

# HILTI

**Technical  
Data Sheet**

**Hilti Firestop  
Wrap strip  
CFS-W SG  
CFS-W EL**

**European  
Technical Approval  
ETA N° 10/0405**



Issue 10 / 2017

## Firestop wrap strip CFS-W SG

Firestopping for flammable pipes from 50 mm up to 160 mm in diameter with pre-cut wraps strips with European Technical Approval.



### Applications

- Sealing flammable pipes from 50 mm to 160 mm in diameter in penetrations through fire compartment walls and floors
- Pipe materials: PE, PE-HD, PVC-U, PVC, PVC-C
- Suitable for use in openings in concrete, aerated concrete, masonry and drywall
- Different backfilling and sealing materials are covered

### Advantages

- Quick and easy closure without tools
- Ready-to-use pre-measured wrap strips for quick installation
- Sound decoupling strip based on PE (foam) can be used
- Ideal for very tight installations

### Technical data

	CFS-W SG
Storage and transportation temperature - range	-5 °C - 50 °C
Expansion temperature	> 180 °C
Expansion ratio	1:15 load expansion, load = 5g/cm <sup>3</sup>
Compatibility other Hilti Firestop Products	Hilti Firestop Acrylic Sealant CFS-ACR

The European Technical Approval (ETA) and the technical data sheet can be obtained via your local Hilti contact.

Dimensions (LxWxH)	Nominal pipe diameter	Recommended opening size	Order designation	Sales Quantity	Item Number
169 x 45 x 4.5 mm	50 mm	67 mm	<b>Firestop wrap strip CFS-W SG 50/1.5"</b>	2	00429549
210 x 45 x 4.5 mm	63 mm	77 mm	<b>Firestop wrap strip CFS-W SG 63/2"</b>	2	00429550
249 x 45 x 4.5 mm	75 mm	92 mm	<b>Firestop wrap strip CFS-W SG 75/2.5"</b>	2	00429551
311 x 45 x 9 mm	90 mm	112 mm	<b>Firestop wrap strip CFS-W SG 90/3"</b>	2	00429552
370 x 45 x 9 mm	110 mm	132 mm	<b>Firestop wrap strip CFS-W SG 110/4"</b>	2	00429553
421 x 45 x 9 mm	125 mm	152 mm	<b>Firestop wrap strip CFS-W SG 125/5"</b>	2	00429554
543 x 45 x 13.5 mm	160 mm	202 mm	<b>Firestop wrap strip CFS-W SG 160/6"</b>	2	00429555

# Firestop wrap strip CFS-W EL

Firestopping for flammable pipes from 50 mm up to 160 mm with endless wraps strip providing an European Technical Approval.



### Applications

- Sealing flammable pipes from 50 mm to 160 mm in diameter in penetrations through fire compartment walls and floors
- Pipe materials: PE, PE-HD, PVC-U, PVC, PVC-C
- Suitable for use in openings in concrete, aerated concrete, masonry and drywall
- Different backfilling and sealing materials are covered

### Advantages

- Quick and easy closure without tools
- Highest flexibility - one product for pipe diameters from 50 mm to 160 mm
- Sound decoupling strip based on PE (foam) can be used
- Ideal for very tight installations

### Technical data

	CFS-W EL
Storage and transportation temperature - range	-5 °C - 50 °C
Expansion temperature	> 180 °C
Expansion ratio	1:15 load expansion, load = 5g/cm <sup>3</sup>
Compatibility other Hilti Fire-stop Products	Hilti Firestop Acrylic Sealant CFS-ACR

The European Technical Approval (ETA) and the technical data sheet can be obtained via your local Hilti contact.

