

PRODUCT PACK

CFS-FIL: Filler mastic

ETA - 21/0256

TECHNICAL DATA **APPLICATIONS** **CHANGE LOG** 

[Overview](#)[Installation instructions](#)

CFS-FIL FILLER MASTIC

A water-based acrylic intumescent firestop sealant for small to medium-sized cables and CPVC pipe penetrations.



APPLICATIONS

- For use within concrete, masonry rigid walls
- For use with small to medium sized cables
- For use with CPVC pipes
- For use with CFS-BL firestop block
- For use with CFS-BL P firestop block
- For use with CFS-PL firestop plug
- For use with CFS-CC firestop cable collar
- For use with CFS-RCC firestop cable collar

ADVANTAGES

- Solvent free sealant, easy to clean up
- Simple adding of cables later on
- Low shrinkage of sealant
- Paintable with most paints



Technical data

Chemical basis	Water-based acrylic sealant
Movement	±7.5%
Intumescent	Yes
Approx. cure time (at 23°C/50% r.H):	~ 2 mm / 72h
Application temperature range	1.5°C - 40°C
Storage and transportation temperature - range	5 °C - 25 °C
Paintable	Yes
LEED VOC	9 g/L
Approvals	ETA-21/0256

Packaging	Volume	Colour	Order designation	Sales quantity	Item number
Cartridge	310 ml	Red	Firestop filler mastic CFS-FIL	1 pc	2052899

Overview

Installation instructions

INSTALLATION INSTRUCTIONS



www.hilti.group

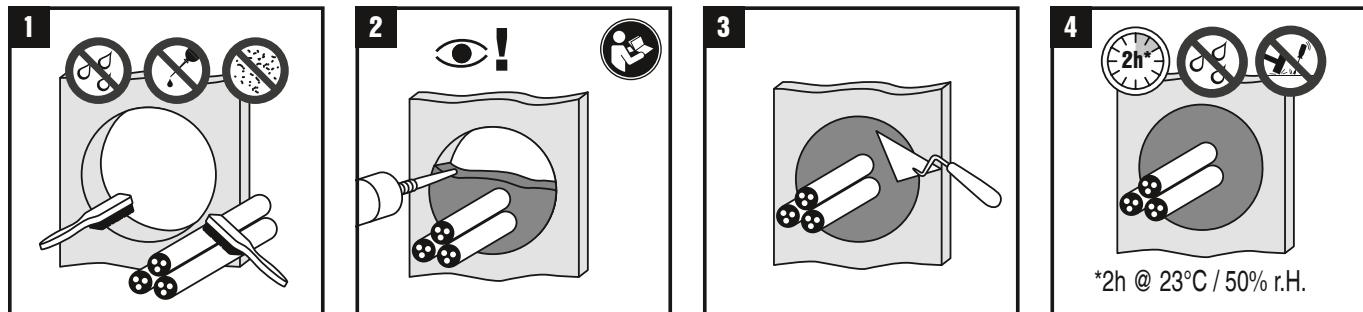
en Before handling and for specific application details, refer to Hilti product literature, 3rd party published listings and national approvals. For industrial use only.

fr Avant toute utilisation et pour tout détail concernant une application, se référer à la documentation Hilti, à la liste de publications des tierces parties et aux approbations nationales. Seulement pour utilisateurs professionnels.

