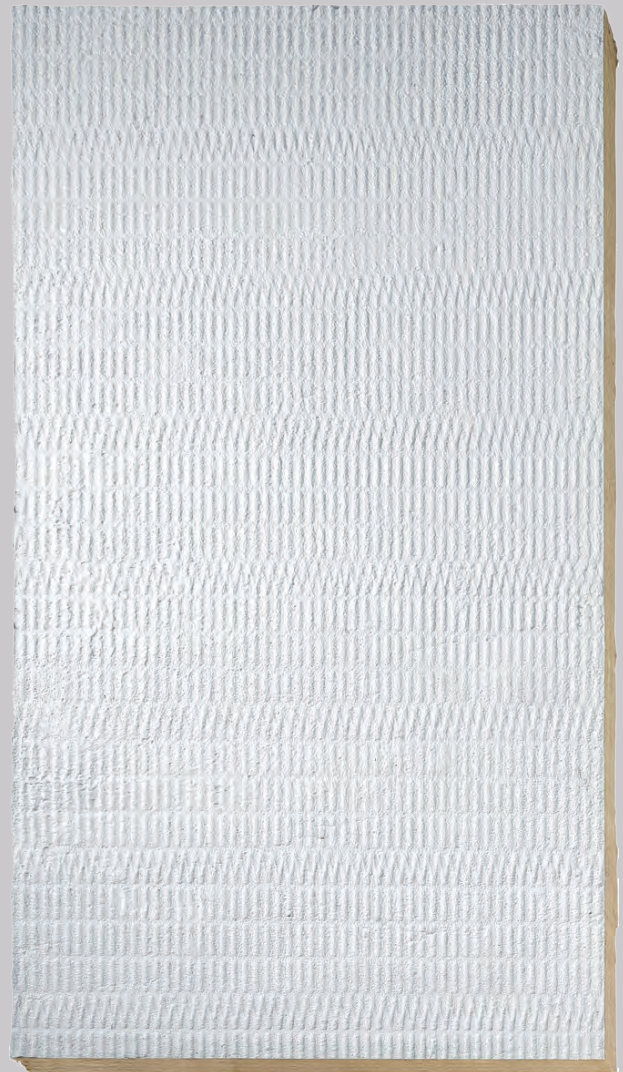




HIGH-DENSITY COATED BOARD CFS-CT HDB

Technical Drawings

European Technical Assessment
ETA-23/0267



CONTENT

General

Firestop board CFS-CT HDB	4
Base material requirements	5
Minimum distance requirements	6
Characteristics of CFS-CT HDB	7
Installation instructions	8

Electrical penetrants in wall

Single cable with CFS-D25	9
Single cable with CFS-D25	10
Cables with or without cable carriers	11
Cables with or without cable carriers	12
Flexible/pliable plastic conduits bundles	13
Rigid plastic conduits bundles	14
Steel cable trunking	15

Combustible pipes in wall

PE/PVC pipes with CFS-IS	16
PP-RCT pipes with CFS-IS	17
PE/PVC/PP pipes with CFS-B	18
PE/PVC pipes with CFS-C EL	19
PE/PVC pipes with CFS-C P	20

Non-combustible pipes in wall

Copper pipes with FEF insulation with CFS-IS	21
Copper pipes with FEF insulation with CFS-IS	22
Steel pipes with FEF insulation, CFS-IS	23
Copper pipes with Phenolic Insulation	24
Zero distance copper pipes with FEF insulation	25
Copper pipes with FEF insulation, CFS-B	26
Copper pipes with FEF insulation, CFS-B	27
Steel pipes with FEF insulation, CFS-B	28
Cooper pipe with local sustained glasswool insulation	29
Copper pipes with glass wool insulation	30
Steel pipes with CS glass wool insulation	31
Steel pipes with LS mineral wool insulation	32

Composite pipes in wall

Composite pipes without insulation	33
FEF insulated composite pipes with CFS-IS	34
Rehau Rautitan Flex insulated with mineral wool	35
Uponor Unipipe Plus with FEF insulation	36

HVAC Penetrants in wall

Clima-split bundle with CFS-B	37
Plastic vent duct with CFS-C EL	38

Electrical penetrants in floor

Cables including cable carriers in rigid floor	39
Cables including cable carriers in rigid floor	40
Flexible/pliable plastic conduit bundles	41

Combustible pipes in floor

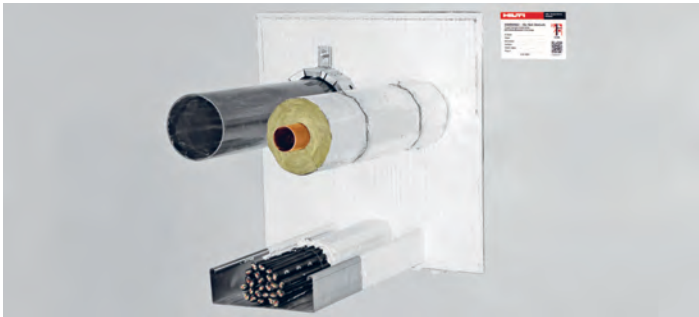
PE/PVC/PP-RCT pipes sealed with CFS-IS	42
PE/PVC/PP pipes sealed with CFS-B	43
PP-RCT pipes in PE insulation sealed with CFS-B	44
PE/PVC/PP pipes sealed with CFS-C EL	45
Non-regulated PP pipes with CFS-C EL	46

CONTENT

Non-combustible pipes in floor	
Copper pipes with FEF insulation sealed with CFS-IS	47
Copper pipes with FEF insulation, sealed with CFS-B, EI 30	48
Copper pipes with FEF insulation, sealed with CFS-B, EI 60	49
Steel pipes with FEF insulation, sealed with CFS-B	50
Copper pipes with local sustained glass wool insulation	51
Copper pipes with local sustained stonewool insulation	52
Steel pipes with local sustained stonewool insulation	53
Composite pipes in floor	
Composite pipes in FEF insulation with CFS-IS	54
Rehau Rautitan Flex insulated with local sustained stonewool	55
HVAC penetrants in floor	
Clima split bundles	56

FIRESTOP BOARD CFS-CT HDB

The all-rounder for combustible pipes and insulation in coated board



Technical data

Approx. density	160 kg/m ³
Dimensions (L x W x H)	1200 x 600 x 60 mm
Color	White
Storage & application temp.	-5 - 40°
Base material	Drywall, concrete, aerated concrete, masonry

Applications

- Single, multiple and mixed penetrations in flexible and rigid walls from 100 mm and rigid floors from 150 mm.
- Openings up to 1200 x 1000 mm in wall and 1000 x 800 mm in floors
- 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
- Combustible pipes in combination with firestop collars CFS-C P or firestop endless collar CFS-C EL

Advantages

- 1-board installation for EI 60 applications
- Can be placed in any position within floors and walls
- Extensive EN testing ensures wide range of application
- Board pre-coated for immediate use
- Easy cutting, no fraying of edges and no mineral fiber exposure, thanks to extremely low delamination of elastic firestop surface



Product	Packaging	Content	Item number
Firestop board CFS-CT HDB	Box & Pallet	4 / 20 / 40	2383609 / 2383608 / 2383607



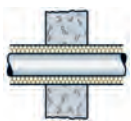
Product	Packaging	Content	Item number
Firestop bandage CFS-B	Box	10 m	429557
Firestop premium collar CFS-C P	Box	1 pc	From 435406 to 435416
Firestop endless collar CFS-C EL	Box	1 pc	2075120
Firestop coating CFS-CT	Pail	6 kg	2036605
Firestop intumescent sealant CFS-IS	Cartridge	310 ml	2004614
Firestop acrylic sealant CFS-S ACR	Cartridge / Foil	310 / 580 ml	435859 / 435863
Dispenser CFS-DISP	/	1 pc	2005843

GENERAL INFORMATIONS

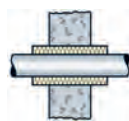


Parameter	Flexible wall	Rigid wall	Rigid floor
Base material thickness	≥ 100 mm		≥ 150 mm
Opening dimensions	≤ 1200 x 1000 mm		≤ 1000 x 800 mm
Distance to first support	≥ 250mm		
Additional info	Opening lined on both faces with minimum 2 layers of 12,5 mm thick boards.	Wall must comprise concrete, aerated concrete, brickwork or masonry Material density ≥ 350 kg/m ³	Floor made of concrete or masonry Density of support construction ρE > 550 kg/m ³
Distance between penetrants	See table next page (mm)		

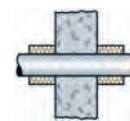
INSULATION TYPE VISUALS



Continued Sustained (CS) insulation



Local Sustained (LS) insulation



Local Interrupted (LI) insulation

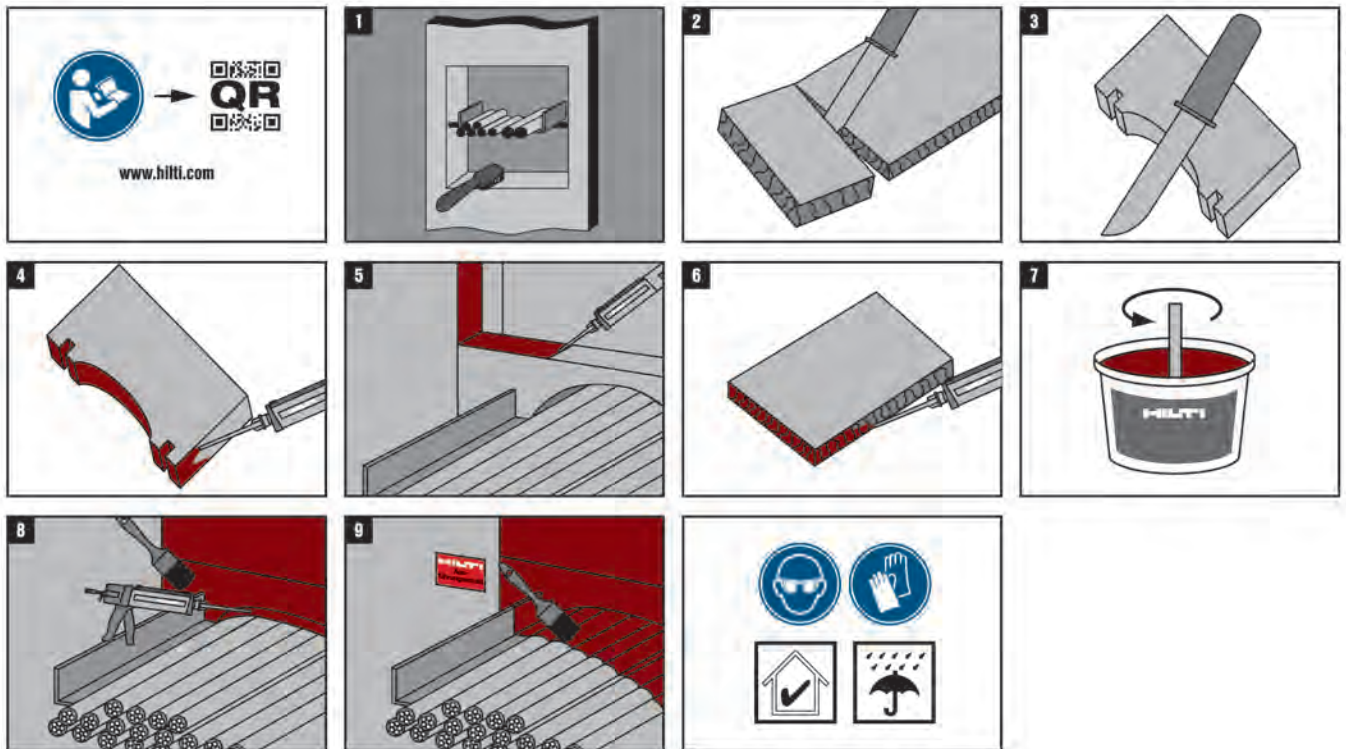
DISTANCE REQUIREMENTS

Minimal distance (mm)	Cables	Cable sup-port	Tied cable bundle	Conduit Ø<16mm	Conduit Ø>16mm	Tied conduit bundle	Metal pipe w/ combustible insultation	Metal pipe w/ non-combustible insulation	Plastic pipe	Al-comp. pipe, non-insulated	Al-com-posite pipe w/ combustible insulation	Al-com-posite pipe with non-combustible insulation	Plastic exhaust channels	Cable trunking, metal	HVAC Clima Split bundle	Edge
Cable	0	0	0	0	0	50	50	50	50	50	50	50	100	100	50	0
Cable support		0	0	50	50	50	50	50	50	50	50	50	100	100	50	0
Tied cable bundle			0	0	0	50	50	50	50	50	50	50	100	100	50	0
Conduit Ø<16mm				0	0	50	50	50	50	50	50	50	100	100	50	50
Conduit Ø>16mm					0	50	50	50	50	50	50	50	100	100	50	50
Tied conduit bundle						50	50	50	50	50	50	50	100	100	50	50
Metal pipe w/ combustible insultation							50	50	50	50	50	50	100	100	50	50
Metal pipe w/ non-combustible insulation								50	50	50	50	50	100	100	50	50
Plastic pipe									50	50	50	50	100	100	50	50
Al-comp. pipe, non-insulated										50	50	50	100	100	50	50
Al-combustible pipe w/ combustible insulation											50	50	100	100	50	50
Al-composite pipe wit non-combustible insulation												50	100	100	50	50
Plastic exhaust channels													100	100	100	100
Cable trunking, metal														100	100	100
HVAC Clima Split bundle															50	50

CHARACTERISTICS OF CFS-CT HDB

Characteristics	Assessment of characteristics	Norm, standard, test
Health and environment		
Air permeability (gas tightness)	Tested for gas permeability regarding the gases air, nitrogen (N), carbon dioxide (CO ₂) and CH ₄ (methane). See ETA 11/0429 for detailed results.	EN 1026
Water permeability	Watertight up to 1000mm head of water or 9806 Pa. for 0.7mm dry film thickness on mineral wool	Annex C of EAD 350454-00-1104
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 datasheet
Durability and serviceability	Category Y2 (suitable for penetrations seals intended for use at internal dry conditions with temperatures between -20°C and +70°C with no exposure to rain nor UV.	EOTA Technical Report TR 024 ETAG 026-2
Reaction to Fire	Precoated board: D- s2, d0 Mineral wool: Class A1	EN 13501-1
Acoustics	Rw = 30 dB (Single board) Rw = 35 dB (Double board)	EN ISO 140-3

INSTALLATION INSTRUCTIONS



INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

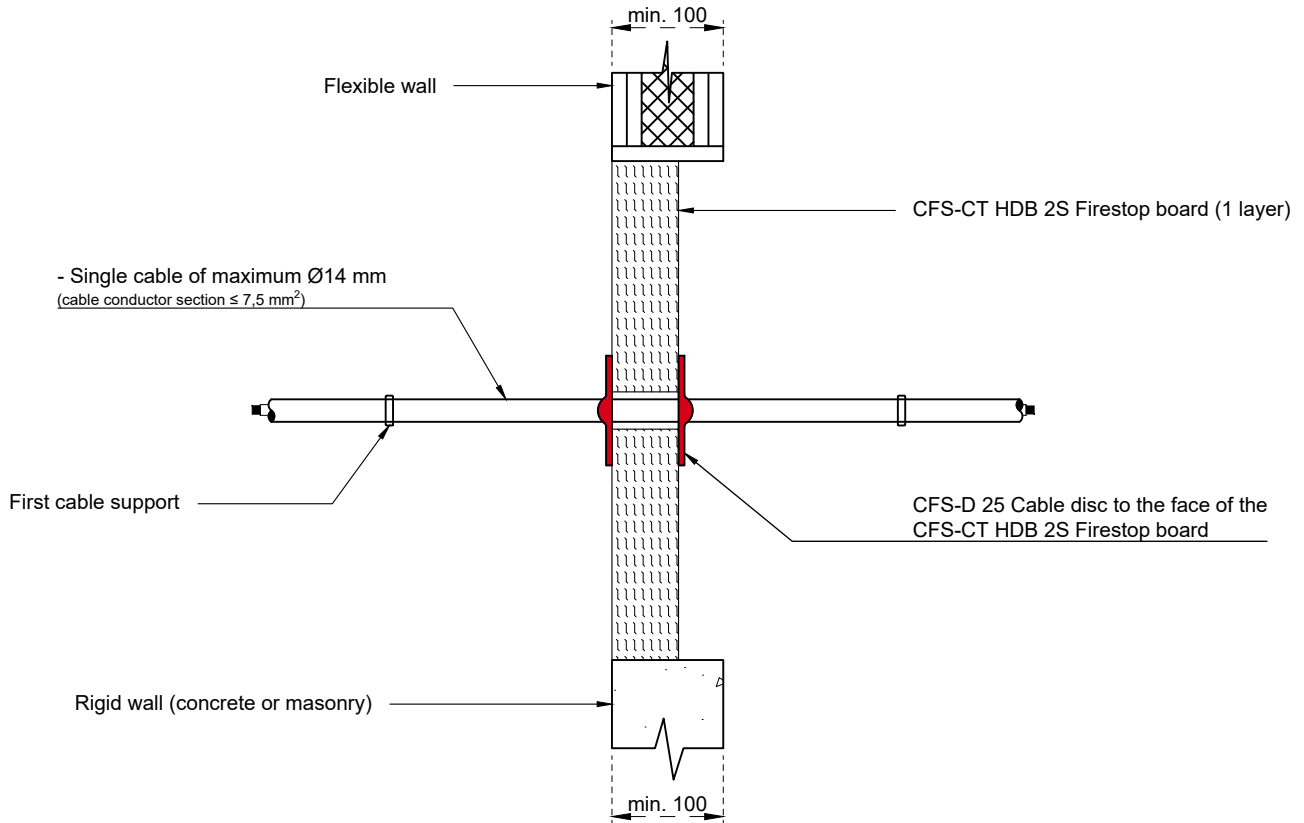
Single cables with CFS-D 25

REV:

01

Fire Rating EI 60

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.
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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

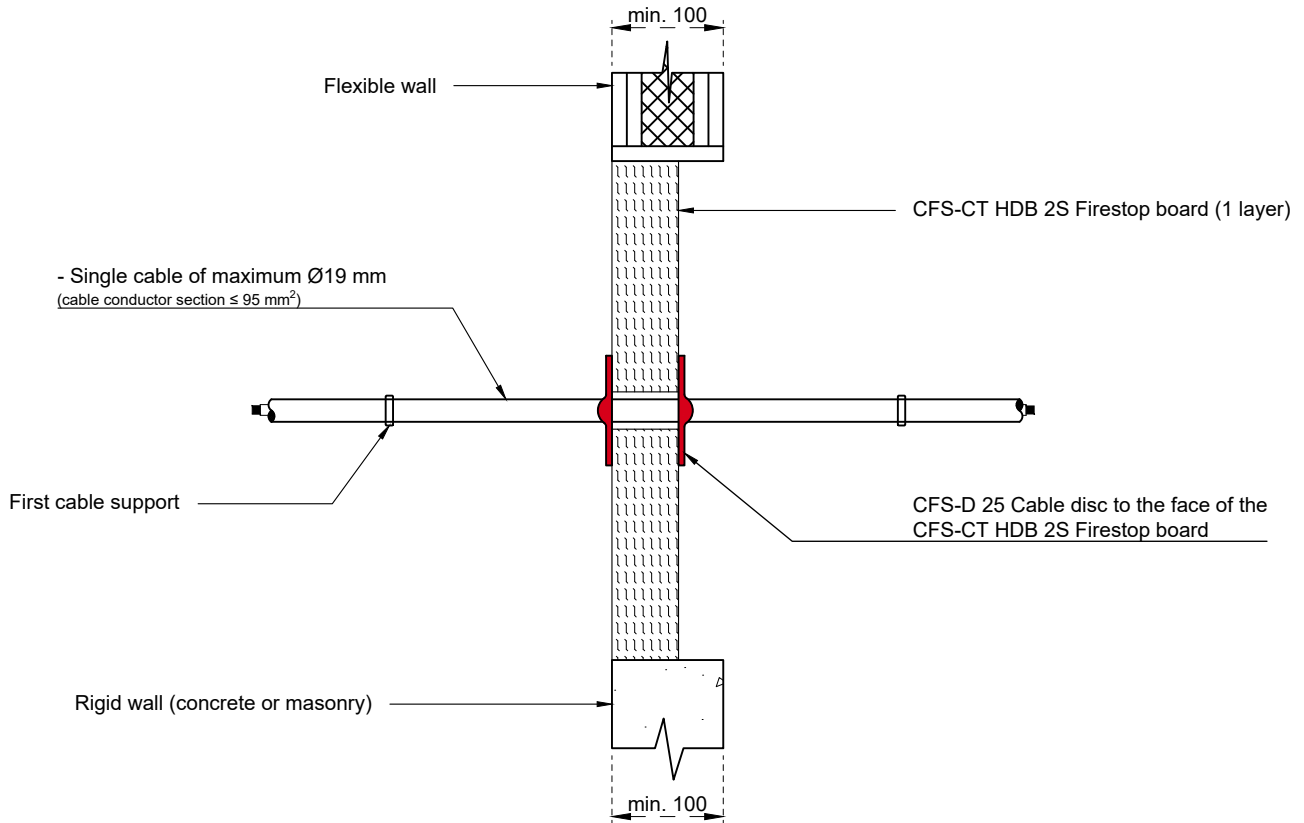
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Single cable with CFS-D 25

REV:

01
Fire Rating EI 30
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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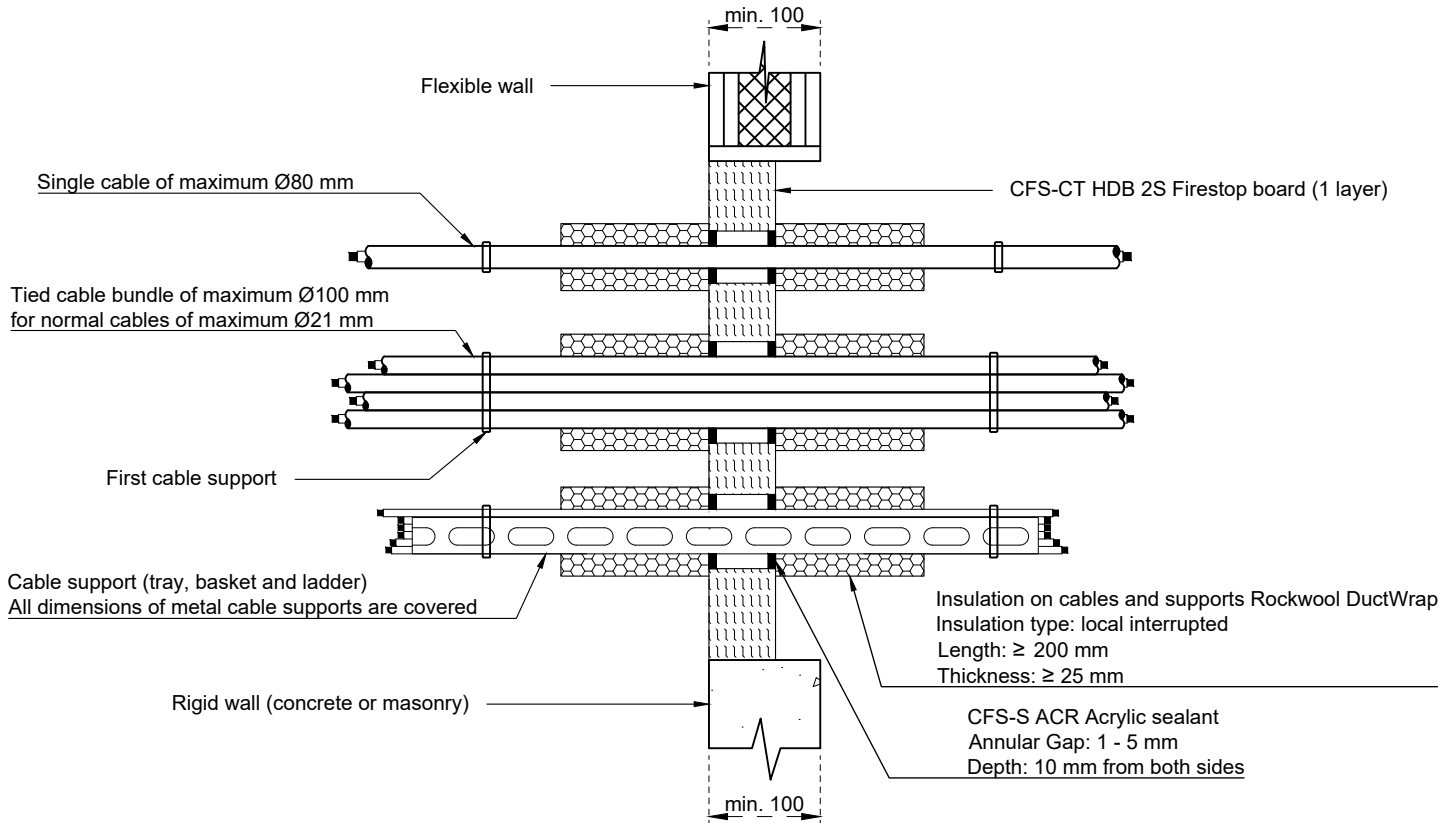
INFORMATION:

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- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Cables with or without cable carriers

REV:

01
Fire Rating EI 60
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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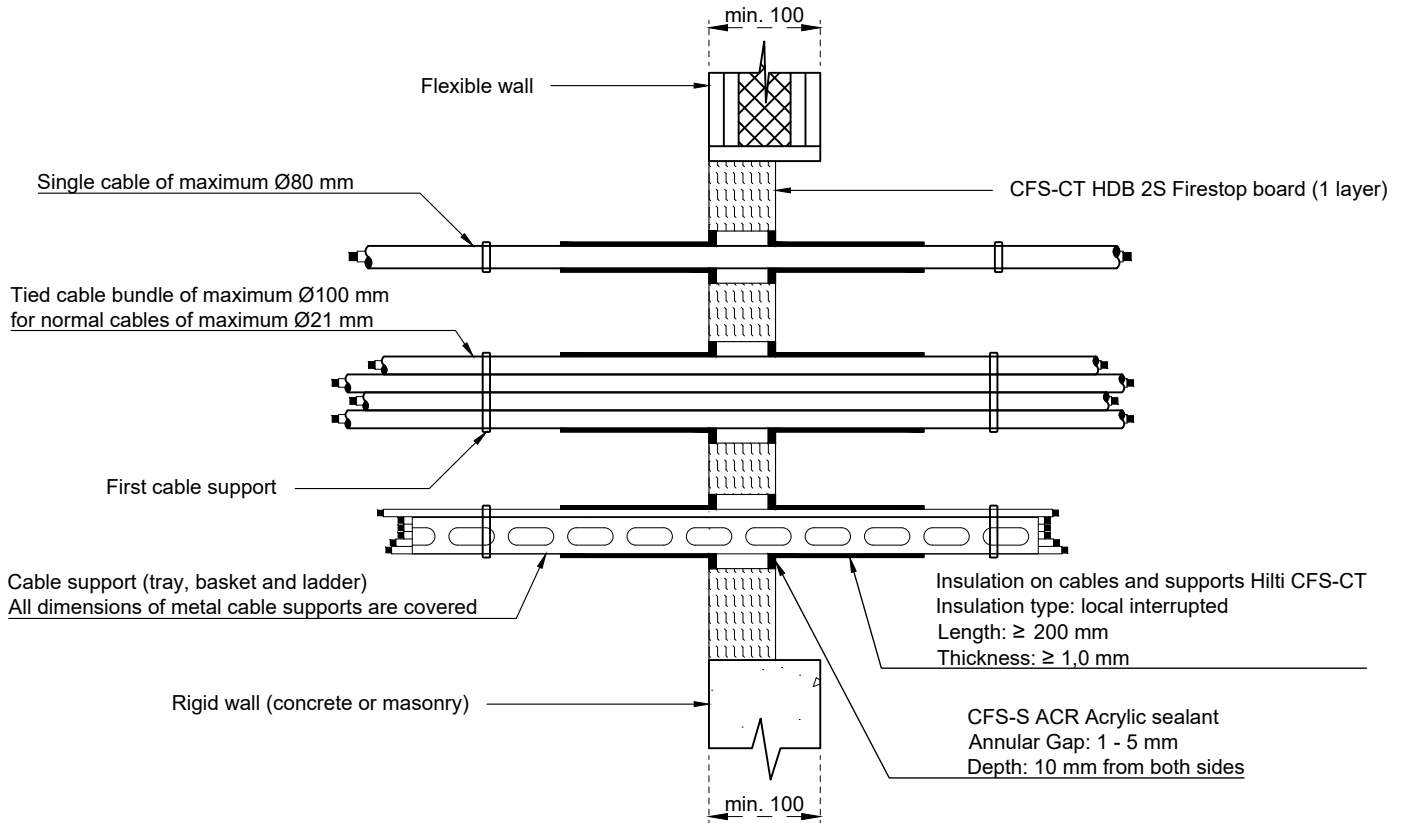
INFORMATION:

- Not to scale
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- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Cables with or without cable carriers

REV:

01
Fire Rating EI 30
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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APPLICATION:

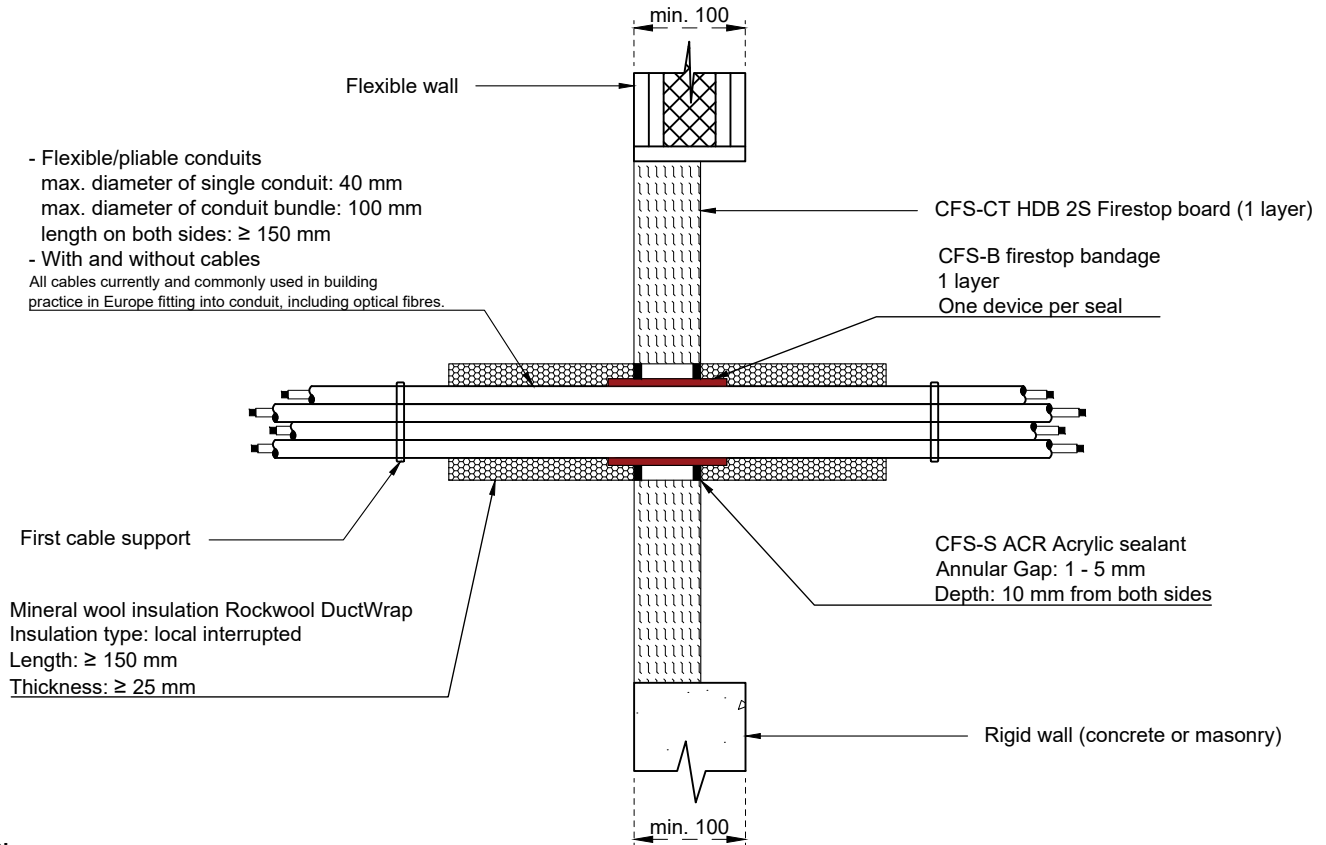
Flexible/pliable plastic conduits bundles

REV:

01

Fire Rating EI 60 U/U

Page 1/1


Note:

- Single conduit and/or conduit bundles.

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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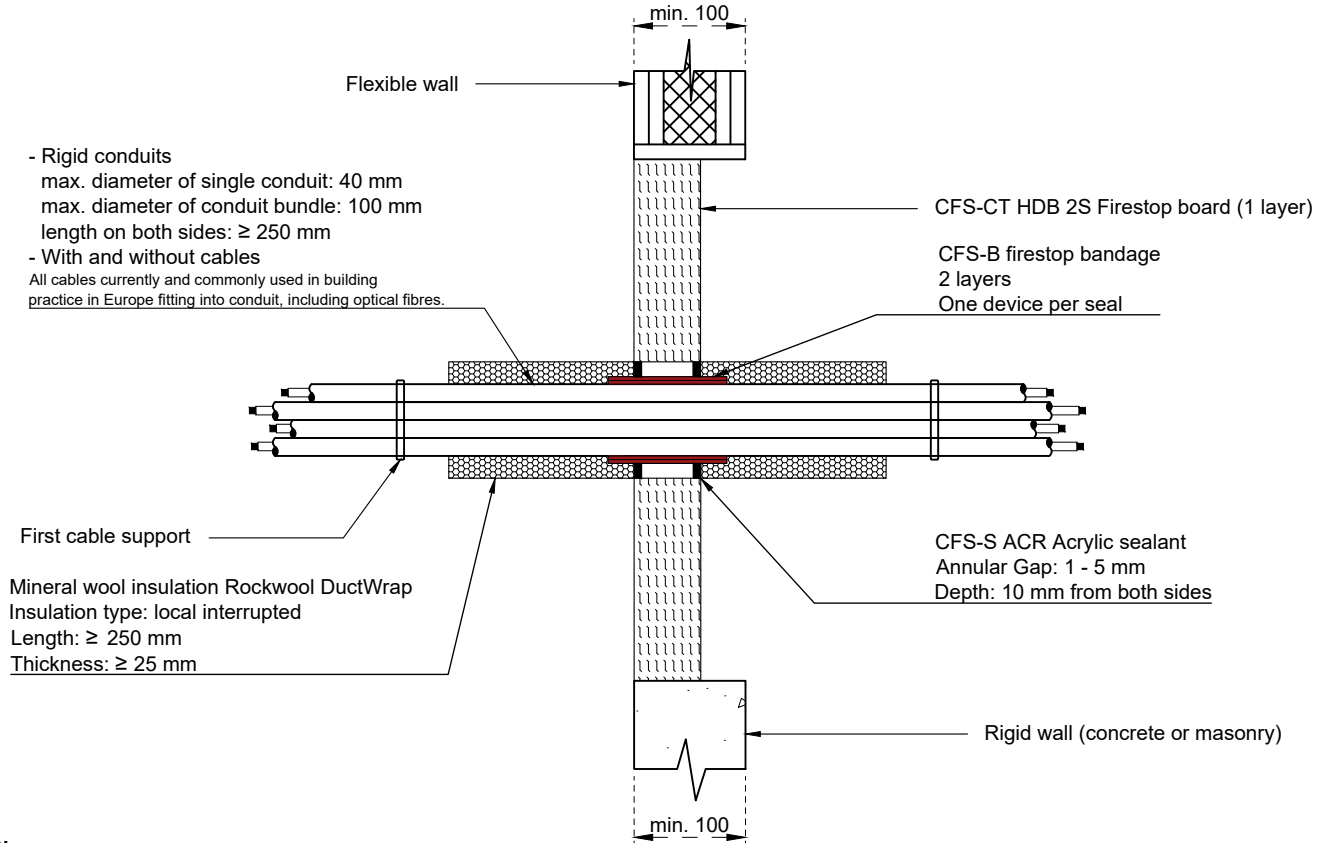
INFORMATION:

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- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Rigid plastic conduits bundles

REV:

01
Fire Rating EI 60 U/U
Page 1/1

Note:

- Single conduit and/or conduit bundles.

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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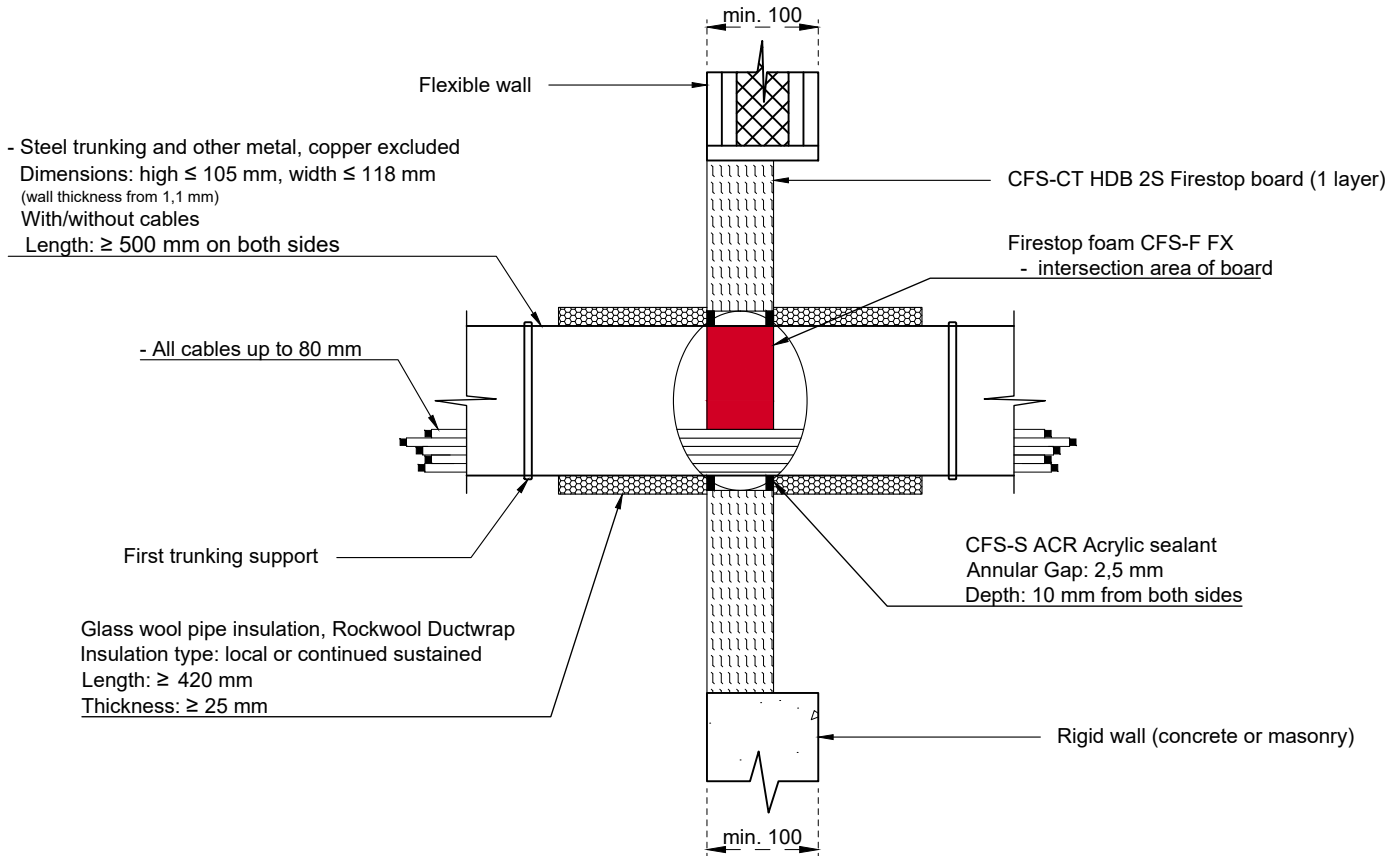
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Steel cable trunking

REV:

01
Fire Rating EI 60 U/U
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

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- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

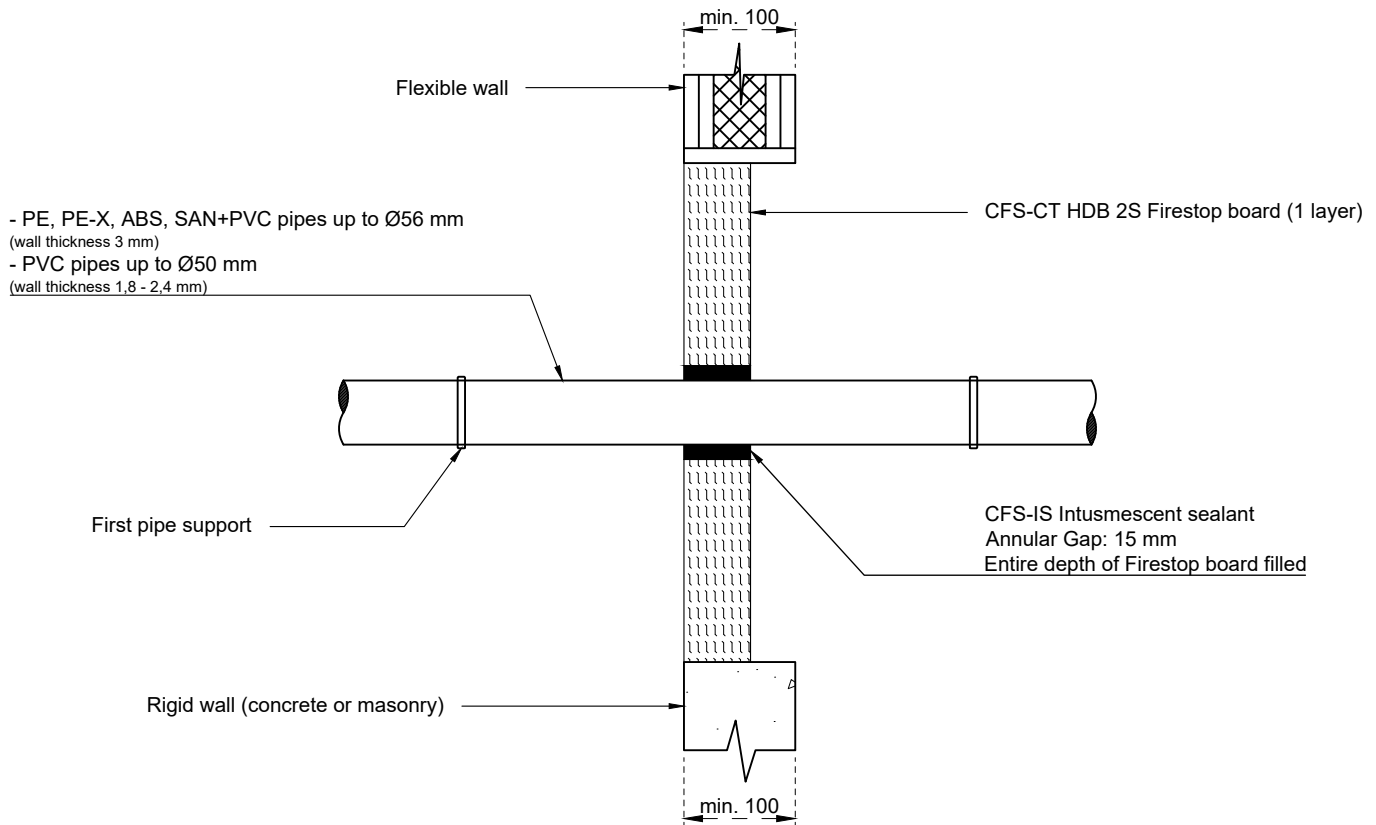
PE/PVC pipes with CFS-IS

REV:

01

Fire Rating EI 60 U/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.

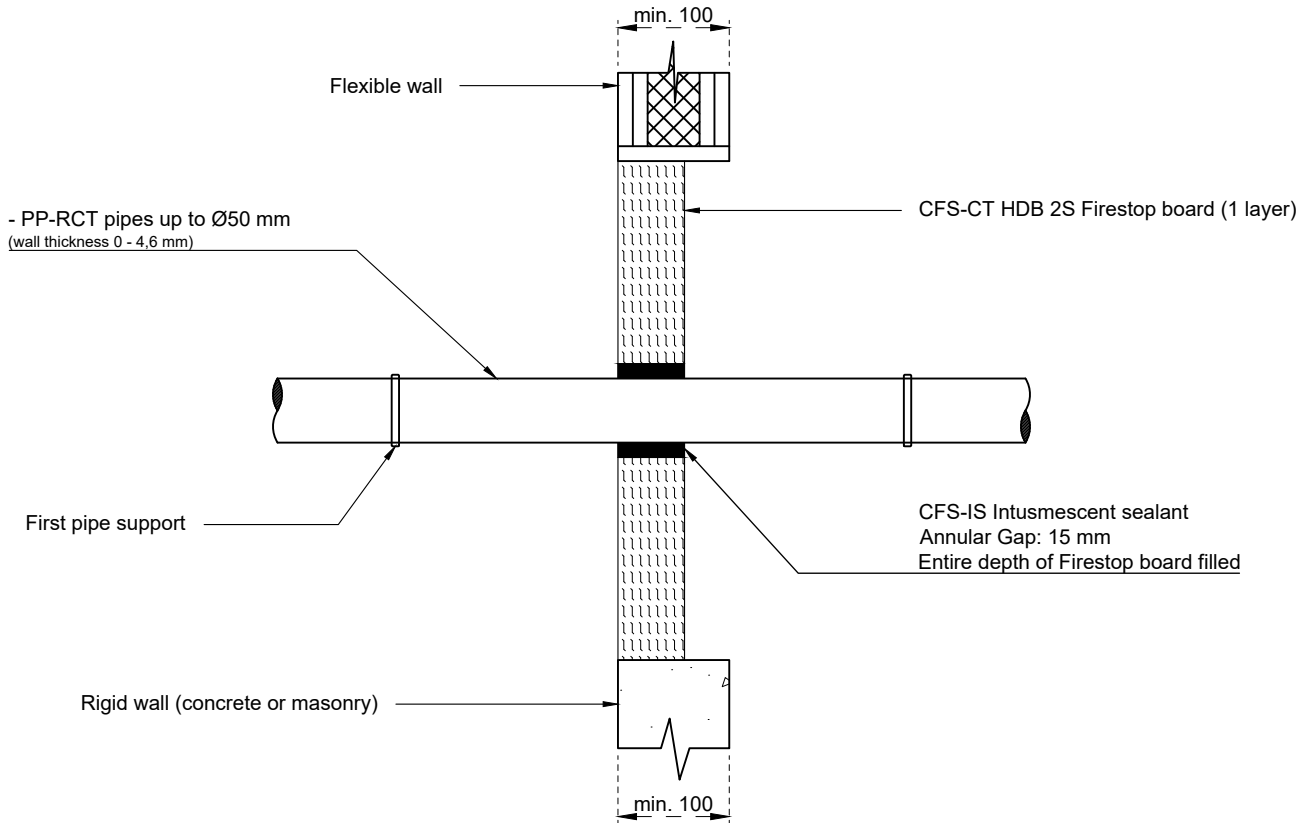
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

PP-RCT pipes with CFS-IS

REV:

01
Fire Rating EI 60 U/C
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

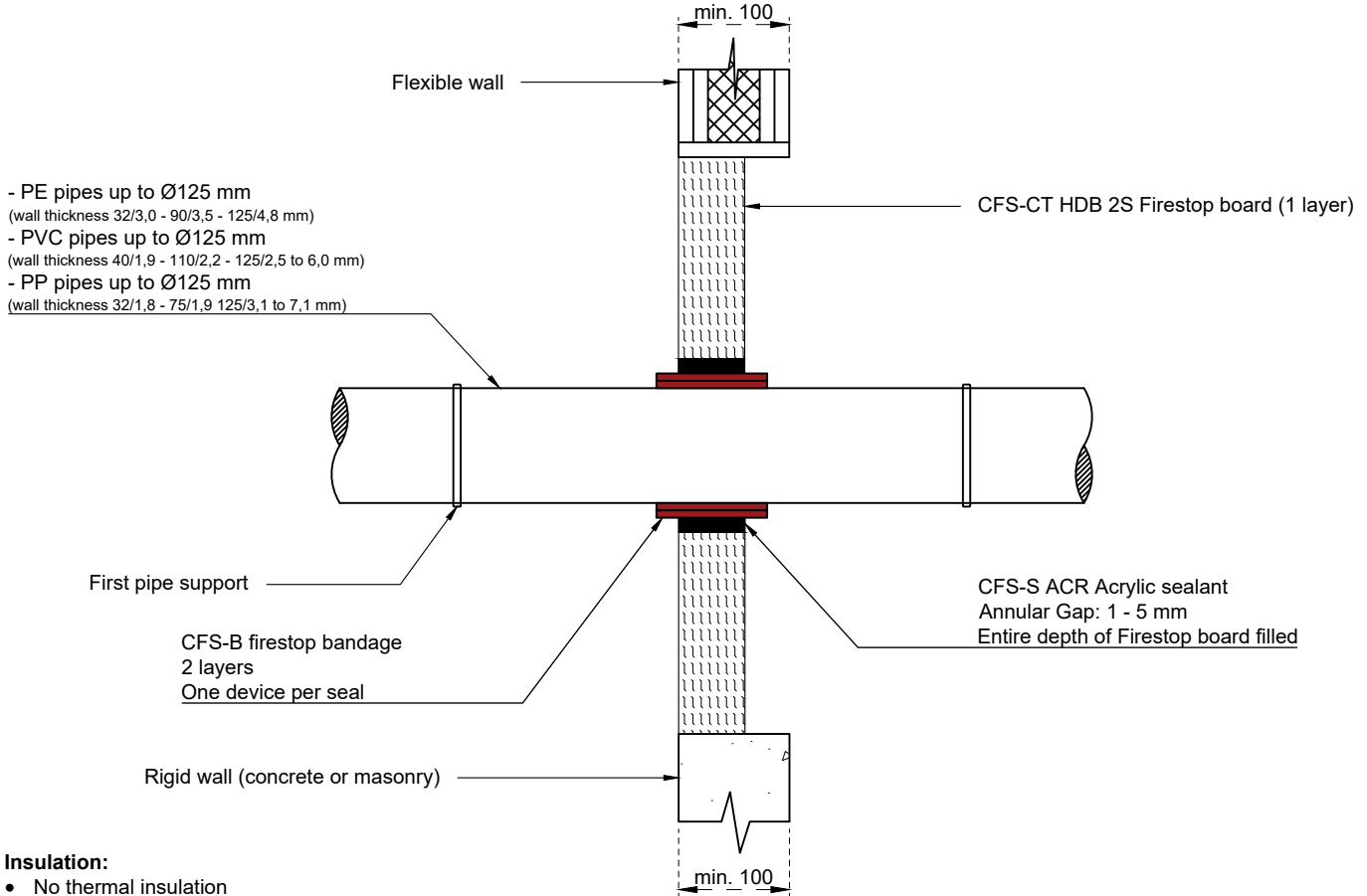
PE/PVC/PP pipes with CFS-B

REV:

01

Fire Rating EI 60 U/C

Page 1/1



- PE pipes up to Ø125 mm
(wall thickness 32/3,0 - 90/3,5 - 125/4,8 mm)
- PVC pipes up to Ø125 mm
(wall thickness 40/1,9 - 110/2,2 - 125/2,5 to 6,0 mm)
- PP pipes up to Ø125 mm
(wall thickness 32/1,8 - 75/1,9 125/3,1 to 7,1 mm)

Insulation:

- No thermal insulation
- No acoustic pipe decoupling on pipe

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.