Dimensions (LxWxH)	Pipe diameter - range	Order designation	Sales Quantity	Item Number
10000 x 45 x 4.5 mm	50 - 160mm	<b>Firestop wrap strip CFS-W EL W45/1.8"</b>	1	<b>00429556</b>



## Plastic pipe penetration Flexible wall | Rigid wall

The intended use of the Hilti Firestop Wrap CFS-W SG and CFS-W EL is to reinstate the fire resistance of:

Flexible walls / drywalls (E) with a minimum thickness of 100 mm ( $t_e$ ), with timber or steel studs lined on both faces with a minimum of two layers of 12.5 mm thick boards. For timber stud walls there must be a minimum distance of 100 mm between the seal and any stud, and the cavity must be filled with a minimum of 100 mm insulation of Class A1 or A2 in accordance with EN 13501-1.

Rigid walls (E) consisting of concrete, aerated concrete or masonry, minimum density of 650 kg/m<sup>3</sup>, minimum thickness 150 mm or comprise concrete or masonry with a minimum density of 1100 kg/m<sup>3</sup>, minimum thickness 175 mm ( $t_e$ ).

Maximum annular gap width: see tables below.

Apertures for the penetration of pipes require separation of minimum 200 mm ( $s_1$ ).

Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PVC-U pipes: EN ISO 1452, EN ISO 15493, DIN 8061/8062, EN 1453-1 <sup>1)</sup> and EN 1329-1 <sup>1)</sup> PVC-C pipes: EN 1566-1			Flexible walls: Annular gap filled with Hilti Firestop Acrylic Sealant CFS-S ACR (A <sub>2</sub> ) on both sides with a depth of minimum 25 mm from the surface of the wall, backfilled with mineral wool of minimum 100 kg/m <sup>3</sup> density to a depth of minimum 100 mm within the wall between the board layers.  Rigid walls: Cementitious mortar (A <sub>3</sub> ) over the entire thickness of the wall or Hilti Firestop Acrylic Sealant CFS-S ACR (A <sub>2</sub> ) on both sides with a depth of minimum 15 mm ( $t_a$ ) from the surface of the wall. The sealant may be backfilled with mineral wool. For suitable mineral wool products see table below.  Maximum annular gap width: 9.5 mm.  Gypsum plaster or cementitious mortar is recommended for filling the annular gap of PVC-C pipes.
Pipe diameter ( $d_c$ ) mm	Pipe wall thickness ( $t_c$ ) mm		
<b>Firestop Wrap CFS-W SG</b>			
50	2.2 - 3.6	EI 120-U/C	
63	2.2 - 3.6	EI 120-U/C	
75	2.2 - 3.6	EI 120-U/C	
90	3.7 - 6.0	EI 90-U/C	
90	3.7	EI 120-U/C	
110	3.7 - 6.0	EI 90-U/C	
110	3.7	EI 120-U/C	
125	3.7 - 6.0	EI 90-U/C	
125	3.7	EI 120-U/C	
160	2.5 - 11.8	EI 60-U/C	
160	11.8	EI 90-U/C	
<b>Firestop Wrap CFS-W EL</b>			
≤ 75	(1 layer) 2.2 - 3.6	EI 120-U/C	
> 75 ≤ 125	(2 layers) 3.7 - 6.0	EI 90-U/C	
> 75 ≤ 125	(2 layers) 3.7	EI 120-U/C	
> 125 ≤ 160	(3 layers) 2.5 - 11.8	EI 60-U/C	
160	(3 layers) 11.8	EI 90-U/C	

