

# Schémas d'applications pour le bandage coupe-feu CFS-B



## Applications pour eau potable

- Tube acier inoxydable avec isolant type Armaflex avec ou sans protection additionnelle en cloison épaisseur 100 mm POT-FW-MP-0007/8/9/12
- Tube acier inoxydable avec isolant type Armaflex en voile rigide épaisseur 100 mm POT-RW-MP-0022/24
- Tube acier inoxydable avec isolant type Armaflex en voile rigide épaisseur 200 mm POT-RW-MP-0019/23/25
- Tube acier inoxydable avec isolant type Armaflex en dalle rigide épaisseur 150 mm POT-RF-MP-0036/37/40/41
- Tube Al composite avec isolant type Armaflex avec ou sans protection additionnelle en cloison épaisseur 100 mm POT-FW-AL-0042/43/44/45
- Tube Al composite avec isolant type Armaflex en voile rigide épaisseur 100 mm POT-RW-AL-0053/55/56
- Tube Al composite avec isolant type Armaflex en voile rigide épaisseur 200 mm POT-RW-AL-0054
- Tube Al composite avec isolant type Armaflex en dalle rigide épaisseur 150 mm POT-RF-AL-0064/65
- Tube plastique PE en cloison épaisseur 100 mm POT-FW-PP-0079
- Tube plastique PE en voile rigide épaisseur 100 mm POT-RW-PP-0092
- Tube plastique PE en dalle rigide épaisseur 100 mm POT-RF-PP-0107

\*) Tous les schémas sont également disponibles sur demande en format DWG pour faciliter l'insertion sur des plans.



CONTENTS

Metal pipe in a flexible wall

ID

POT-FW-MP-0007

FIRESTOP BANDAGE

0007\_01

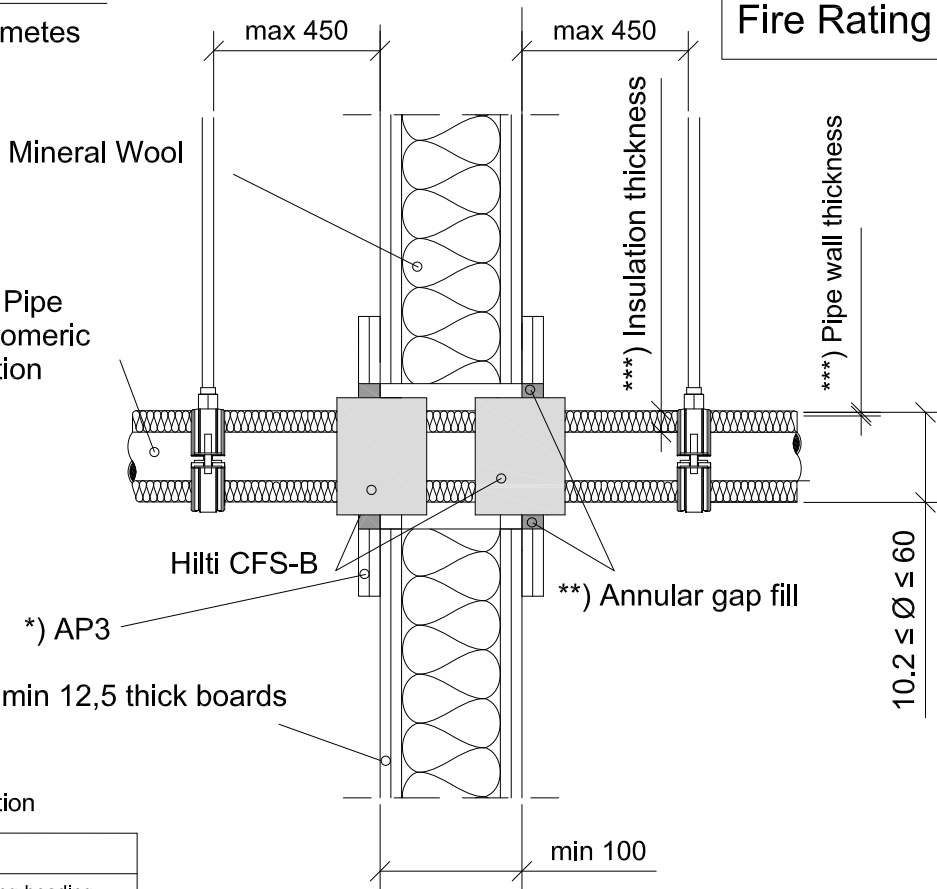
REV  
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No scale

All units are in millimetres

Fire Rating EI 120 C/U

\*\*\*) Stainless steel Pipe insulated with elastomeric combustible insulation



\*) Additional Protection

AP3
Beading/outside framing-beading for flexible wall (100mm) is applied by adding boards on both sides in two layers (2x12.5 mm Type F board) fixed with drywall screws. The resulting strips around the whole pipe are at least 50 mm in width.

\*\*\*) Annular gap fill material

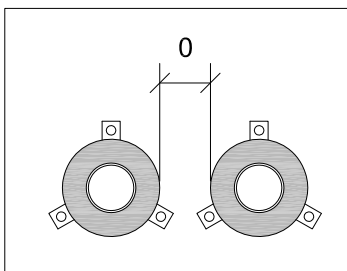
Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR or gypsum only with a depth > 25 mm on both sides of the wall

- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
10.2-60	1-14.2	7.5	9.0	15.4	39.0

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.



Zero distance between annular gap

\*\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armaceil GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Metal pipe in a flexible wall

ID

POT-FW-MP-0008

FIRESTOP BANDAGE

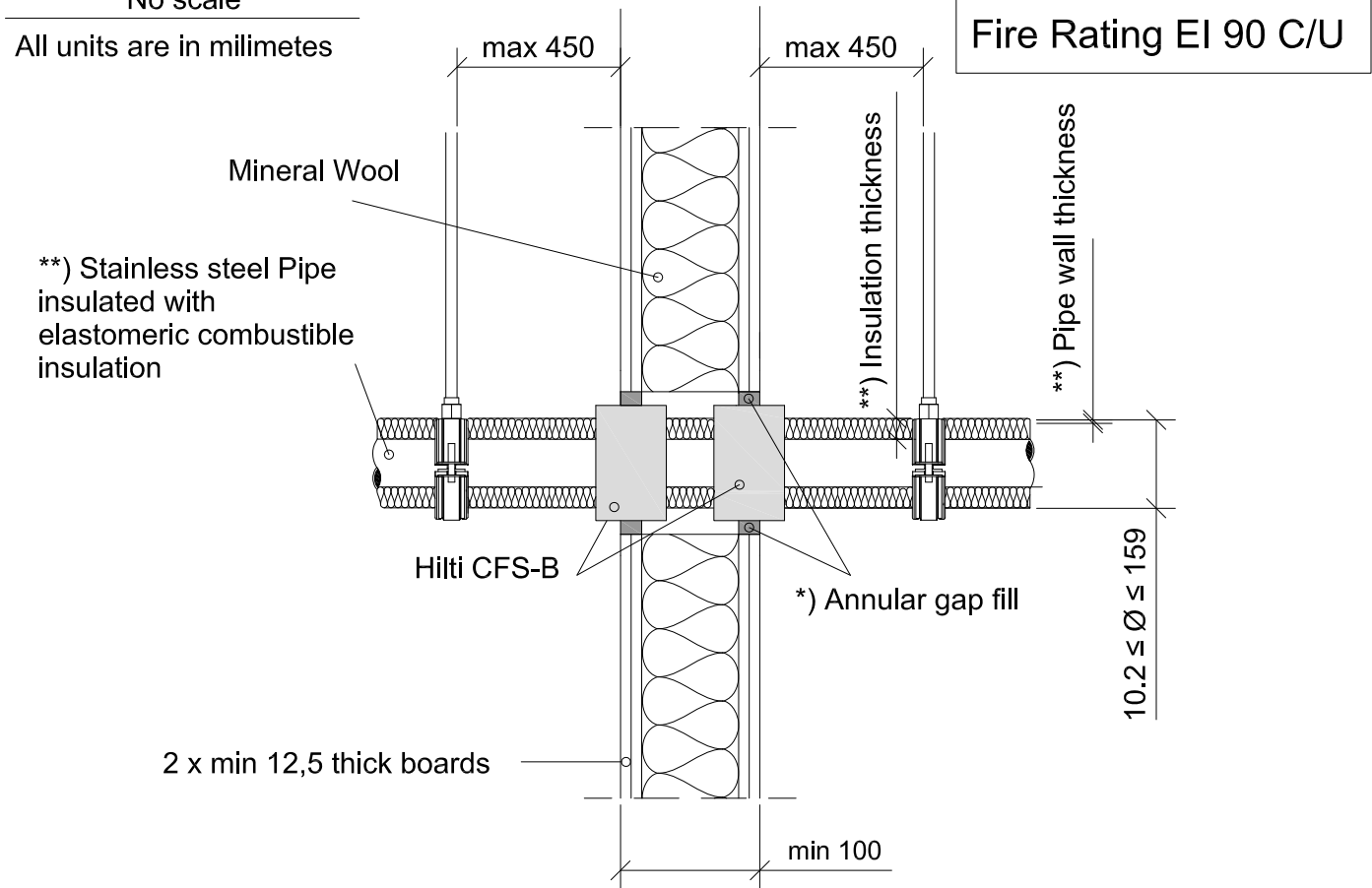
0008\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 90 C/U



- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

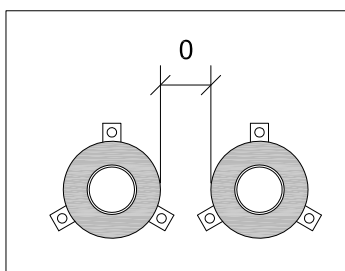
\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
10.2-18	1-14.2	7.5	8.5	15.4	33.5
18-42	1-14.2	14.0	16.5	32.0	36.5
42.4-76	1.4-14.2	16.5	17.5	36.5	40.5
76-159	1.8-14.2	40.5	45.0	40.5	45.0

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR or gypsum only with a depth > 25 mm on both sides of the wall



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal Insulation
Armaceff GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L`isolante K-Flex	L`isolante K-Flex HT, L`isolante K-Flex ECO, L`isolante K-Flex ST, L`isolante K-Flex H, L`isolante K-Flex ST Plus



CONTENTS

Metal pipe in a flexible wall

ID

POT-FW-MP-0009

FIRESTOP BANDAGE

0009\_01

REV

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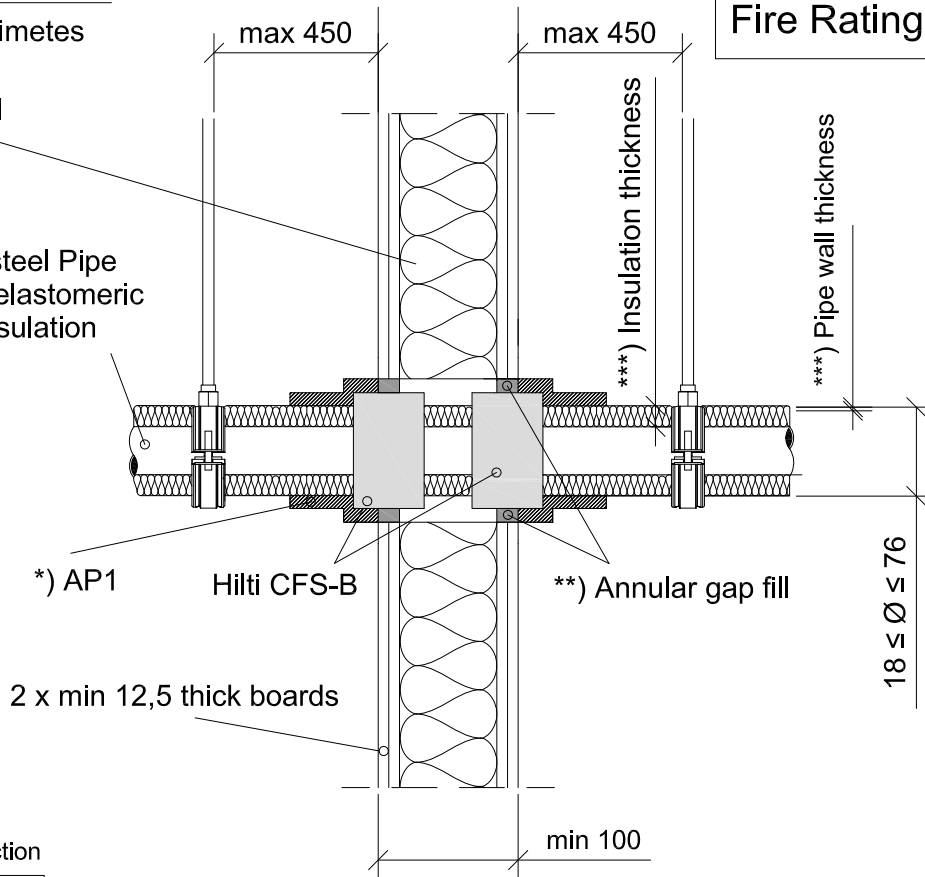
No scale

All units are in millimetres

Fire Rating EI 90 C/U

Mineral Wool

\*\*\*) Stainless steel Pipe insulated with elastomeric combustible insulation



\*) AP1

Hilti CFS-B

\*\*\*) Annular gap fill

2 x min 12,5 thick boards

min 100

18 ≤ Ø ≤ 76

\*) Additional Protection

AP1
Armaflex AF elastomeric material for thermal insulation, 19 mm thick and 250 mm in length, local interrupted configuration

- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

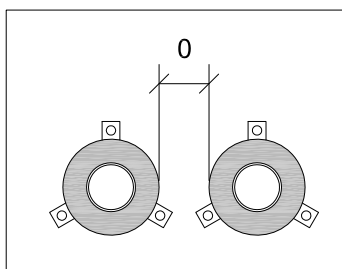
\*\*\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR or gypsum only with a depth > 25 mm on both sides of the wall

\*\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
18-42	1-14.2	8.5	9.0	32.0	36.5
10.2-76	1-14.2	7.5	9.5	15.4	40.5

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.