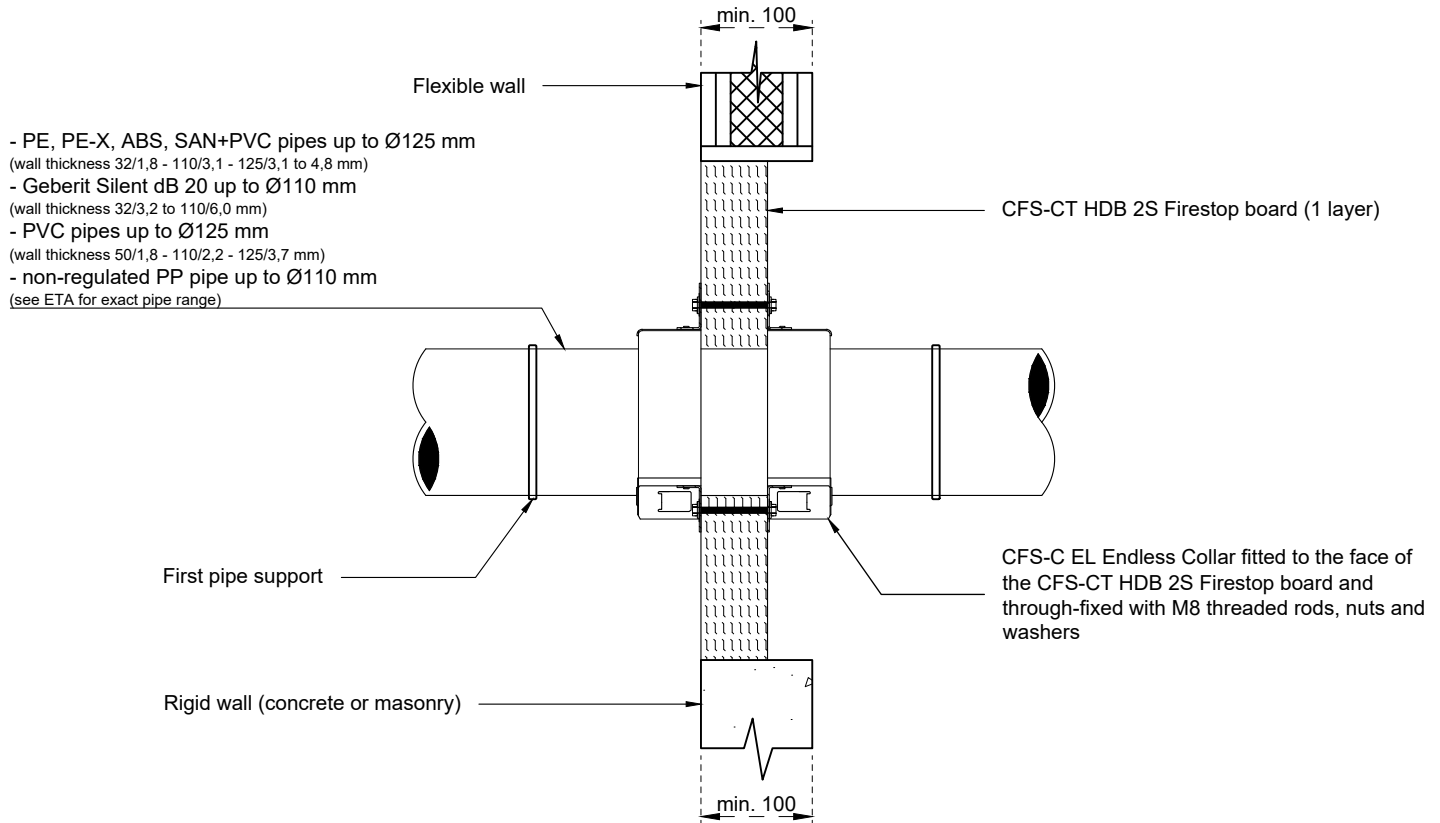
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

PE/PVC pipes with CFS-C EL

REV:

01
Fire Rating EI 60 U/U
Page 1/1

Insulation:

- No thermal insulation
- No acoustic pipe decoupling on pipe

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

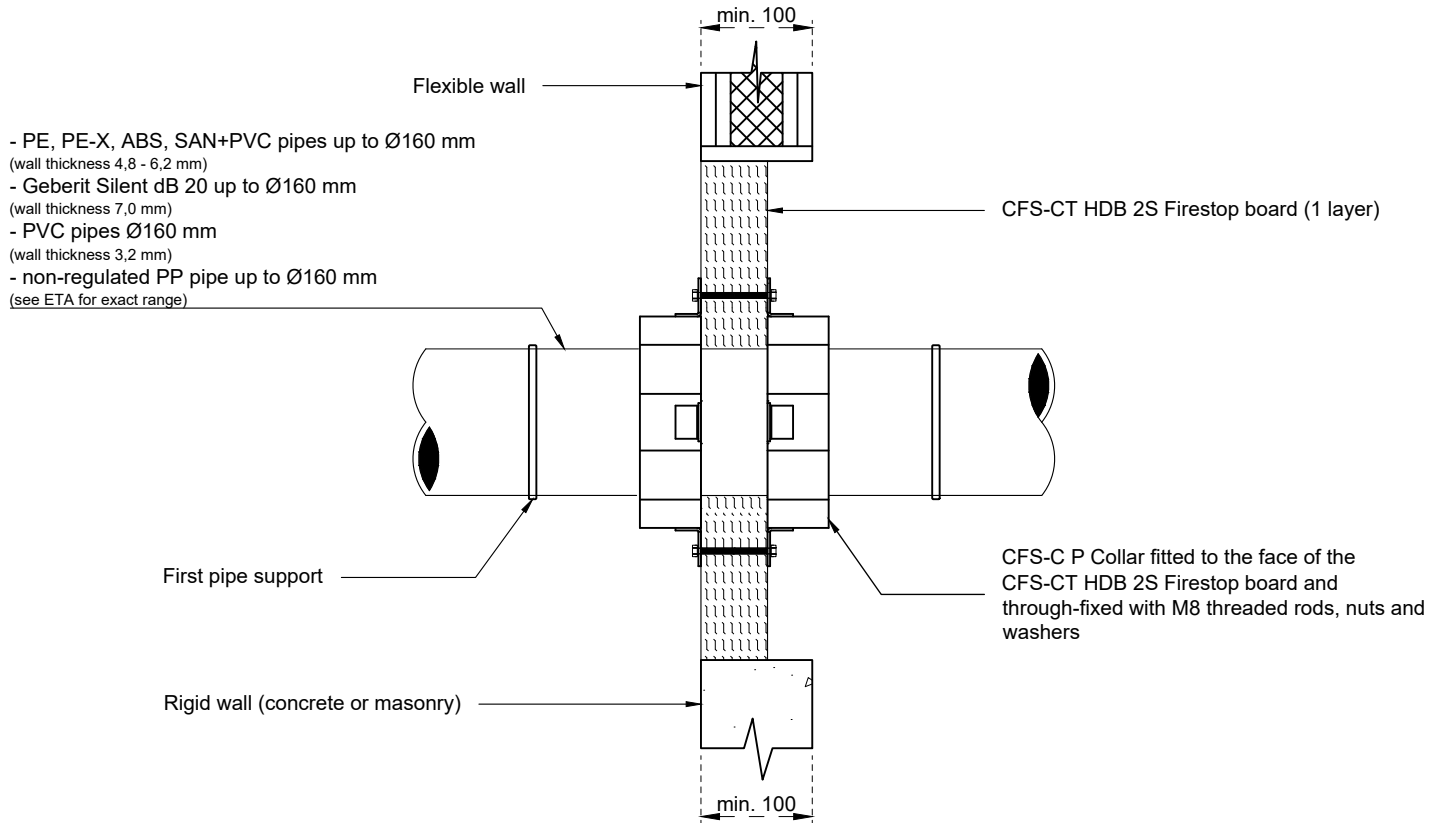
PE/PVC pipes with CFS-C P

REV:

01

Fire Rating EI 60 U/U

Page 1/1


Insulation:

- No thermal insulation
- No acoustic pipe decoupling on pipe

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

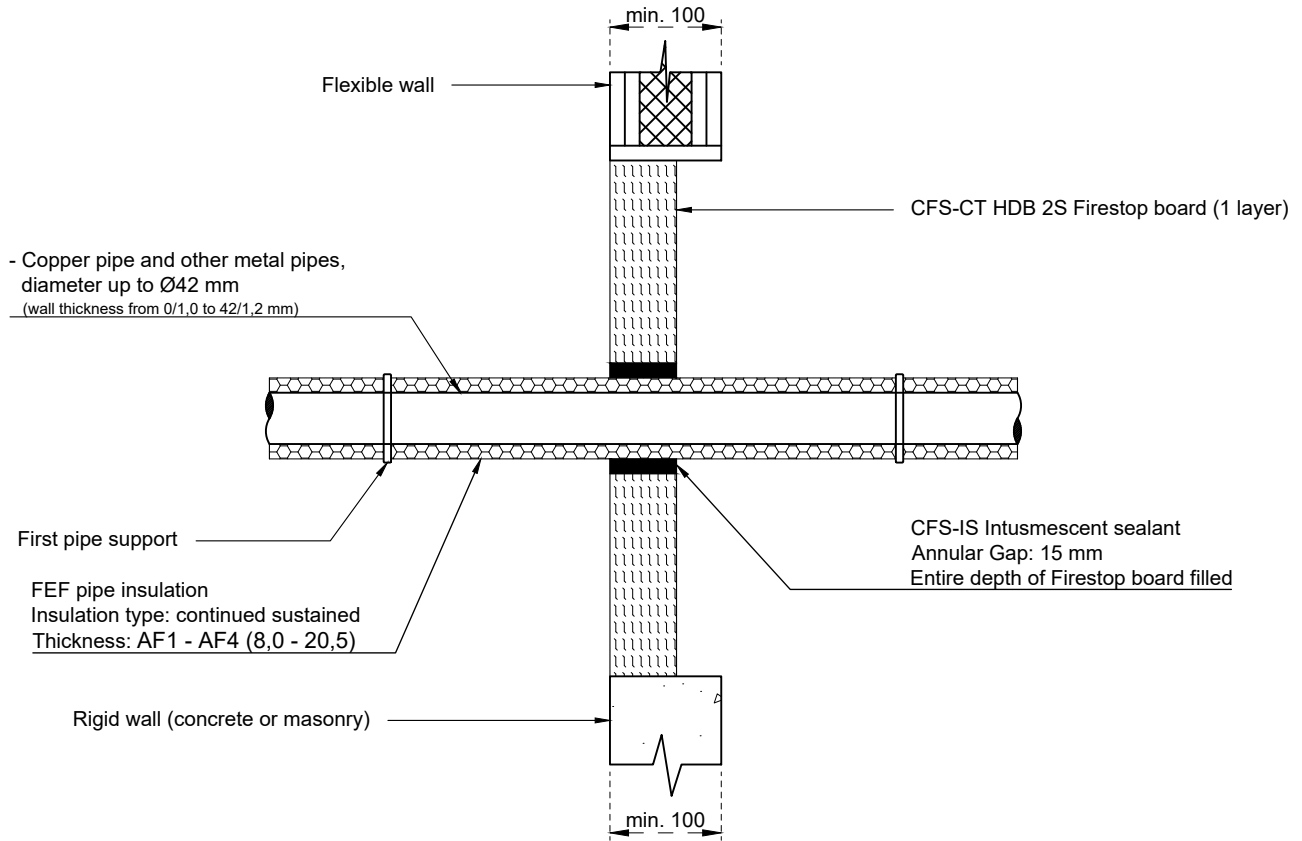
Copper pipes with FEF insulation with CFS-IS

REV:

01

Fire Rating EI 45 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

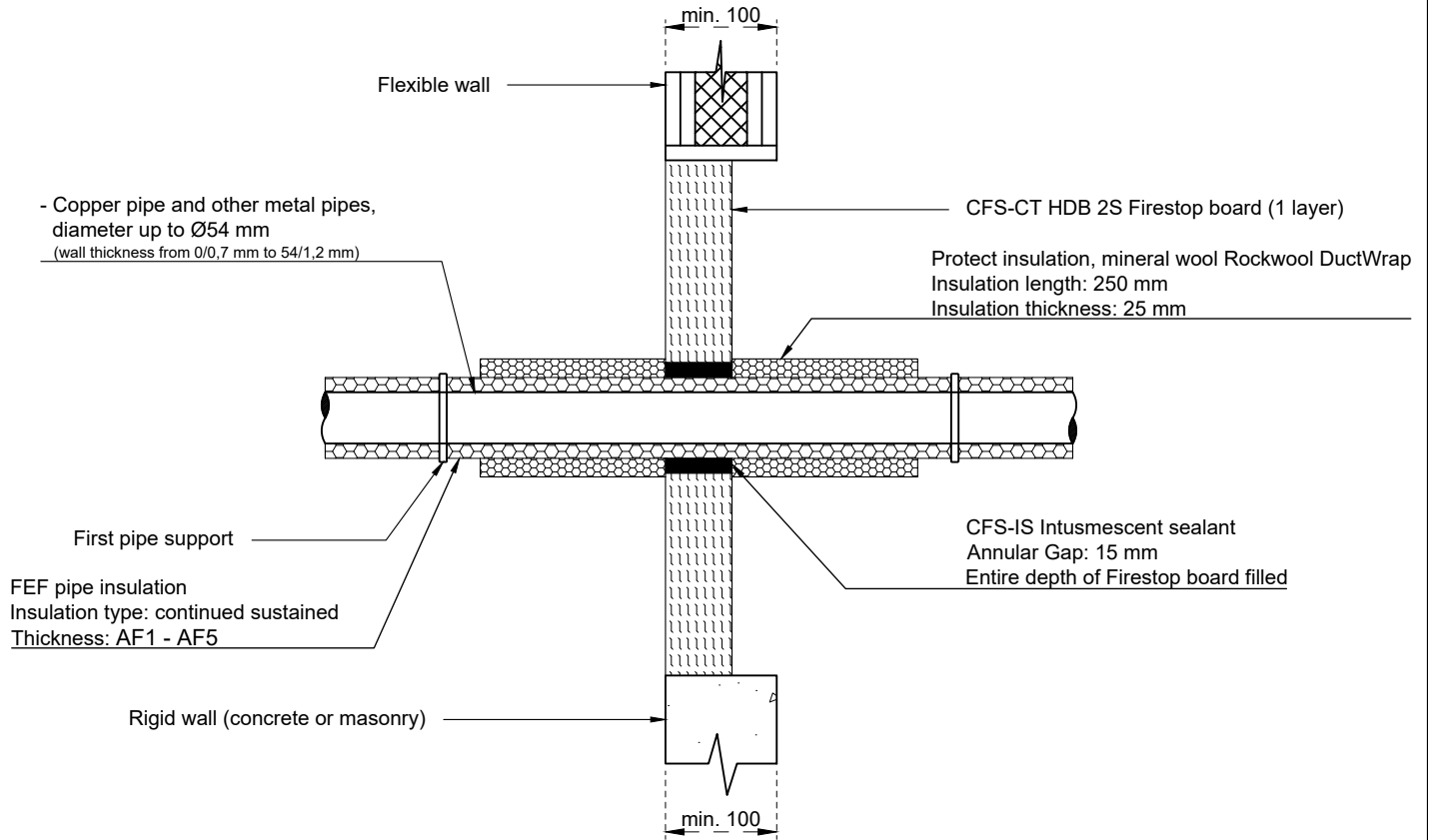
Copper pipes with FEF insulation with CFS-IS

REV:

01

Fire Rating EI 60 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

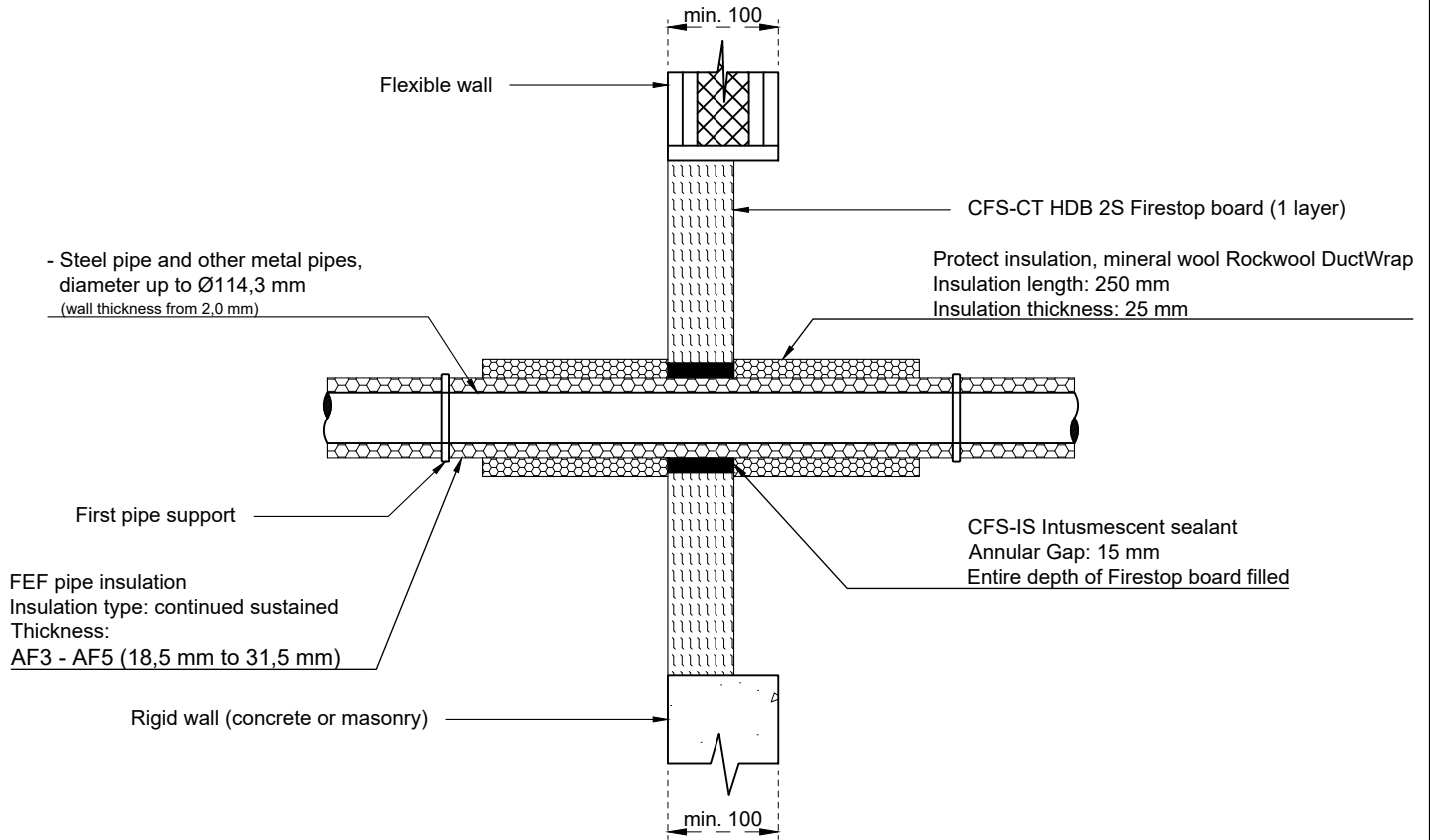
Steel pipe with FEF insulation, CFS-IS

REV:

01

Fire Rating EI 60 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

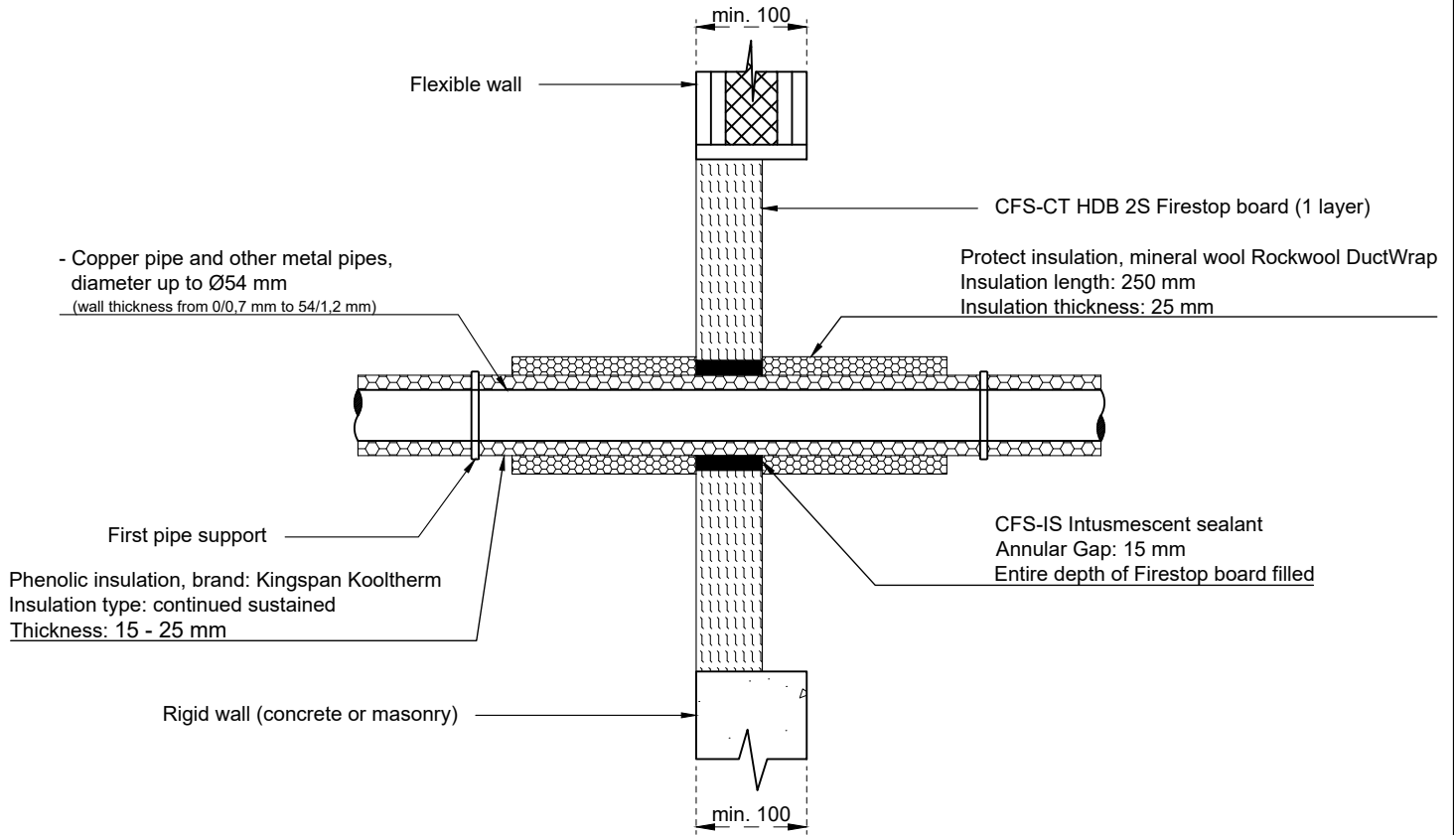
Copper pipe with Kingspan Kooltherm

REV:

01

Fire Rating EI 60 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

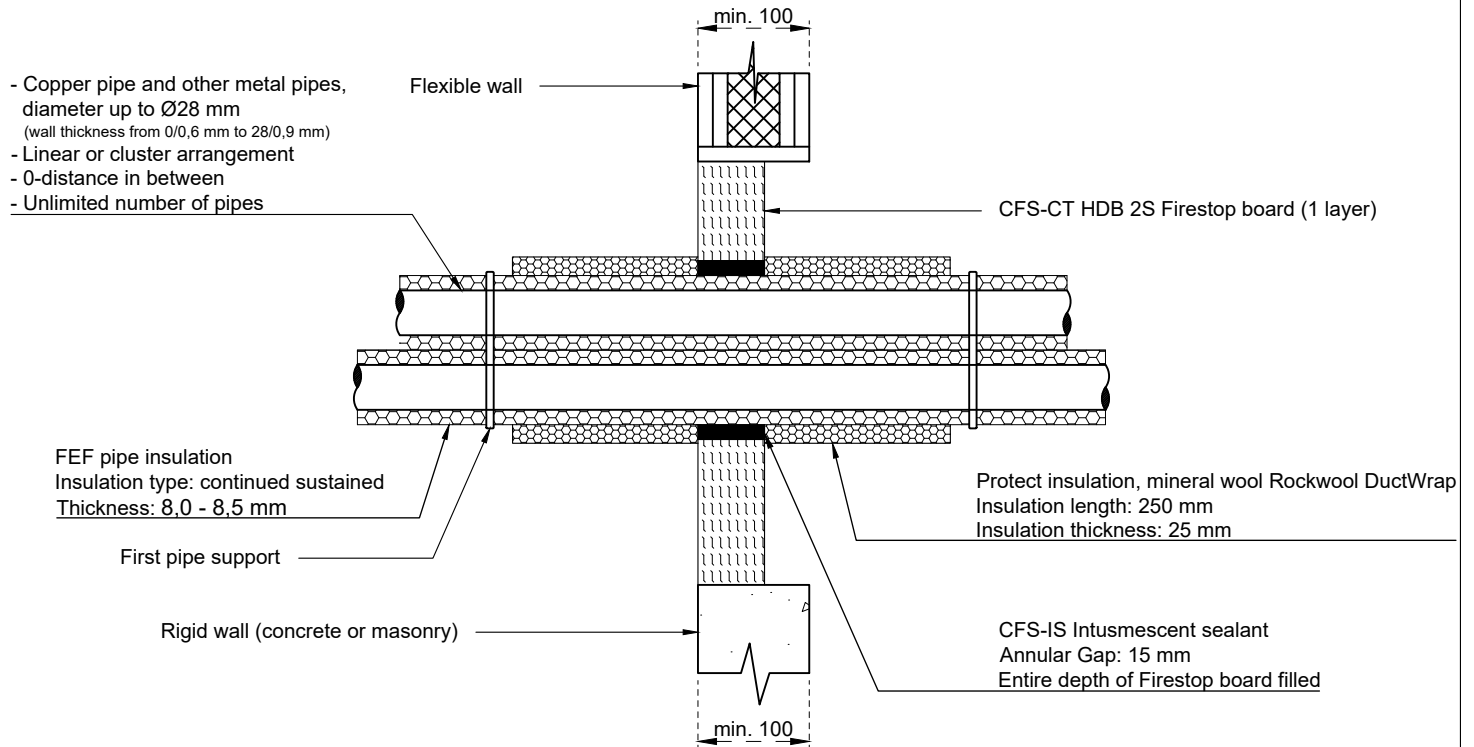
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

0-Distance copper pipes with FEF insulation

REV:

01
Fire Rating EI 60 C/U
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

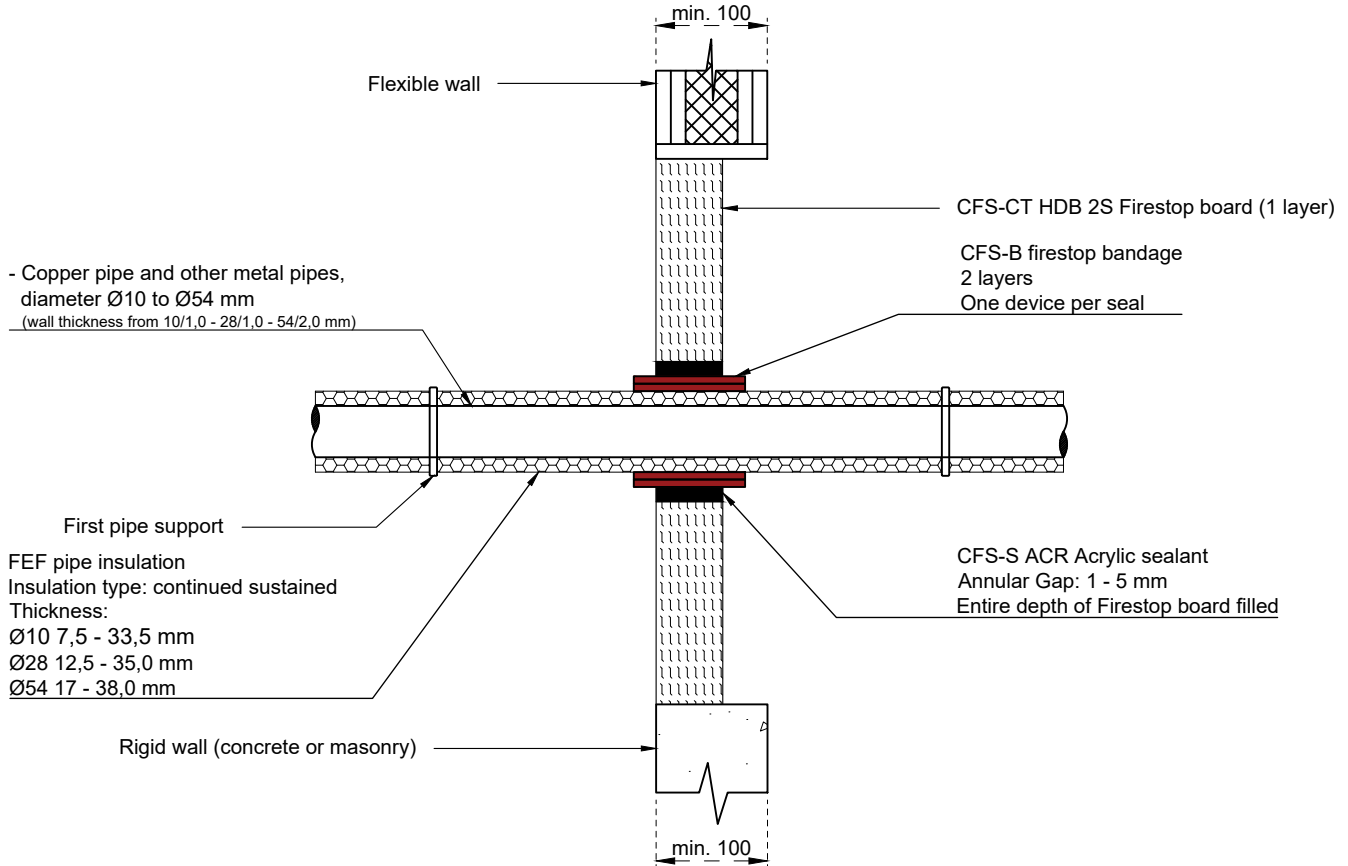
Cu pipes with FEF insulation, CFS-B

REV:

01

Fire Rating EI 30 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

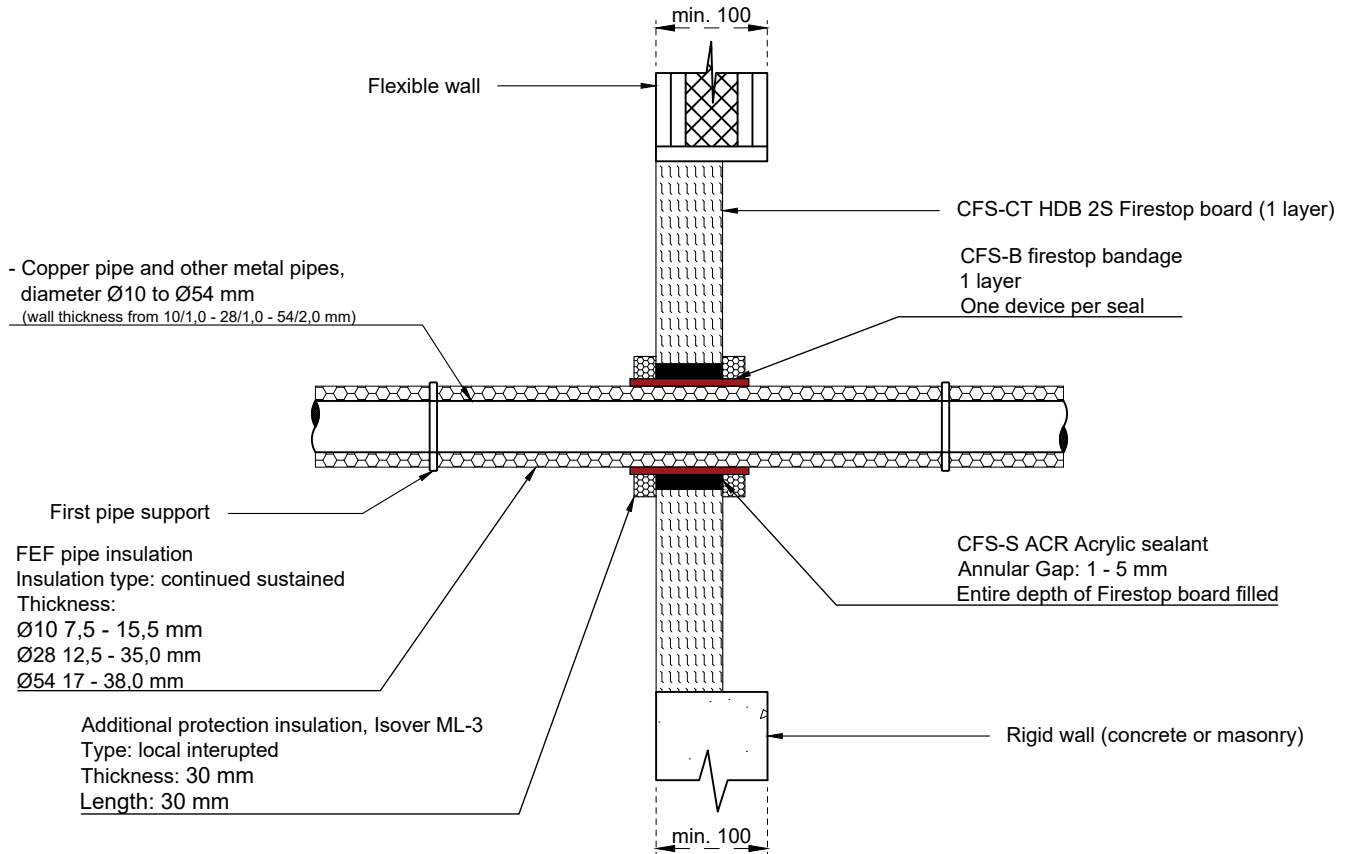
Copper pipes with FEF insulation, CFS-B

REV:

01

Fire Rating EI 60 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

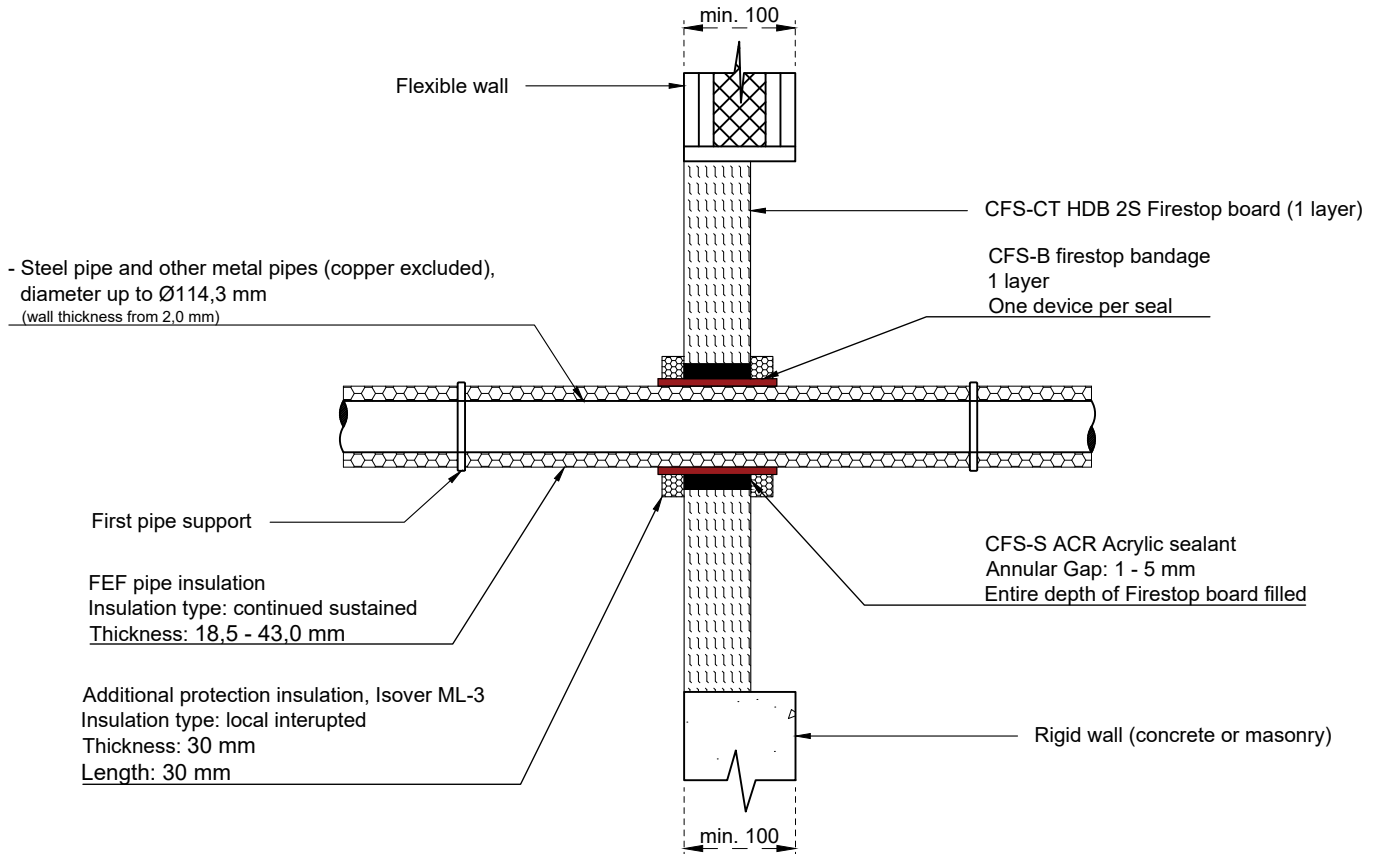
Steel pipes with FEF insulation, CFS-B

REV:

01

Fire Rating EI 60 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.

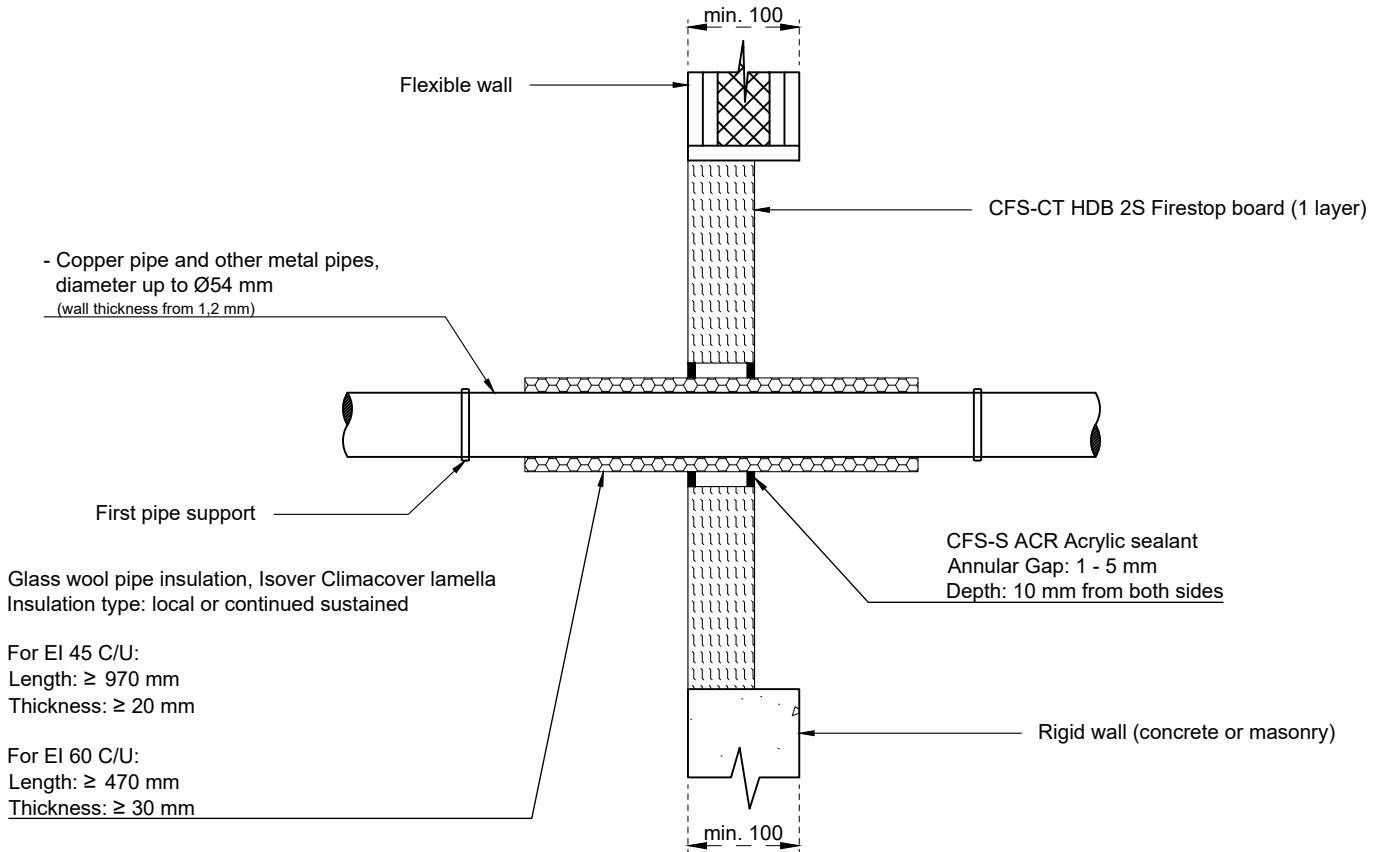
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Cu/Fe pipes with LS glass wool insulation

REV:

01
Fire Rating EI 45 C/U / EI 60 C/U
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.
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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

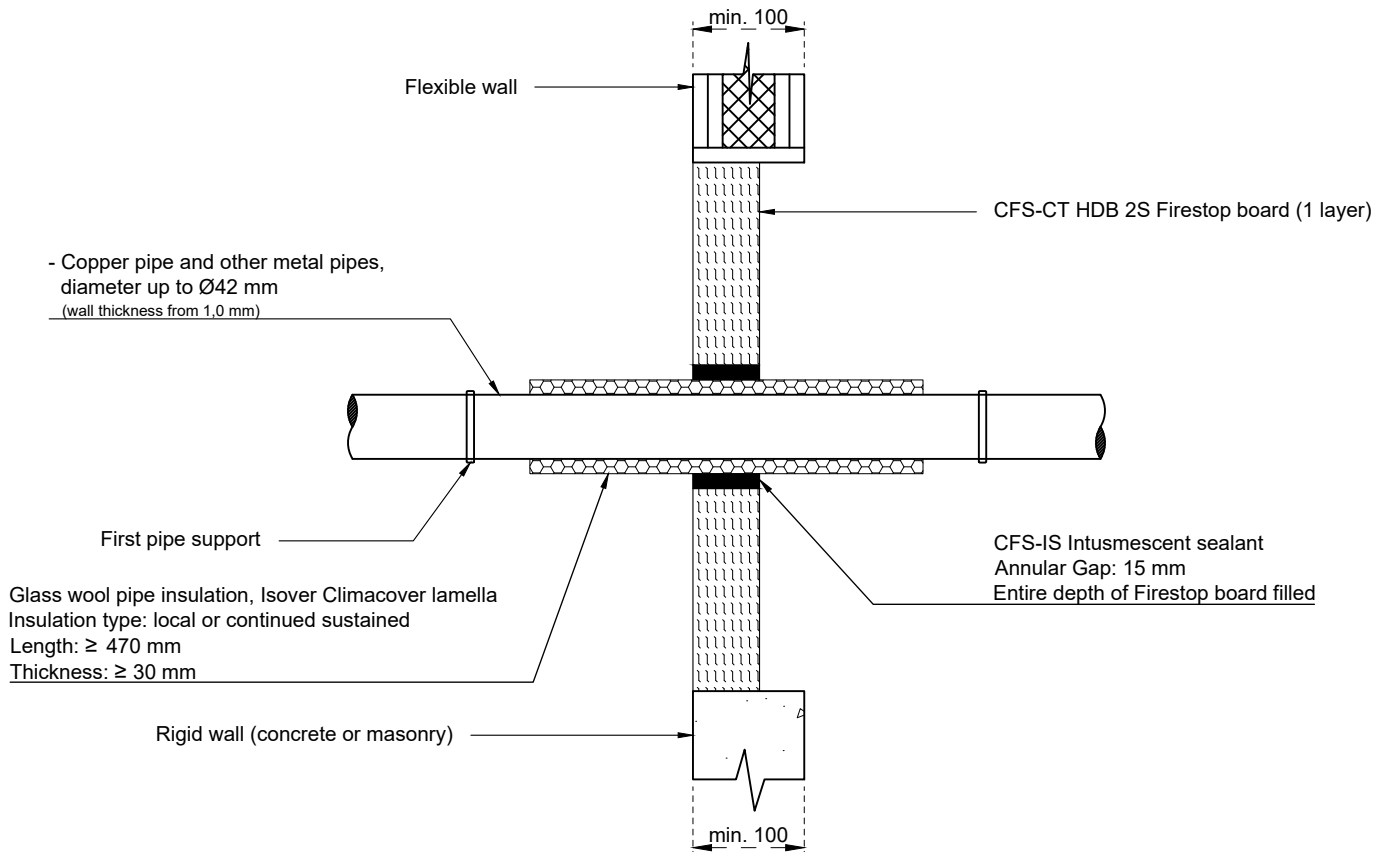
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Copper pipes with glass wool insulation