1) In Germany these pipes have additionally to comply with DIN 19531-10

Penetration seal (A)/services (C)			Classification E = integrity I = insulation		Other criteria Description
PE pipes					Flexible walls: Annular gap filled with Hilti Firestop Acrylic Sealant CFS-S ACR (A <sub>2</sub> ) on both sides with a depth of minimum 25 mm from the surface of the wall, backfilled with mineral wool of minimum 100 kg/m <sup>3</sup> density to a depth of minimum 100 mm within the wall between the board layers.  Rigid walls: Cementitious mortar (A <sub>3</sub> ) over the entire thickness of the wall or Hilti Firestop Acrylic Sealant CFS-S ACR (A <sub>2</sub> ) on both sides with a depth of minimum 15 mm (t <sub>A2</sub> ) from the surface of the wall. The sealant may be backfilled with mineral wool. For suitable mineral wool products see table below.  Maximum annular gap width: 9.5 mm (pipes acc. to EN ISO 15494 and DIN 8074/8075). 4.5 mm (pipes acc. to EN 12201-2, EN 1519-1 and EN 1266-1).
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm				
	EN ISO 15494, DIN 8074/8075	EN 12201-2 EN 1519-1 <sup>2)</sup> EN 12666-1			
Firestop Wrap CFS-W SG					
50	1.9-6.8	3.0	EI 120-U/C	EI 120-U/C	
63	1.9-6.8	3.0			
75	1.9-6.8	3.0			
90	3.2-7.1	4.8			
110	3.2-7.1	4.8			
125	3.2-7.1	4.8			
160	4.9-9.1		EI 60-U/C		
160	9.1		EI 90-U/C		
Firestop Wrap CFS-W EL					
≤ 75 (1 layer)	1.9-6.8	3.0	EI 120-U/C	EI 120-U/C	
> 75 ≤ 125 (2 layers)	3.2-7.1	4.8			
> 125 ≤ 160 (3 layers)	4.0-9.1		EI 60-U/C		
160 (3 layers)	9.1		EI 90-U/C		

2) In Germany these pipes have additionally to comply with DIN 19535-10

## Rigid wall, minimum thickness 150mm/175mm

Penetration seal (A)/services (C)			Classification E = integrity I = insulation		Other criteria Description
PVC-U pipes: EN ISO 1452, EN ISO 15493, DIN 8061/8062, EN 1453-1 <sup>1)</sup> and EN 1329-1 <sup>1)</sup> PVC-C pipes: EN 1566-1					See previous tables  Maximum annular gap width: 7.5 mm
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm		Rigid wall thickness ≥ 150mm (density ≥ 650 kg/m <sup>3</sup> )		
Firestop Wrap CFS-W SG					
160	2.5-11.8		EI 180-U/C		
Firestop Wrap CFS-W EL					
> 125 ≤ 160 (3 layers)	2.5-11.8		EI 180-U/C		

1) In Germany these pipes have additionally to comply with DIN 19531-10

Penetration seal (A)/services (C)			Classification E = integrity I = insulation		Other criteria Description
PE pipes EN ISO 15494, DIN 8074/8075					See previous tables  Maximum annular gap width: 7.5 mm
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm		Rigid wall thickness ≥ 150mm (density ≥ 650 kg/m <sup>3</sup> )		
Firestop Wrap CFS-W SG					
160	4.0-9.1		EI 180-U/C		
Firestop Wrap CFS-W EL					
> 125 ≤ 160 (3 layers)	4.0-9.1		EI 180-U/C		

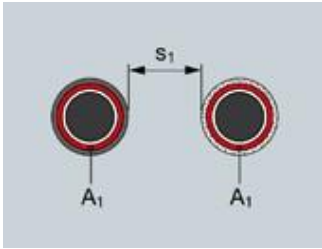
Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PE pipes EN 1519-1 <sup>2)</sup>			See previous tables
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm	Rigid wall thickness ≥ 150 mm (density ≥ 650kg/m <sup>3</sup> )	Maximum annular gap width: 7.5 mm
<b>Firestop Wrap CFS-W SG</b>			
160	6.2	EI 180-U/C	
<b>Firestop Wrap CFS-W EL</b>			
>125 ≤ 160	(3 layers) 6.2	EI 180-U/C	