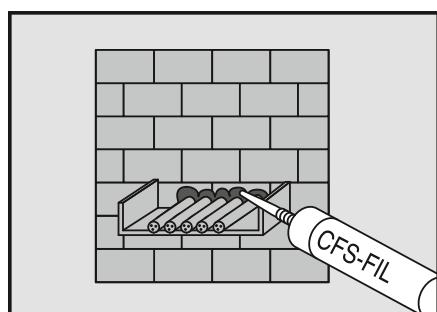
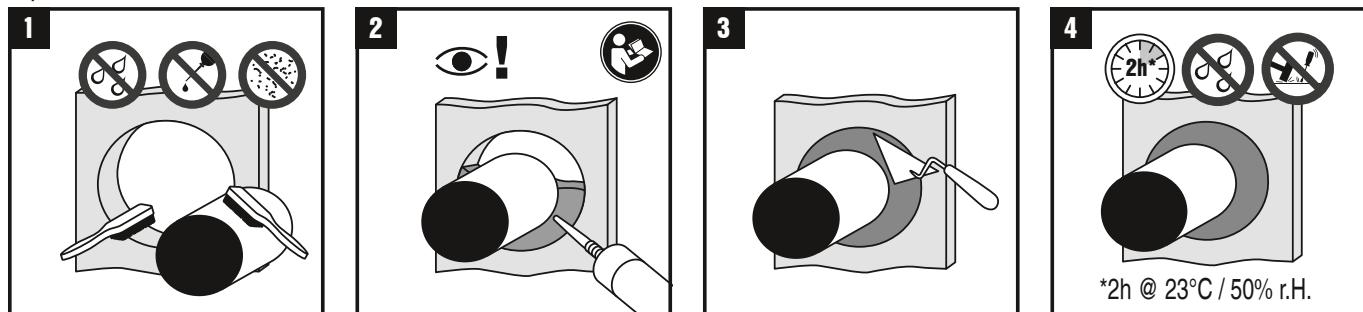
es Antes de usar y para detalles específicos de aplicación, véase la información que acompaña al producto Hilti, el listado publicado por terceros y las aprobaciones nacionales. Solamente para los usuarios profesionales.



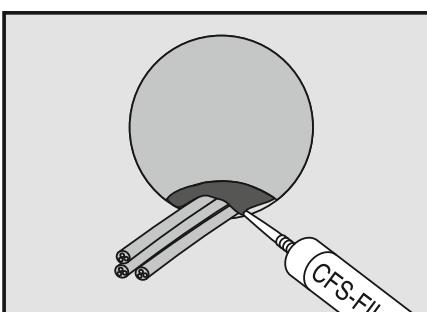
Cables



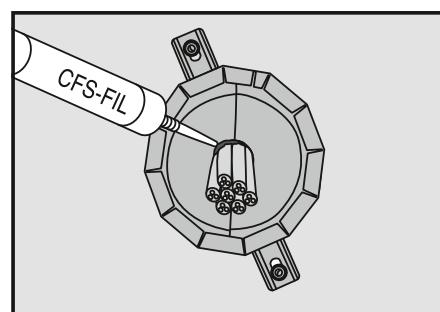
Pipes



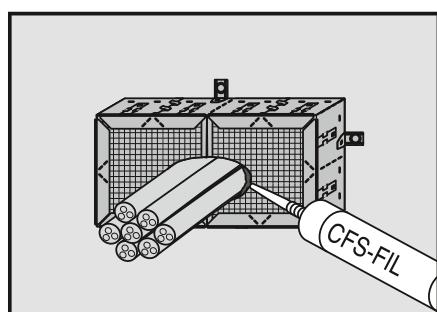
CFS-BL / CFS-BL P



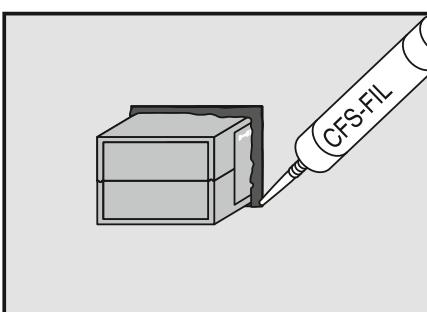
CFS-PL



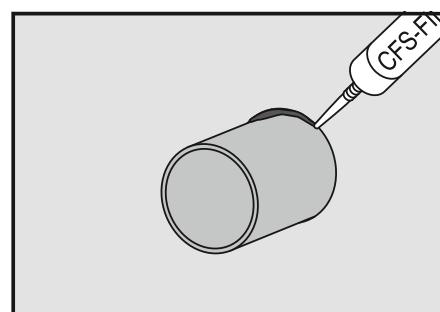
CFS-CC



CFS-RCC



CFS-MB



CFS-C EL

[Back](#)

APPLICATION INFORMATION

FOR PIPES/CABLE DIAMETERS

S = Single pipe/cable*

B = pipe/cable Bundle

*For pipes, if no S or B, assume single pipe.

