA S: Ø = 63 – 73 mm CFS-SL GA M/L: Ø = 113 – 122 mm</p>	<p>2</p> 	<p>3</p> 
<p>4</p> 	<p>5</p> 		
<p>6</p> 	<p>7</p> 		
<p>8</p> 	<p>9</p> 		
<p>A</p>  <p>CFS-S ACR</p>	<p>B</p>  <p>CFS-P BA CP 617/CP 619 T</p>		

INSTRUCTIONS FOR USE FIRESTOP GANGPLATE CFS-SL GP





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