2) In Germany these pipes have additionally to comply with DIN 19535-10

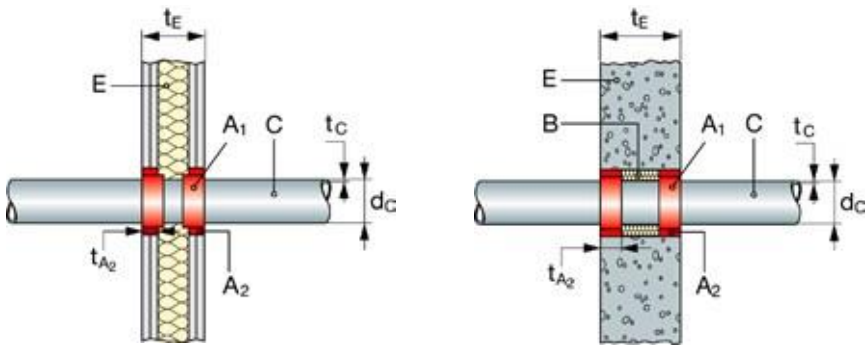
Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PVC-U pipes: EN ISO 1452, EN ISO 15493, DIN 8061/8062, EN 1453-1 <sup>1)</sup> and EN 1329-1 <sup>1)</sup> PVC-C pipes: EN 1566-1			See previous tables
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm	Rigid wall thickness ≥ 175 mm (density ≥ 1100kg/m <sup>3</sup> )	Maximum annular gap width: 8.5 mm
<b>Firestop Wrap CFS-W SG</b>			
90	3.2	EI 240-U/C	
110	3.2		
160	3.2 - 13.0		
<b>Firestop Wrap CFS-W EL</b>			
≤ 32	(1 layer) 1.8	EI 240-U/C	
> 75 ≤ 110	(2 layers) 3.2		
> 125 ≤ 160	(3 layers) 3.2 - 13.0		

1) In Germany these pipes have additionally to comply with DIN 19531-10

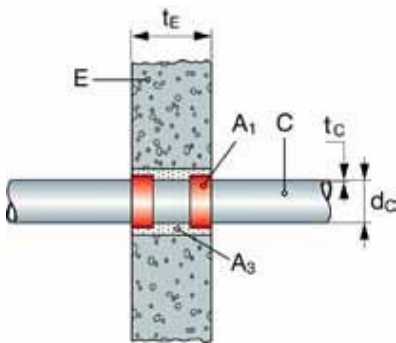
Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PE pipes EN ISO 15494, DIN 8074/8075			See previous tables
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm	Rigid wall thickness ≥ 175 mm (density ≥ 1100kg/m <sup>3</sup> )	Maximum annular gap width: 8.5 mm
<b>Firestop Wrap CFS-W SG</b>			
90	2.7	EI 240-U/C	
110	2.7		
160	4.0 - 14.6		
<b>Firestop Wrap CFS-W EL</b>			
≤ 32	(1 layer) 1.8	EI 240-U/C	
> 75 ≤ 110	(2 layers) 2.7		
> 125 ≤ 160	(3 layers) 4.0 - 14.6		



**Annular gap seal Hilti Firestop Acrylic Sealant CFS-S ACR (A<sub>2</sub>)**



**Annular gap seal gypsum plaster or cementitious mortar (A<sub>3</sub>)**





## Plastic pipe penetration Floor

The intended use of the Hilti Firestop Wrap CFS-W SG and CFS-W EL is to reinstate the fire resistance of:

Rigid floors (E) consisting of concrete with a minimum density of 2400 kg/m<sup>3</sup> or aered concrete with a minimum density of 550 kg/m<sup>3</sup>, minimum thickness 150 / 200 mm (t<sub>e</sub>) respectively.

Maximum annular gap width: see tables below.

Apertures for the penetration of pipes require separation of minimum 200 mm (s<sub>1</sub>).

Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PVC-U pipes: EN ISO 1452, EN ISO 15493, DIN 8061 / 8062, EN 1453-1 <sup>1)</sup> and EN 1329-1 <sup>1)</sup> PVC-C pipes: EN 1566-1			Annular gap filled either with gypsum plaster or cementitious mortar (A <sub>3</sub> ) over the entire thickness of the floor or with Hilti Firestop Acrylic Sealant CFS-SACR (A <sub>2</sub> ) with a depth of minimum 15 mm and mineral wool products compressed to achieve minimum density of 60 kg/m <sup>3</sup> .
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm	Minimum floor thickness (t <sub>e</sub> ) 150 mm (density ≥ 2400 kg/m <sup>3</sup> )	
<b>Firestop Wrap CFS-W SG</b>			
90	3.7 - 6.0	EI 120-U/C	Maximum annular gap width: 9.5 mm (∅ 90-125 mm), 1.5 mm (> ∅ 125 mm).  Gypsum plaster or cementitious mortar is recommended for filling the annular gap of PVC-C pipes.
110	3.7 - 6.0		
125	3.7 - 6.0		
160	3.2 - 4.0		
<b>Firestop Wrap CFS-W EL</b>			
> 75 ≤ 125	(2 layers) 3.2	EI 120-U/C	
> 125 ≤ 160	(3 layers) 3.2 - 4.0		

1) In Germany these pipes have additionally to comply with DIN 19531-10

Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PE pipes EN ISO 15494, DIN 8074 / 8075			Annular gap filled either with gypsum plaster or cementitious mortar (A <sub>3</sub> ) over the entire thickness of the floor or with Hilti Firestop Acrylic Sealant CFS-SACR (A <sub>2</sub> ) with a depth of minimum 15 mm and mineral wool products compressed to achieve minimum density of 60 kg/m <sup>3</sup> .
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm	Minimum floor thickness (t <sub>e</sub> ) 150 mm (density ≥ 2400 kg/m <sup>3</sup> )	
<b>Firestop Wrap CFS-W SG</b>			
90	7.1	EI 120-U/C	Maximum annular gap width: 9.5 mm
110	7.1		
125	7.1		
<b>Firestop Wrap CFS-W EL</b>			
> 75 ≤ 125	(2 layers) 7.1	EI 120-U/C	

Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PE pipes EN 12201-2, EN 1519-1 <sup>2)</sup> , EN 12666-1			Annular gap filled either with gypsum plaster or cementitious mortar (A <sub>3</sub> ) over the entire thickness of the floor or with Hilti Firestop Acrylic Sealant CFS-SACR (A <sub>2</sub> ) with a depth of minimum 15 mm and mineral wool products compressed to achieve minimum density of 60 kg/m <sup>3</sup> .
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm	Minimum floor thickness (t <sub>f</sub> ) 150 mm (density ≥ 2400 kg/m <sup>3</sup> )	
<b>Firestop Wrap CFS-W SG</b>			
50	3.0	EI 120-U/C	Maximum annular gap width: 3.5 mm
63	3.0		
75	3.0		
90	4.8		
110	4.8		
125	4.8		
160	6.2		
<b>Firestop Wrap CFS-W EL</b>			
≤ 75 (1 layer)	3.0	EI 120-U/C	
> 75 ≤ 110 (2 layers)	4.8		
> 125 ≤ 160 (3 layers)	6.2		