FOR INSULATION

N-C = Non-Combustible (e.g., stone wool etc.)

C = Combustible (e.g., Armaflex, phenolic etc.)

None = No insulation

LS = Local Sustained

LI = Local Interrupted

CS = Continuous Sustained

CI = Continuous Interrupted

Please note, in many cases details have numerous pages.

Please check all pages for the necessary information as differing insulation layouts might be on differing pages (e.g., LS one page 1 and LI on page 2 etc.).

PENETRATION TYPE

Single = penetration seal intended for penetrations with only one service passing through

Multi = penetration seal intended for penetrations where more than one service of the same type (e.g. cables) or pipe material group pass through

Mixed = penetration seal intended for penetrations where more than one type of services (e.g. cables and pipes or pipes of different pipe material groups) pass through

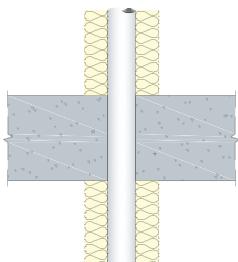
CLASSIFICATION

Classification will give the best-case EI value possible. As such, check each specific detail as there may be instances where a higher I value is possible or another sized service within the application may attain a lower value (e.g., 110mm pipe achieves EI 120 but a 160mm pipe achieves EI 90).

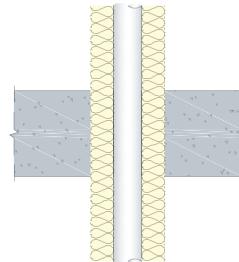
PRODUCT/DETAIL

Full product name first/Detail ID (See specific detail for the full ID).

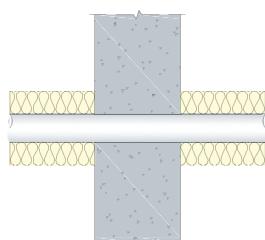
Please note, in many cases details have numerous pages. Please check all pages for the necessary information.



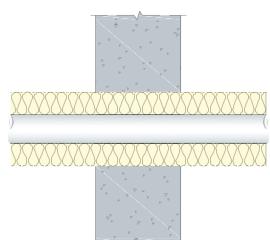
Continued Interrupted (CI)



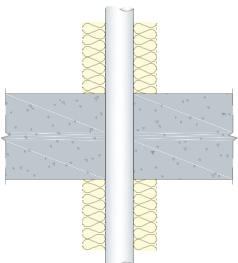
Continued Sustained (CS)



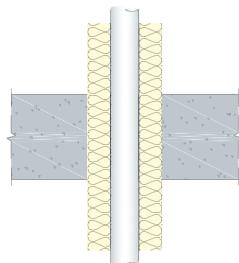
Continued Interrupted (CI)



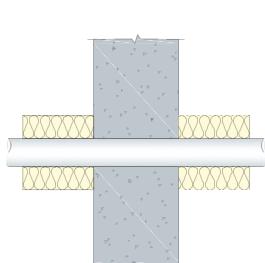
Continued Sustained (CS)



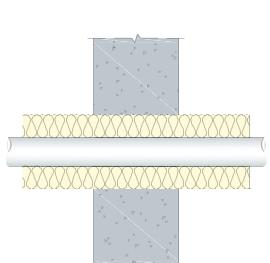
Local Interrupted (LI)



Local Sustained (LS)



Local Interrupted (LI)