Zero distance between annular gap

\*\*\*) List of approved elastomeric combustible insulation types

Product	Approved type of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Metal pipe in a flexible wall

ID

POT-FW-MP-0012

FIRESTOP BANDAGE

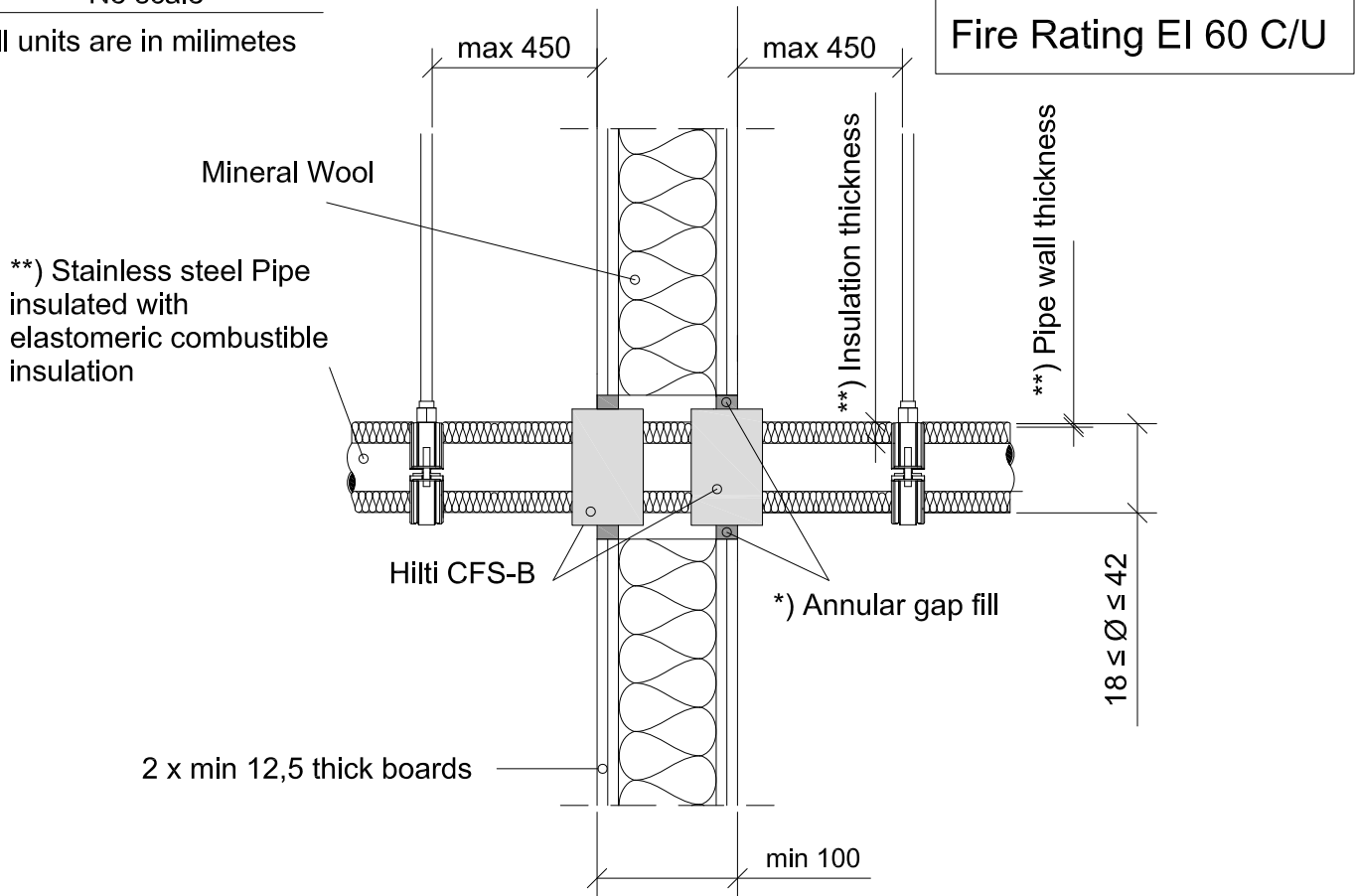
0012\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 60 C/U



- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

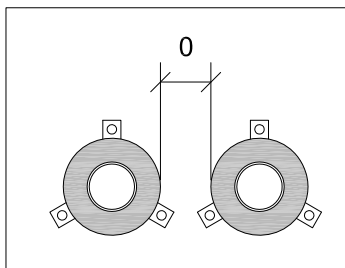
\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR or gypsum only with a depth > 25 mm on both sides of the wall

\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
18-42	1-14.2	8.5	9.0	32.0	36.5

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal Insulation
Armocell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L`isolante K-Flex	L`isolante K-Flex HT, L`isolante K-Flex ECO, L`isolante K-Flex ST, L`isolante K-Flex H, L`isolante K-Flex ST Plus



CONTENTS

# Metal pipe in a rigid wall

ID

POT-RW-MP-0019

## FIRESTOP BANDAGE

0019\_01

REV

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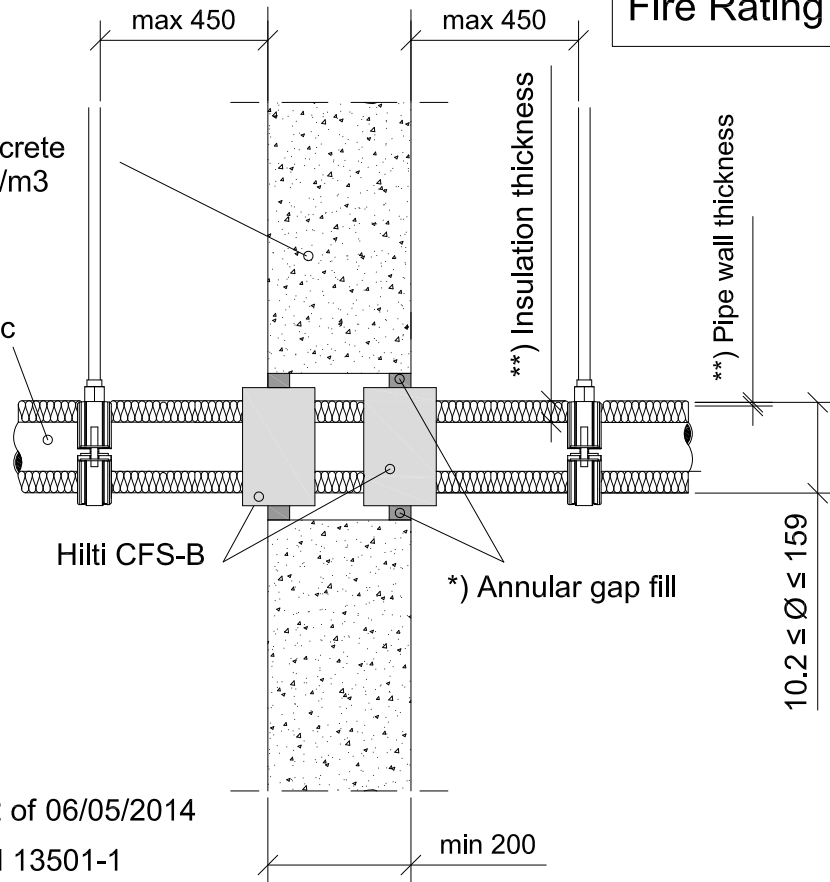
No scale

All units are in millimetres

Fire Rating EI 120 U/C

Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>

\*\* ) Stainless steel Pipe insulated with elastomeric combustible insulation



- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

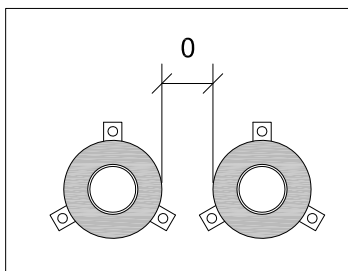
\*) Annular gap fill material

\*\* ) Pipe wall thickness and insulation

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR only with a depth > 25 mm on both sides of the wall.
0-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the wall.

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
10.2-60	1-14.2	7.5	9.0	32.0	39.0
159	2-14.2	45	45	45	45

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.



Zero distance between annular gap

\*\* ) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

# Metal pipe in a rigid wall

ID

POT-RW-MP-0022

## FIRESTOP BANDAGE

0022\_01

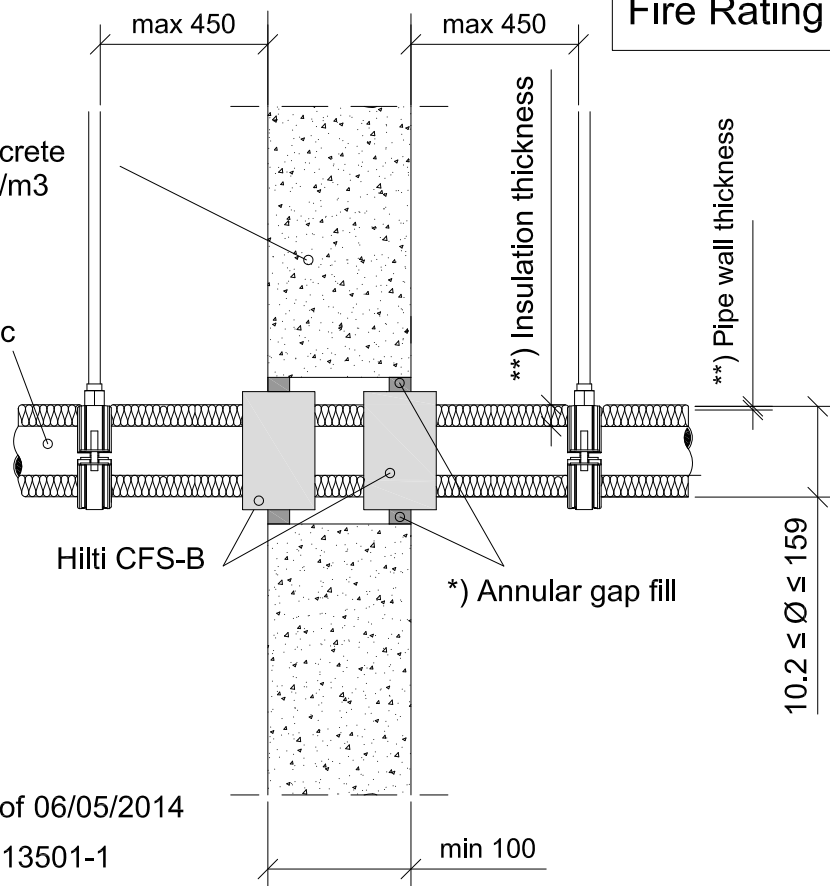
REV  
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No scale

All units are in millimetres

Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>

\*\*\*) Stainless steel Pipe insulated with elastomeric combustible insulation



- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

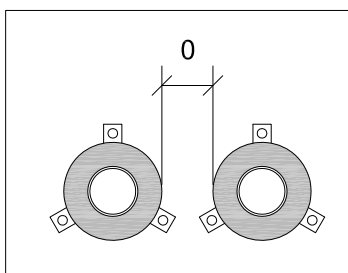
\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR only with a depth > 25 mm on both sides of the wall.
0-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the wall.