REV:

01
Fire Rating EI 60 C/U
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

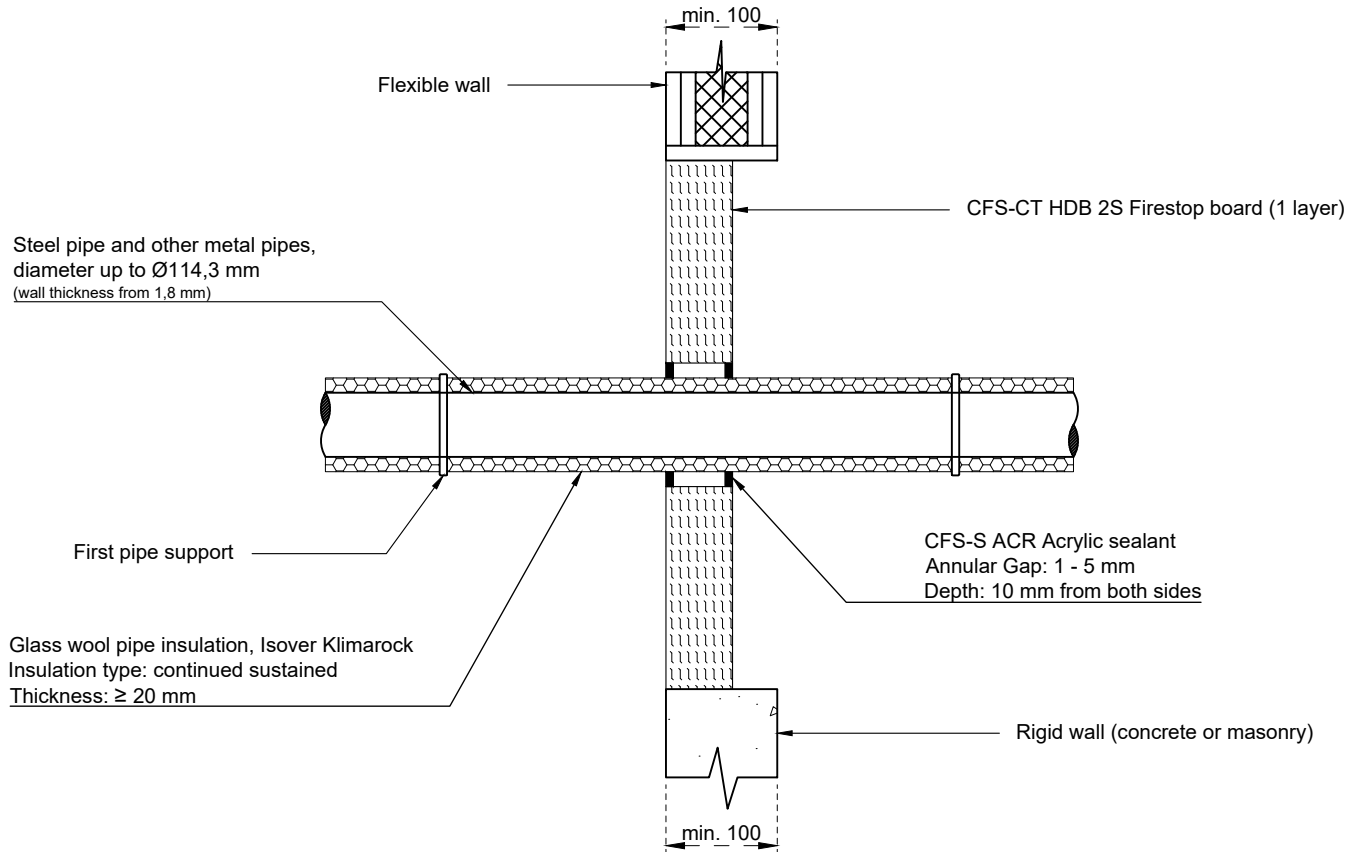
Steel pipe with CS glass wool insulation

REV:

01

Fire Rating EI 60 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

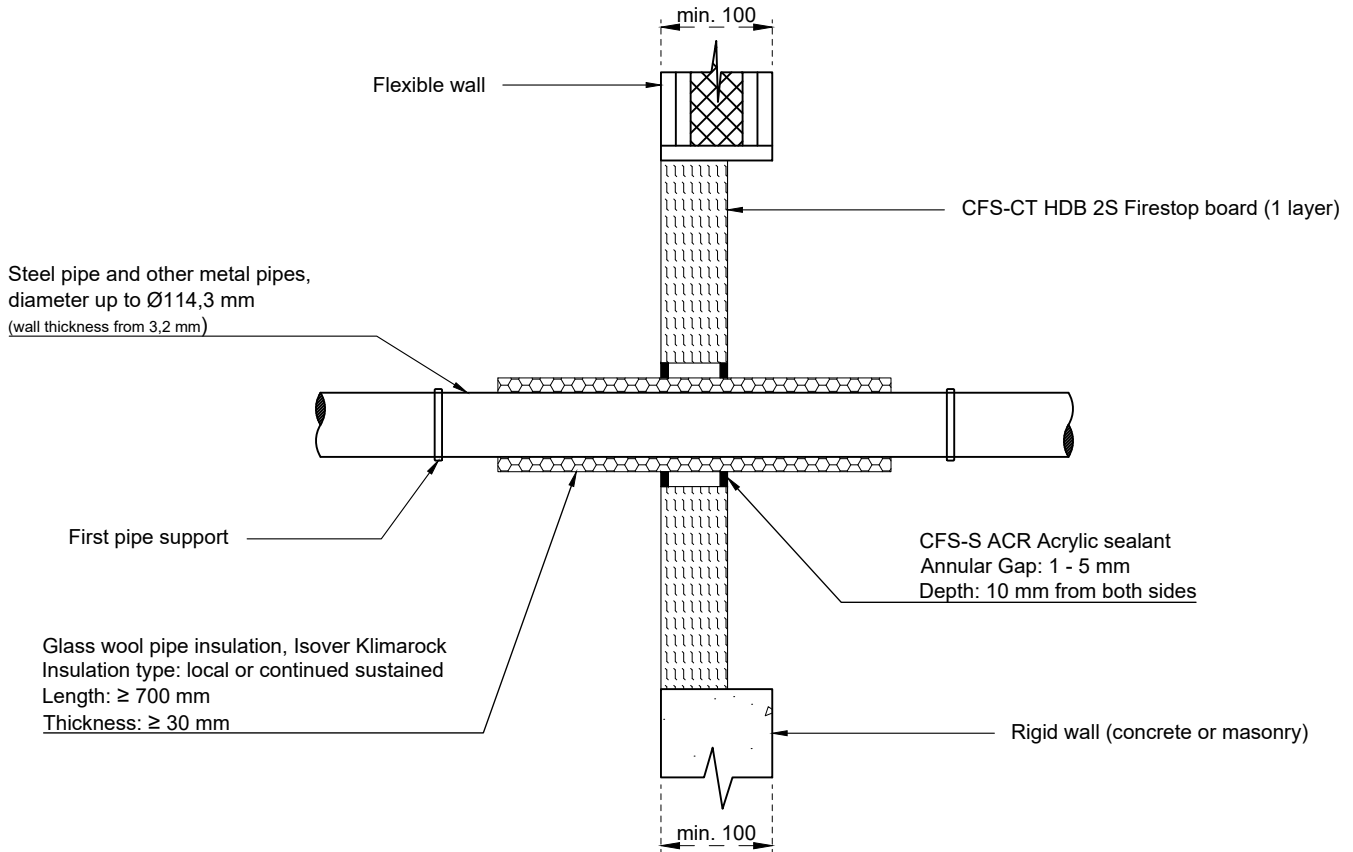
Steel pipes with local sustained mineral wool

REV:

01

Fire Rating EI 60 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.

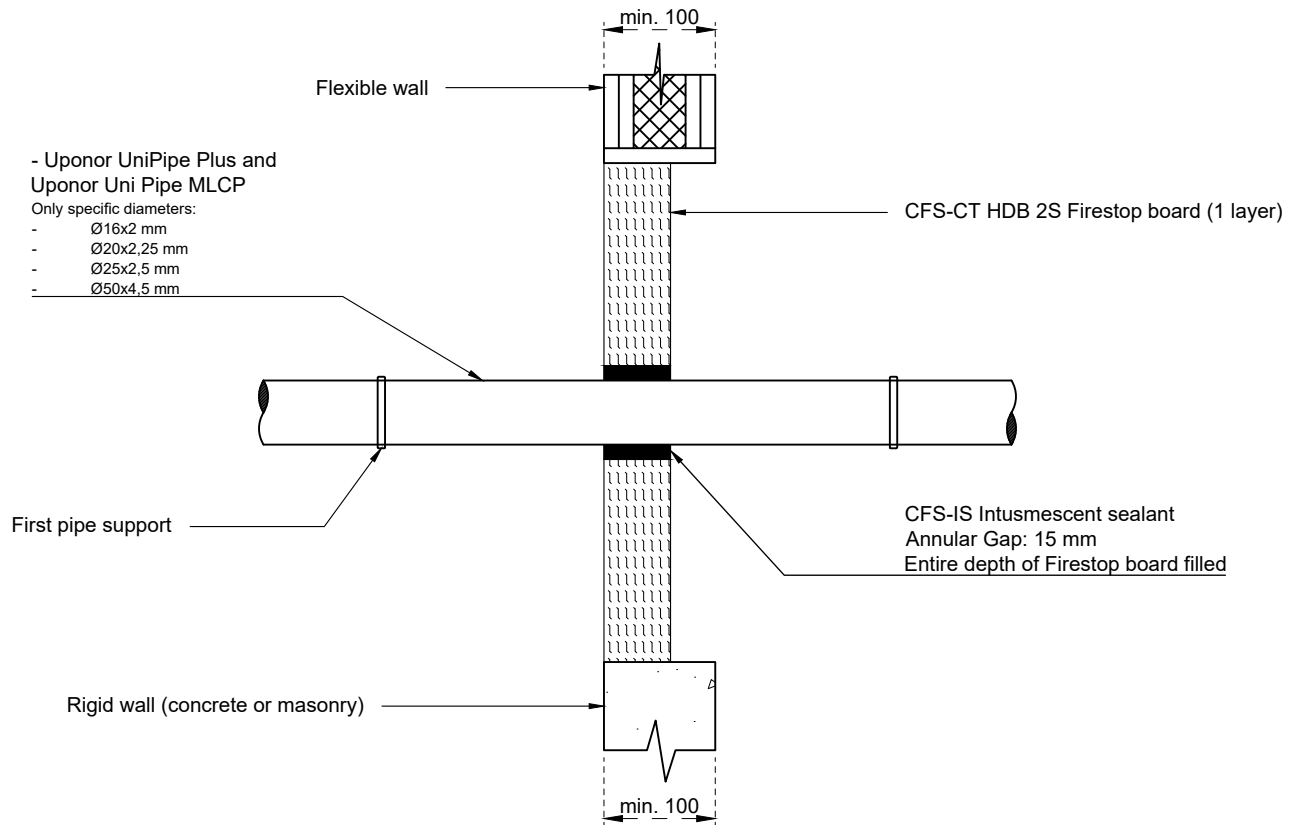
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Composite pipes without insulation

REV:

01
Fire Rating EI 60 U/C
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

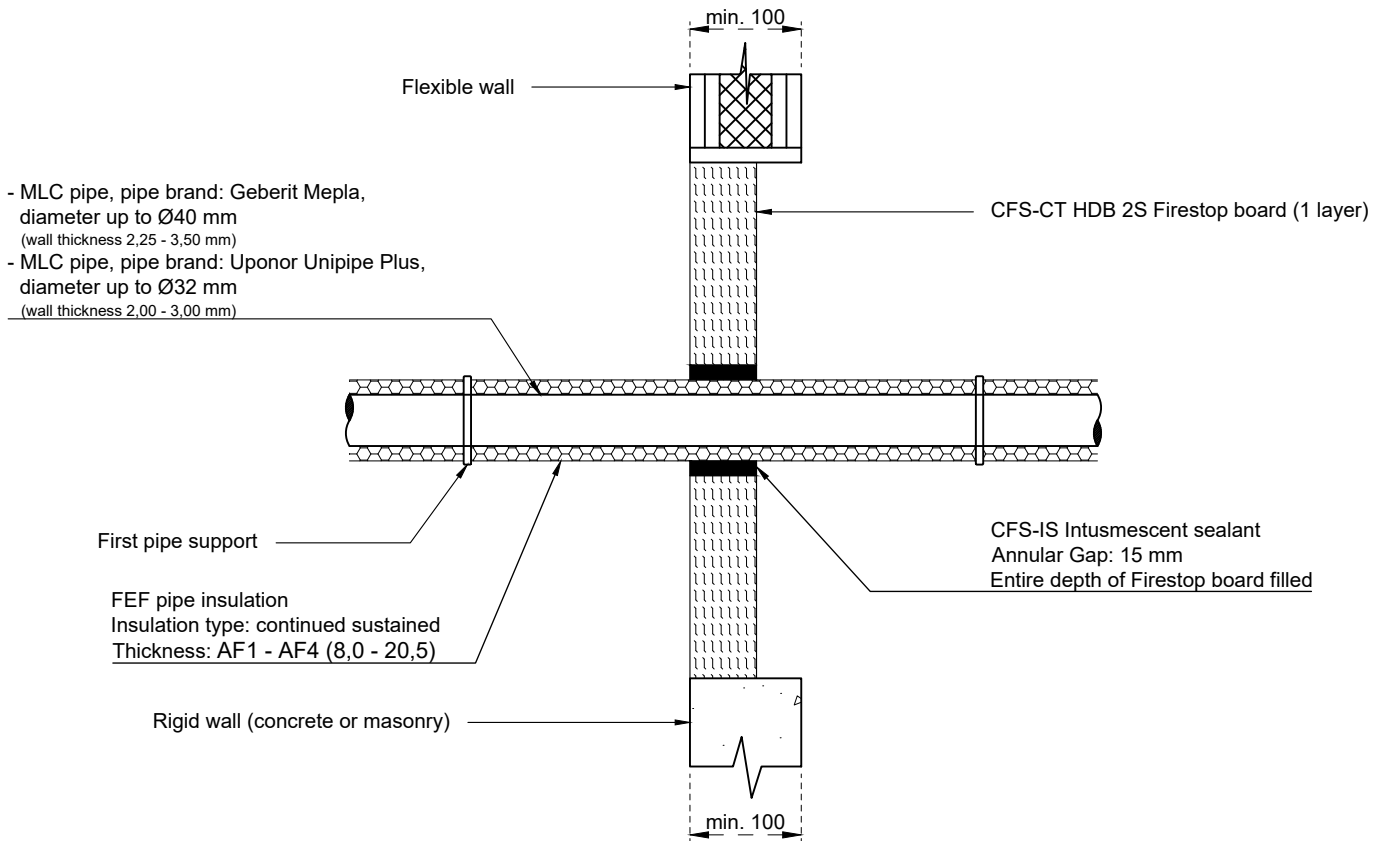
FEF insulated composite pipes with CFS-IS

REV:

01

Fire Rating EI 60 U/C

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

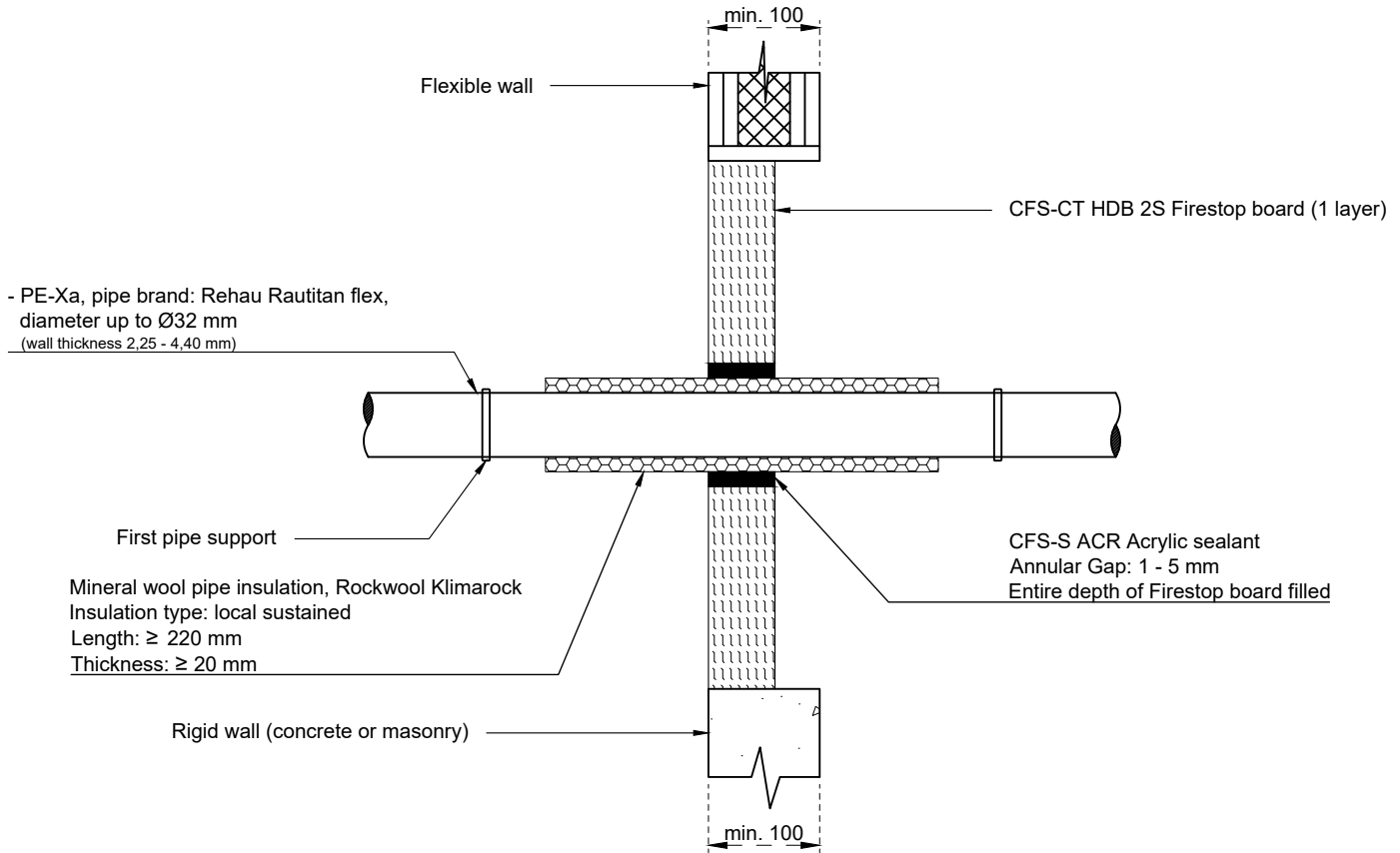
Rehau Rautitan Flex insulated with mineral wool

REV:

01

Fire Rating EI 60 U/C

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

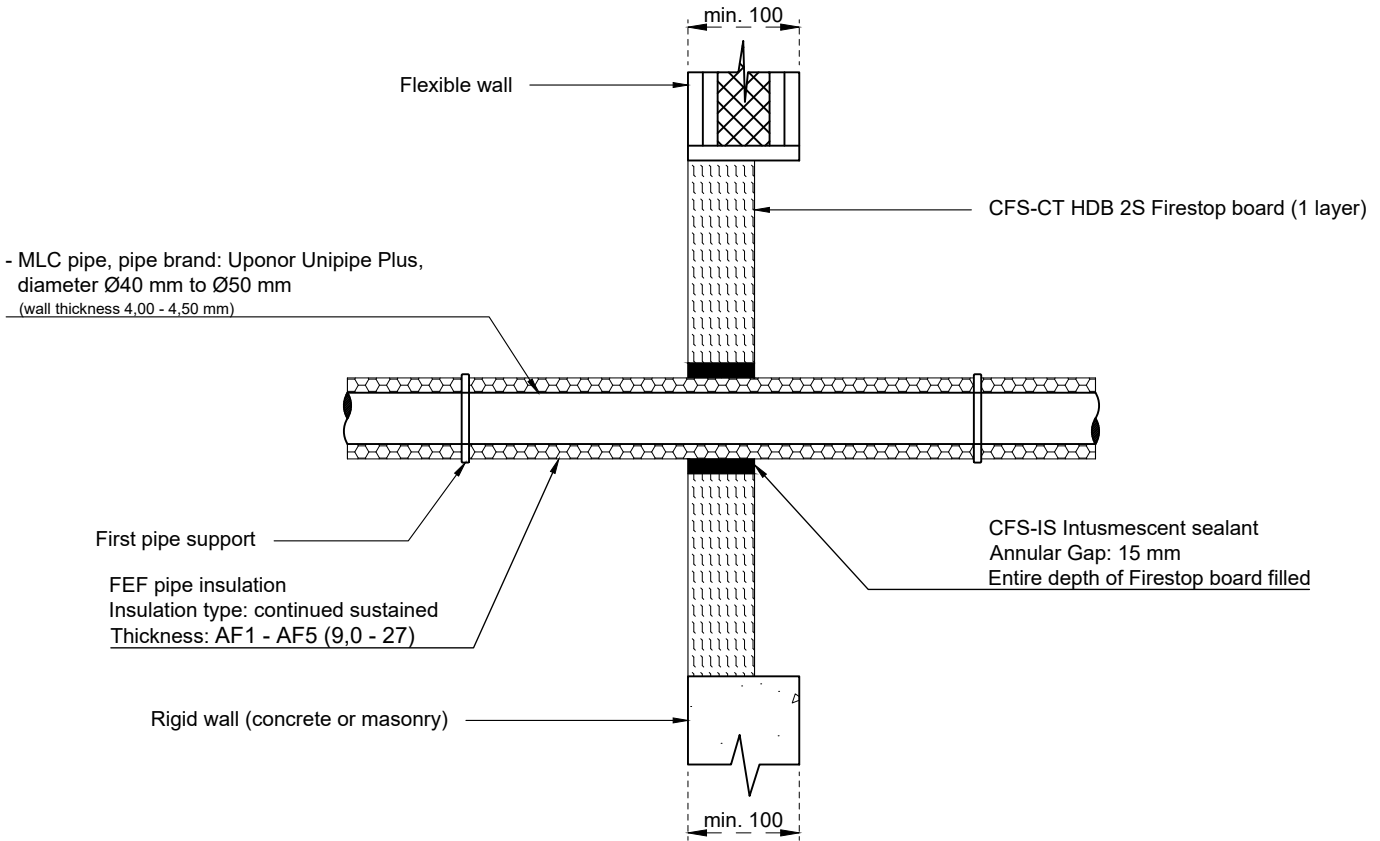
Uponor UniPipe Plus with FEF insulation

REV:

01

Fire Rating EI 60 U/C

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

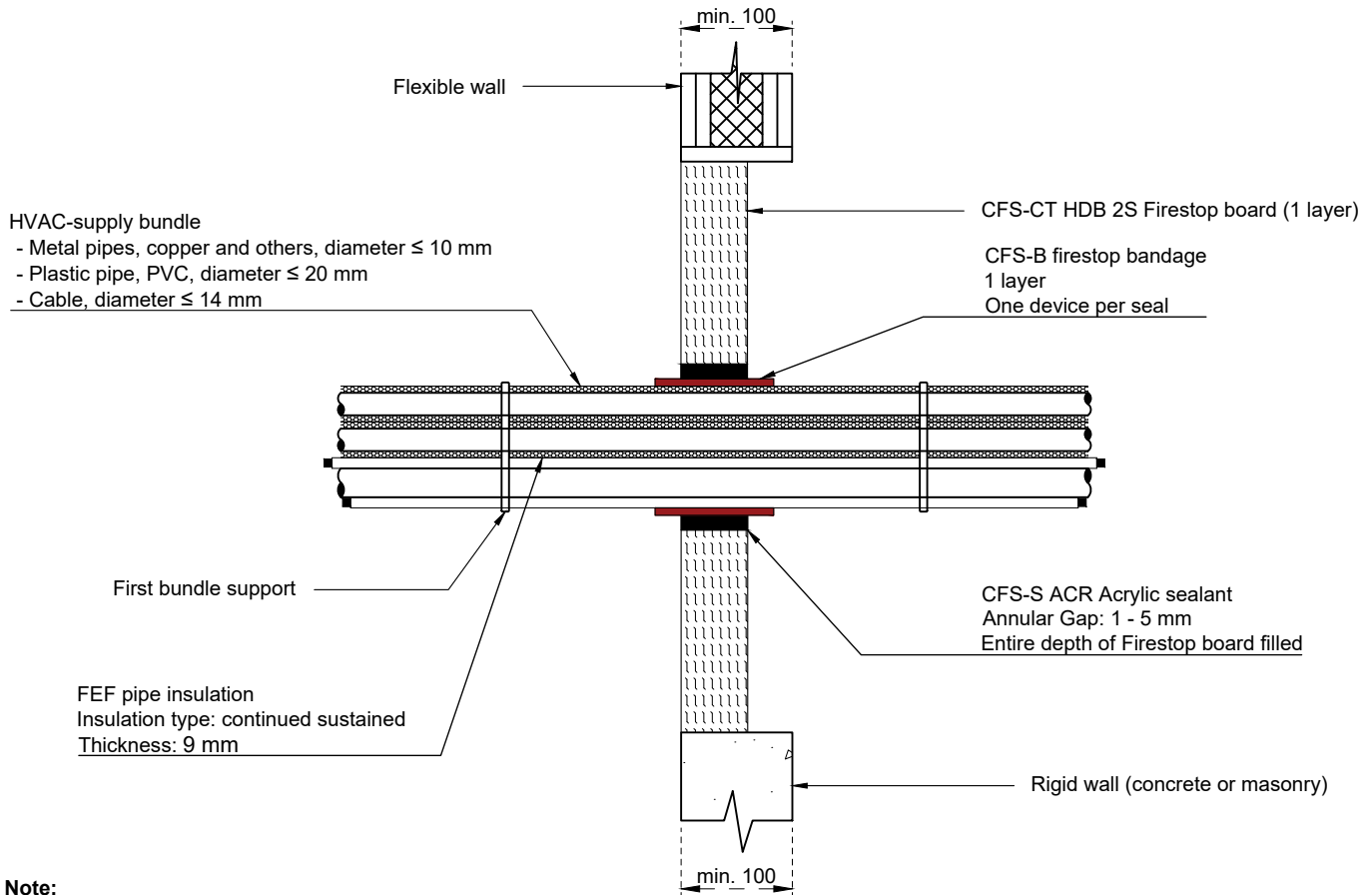
Clima-split bundle with CFS-B

REV:

01

Fire Rating EI 60

Page 1/1


Note:

- Copper pipes in C/U configuration
- PVC pipe in U/U configuration

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

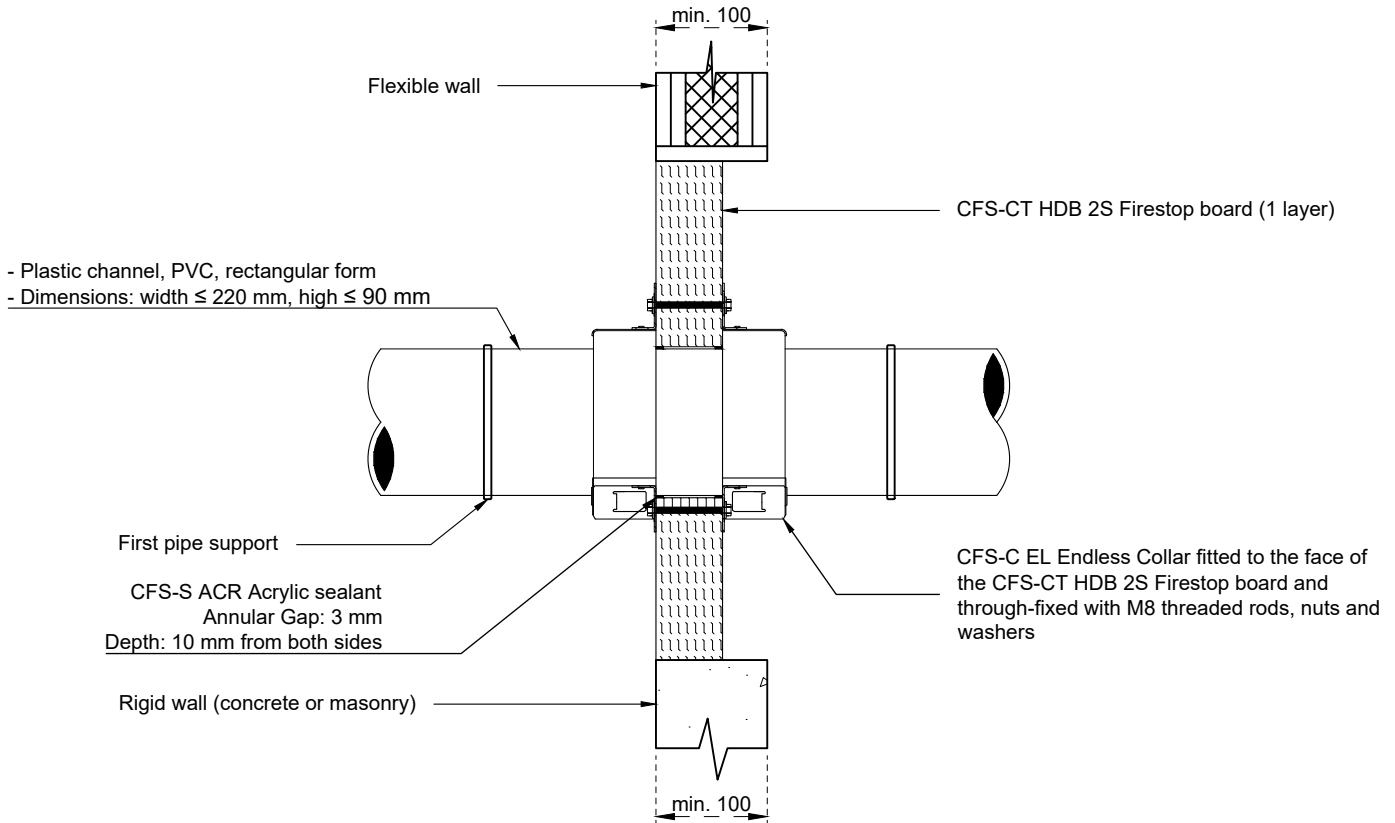
Plastic ven duct with CFS-C EL

REV:

01

Fire Rating EI 60 U/U

Page 1/1


Insulation:

- No thermal insulation
- No acoustic pipe decoupling on pipe

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size in a wall 1000 x 1200 (w x h) or 1200 x 1000 (h x w).

Flexible walls

- Minimum thickness of 100 mm. comprises timber or steel studs.
- Lined on both faces with minimum 2 layers of minimum 12,5 mm thick board, aperture must be framed.
- Construction itself has been classified according to EN 13501-2.

Rigid walls

- Min. thickness: 100mm and must comprise of concrete, aerated concrete, masonry or brickwork of Min. density 350kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- Plastic ducts and cable trunking require min. 100 mm distance to all other services and to the CFS-CT HDB seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

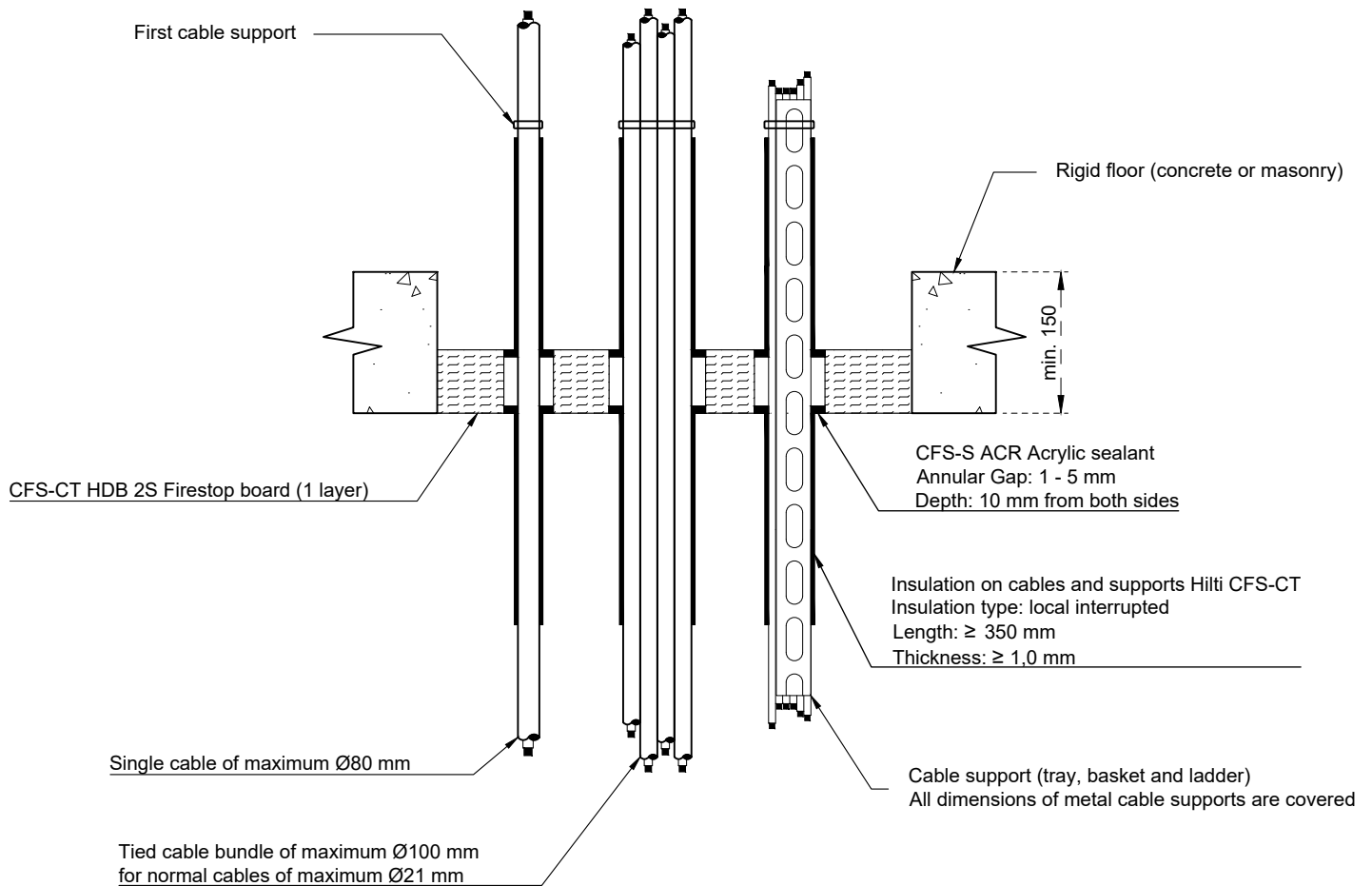
Cables including cable carriers in rigid floor

REV:

01

Fire Rating EI 45

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.
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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

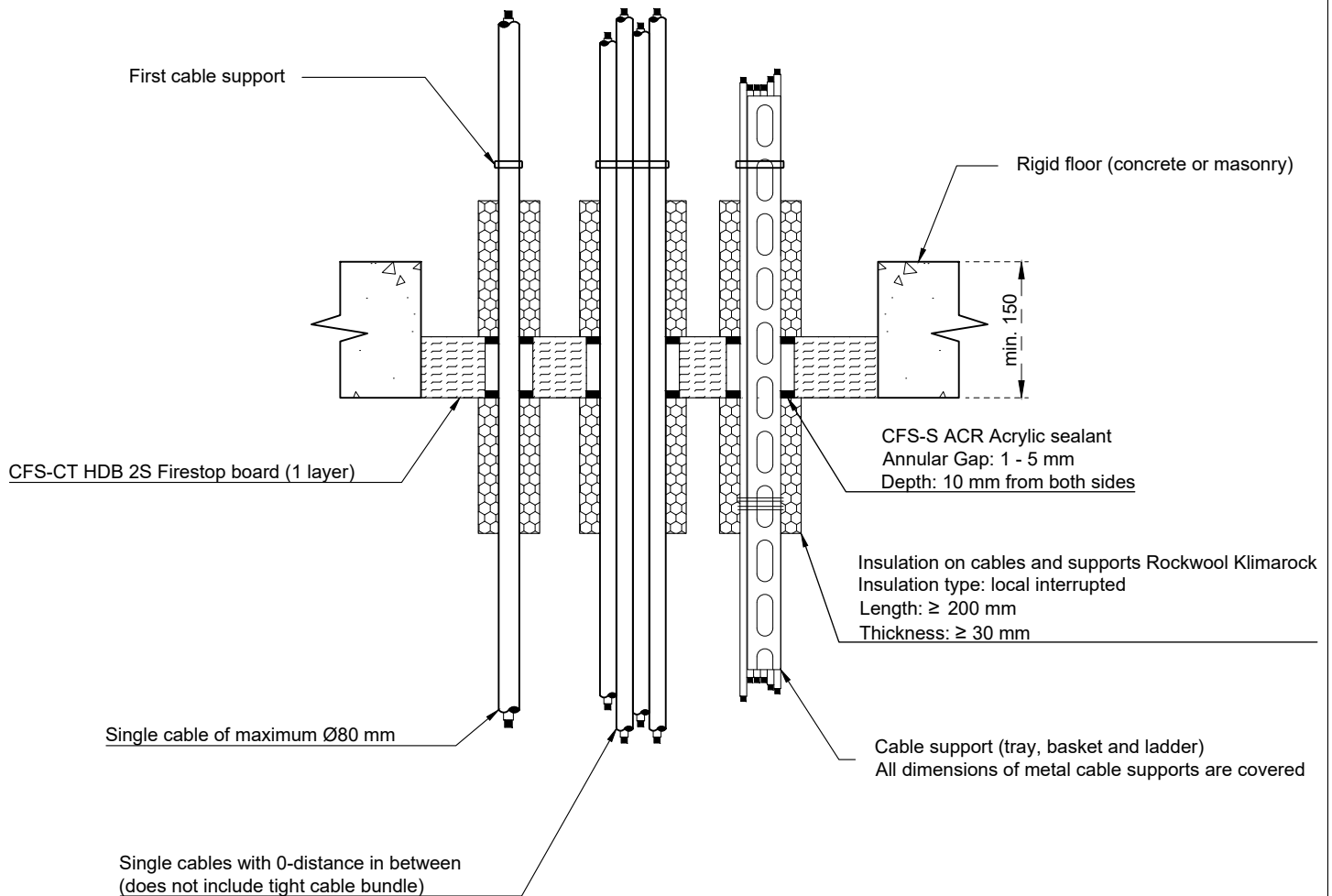
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Cables including cable carriers in rigid floor

REV:

01
Fire Rating EI 60
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

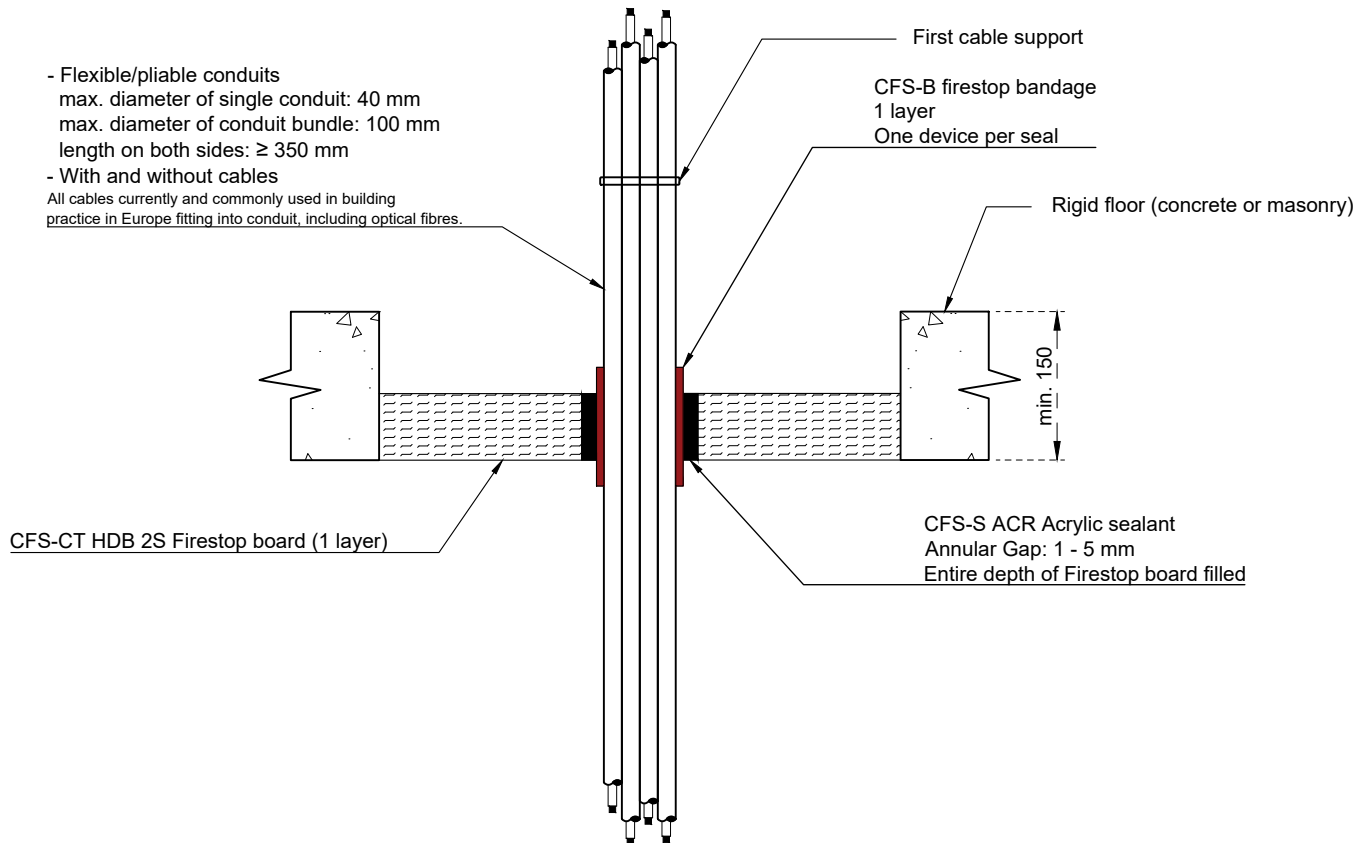
Flexible and pliable conduit bundles

REV:

01

Fire Rating EI 60 U/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.
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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

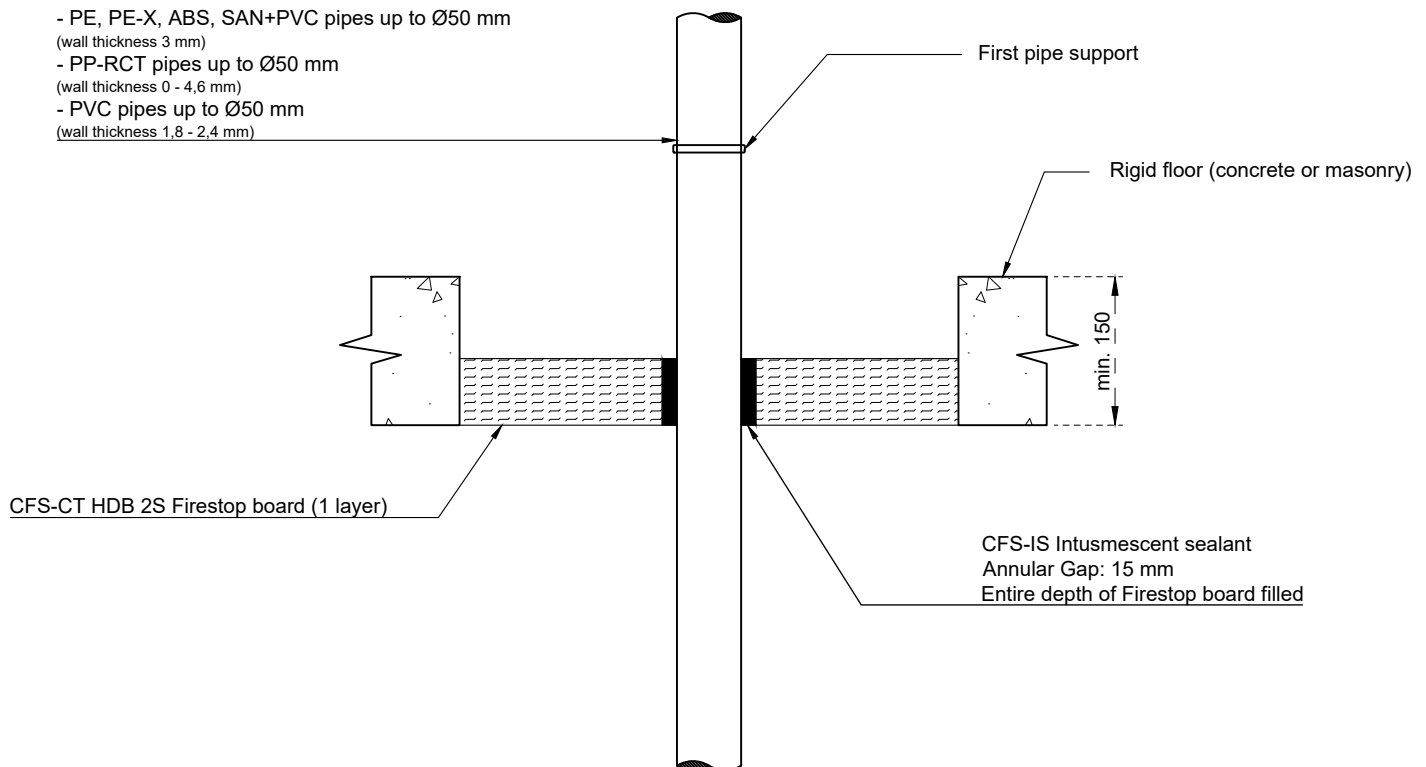
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

PE , PVC, PP-RCT pipes sealed with CFS-IS

REV:

01
Fire Rating EI 60 U/U
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.
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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

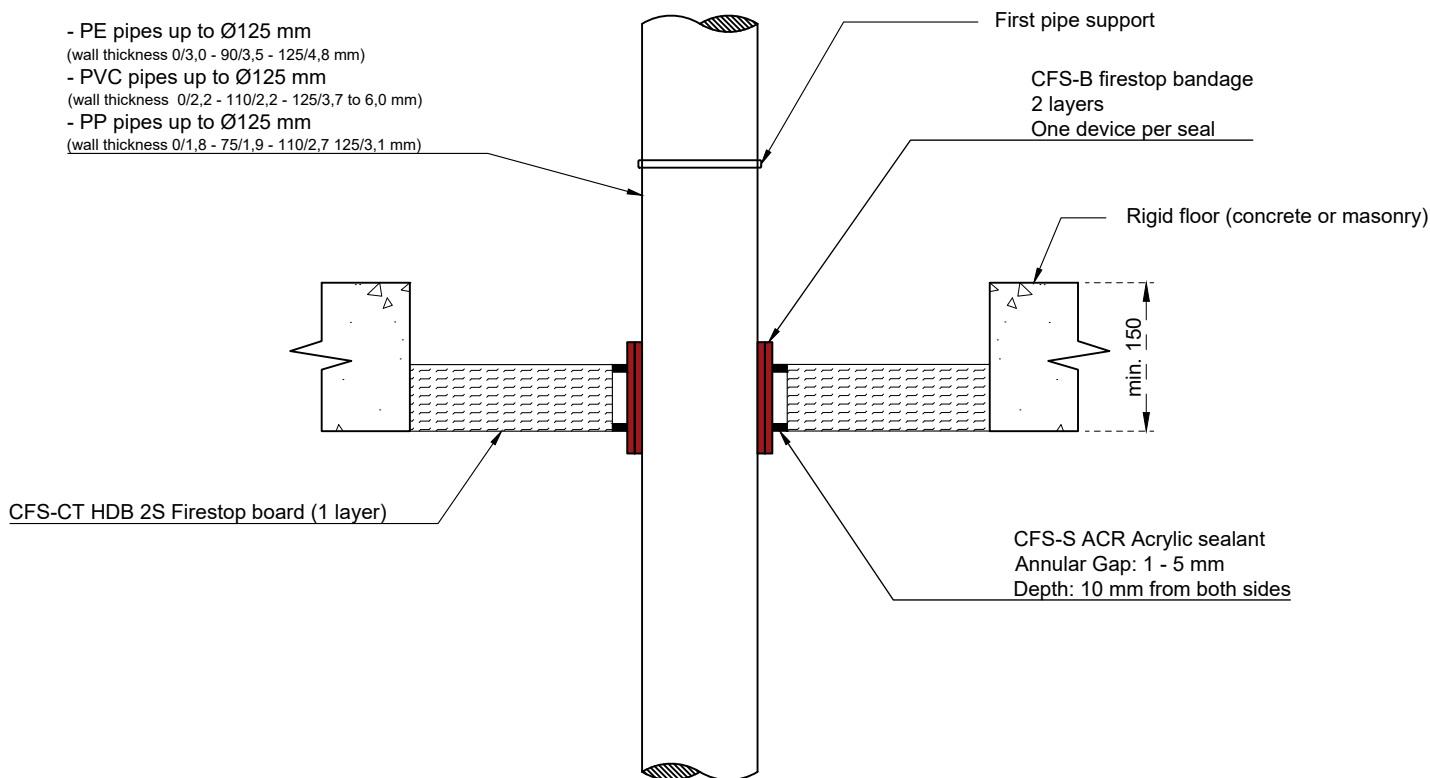
PE, PVC, PP pipes sealed with CFS-B

REV:

01

Fire Rating EI 60 U/C

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

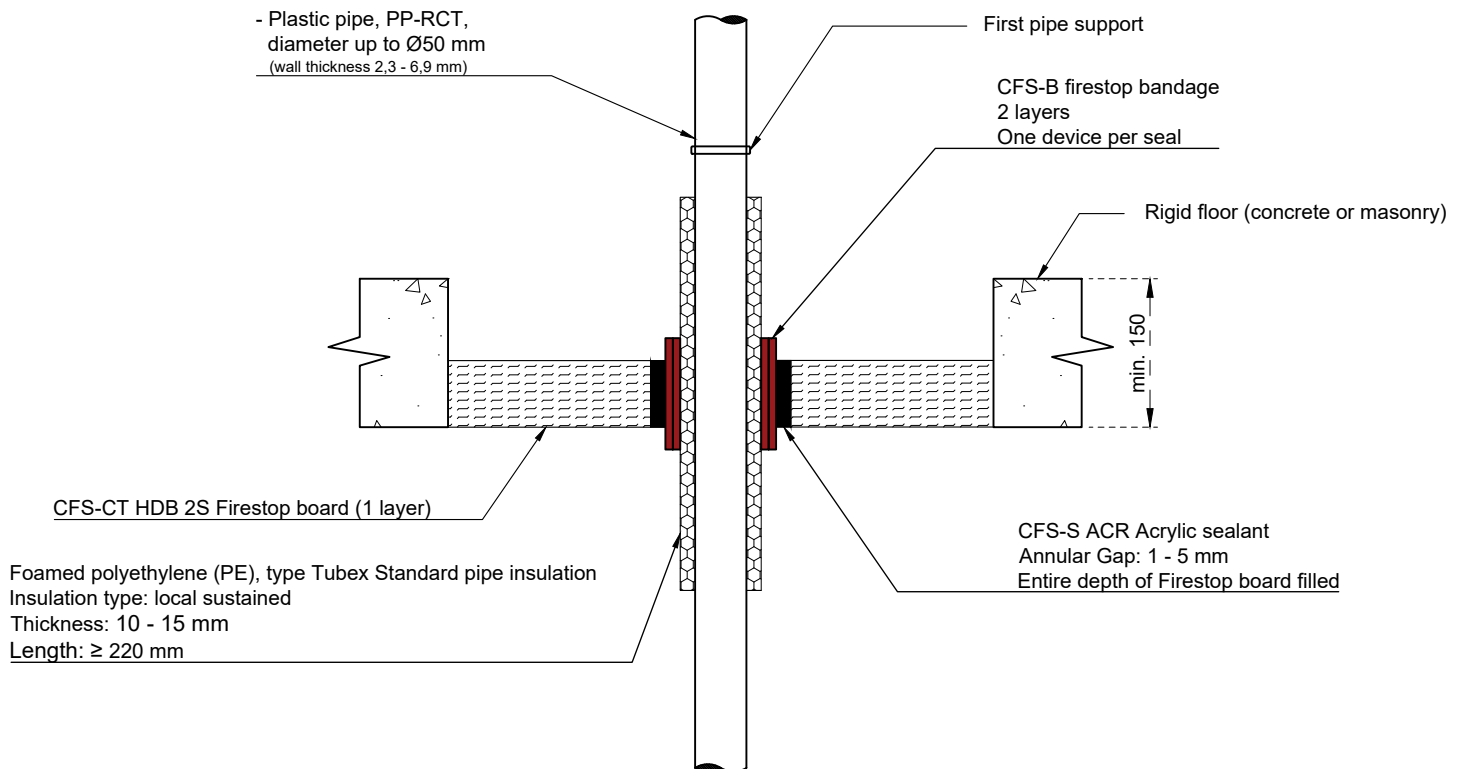
PP-RCT pipes in PE insulation sealed with CFS-B

REV:

01

Fire Rating EI 60 U/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.
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INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

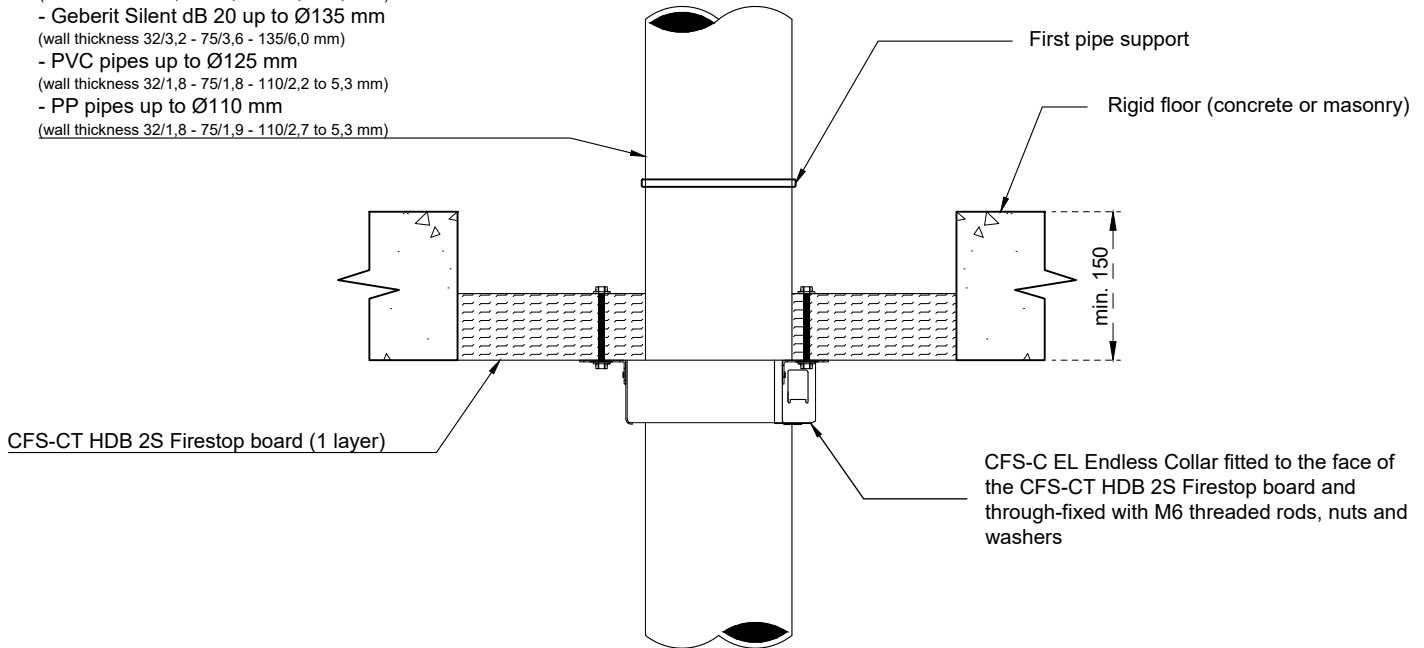
APPLICATION:

PE, PVC, PP pipes sealed with CFS-C EL

REV:

01
Fire Rating EI 60 U/U
Page 1/1

- PE, PE-X, ABS, SAN+PVC pipes up to $\varnothing 125$ mm
(wall thickness 32/3,0 - 75/3,0 - 110/3,1 to 4,2 mm)
- Geberit Silent dB 20 up to $\varnothing 135$ mm
(wall thickness 32/3,2 - 75/3,6 - 135/6,0 mm)
- PVC pipes up to $\varnothing 125$ mm
(wall thickness 32/1,8 - 75/1,8 - 110/2,2 to 5,3 mm)
- PP pipes up to $\varnothing 110$ mm
(wall thickness 32/1,8 - 75/1,9 - 110/2,7 to 5,3 mm)


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

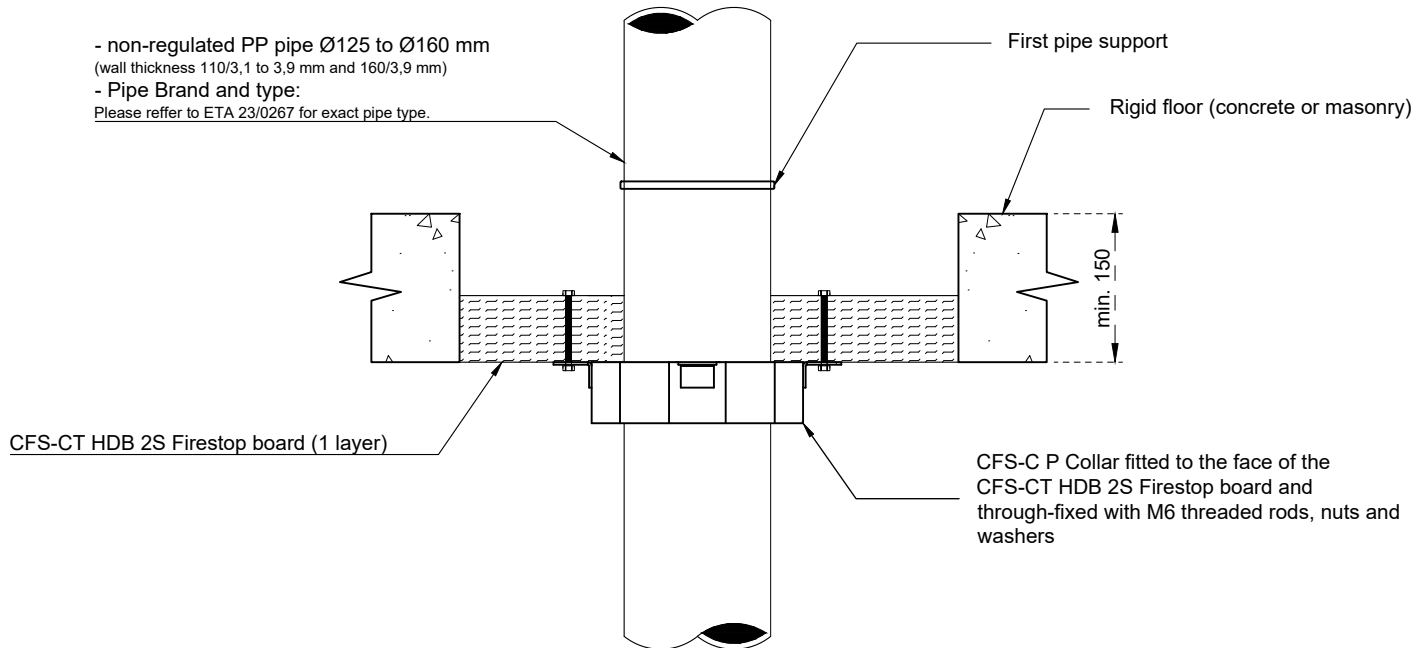
Non-regulated PP pipes with CFS-C EL

REV:

01

Fire Rating EI 60 U/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

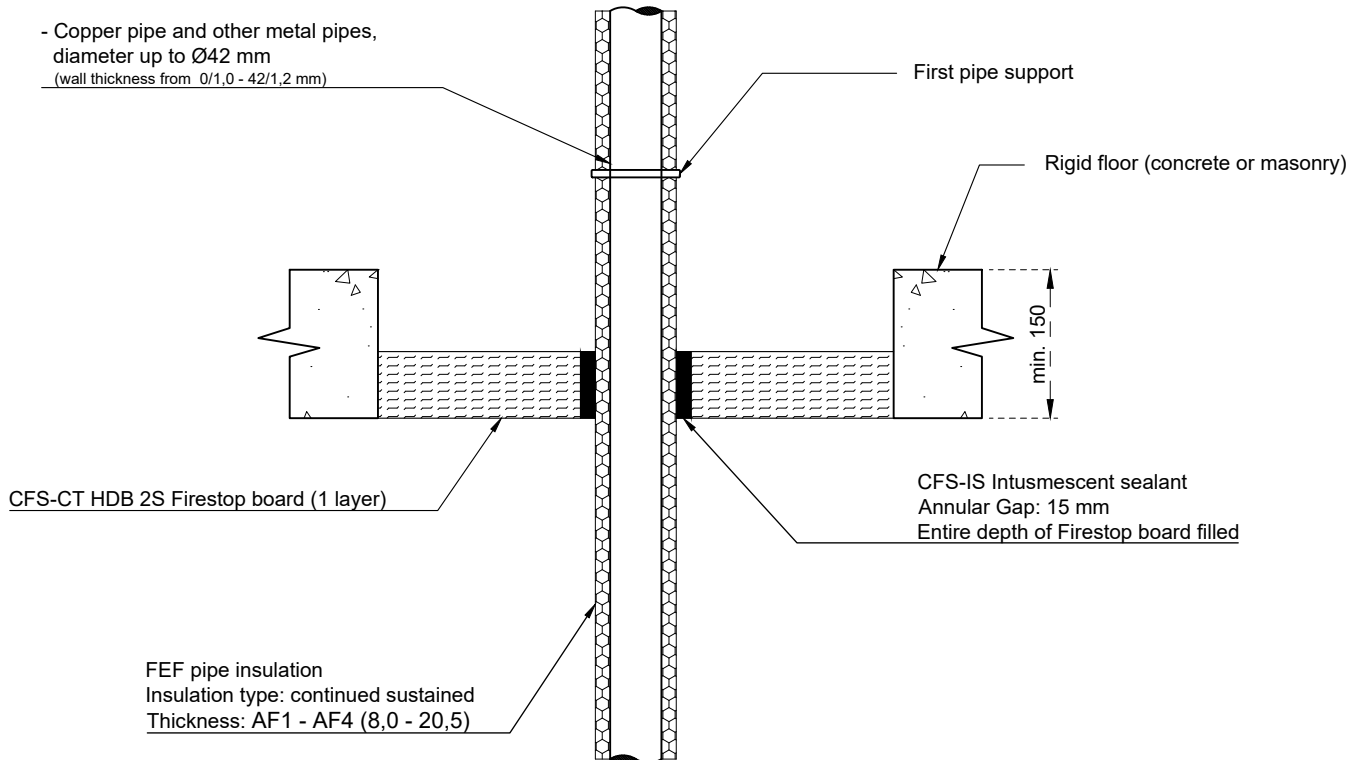
Copper pipes with Armaflex sealed with CFS-IS

REV:

01

Fire Rating EI 45 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

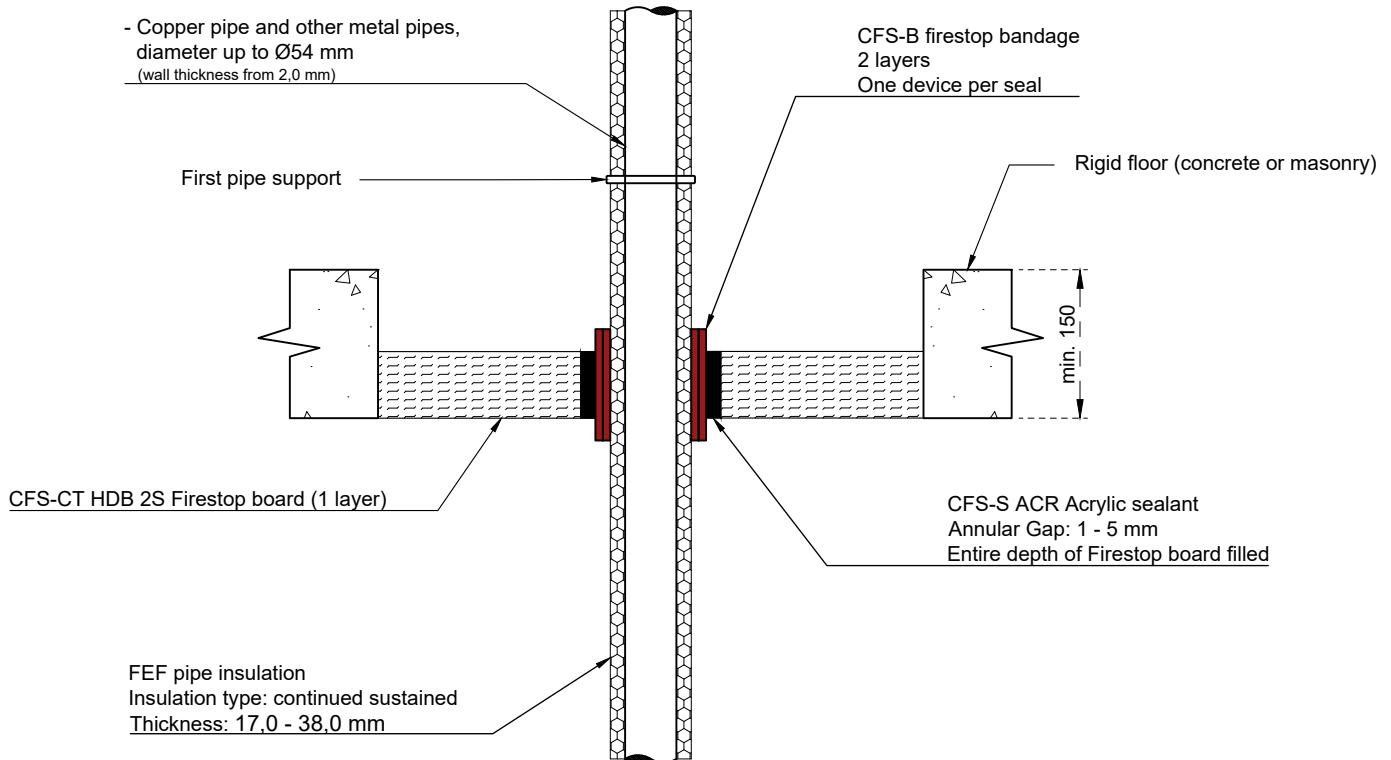
Copper pipes with Armaflex insulation, sealed with CFS-B

REV:

01

Fire Rating EI 30 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

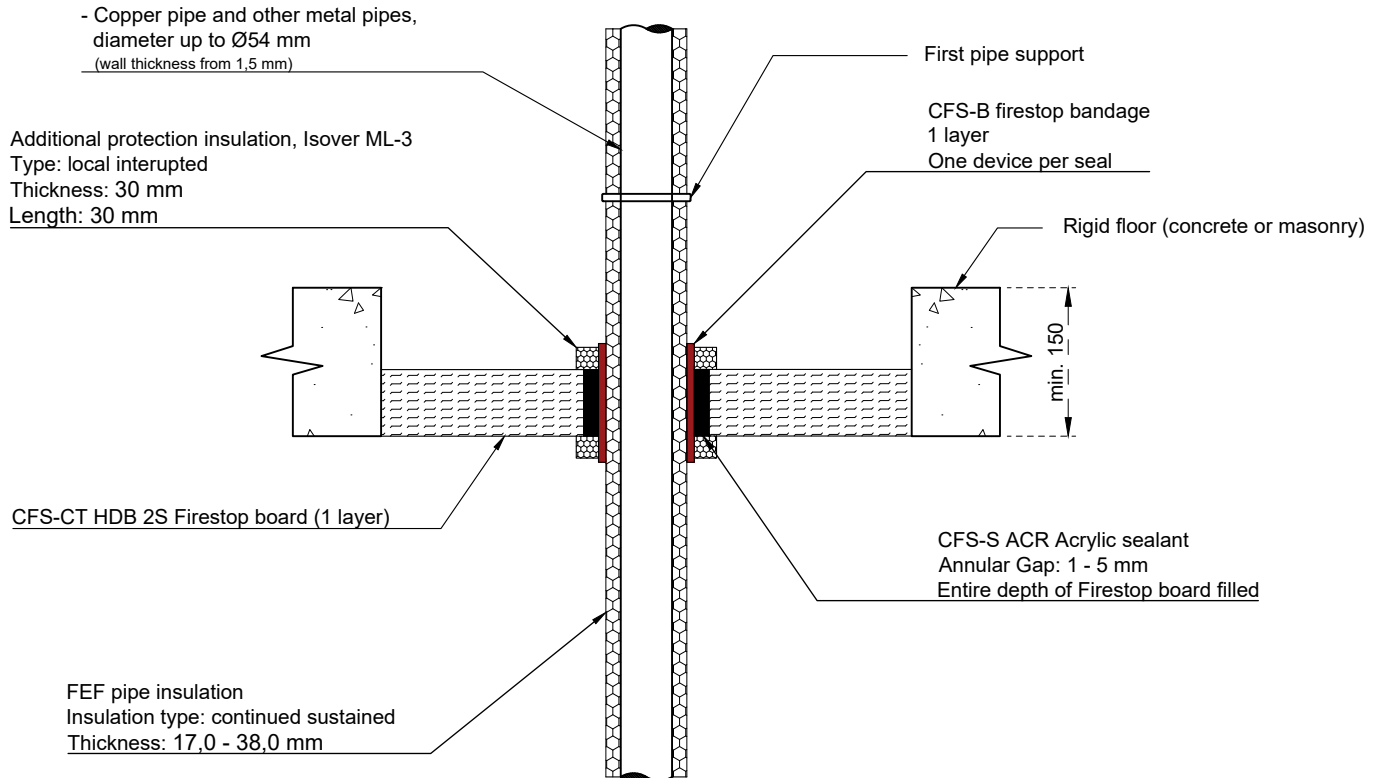
Copper pipes with Armaflex insulation, sealed with CFS-B

REV:

01

Fire Rating EI 60 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Steel pipes with Armaflex insulation, sealed with CFS-B

REV:

01

Fire Rating EI 30 C/U

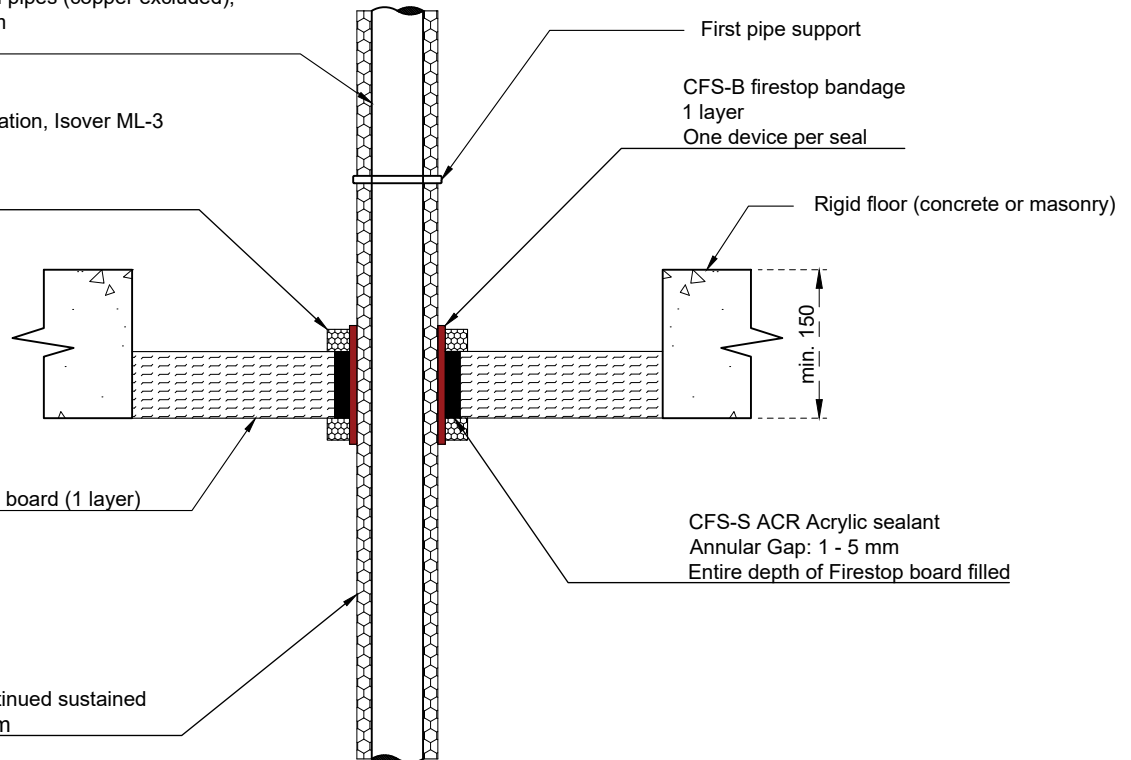
Page 1/1

- Steel pipe and other metal pipes (copper excluded), diameter up to $\varnothing 114,3$ mm (wall thickness from 2,0 mm)