Local Sustained (LS)

Single board drywall	Double board drywall	Rigid wall	Timber wall	Sandwich panel	Rigid floor	Timber floor	Metal deck	Linear joints
Mechanical			Electrical				HVAC	
Min. base material thickness	Pipes ⁱ	Size	N/C	Insulation ⁱ	Penetration type ⁱ	Classification ⁱ	Product/Detail ⁱ	
≥ 100	CPVC (Blazemaster)	Ø ≤ 60.3		✓	✓	EI 120	FIL:RW-M-01	
≥ 100	CPVC (Spears EverTuff)	Ø ≤ 53.98		✓	✓	EI 120	FIL:RW-M-01	

Single board drywall	Double board drywall	Rigid wall	Timber wall	Sandwich panel	Rigid floor	Timber floor	Metal deck	Linear joints	
Mechanical		Electrical				HVAC			
Min. base material thickness	Service	Electrical service		Insulation	Penetration type ⁱ			Classification ⁱ	Product/Detail ⁱ
≥ 100	Single Cables	Max. Diameter (Ø) or Size (H x W)		Insulation	Single	Multi	Mixed	EI 90	FIL:RW-E-01 
≥ 100	Cable Bundles	≤ 21		≤ 46	✓	✓		EI 90	FIL:RW-E-01 

Single board drywall	Double board drywall	Rigid wall	Timber wall	Sandwich panel	Rigid floor	Timber floor	Metal deck	Linear joints
Min. base material thickness	Mechanical		Electrical			HVAC		
	Service	Electrical service	Max. Diameter (Ø) or Size (H x W)	Insulation	Penetration type ⁱ	Classification ⁱ	Product/Detail ⁱ	
≥ 150	Single Cables	≤ 21			✓ ✓	EI 120	FIL:RF-E-01 	
≥ 150	Cable Bundles	≤ 46			✓ ✓	EI 120	FIL:RF-E-01 	

Single board drywall	Double board drywall	Rigid wall	Timber wall	Sandwich panel	Rigid floor	Timber floor	Metal deck	Linear joints
Mechanical			Electrical			HVAC		
Min. base material thickness	Material	Pipes ⁱ	N/C	Insulation ⁱ	Penetration type ⁱ	Classification ⁱ	Product/Detail ⁱ	
≥ 75	cPVC (Blazemaster, Spears EverTuff)	Ø ≤ 48.3		✓	✓	≤ EI 60	FIL-FW/RW-75-M-01	