2) In Germany these pipes have additionally to comply with DIN 19535-10

Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PVC-U pipes: EN ISO 1452, EN ISO 15493, DIN 8061/8062, EN 1453-1 <sup>1)</sup> and EN 1329-1 <sup>1)</sup> PVC-C pipes: EN 1566-1			Annular gap filled either with gypsum plaster or cementitious mortar (A <sub>3</sub> ) over the entire thickness of the floor or with Hilti Firestop Acrylic Sealant CFS-SACR (A <sub>2</sub> ) with a depth of minimum 15 mm and mineral wool products compressed to achieve minimum density of 60 kg/m <sup>3</sup> .
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm	Minimum floor thickness (t <sub>f</sub> ) 200 mm (density ≥ 2400 kg/m <sup>3</sup> )	
<b>Firestop Wrap CFS-W SG</b>			
90	3.2	EI 240-U/C	Maximum annular gap width: 7.5 mm
110	3.2		
50	2.2-3.6	EI 180-U/C	Gypsum plaster or cementitious mortar is recommended for filling the annular gap of PVC-C pipes.
63	2.2-3.6		
75	2.2-3.6		
90	3.2-6.0		
110	3.2-6.0		
125	3.7-6.0		
160	2.5-3.2	EI 60-U/C	
160	3.2-11.8	EI 120-U/C	
160	11.8	EI 180-U/C	
160	11.8-13.0	EI 120-U/C	
<b>Firestop Wrap CFS-W EL</b>			
≤ 32 (1 layer)	1.8	EI 240-U/C	
≤ 75 (1 layer)	2.2-3.6	EI 180-U/C	
> 75 ≤ 110 (2 layers)	3.2	EI 240-U/C	
> 75 ≤ 125 (2 layers)	3.7-6.0	EI 180-U/C	
> 125 ≤ 160 (3 layers)	2.5-3.2	EI 60-U/C	
> 125 ≤ 160 (3 layers)	3.2-11.8	EI 120-U/C	
> 125 ≤ 160 (3 layers)	11.8	EI 180-U/C	
> 125 ≤ 160 (3 layers)	11.8-13.0	EI 120-U/C	

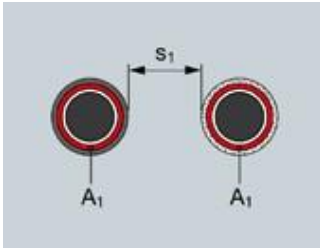
1) In Germany these pipes have additionally to comply with DIN 19531-10

Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PE pipes EN ISO 15494, DIN 8074/8075			Annular gap filled either with gypsum plaster or cementitious mortar (A <sub>3</sub> ) over the entire thickness of the floor or with Hilti Firestop Acrylic Sealant CFS-S ACR on both sides (A <sub>2</sub> ) with a depth of minimum 15 mm from the surface of the floor and mineral wool products compressed to achieve minimum density of 60 kg/m <sup>3</sup> .  Maximum annular gap width: 7.5 mm
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm	Minimum floor thickness (t <sub>f</sub> ) 200 mm (density ≥ 2400 kg/m <sup>3</sup> )	
<b>Firestop Wrap CFS-W SG</b>			
90	2.7	EI 240-U/C	
110	2.7		
160	14.6	EI 180-U/C	
50	1.9-6.8		
63	1.9-6.8		
75	1.9-6.8		
90	2.7-7.1		
110	2.7-7.1		
125	3.2-7.1		
160	4.0-14.6		
<b>Firestop Wrap CFS-W EL</b>			
≤ 32 (1 layer)	1.8	EI 240-U/C	
> 75 ≤ 110 (2 layers)	2.7		
> 125 ≤ 160 (3 layers)	14.6		
≤ 75 (1 layer)	1.9-6.8	EI 180-U/C	
> 75 ≤ 125 (2 layers)	3.2-7.1		
> 125 ≤ 160 (3 layers)	4.0-9.1		

Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PVC-U pipes: EN ISO 1452, EN ISO 15493, DIN 8061/8062, EN 1453-1 <sup>1)</sup> and EN 1329-1 <sup>1)</sup> PVC-C pipes: EN 1566-1			See previous tables  Maximum annular gap width: 9.5 mm
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm	Minimum floor thickness (t <sub>f</sub> ) 150 mm (density ≥ 550)	
<b>Firestop Wrap CFS-W SG</b>			
90	3.7-6.0	EI 120-U/C	
110	3.7-6.0		
125	3.7-6.0		
160	4.0		
<b>Firestop Wrap CFS-W EL</b>			
> 75 ≤ 125 (2 layers)	3.7-6.0	EI 120-U/C	
> 125 ≤ 160 (3 layers)	4.0		