\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
10.2-18	1-14.2	7.5	8.5	15.4	33.5
18-42	1-14.2	14.0	16.5	32.0	36.5
42.4-76	1.4-14.2	16.5	17.5	36.5	40.5
76-159	1.8-14.2	40.5	45.0	40.5	45.0

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

# Metal pipe in a rigid wall

ID

POT-RW-MP-0023

## FIRESTOP BANDAGE

0023\_01

REV

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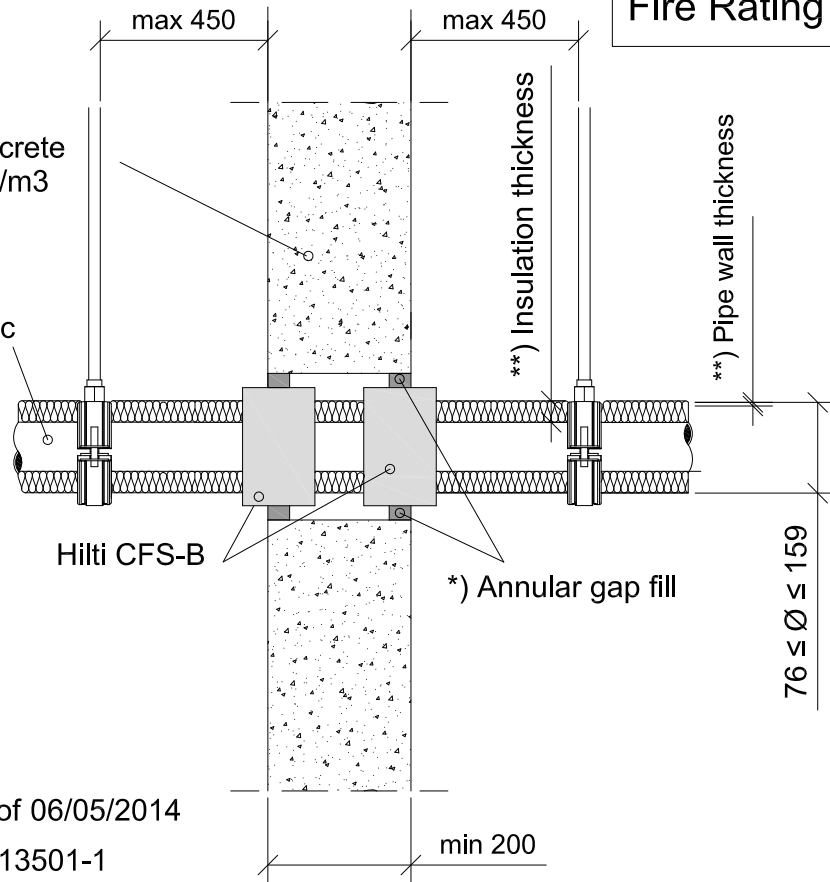
No scale

All units are in millimetres

Fire Rating EI 90 U/C

Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>

\*\*\*) Stainless steel Pipe insulated with elastomeric combustible insulation



- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

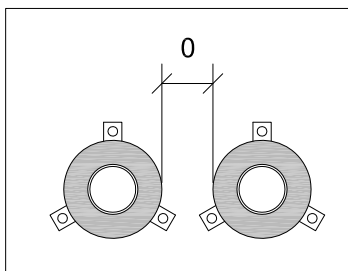
\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR only with a depth > 25 mm on both sides of the wall.
0-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the wall.

\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
76-159	1.8-14.2	17.5	19	40.5	45.0

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus





CONTENTS

# Metal pipe in a rigid wall

ID

POT-RW-MP-0024

## FIRESTOP BANDAGE

0024\_01

REV

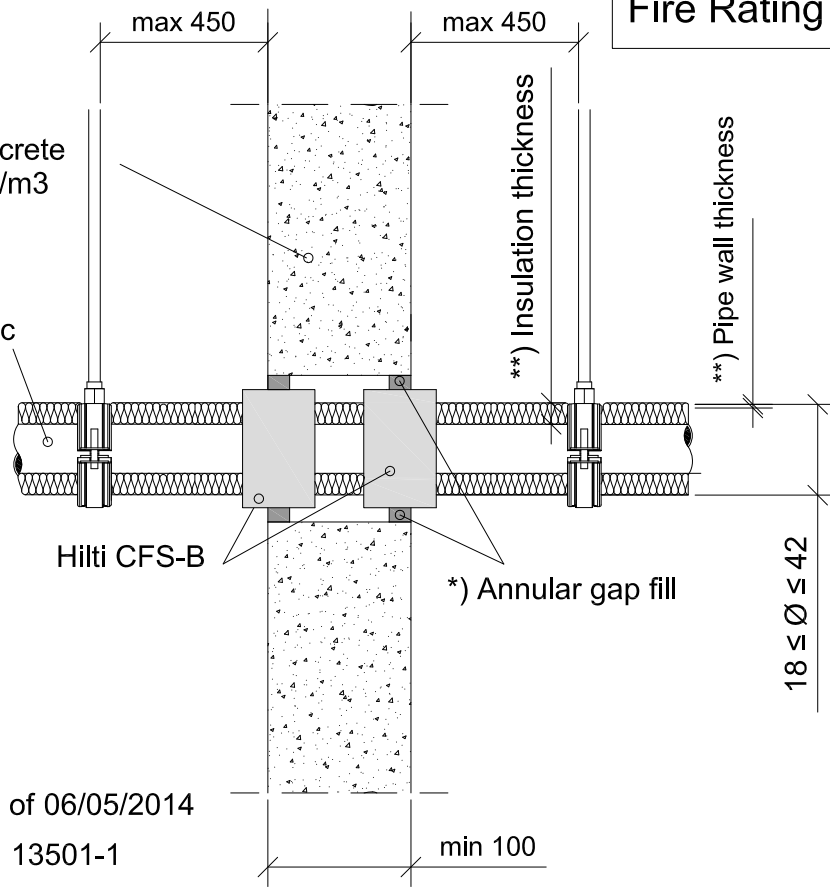
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No scale

All units are in millimetres

Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>

\*\*\*) Stainless steel Pipe insulated with elastomeric combustible insulation



- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

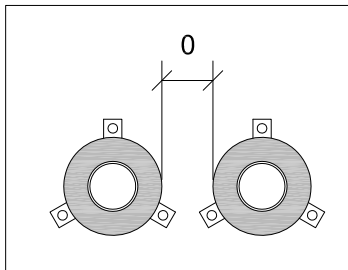
\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR only with a depth > 25 mm on both sides of the wall.
0-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the wall.

\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
18-42	1-14.2	8.5	9.0	32.0	36.5

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Metal pipe in a rigid wall

ID

POT-RW-MP-0025

FIRESTOP BANDAGE

0025\_01

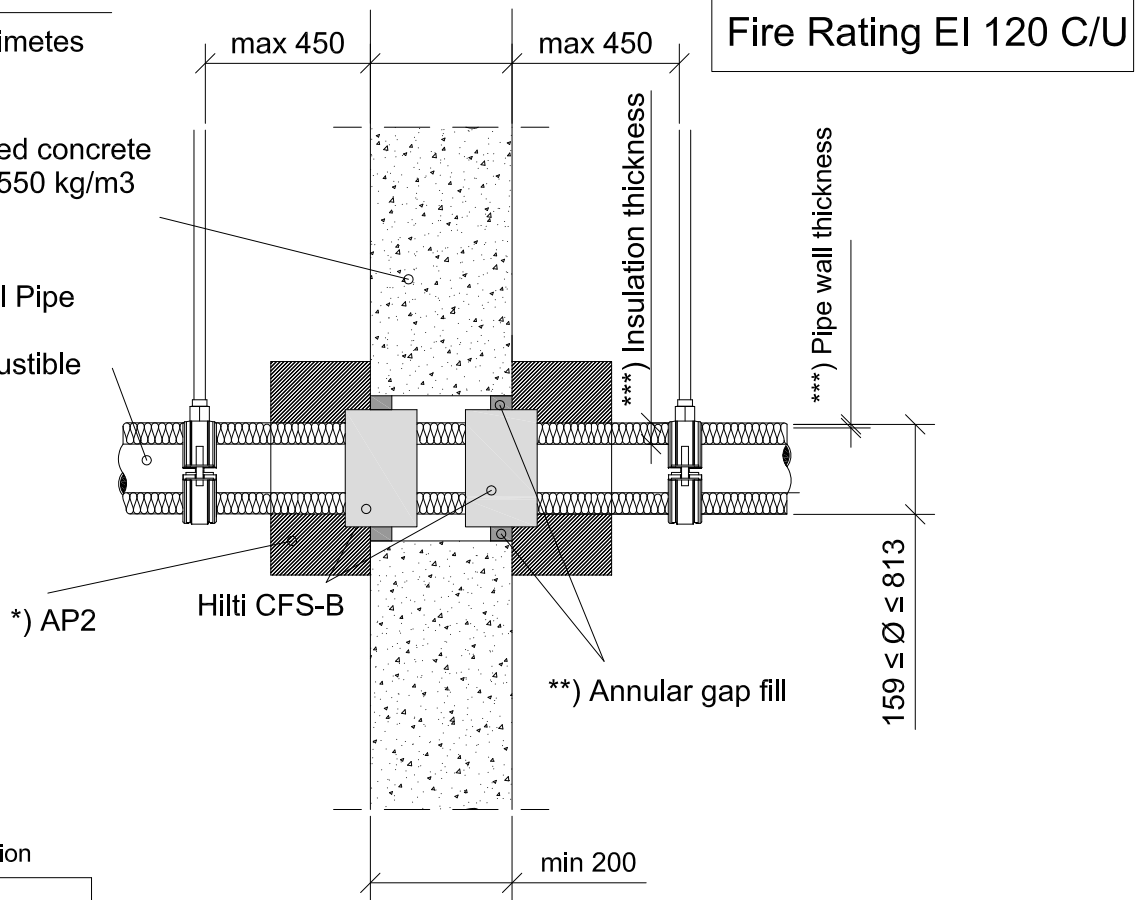
REV  
00

No scale

All units are in millimetres

Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>

\*\*\*) Stainless steel Pipe insulated with elastomeric combustible insulation



\*) Additional Protection

AP2
Mineral wool, Rockwool Klimarock, 40 mm thick, 250 mm in length; density approximately 40 kg/m <sup>3</sup> , local interrupted configuration

- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

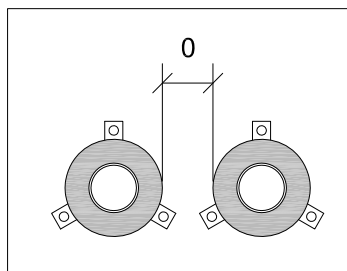
\*\*\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR only with a depth > 25 mm on both sides of the wall.
0-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the wall.

\*\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
159-813	2-14.2	16	25	45	25

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.



Zero distance between annular gap

\*\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Metal pipe in a rigid floor

ID

POT-RF-MP-0036

FIRESTOP BANDAGE

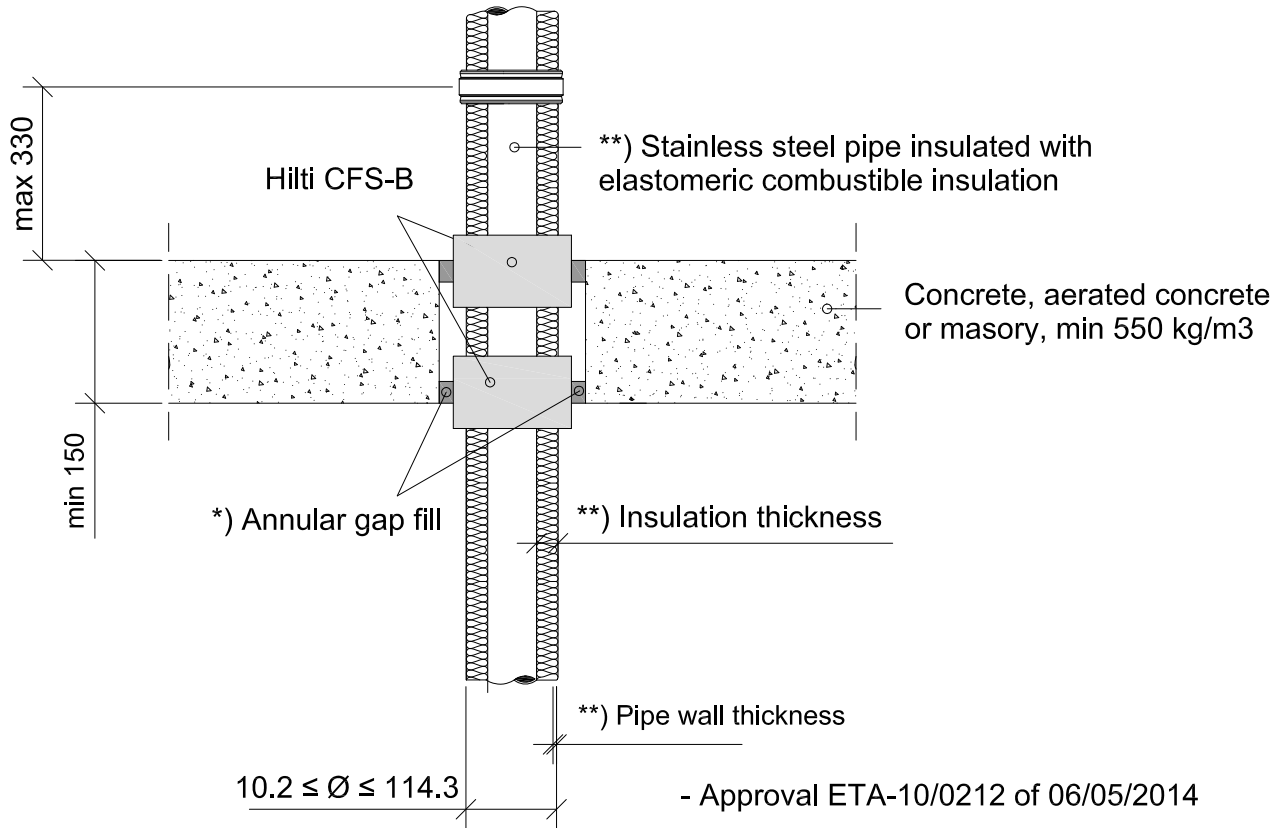
0036\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 120 U/C



Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>

- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

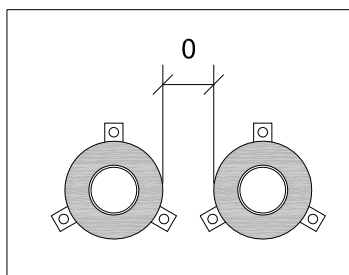
\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
3-50	Cementitious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the floor.