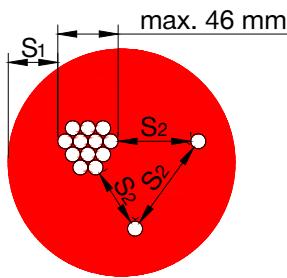
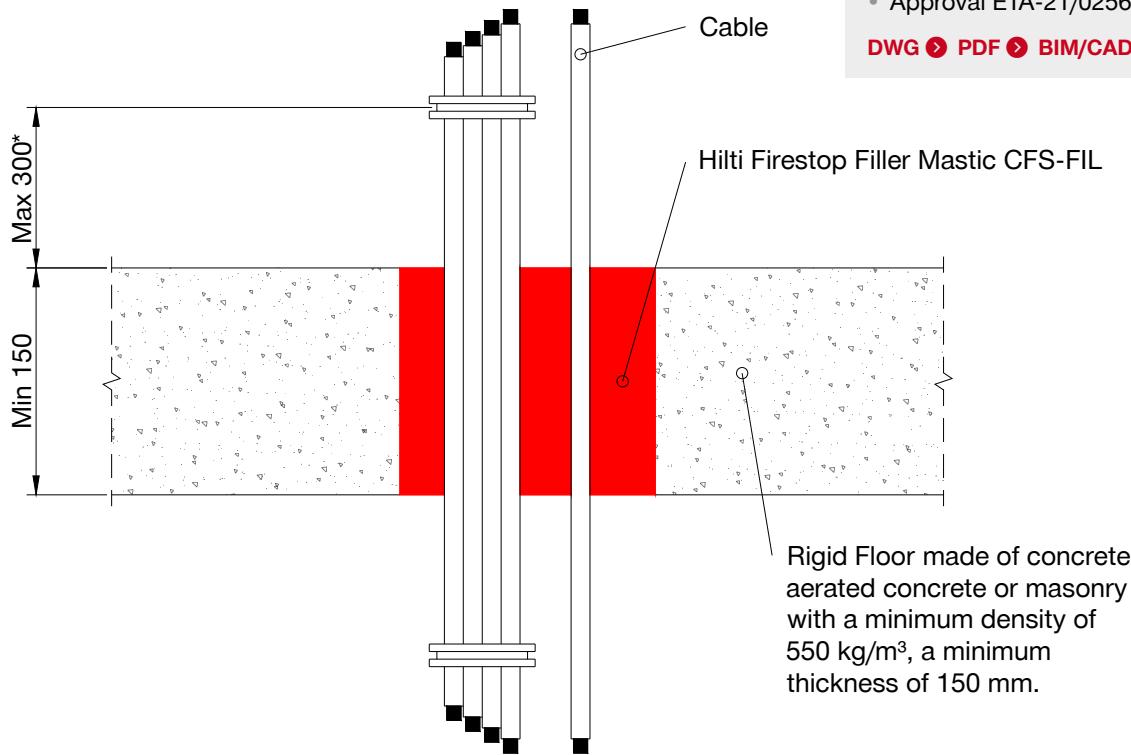


[Back](#)

FIL: SP-RF-E-01

CABLES THROUGH RIGID FLOORS

Fire rating up to EI 120



Minimum distances between the services

Single/multiple cable(s) to single/multiple cable(s) $S_2 = 0$

Single/multiple cable(s) to edge of aperture $S_1 = 0$

Minimum distances between the penetrations

Cable or multiple cable penetration and other services 200

Cable type²

Fire class

Single cable diameter up to Ø 21

EI 120

Multiple cables (single cable diameter max. Ø 21 mm. small cables), up to a bundle of Ø 46 mm with zero distance between the cables

EI 120

* First support and ancillary products should be capable of achieving the same fire performance as the seal and supporting structure.

² The total amount of cross sections of the cables (core and insulation) does not exceed 60% of the penetration area.

1. The application limits on this detail are for guidance purposes only. For more detailed information based on the full range of available test results please contact the Hilti Technical Advisory Service.
2. The product and application has been assessed as a minimum to the BS 476 standard. It may have additional European and worldwide testing. Please contact Hilti for further information.
3. All installations should be carried out in accordance with Hilti's installation instructions and by competent & experienced installers using Hilti branded products.
4. All services are to be correctly and adequately supported to prevent collapse and distortion.

Hilti (Gt. Britain) Limited | No 1, Circle Square | 3 Symphony Park | Manchester | M1 7FS Freephone: 0800 886 100 | Website: www.hilti.co.uk

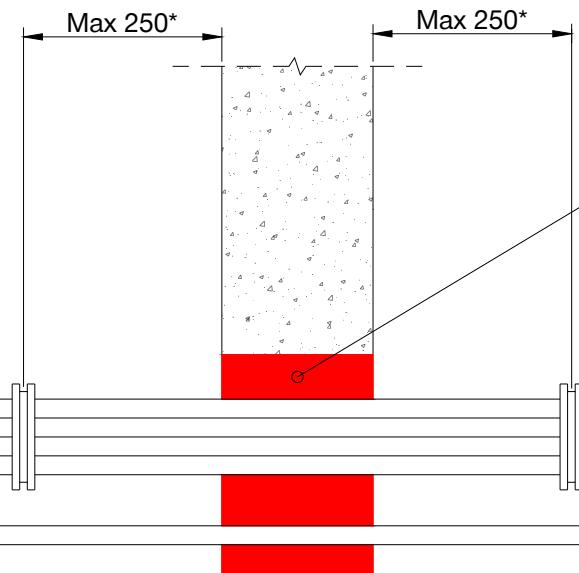
LEGAL NOTICE: This template contains Hilti Intellectual Property which is legally protected, including Community registration of Hilti trademarks. For use only by Hilti customers and in conjunction with Hilti products. No third party use/products is authorised and breaches Hilti's intellectual property rights. Hilti accepts no responsibility for unauthorized use and reserves all rights to take legal action to enforce its rights in law.