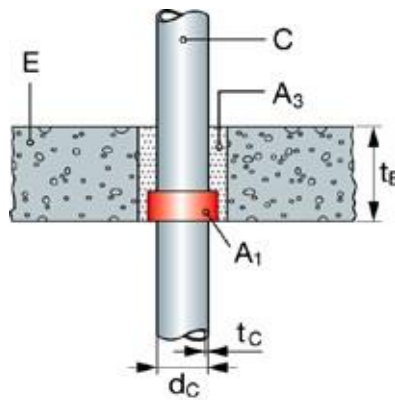
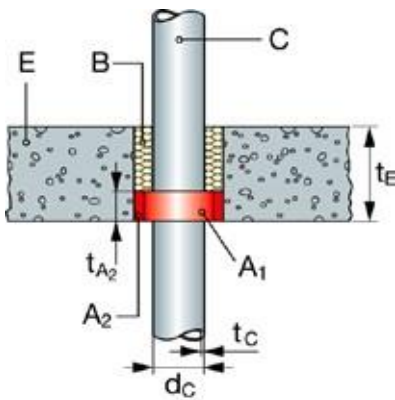
1) In Germany these pipes have additionally to comply with DIN 19531-10

Penetration seal (A)/services (C)		Classification E = integrity I = insulation	Other criteria Description
PE pipes EN ISO 15494, DIN 8074/8075			See previous tables
Pipe diameter (d <sub>c</sub> ) mm	Pipe wall thickness (t <sub>c</sub> ) mm	Minimum floor thickness (t <sub>f</sub> ) 200 mm (density ≥ 2400 kg/m <sup>3</sup> )	Maximum annular gap width: 9.5 mm
<b>Firestop Wrap CFS-W SG</b>			
90	7.1	EI 120-U/C	
110	7.1		
125	7.1		
<b>Firestop Wrap CFS-W EL</b>			
>75 ≤125	(2 layers) 7.1	EI 120-U/C	



**Annular gap seal Hilti Firestop Acrylic Sealant CFS-S ACR (A<sub>2</sub>)**

**Annular gap seal cementitious mortar (A<sub>3</sub>)**



Loose mineral wool products suitable for being used as backfilling material of Hilti Firestop Acrylic Sealant CFS-SACR:

Product	Manufacturer
Heralan LS	Knauf Insulation
Isover loose wool SL	Saint-Gobain Isover
Isover Universal-Stopfwolle	Saint-Gobain Isover
Rockwool RL	Rockwool
Paroc Pro Loose Wool	Paroc OY AB

## Characteristics of CFS-W Additional Attributes

Hilti firestop products are comprehensively tested and individually matched to the technical requirements of a building's mechanical installations. In addition to their superior passive fire protection behavior, Hilti firestop products also meet increasingly significant requirements in building technology and also help designers and installers to meet these additional requirements. The assessment of fitness for use has been made in accordance with EOTA ETAG N° 026 – Part 2.



Charecteristics	Assessment of charecteristics	Norm, standard, test
<b>Health and the environment</b> Dangerous substances	CFS-W is in compliance concerning the registration, evaluation, authorization and restriction of Chemicals (REACH). The product does not contain any constituents contained in the list of dangerous substances of the European Commission above the acceptable limits.	Material safety data sheet
<b>Durability and serviceability</b>	Use category $Y_{2,(-20/+70)^\circ C}$ . Intended for use in external sheltered conditions at temperatures between $-20^\circ C$ and $+70^\circ C$ , but no exposure to rain or UV, as well as humid and dry internal conditions.	ETAG 026-2 and 3
<b>Reaction to fire</b>	Class E	EN 13501-1

## Service

With more than 20 years of experience worldwide, Hilti is one of the leading suppliers of firestop systems. We actively help you manage your firestop projects better by providing:

- Quick engineering judgements
- Extensive technical literature
- On-site training and demonstration
- Sophisticated jobsite logistics
- Assurance of conformity with specific application requirements
- International network of Hilti firestop specialists

Our network of experienced sales representatives, field engineers, firestop specialists and customer service representatives is just a phone call away (use the local toll-free Hilti numbe



**Hilti. Outperform. Outlast.**

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