\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
10.2-60	1-14.2	7.5	9.0	15.5	39.0
10.2-114.3	1-14.2	15.5	42.5	15.5	42.5

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L`isolante K-Flex	L`isolante K-Flex HT, L`isolante K-Flex ECO, L`isolante K-Flex ST, L`isolante K-Flex H, L`isolante K-Flex ST Plus



CONTENTS

Metal pipe in a rigid floor

ID

POT-RF-MP-0037

FIRESTOP BANDAGE

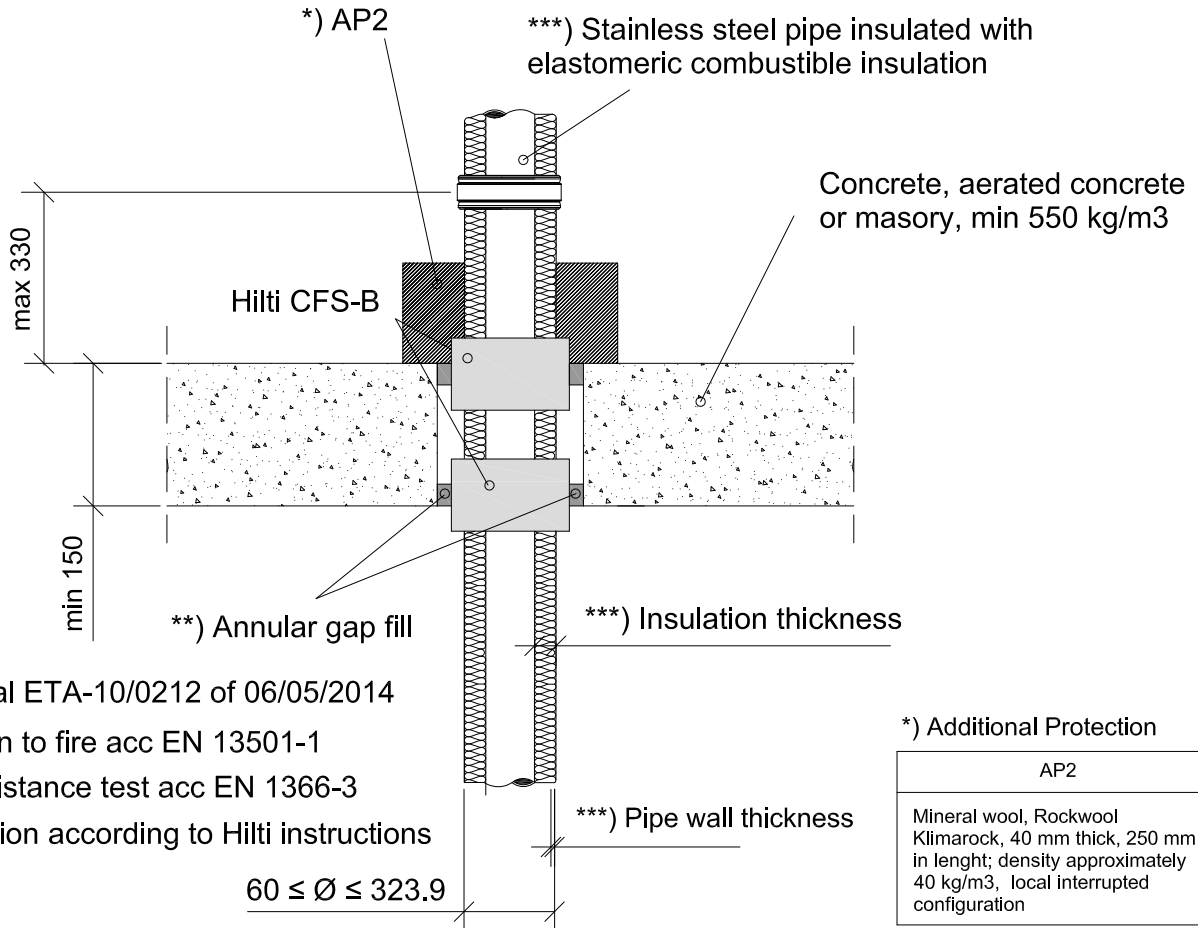
0037\_01

REV  
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No scale

All units are in milimetres

Fire Rating EI 120 C/U



- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

$$60 \leq \text{Ø} \leq 323.9$$

\*) Additional Protection

AP2
Mineral wool, Rockwool Klimarock, 40 mm thick, 250 mm in length; density approximately 40 kg/m <sup>3</sup> , local interrupted configuration

\*\*\*)) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness t <sub>ie</sub>			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
60-76	1-14.2	9.0	9.5	39.0	40.5
76-323.9 <sup>(1)</sup>	1.8-14.2	9.5	25.0	39.0	25.0

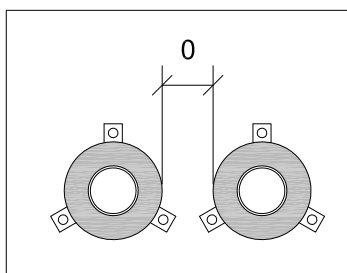
Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.

<sup>(1)</sup> Ø up to 159mm t<sub>DE</sub> is up to 45 mm, for pipe Ø above this size insulation is 25mm.

AP 2 Klimarock insulation (42.5mm) was applied to pipes with a Ø of 323.9 over a length of 500 mm.

\*\*)) Annular gap fill material

Gap with (mm)	Annular Gap Fill
3-50	Cementitious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the floor.



Zero distance between annular gap

\*\*)) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Metal pipe in a rigid floor

ID

POT-RF-MP-0040

FIRESTOP BANDAGE

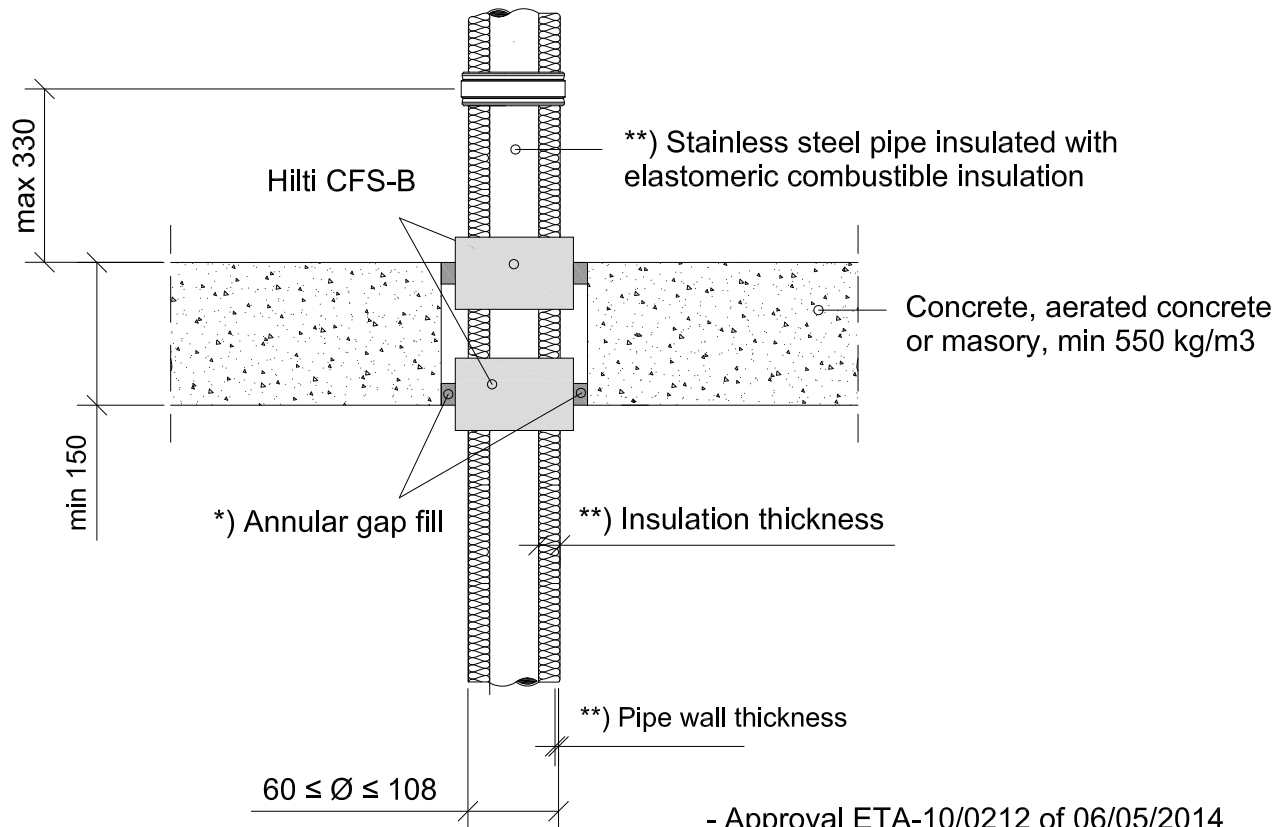
0040\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 90 U/C



- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

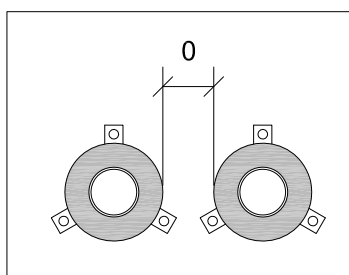
\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
3-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the floor.

\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
60-76	1-14.2	9.0	9.5	39.0	40.5
76-108	1.8-14.2	14.0	14.5	39.0	42.5

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armocell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L`isolante K-Flex	L`isolante K-Flex HT, L`isolante K-Flex ECO, L`isolante K-Flex ST, L`isolante K-Flex H, L`isolante K-Flex ST Plus



CONTENTS

Metal pipe in a rigid floor

ID

POT-RF-MP-0041

FIRESTOP BANDAGE

0041\_01

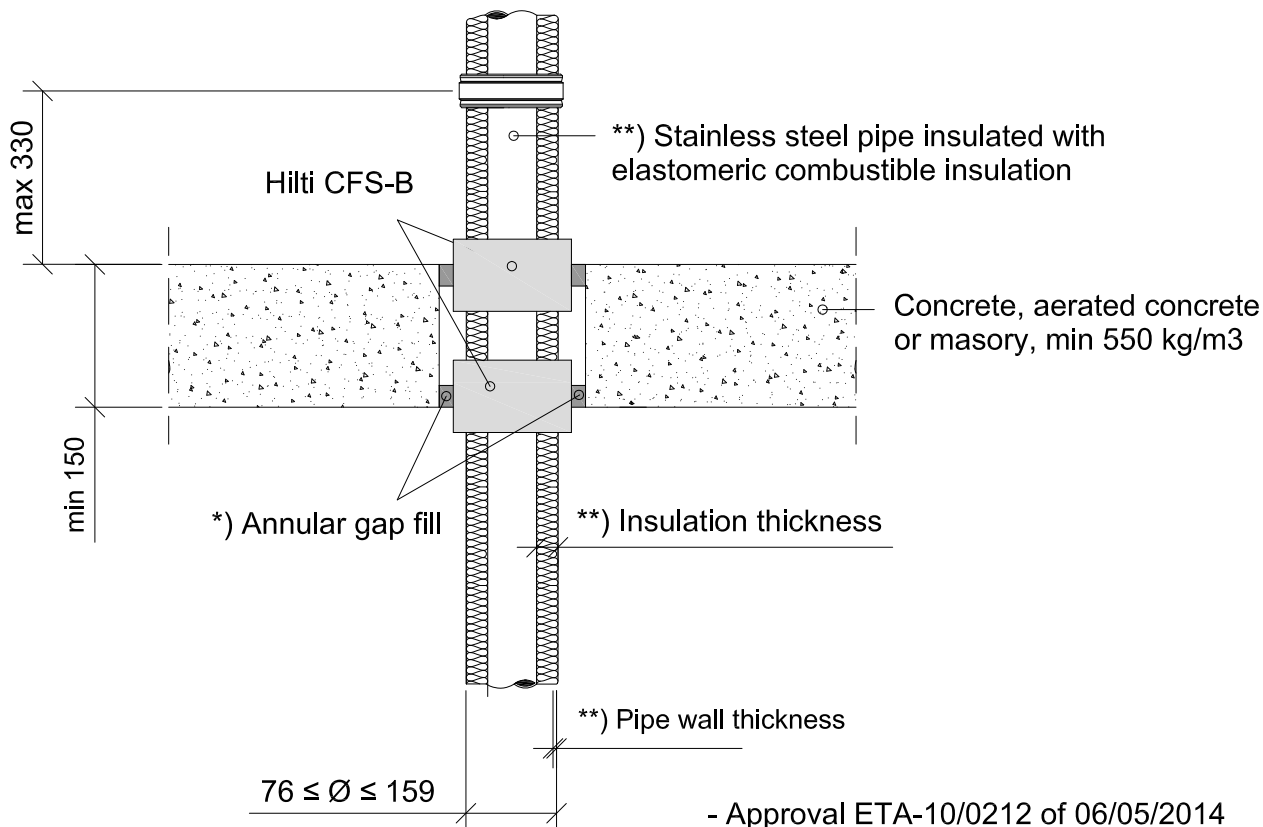
REV

00

No scale

All units are in millimetres

Fire Rating EI 60 U/C



- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

**\*) Annular gap fill material**

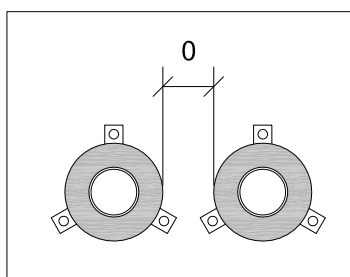
Gap with (mm)	Annular Gap Fill
3-50	Cementitious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the floor.