[Back](#)

FIL: SP-RW-E-01

CABLES THROUGH RIGID WALL

Fire rating up to EI 90

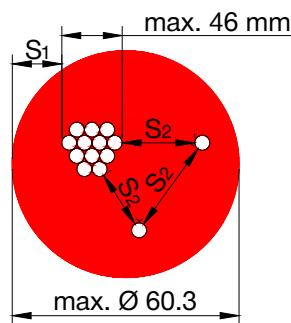


Information

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Approval ETA-21/0256

[DWG](#) [PDF](#) [BIM/CAD](#) [Web](#)

Rigid walls made of concrete, aerated concrete or masonry with a minimum density of 550 kg/m³, a minimum thickness of 100 mm.



Min 100

Minimum distances between the services

Single/multiple cable(s) to single/multiple cable(s) $S_2 = 0$

Single/multiple cable(s) to edge of aperture $S_1 = 0$

Minimum distances between the penetrations

Cable or multiple cable penetration and other services 200

Cable type¹

Fire class

Single cable diameter up to Ø 21

EI 90/E 120

Multiple cables (single cable diameter max. Ø 21 mm. small cables), up to a bundle of Ø 46 mm with zero distance between the cables

EI 90/E 120

¹ The total amount of cross sections of the cables (core and insulation) does not exceed 60% of the penetration area.

* First support and ancillary products should be capable of achieving the same fire performance as the seal and supporting structure.

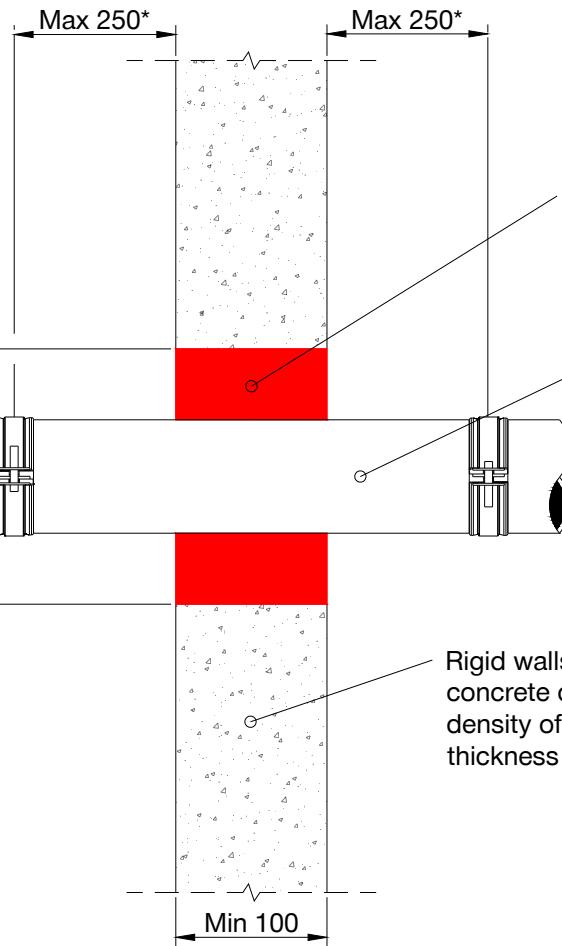
- The application limits on this detail are for guidance purposes only. For more detailed information based on the full range of available test results please contact the Hilti Technical Advisory Service.
- The product and application has been assessed as a minimum to the BS 476 standard. It may have additional European and worldwide testing. Please contact Hilti for further information.
- All installations should be carried out in accordance with Hilti's installation instructions and by competent & experienced installers using Hilti branded products.
- All services are to be correctly and adequately supported to prevent collapse and distortion.