Additional protection insulation, Isover ML-3
Type: local interrupted
Thickness: 30 mm
Length: 30 mm

CFS-CT HDB 2S Firestop board (1 layer)

FEF pipe insulation
Insulation type: continued sustained
Thickness: 43,0 mm


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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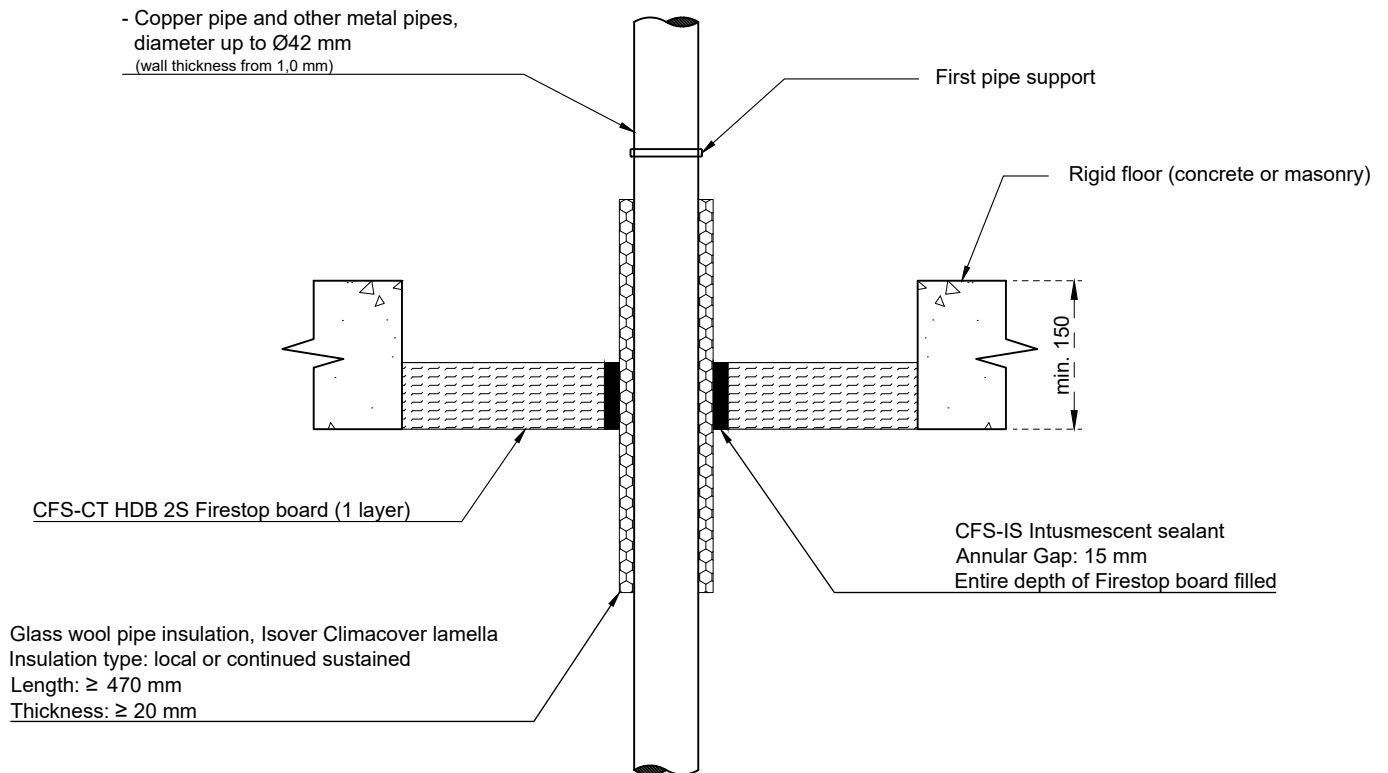
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Copper pipes with local sustained glass wool insulation

REV:

01**Fire Rating EI 30 C/U****Page 1/1****Construction details:**

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

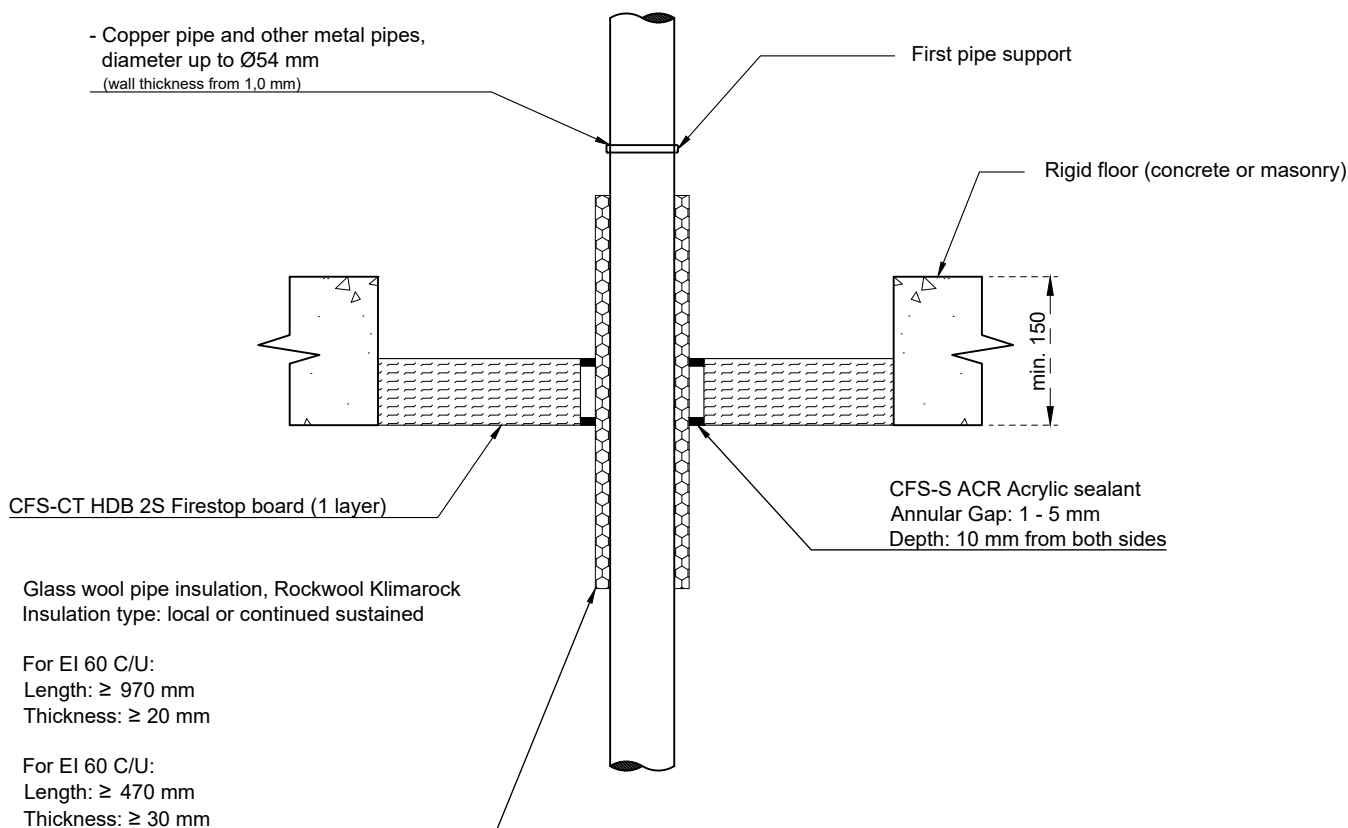
Copper pipes with local sustained Rockwool

REV:

01

Fire Rating EI 60 C/U

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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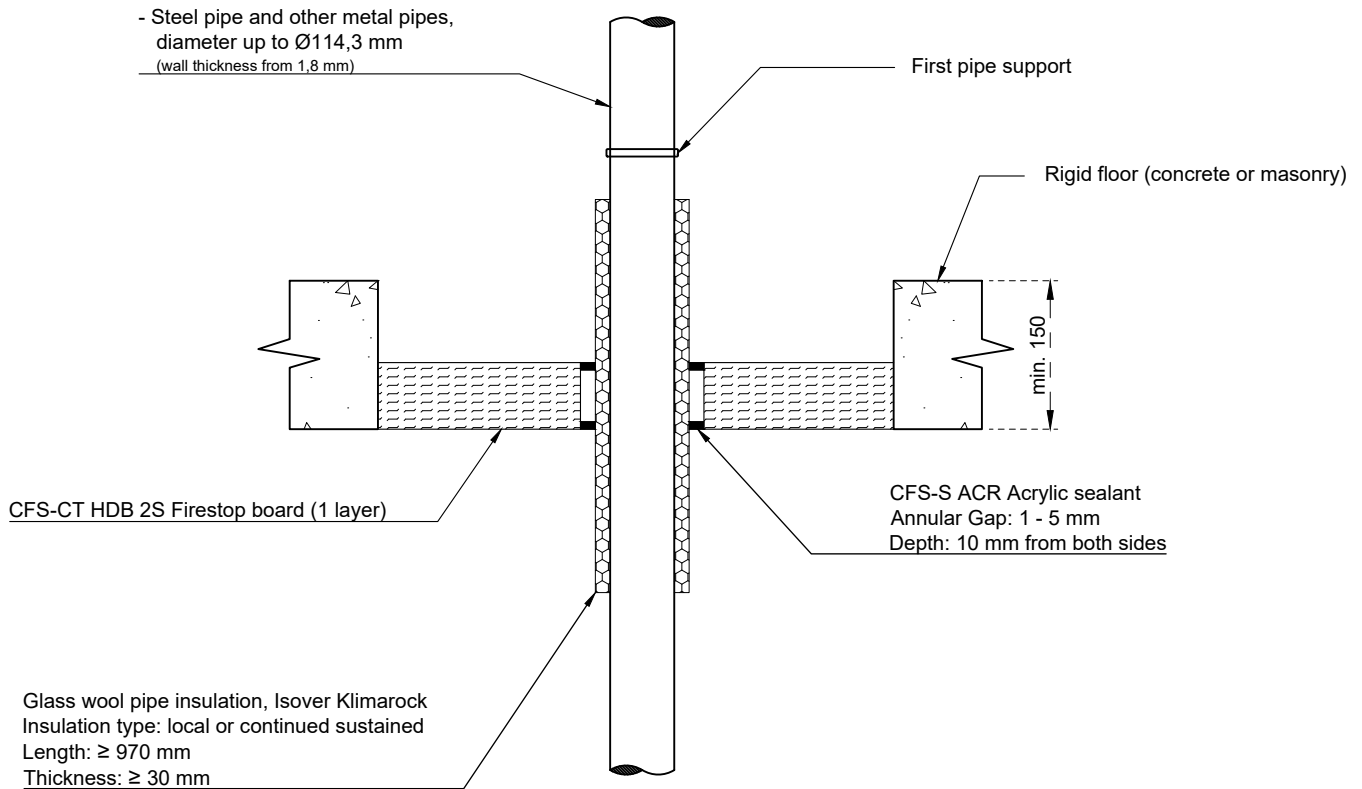
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Steel pipes with local sustained Rockwool

REV:

01
Fire Rating EI 60 C/U
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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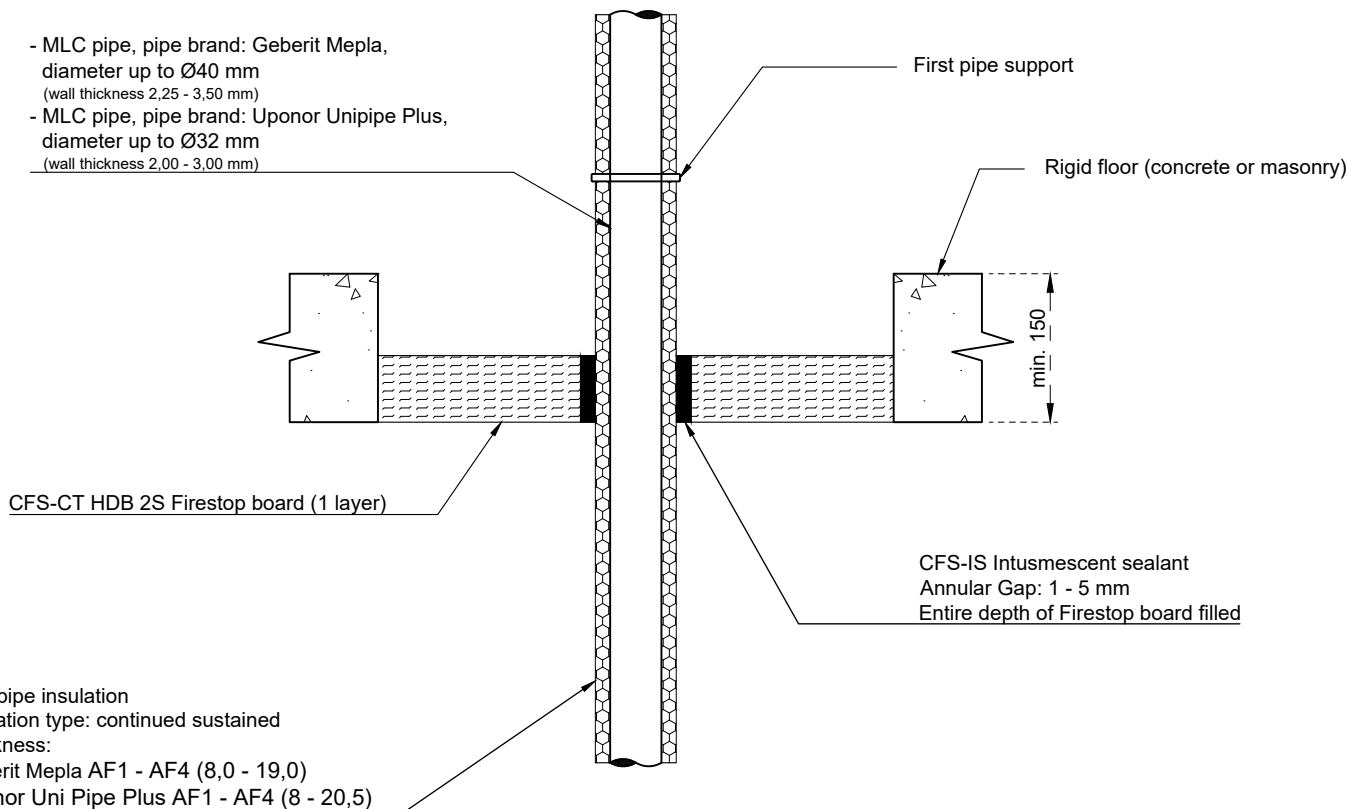
INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

Composite pipes in Armaflex with CFS-IS

REV:

01
Fire Rating EI 60 U/C
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

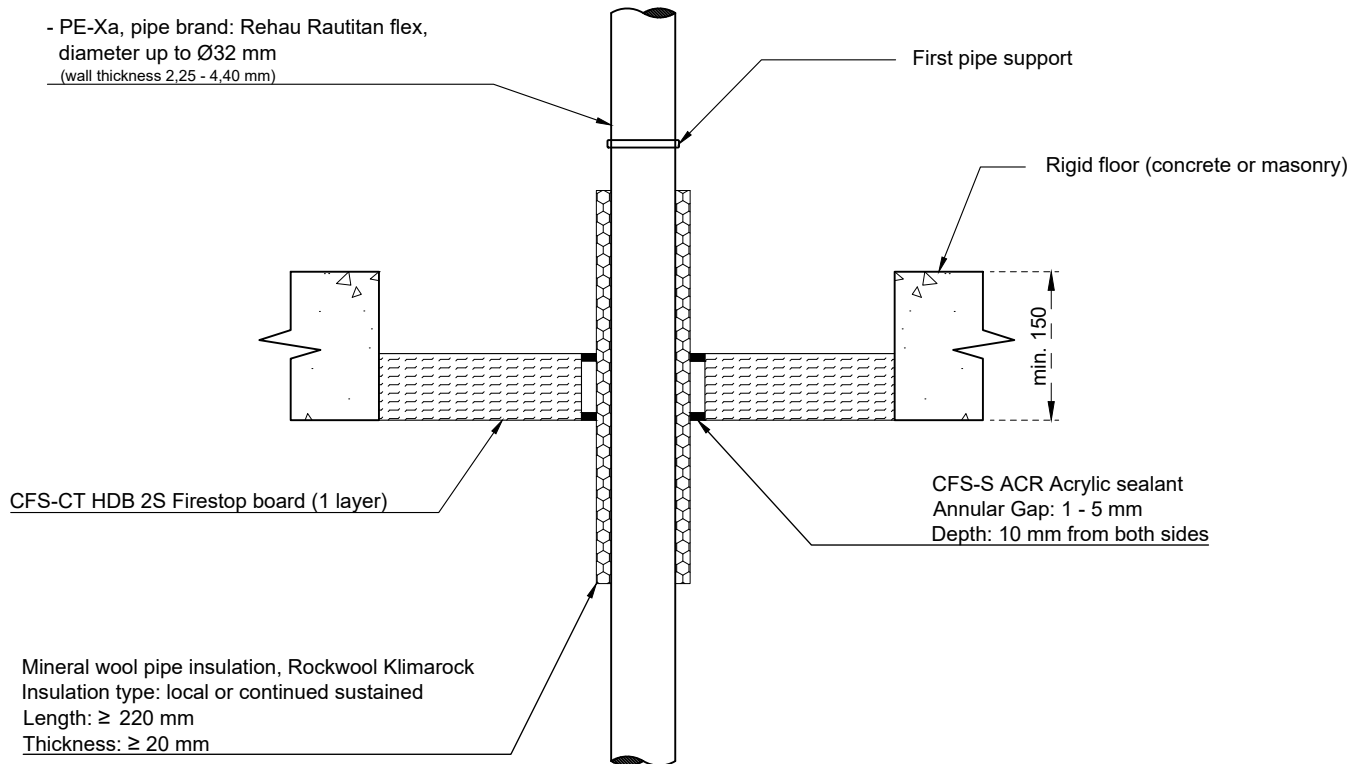
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 3. All installations should be carried out in accordance with Hilti's installation instructions and by competent & experienced installers using Hilti branded products.
 4. All services are to be correctly and adequately supported to prevent collapse and distortion.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:
Rehau rautitan Flex insulated with local sustained rockwool

REV:

01
Fire Rating EI 30 U/C
Page 1/1

Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

- Min. 100 mm distance to other CFS-CT HDB openings.
- Cables or cable carriers can be installed with a min. distance of 0 mm to other cables/cable carriers and 0 mm distance to the seal edge.
- All other services require a min. 50 mm to other services and to the CFS-CT HDB seal edge.

First support for penetrants

- > 250 mm

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.

INFORMATION:

- Not to scale
- All units are in millimetres
- Tested according EN 1366-3
- Coverage acc. ETA 23/0267

APPLICATION:

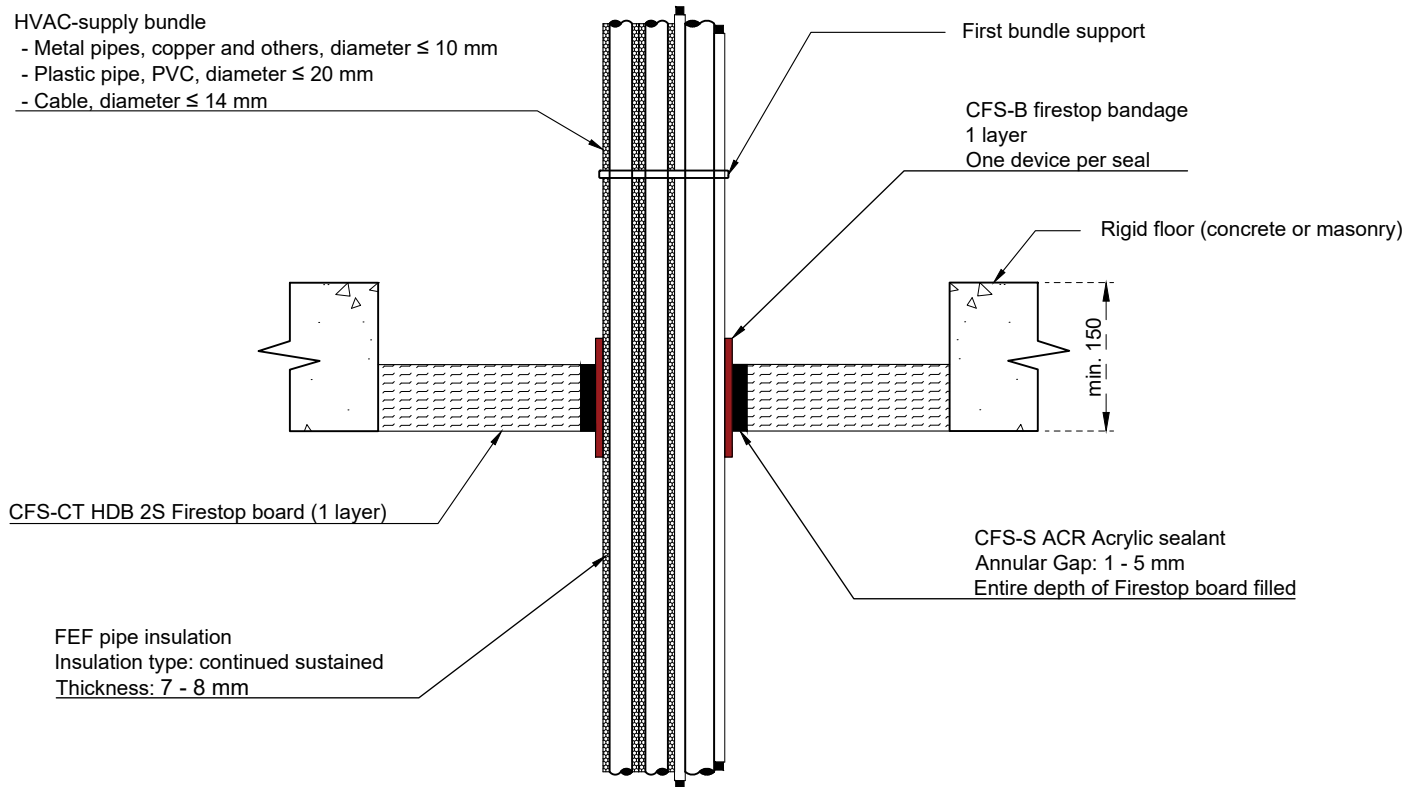
Clima split bundles

REV:

01

Fire Rating EI 60

Page 1/1


Construction details:

- Hilti CFS-CT HDB tightly to fit into the opening of the wall - friction fit, the board can be placed anywhere in opening.
- Contact phase between board and support construction should be covered by a thin film of CFS-S ACR, flush with both sides of the board, width 1-5 mm.
- Maximum seal size is 1000 x 800 w x h (mm x mm).

Rigid floors

- Min. thickness: 150 mm, must comprise of concrete, aerated concrete or masonry. Min. density 550 kg/m³.

Gap seal

- Remaining gaps to be sealed completely with CFS-S ACR.

Service distances for linear and cluster arrangement:

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First support for penetrants

- > 250 mm

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