**\*\*) Pipe wall thickness and insulation**

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
76-159	1.6-14.2	9.0	16.0 (1)	39.0	45.0

Also valid for other metal pipes with lower heat conductivity than copper and a melting point of minimum 1050°C.

(1) minimal insulation thickness above Ø 114.3 mm is increased to 16 mm



Zero distance between annular gap

**\*\*) List of approved elastomeric combustible insulation types**

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L`isolante K-Flex	L`isolante K-Flex HT, L`isolante K-Flex ECO, L`isolante K-Flex ST, L`isolante K-Flex H, L`isolante K-Flex ST Plus



CONTENTS

# Al composite pipe in a flexible wall

ID

POT-FW-AL-0042

## FIRESTOP BANDAGE

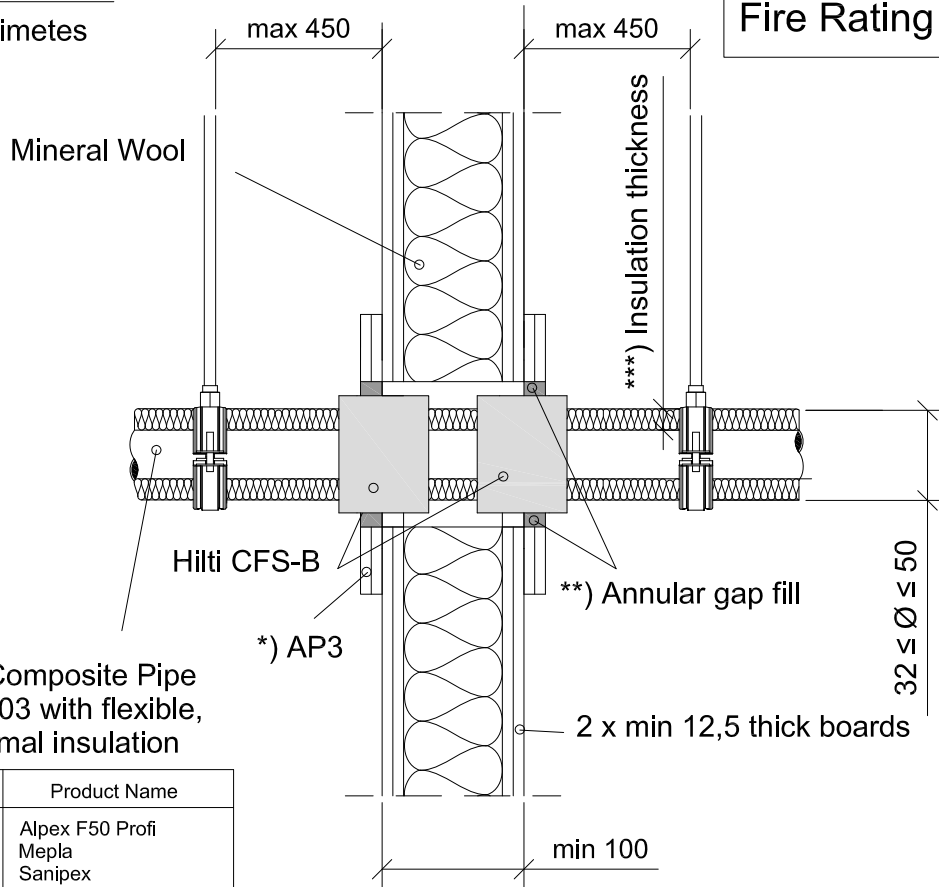
0042\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 120 C/U



\*\*\*) Aluminium Composite Pipe acc EN ISO 21003 with flexible, elastomeric thermal insulation

Manufacturer	Product Name
Frankische Rohrwerke Geberit Georg Fischer Viega	Alpex F50 Profi Mepla Sanipex SANIFIX Fosta-Rohr

\*) Additional Protection

AP3	
Beading/outside framing-beading for flexible wall (100mm) is applied by adding boards on both sides in two layers (2x12.5 mm Type F board) fixed with drywall screws. The resulting strips around the whole pipe are at least 50 mm in width.	

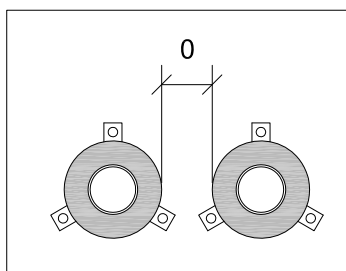
\*\*\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR or gypsum only with a depth > 25 mm on both sides of the wall

- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*\*\*) Pipe wall thickness and insulation

Pipe Ø	Insulation thickness			
	From		To	
	Small Ø	Large Ø	Small Ø	Large Ø
32-50	9.0	9.0	35.1	37.5



Zero distance between annular gap

\*\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armaceil GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Al composite pipe in a flexible wall

ID

POT-FW-AL-0043

FIRESTOP BANDAGE

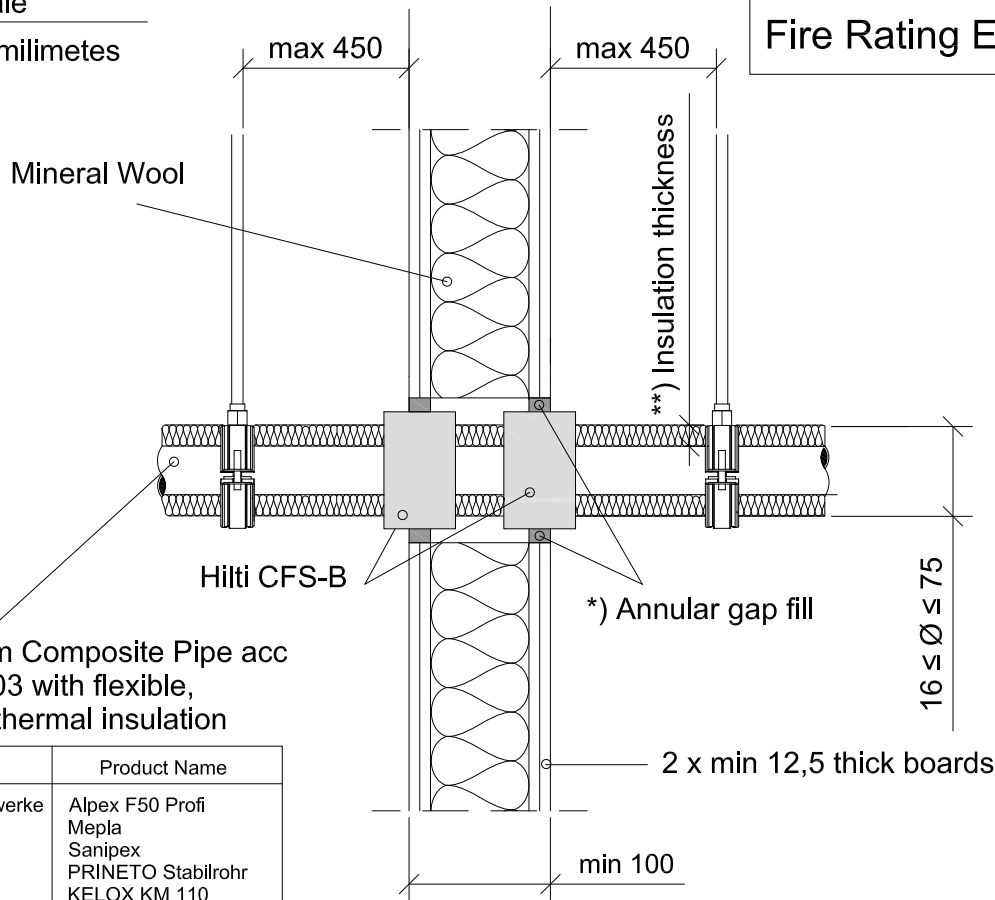
0043\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 120 U/C



\*\*) Aluminium Composite Pipe acc EN ISO 21003 with flexible, elastomeric thermal insulation

Manufacturer	Product Name
Frankische Rohrwerke	Alpex F50 Profi
Geberit	Mepla
Georg Fischer	Sanipex
IVT	PRINETO Stabilrohr
Kekelit	KELOX KM 110
Rehau	Rautitau stabil
TECE	TECEflex Verbundrohr
Uponor	Unipipe MLC
Viega	SANIFIX Fosta-Rohr

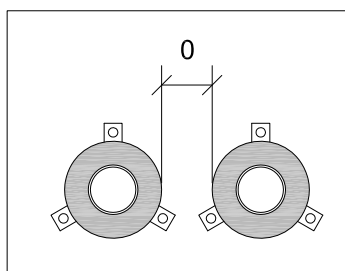
- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR or gypsum only with a depth > 25 mm on both sides of the wall

\*\*) Pipe wall thickness and insulation

Product Name	Pipe Ø	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
Alpex F50 Profi and Geberit Mepla	50-75	37.5	40.5	37.5	40.5
Sanipex	40-63	9.0	9.0	36.5	39.0
PRINETO Stabilrohr	17-63	32	39	32	39
KELOX KM 110	16-73	32	40.5	32.0	40.5
Rautitau stabil	16-40	32	38.5	32.0	38.5
TECEflex Verbundrohr	16-63	32	40.5	32.0	40.5
Unipipe MLC	16-32	8.0	9.0	32.0	35.0
SANIFIX Fosta-Rohr	16-63	32	39.0	32.0	39.0



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved type of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kalman GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus





CONTENTS

Al composite pipe in a flexible wall

ID

POT-FW-AL-0044

FIRESTOP BANDAGE

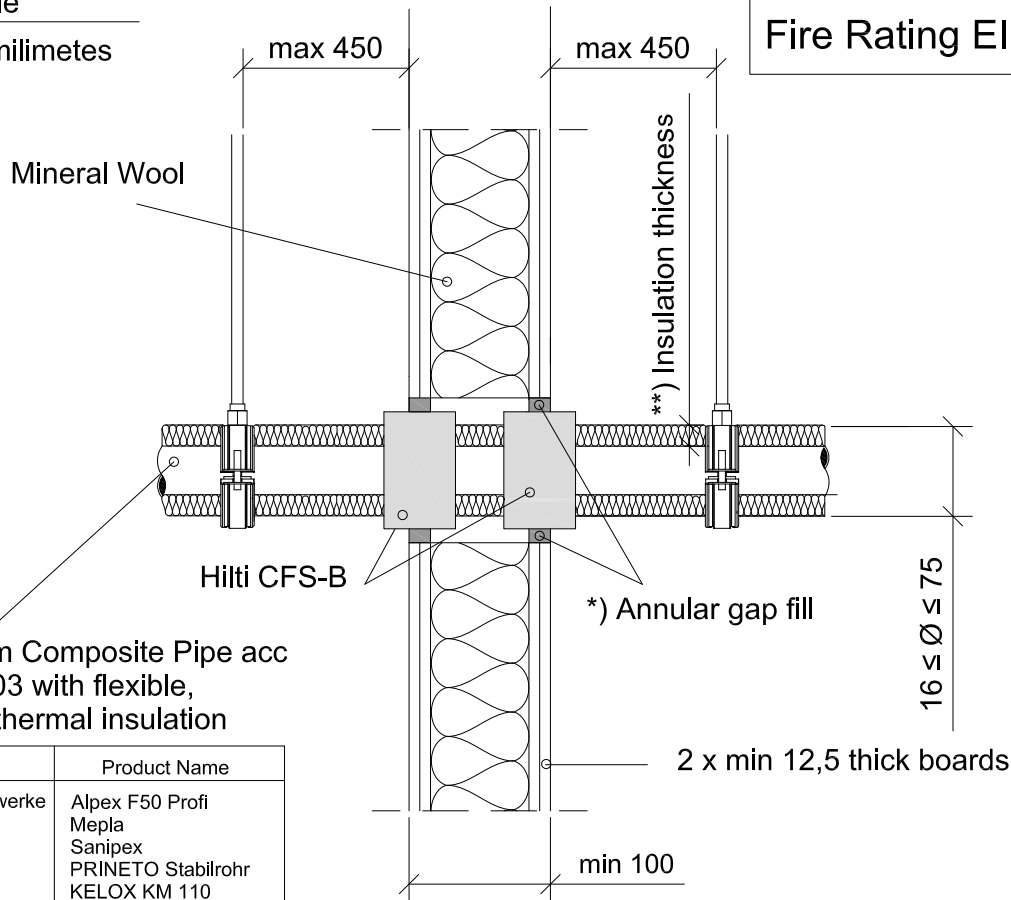
0044\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 90 U/C