[Back](#)

FIL: SP-RW-M-01

CPVC PIPES THROUGH RIGID WALL

Fire rating up to 120 U/C



Information

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Approval ETA-21/0256

[DWG](#) [PDF](#) [BIM/CAD](#) [Web](#)

CPVC Blazemaster: The width of the annular gap is min 5 mm, max. 25 mm

Pipe	Diameter (d _c)	Wall thickness (t _c)	Opening size Max (d _c + 25)	Classification
Blazemaster 25	33.4	2.7	58.4	EI 120 U/C
Blazemaster 32	42.2	3.4	67.2	EI 120 U/C
Blazemaster 50	60.3	4.7	85.3	EI 120 U/C
Spears EverTuff 1/2"	15.88	1.98	40.88	EI 120 U/C
Spears EverTuff 1"	28.58	2.85	53.58	EI 120 U/C
Spears EverTuff 2"	53.98	5.19	78.98	EI 120 U/C

* First support and ancillary products should be capable of achieving the same fire performance as the seal and supporting structure.

Minimum distances between the penetrations

CPVC pipe to CPVC pipe penetration

50

- The application limits on this detail are for guidance purposes only. For more detailed information based on the full range of available test results please contact the Hilti Technical Advisory Service.
- The product and application has been assessed as a minimum to the BS 476 standard. It may have additional European and worldwide testing. Please contact Hilti for further information.
- All installations should be carried out in accordance with Hilti's installation instructions and by competent & experienced installers using Hilti branded products.
- All services are to be correctly and adequately supported to prevent collapse and distortion.

Hilti (Gt. Britain) Limited | No 1, Circle Square | 3 Symphony Park | Manchester | M1 7FS Freephone: 0800 886 100 | Website: www.hilti.co.uk

LEGAL NOTICE: This template contains Hilti Intellectual Property which is legally protected, including Community registration of Hilti trademarks and in conjunction with Hilti products. No third party use/products is authorised and breaches Hilti's intellectual property rights. Hilti accepts no responsibility for unauthorized use and reserves all rights to take legal action to enforce its rights in law.

[Back](#)