\*\*) Aluminium Composite Pipe acc EN ISO 21003 with flexible, elastomeric thermal insulation

Manufacturer	Product Name
Frankische Rohrwerke	Alpex F50 Profi
Geberit	Mepla
Georg Fischer	Sanipex
IVT	PRINETO Stabilrohr
Kekelit	KELOX KM 110
Rehau	Rautitau stabil
TECE	TECEflex Verbundrohr

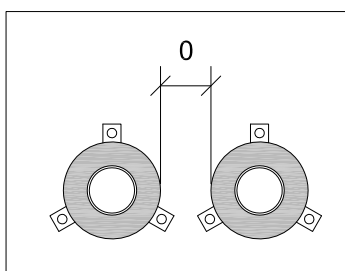
- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*\*) Pipe wall thickness and insulation

Product Name	Pipe Ø	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
Alpex F50 Profi, Geberit Mepla and Sanipex	16-32	8.0	9.0	32.0	35.0
PRINETO Stabilrohr	17-52	8.0	9.0	32.0	37.5
KELOX KM 110	16-75	8.0	14.0	32.0	40.5
Rautitau stabil	16-40	8.0	9.0	32.0	38.5
TECEflex Verbundrohr	16-50	8.0	9.0	32.0	37.5

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR or gypsum only with a depth > 25 mm on both sides of the wall



Zero distance between annular gap

\*\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kalflex KK plus, Kalflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Al composite pipe in a flexible wall

ID

POT-FW-AL-0045

FIRESTOP BANDAGE

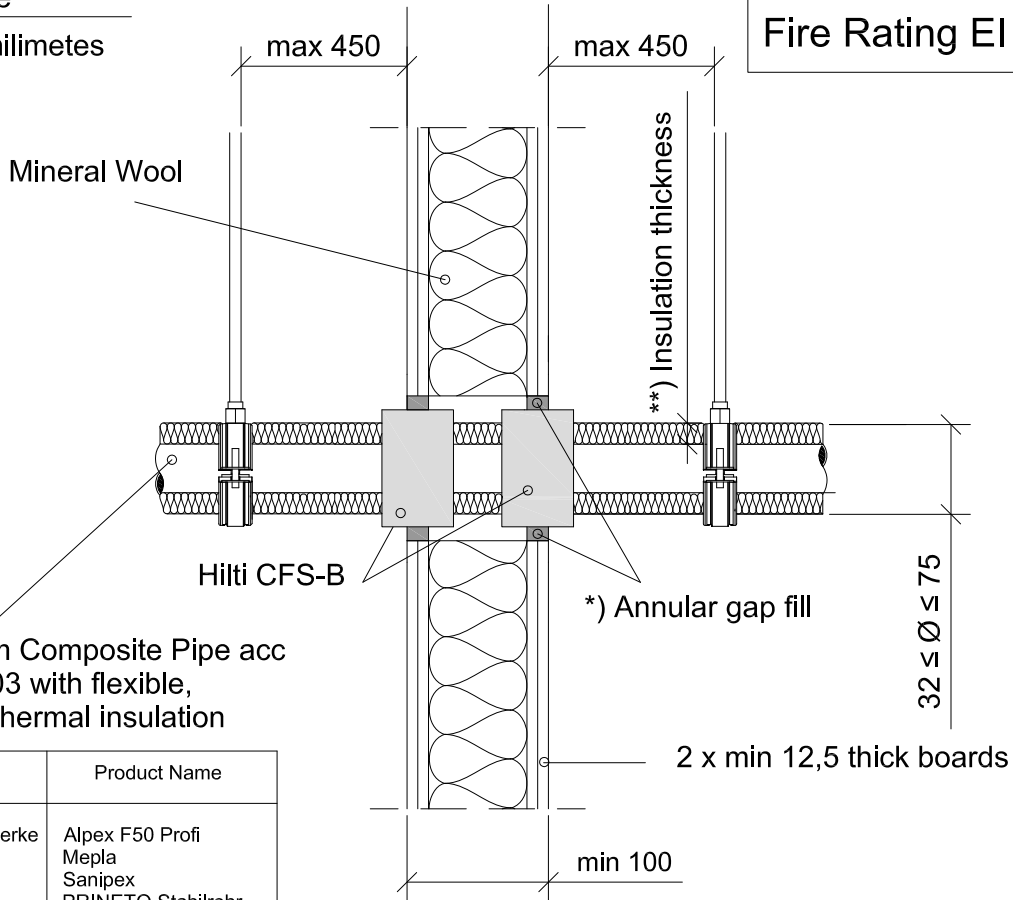
0045\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 60 U/C



\*\*\*) Aluminium Composite Pipe acc EN ISO 21003 with flexible, elastomeric thermal insulation

Manufacturer	Product Name
Frankische Rohrwerke	Alpex F50 Profi
Geberit	Mepla
Georg Fischer	Sanipex
IVT	PRINETO Stabilrohr
TECE	TECEflex Verbundrohr
Viega	SANIFIX Fosta-Rohr

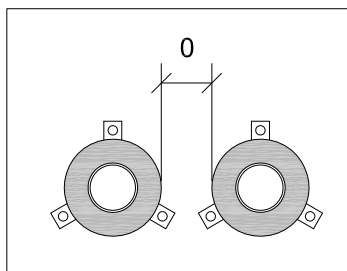
- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR or gypsum only with a depth > 25 mm on both sides of the wall

\*\*\*) Pipe wall thickness and insulation

Product Name	Pipe Ø	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
Alpex F50 Profi and Geberit Mepla	32-40	9.0	9.0	35.0	36.5
	50-75	9.0	9.0	37.5	40.5
Sanipex	32-40	9.0	9.0	35.0	36.5
	50-63	9.0	9.0	37.5	39.0
PRINETO Stabilrohr	50-63	9.0	9.0	37.5	39.0
TECEflex Verbundrohr	63	9.0	9.0	29.0	29.0
SANIFIX Fosta-Rohr	32-63	9.0	9.0	36.5	39.0



Zero distance between annular gap

\*\*\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armaceil GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Al composite pipe in a rigid wall

ID

POT-RW-AL-0053

FIRESTOP BANDAGE

0053\_01

REV

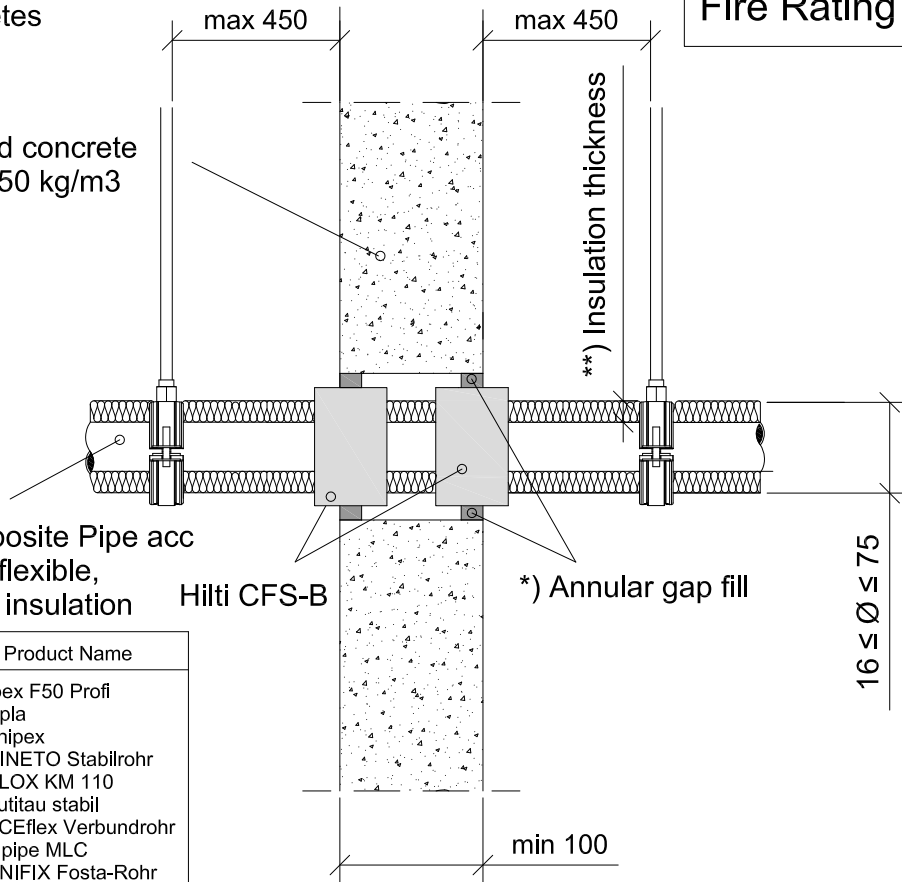
00

No scale

All units are in millimetres

Fire Rating EI 120 U/C

Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>



\*\*) Aluminium Composite Pipe acc EN ISO 21003 with flexible, elastomeric thermal insulation

Manufacturer	Product Name
Frankische Rohrwerke	Alpex F50 Profi
Geberit	Mepla
Georg Fischer	Sanipex
IVT	PRINETO Stabilrohr
Kekelit	KELOX KM 110
Rehau	Rautitau stabil
TECE	TECEflex Verbundrohr
Uponor	Unipipe MLC
Viega	SANIFIX Fosta-Rohr

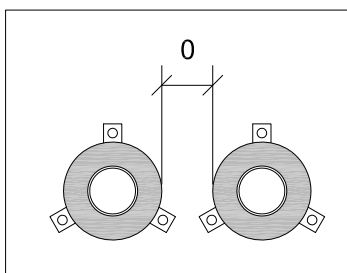
\*\*) Insulation thickness

- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR only with a depth > 25 mm on both sides of the wall.
0-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the wall.

Product Name	Pipe Ø	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
Alpex F50 Profi and Geberit Mepla	50-75	37.5	40.5	37.5	40.5
Sanipex	40-63	9.0	9.0	36.5	39.0
PRINETO Stabilrohr	17-63	32	39	32	39
KELOX KM 110	16-73	32	40.5	32.0	40.5
Rautitau stabil	16-40	32	38.5	32.0	38.5
TECEflex Verbundrohr	16-63	32	40.5	32.0	40.5
Unipipe MLC	16-32	8.0	9.0	32.0	35.0
SANIFIX Fosta-Rohr	16-32	8.0	9.0	32.0	35.0
	16-63	32	39.0	32.0	39.0



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Al composite pipe in a rigid wall

ID

POT-RW-AL-0054

FIRESTOP BANDAGE

0054\_01

REV

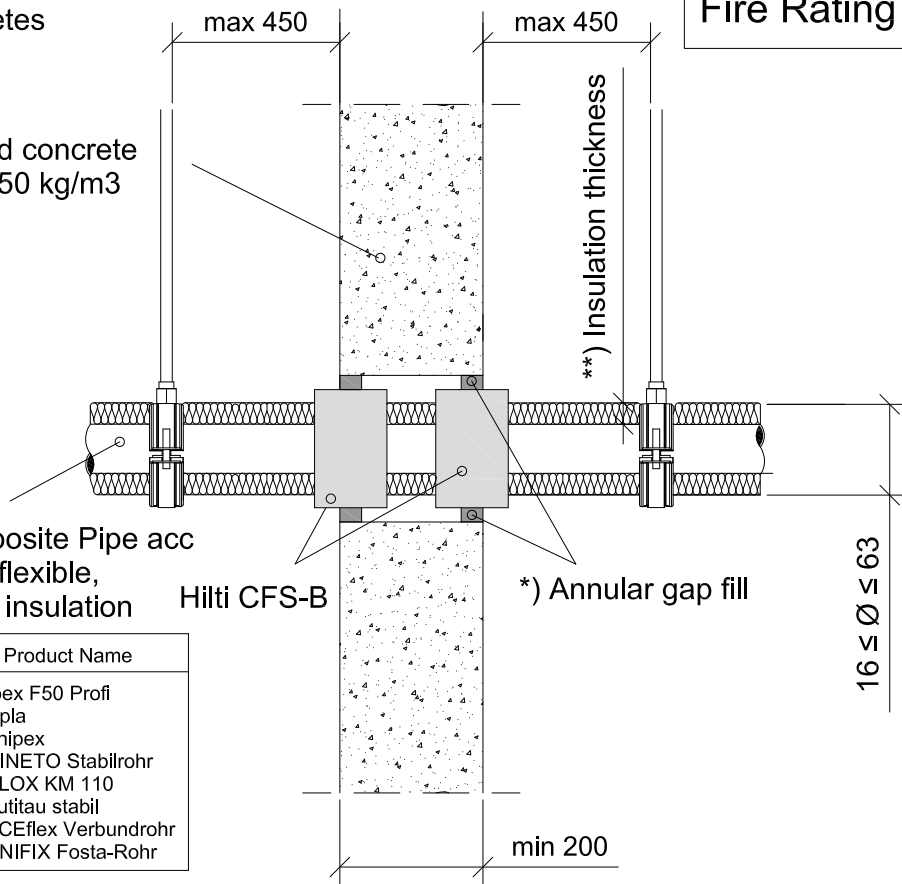
00

No scale

All units are in millimetres

Fire Rating EI 120 U/C

Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>



\*\*') Aluminium Composite Pipe acc EN ISO 21003 with flexible, elastomeric thermal insulation

Manufacturer	Product Name
Frankische Rohrwerke	Alpex F50 Profi
Geberit	Mepla
Georg Fischer	Sanipex
IVT	PRINETO Stabilrohr
Kekelit	KELOX KM 110
Rehau	Rautitau stabil
TECE	TECEflex Verbundrohr
Viega	SANIFIX Fosta-Rohr

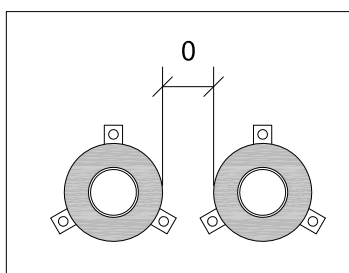
- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR only with a depth > 25 mm on both sides of the floor
0-50	Cementitious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the wall.