FIL: FW/RW-75-M-01

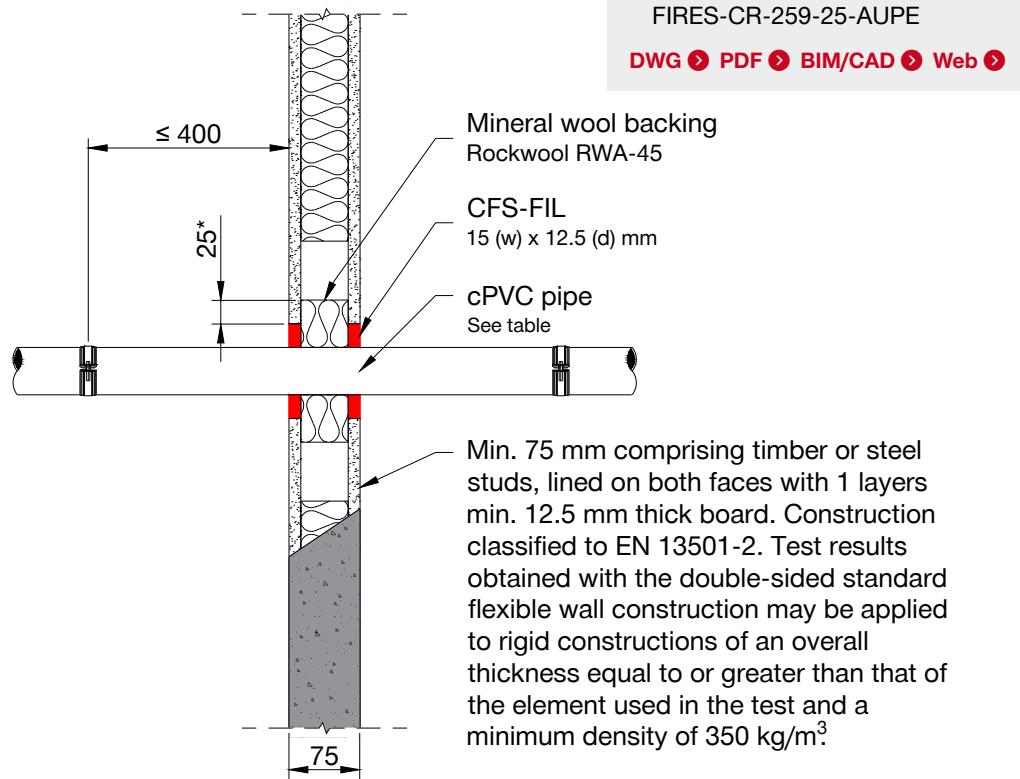
CPVC PIPE ON FLEXIBLE WALL TH. \geq 75 MM

Fire rating up to EI 60 U/C

Information

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Classification report FIRES-CR-259-25-AUPE

[DWG](#) [PDF](#) [BIM/CAD](#) [Web](#)



Notes:

- (*) The stone wool backing is applied to full depth inside the wall, overlapping the opening by 25 mm, type Rockwool RWA-45
- All services are passing through the penetration seals, perpendicular to the supporting construction.
- Maximum distance to 1st rigid support: \leq 400 mm**
- Distances between service openings \geq 50 mm
- Annular gap 15 mm
- Distance between Hilti CFS-FIL and seal edge 15 mm

Brand and type	Pipe diameter	Wall thickness	Classification
Viking plastics, BlazeMaster pipe	\varnothing 26.7	2.24	EI 60 U/C
	\varnothing 33.4	2.7	EI 60 U/C
	\varnothing 42.2	3.4	EI 45 U/C
	\varnothing 48.3	4.15	E 60 U/C
Spears, FlameGuard	\varnothing 26.7	2.0	EI 45 U/C
	\varnothing 33.4	2.5	EI 60 U/C
	\varnothing 42.2	3.1	EI 30 U/C
	\varnothing 48.3	3.6	E 60 U/C

- The application limits on this detail are for guidance purposes only. For more detailed information based on the full range of available test results please contact the Hilti Technical Advisory Service.
- The product and application has been assessed as a minimum to the BS 476 standard. It may have additional European and worldwide testing. Please contact Hilti for further information.
- All installations should be carried out in accordance with Hilti's installation instructions and by competent & experienced installers using Hilti branded products.
- All services are to be correctly and adequately supported to prevent collapse and distortion.

Hilti (Gt. Britain) Limited | No 1, Circle Square | 3 Symphony Park | Manchester | M1 7FS Freephone: 0800 886 100 | Website: www.hilti.co.uk

LEGAL NOTICE: This template contains Hilti Intellectual Property which is legally protected, including Community registration of Hilti trademarks. For use only by Hilti customers and in conjunction with Hilti products. No third party use/products is authorised and breaches Hilti's intellectual property rights. Hilti accepts no responsibility for unauthorized use and reserves all rights to take legal action to enforce its rights in law.

CHANGE LOG

Date	Description
8/12/2025	Detail: FIL: FW/RW-75-M-01 added



Hilti (Gt. Britain) Ltd
No. 1 Circle Square
3 Symphony Park Manchester
M1 7FS

ask.hilti.co.uk
www.hilti.co.uk