\*\*') Pipe wall thickness and insulation

Pipe Ø	Insulation thickness			
	From		To	
	Small Ø	Large Ø	Small Ø	Large Ø
16-63	8.0	9.0	32.0	39.0



Zero distance between annular gap

\*\*') List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armaceil GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Al composite pipe in a rigid wall

ID

POT-RW-AL-0055

FIRESTOP BANDAGE

0055\_01

REV

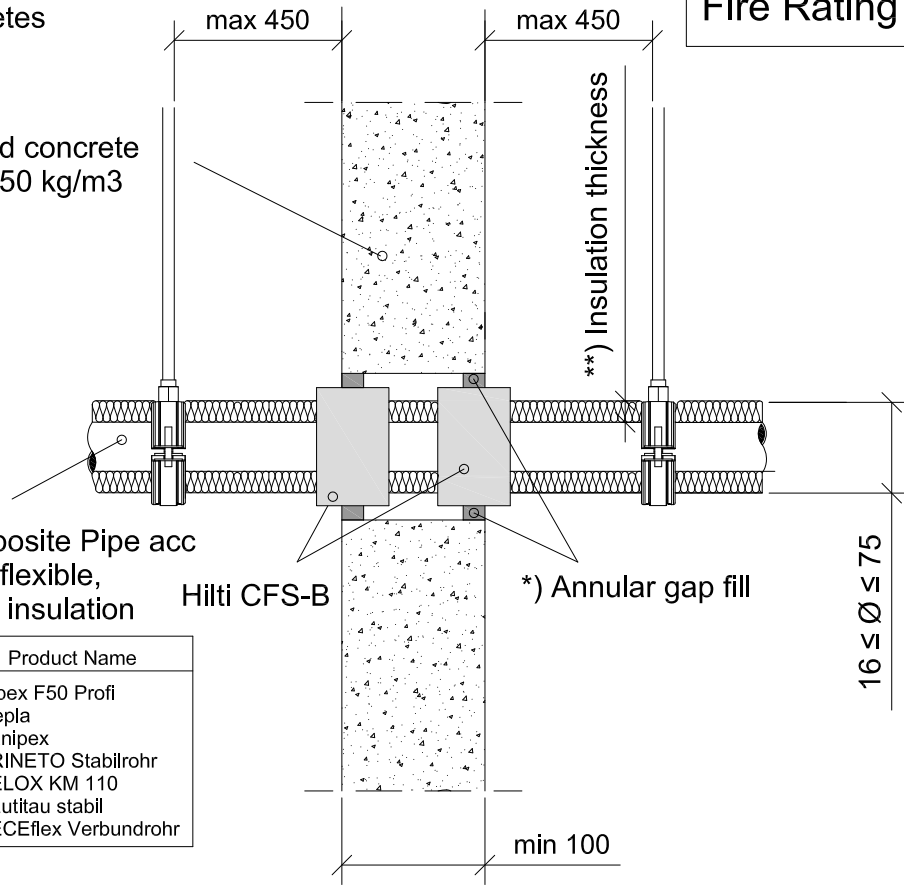
00

No scale

All units are in millimetres

Fire Rating EI 90 U/C

Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>



\*\* ) Aluminium Composite Pipe acc EN ISO 21003 with flexible, elastomeric thermal insulation

Hilti CFS-B

\*) Annular gap fill

16 ≤ Ø ≤ 75

Manufacturer	Product Name
Frankische Rohrwerke	Alpex F50 Profi
Geberit	Mepla
Georg Fischer	Sanipex
IVT	PRINETO Stabilrohr
Kekelit	KELOX KM 110
Rehau	Rautitau stabil
TECE	TECEflex Verbundrohr

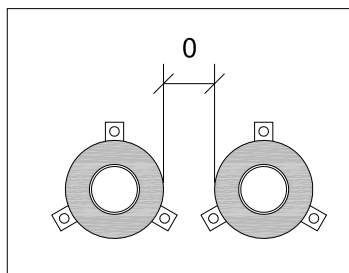
- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*\* ) Insulation thickness

Product Name	Pipe Ø	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
Alpex F50 Profi, Geberit Mepla and Sanipex	16-32	8.0	9.0	32.0	35.0
PRINETO Stabilrohr	17-52	8.0	9.0	32.0	37.5
KELOX KM 110	16-75	8.0	14.0	32.0	40.5
Rautitau stabil	16-40	8.0	9.0	32.0	38.5
TECEflex Verbundrohr	16-50	8.0	9.0	32.0	37.5

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR only with a depth > 25 mm on both sides of the wall
0-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the wall.



Zero distance between annular gap

\*\* ) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Al composite pipe in a rigid wall

ID

POT-RW-AL-0056

FIRESTOP BANDAGE

0056\_01

REV

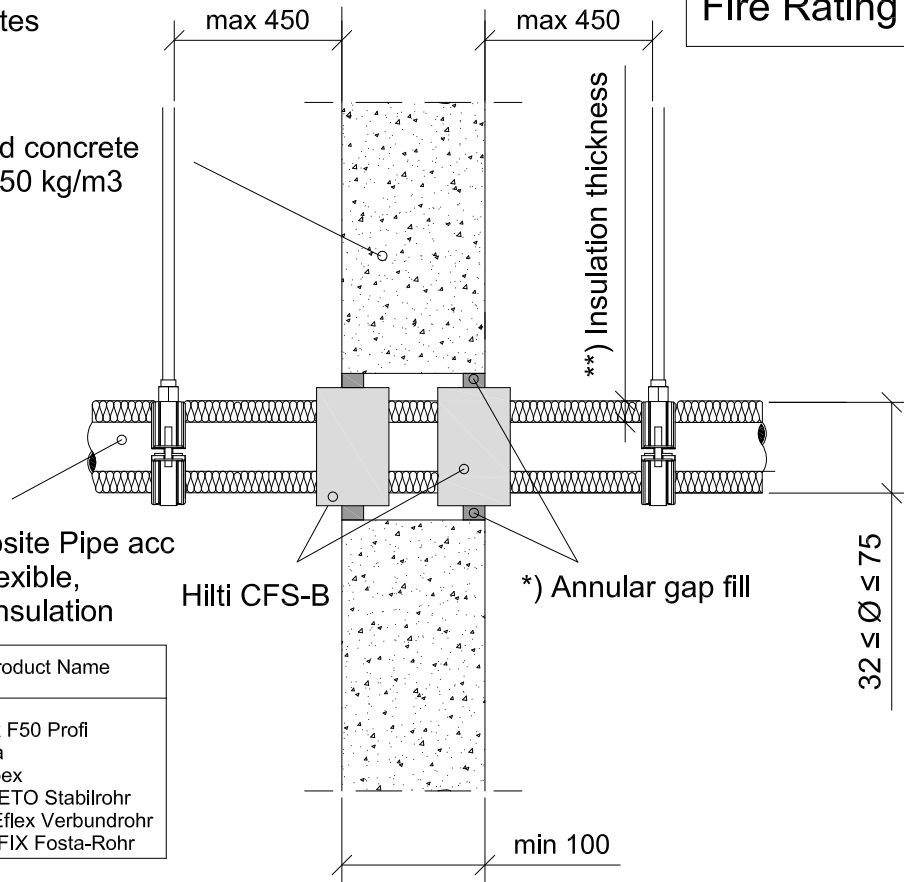
00

No scale

All units are in millimetres

Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>

Fire Rating EI 60 U/C



\*\* ) Aluminium Composite Pipe acc EN ISO 21003 with flexible, elastomeric thermal insulation

Manufacturer	Product Name
Frankische Rohrwerke	Alpex F50 Profi
Geberit	Mepla
Georg Fischer	Sanipex
IVT	PRINETO Stabilrohr
TECE	TECEflex Verbundrohr
Viega	SANIFIX Fosta-Rohr

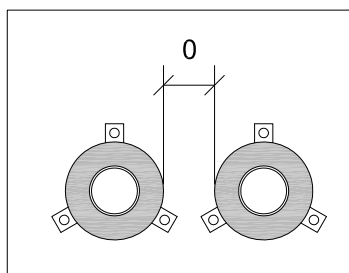
- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*\* ) Insulation thickness

Product Name	Pipe Ø	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
Alpex F50 Profi and Geberit Mepla	32-40	9.0	9.0	35.0	36.5
	50-75	9.0	9.0	37.5	40.5
Sanipex	32-40	9.0	9.0	35.0	36.5
	50-63	9.0	9.0	37.5	39.0
PRINETO Stabilrohr	52-63	9.0	9.0	37.5	39.0
TECEflex Verbundrohr	63	9.0	9.0	29.0	29.0
SANIFIX Fosta-Rohr	32-63	9.0	9.0	36.5	39.0

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR only with a depth > 25 mm on both sides of the wall.
0-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the wall.



Zero distance between annular gap

\*\* ) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L`isolante K-Flex	L`isolante K-Flex HT, L`isolante K-Flex ECO, L`isolante K-Flex ST, L`isolante K-Flex H, L`isolante K-Flex ST Plus



CONTENTS

Al composite pipe in a rigid floor

ID

POT-RF-AL-0064

FIRESTOP BANDAGE

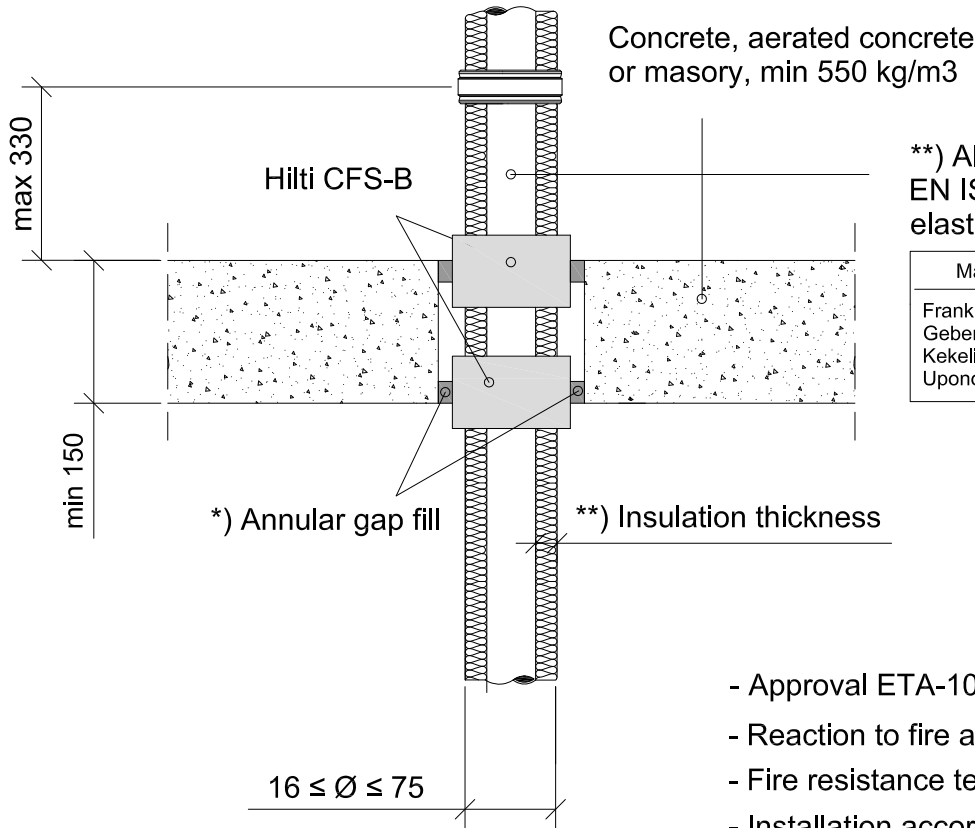
0064\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 180 U/C



\*\*) Aluminium Composite Pipe acc EN ISO 21003 with flexible, elastomeric thermal insulation

Manufacturer	Product Name
Frankische Rohrwerke	Alpex F50 Profi
Geberit	Mepla
Kekelit	KELOX KM 110
Uponor	Unipipe MLC

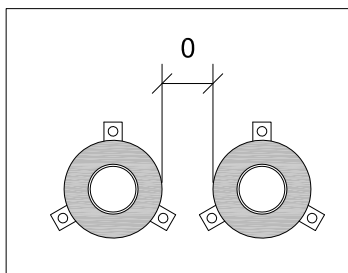
- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
3-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the floor.

\*\*) Insulation thickness

Product Name	Pipe Ø	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
Unipipe MLC	16-32	8.0	9.0	32.0	35.0
Alpex F50 Profi Mepla KELOX KM 110	75	40.5		40.5	



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L`isolante K-Flex	L`isolante K-Flex HT, L`isolante K-Flex ECO, L`isolante K-Flex ST, L`isolante K-Flex H, L`isolante K-Flex ST Plus



CONTENTS

Al composite pipe in a rigid floor

ID

POT-RF-AL-0065

FIRESTOP BANDAGE

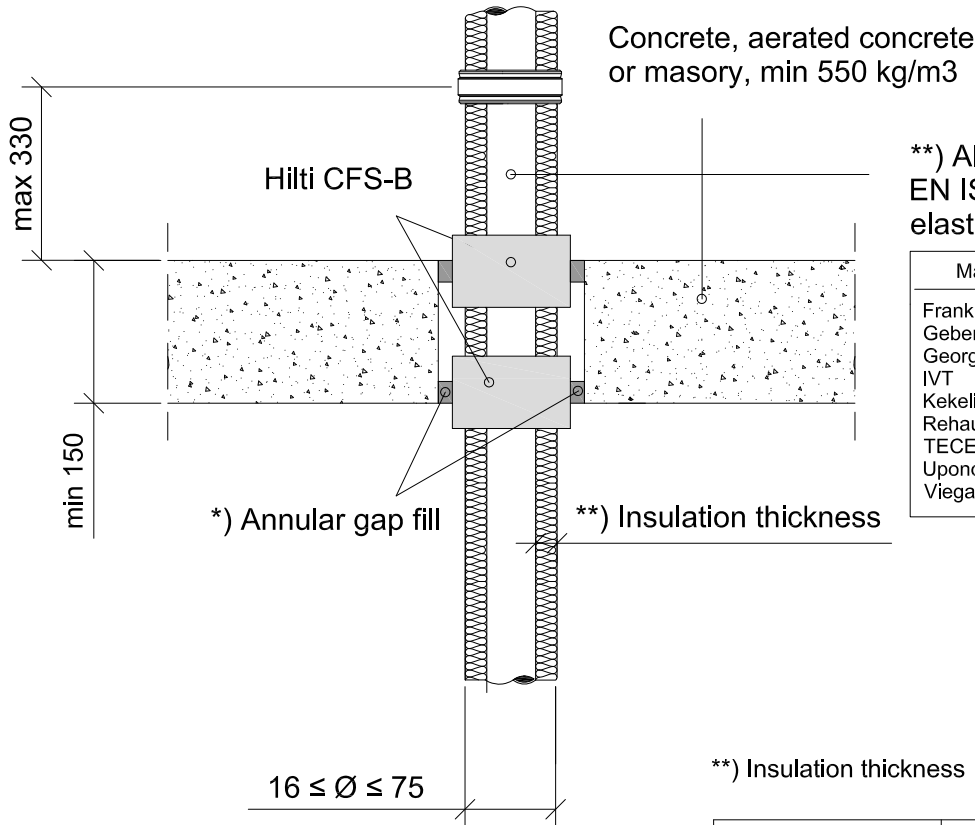
0065\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 120 U/C



\*\*) Aluminium Composite Pipe acc EN ISO 21003 with flexible, elastomeric thermal insulation

Manufacturer	Product Name
Frankische Rohrwerke	Alpex F50 Profi
Geberit	Mepla
Georg Fischer	Sanipex
IVT	PRINETO Stabilrohr
Kekelit	KELOX KM 110
Rehau	Rautitau stabil
TECE	TECEflex Verbundrohr
Uponor	Unipipe MLC
Viega	SANIFIX Fosta-Rohr

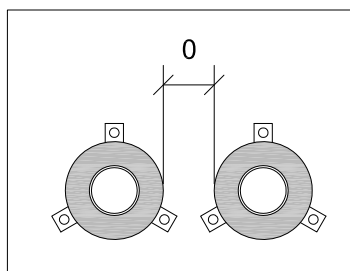
- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
3-50	Cementitious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the floor.

\*\*) Insulation thickness

Product Name	Pipe Ø	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
Alpex F50 Profi	16-40	8.0	9.0	32.0	36.5
Geberit Mepla	16-75	8.0	9.0	32.0	39.0
Sanipex	16-63	8.0	9.0	32.0	39.0
PRINETO Stabilrohr	17-63	8.0	9.0	32.0	39.0
KELOX KM 110 Rautitau stabil TECEflex Verbundrohr Unipipe MLC SANIFIX Fosta-Rohr	16-63	8.0	9.0	32.0	39.0



Zero distance between annular gap

\*\*) List of approved elastomeric combustible insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus





CONTENTS

Plastic pipe in a flexible wall

ID

POT-FW-PP-0079

FIRESTOP BANDAGE

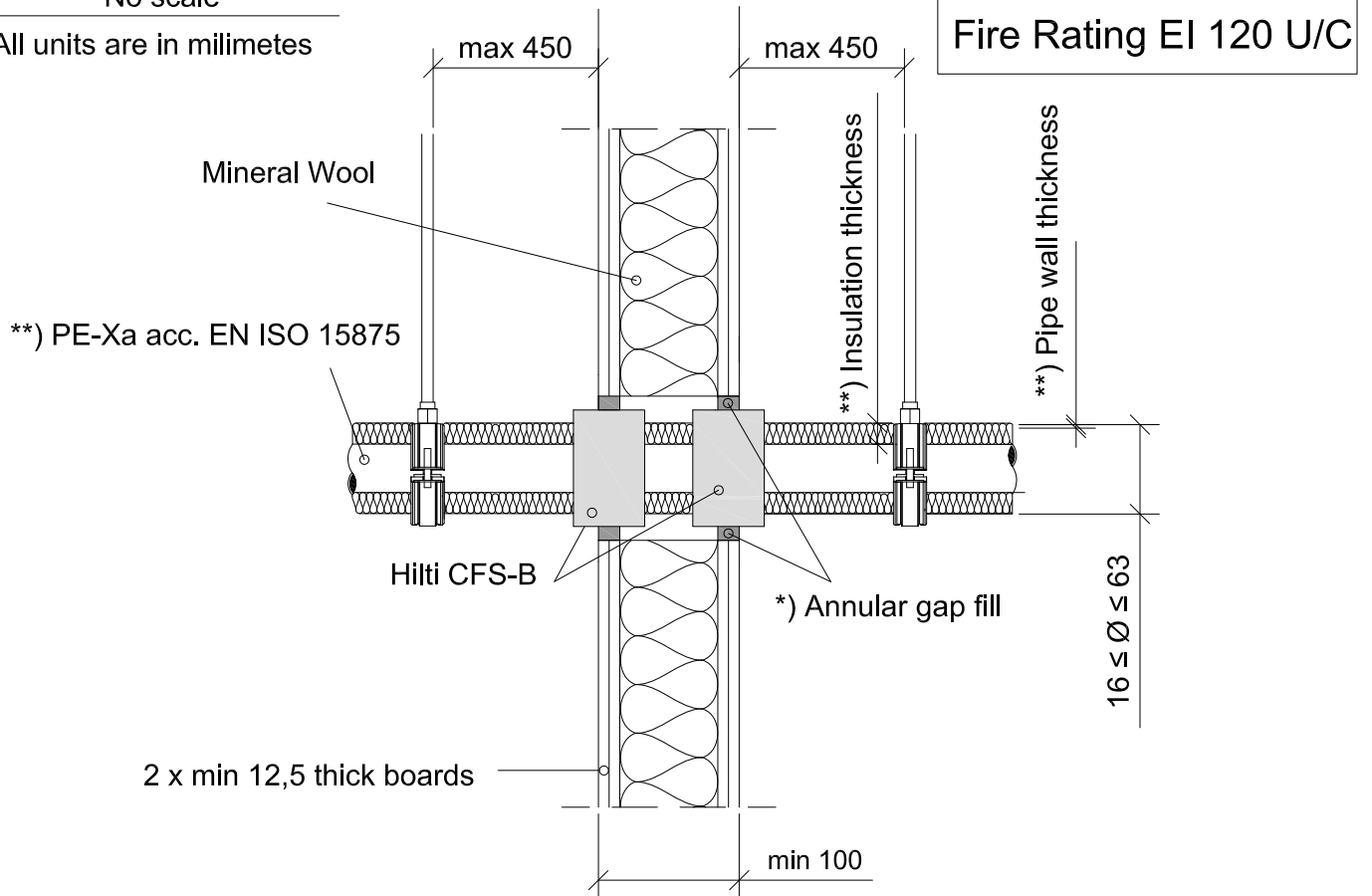
0079\_01

REV  
00

No scale

All units are in millimetres

Fire Rating EI 120 U/C



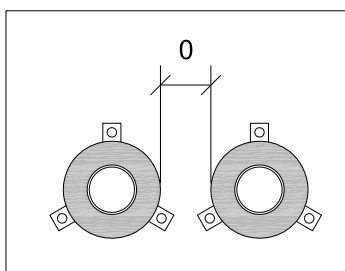
- Approval ETA-10/0212 f 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR or gypsum only with a depth > 25 mm on both sides of the wall

\*\*) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
16-63	2.2-8.6	8.0	9.0	32.0	39.0



Zero distance between annular gap

\*\*) List of approved elastomeric combustibile insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armaceil GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L'isolante K-Flex	L'isolante K-Flex HT, L'isolante K-Flex ECO, L'isolante K-Flex ST, L'isolante K-Flex H, L'isolante K-Flex ST Plus



CONTENTS

Plastic pipe in a rigid wall

ID

POT-RW-PP-0092

FIRESTOP BANDAGE

0092\_01

REV  
00

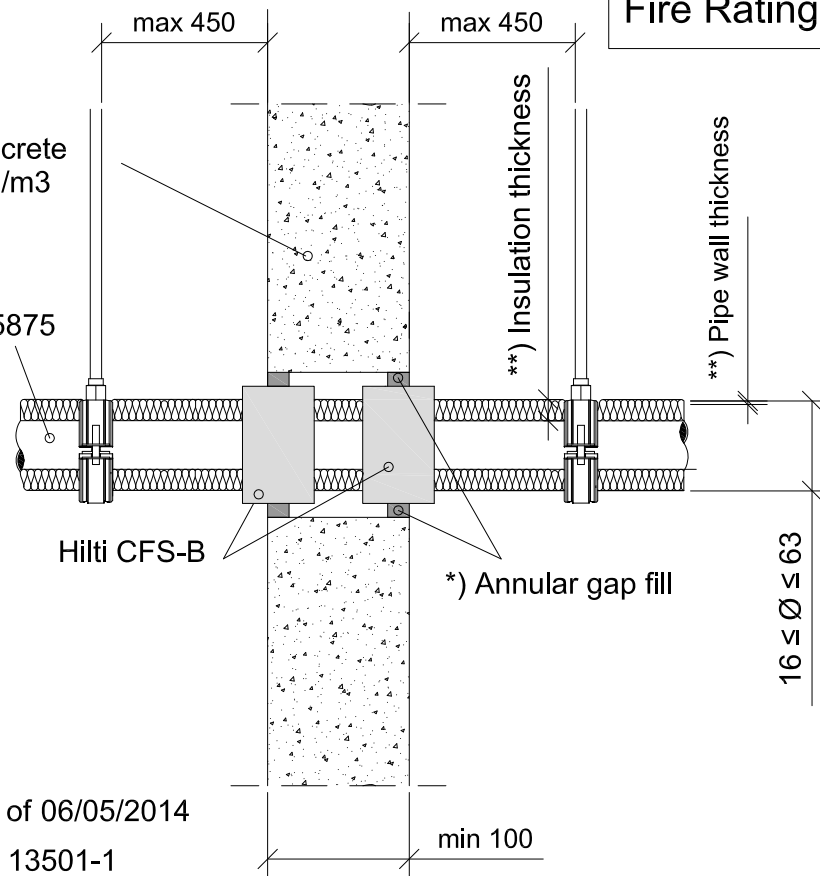
No scale

All units are in millimetres

Fire Rating EI 120 U/C

Concrete, aerated concrete or masonry, min 550 kg/m<sup>3</sup>

\*\* ) PE-Xa acc. EN ISO 15875



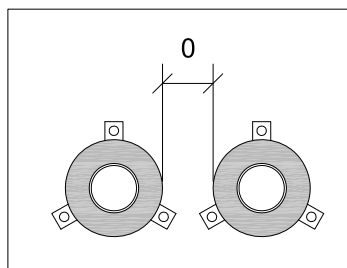
- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\*) Annular gap fill material

Gap with (mm)	Annular Gap Fill
0-15	Hilti Firestop Acrylic Sealant CFS-S ACR only with a depth > 25 mm on both sides of the wall.
0-50	Cementious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the wall.

\*\* ) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
16-63	2.2-8.6	8.0	9.0	32.0	39.0



Zero distance between annular gap

\*\* ) List of approved elastomeric combustibile insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L`isolante K-Flex	L`isolante K-Flex HT, L`isolante K-Flex ECO, L`isolante K-Flex ST, L`isolante K-Flex H, L`isolante K-Flex ST Plus



CONTENTS

Plastic pipe in a rigid floor

ID

POT-RF-PP-0107

FIRESTOP BANDAGE

0107\_01

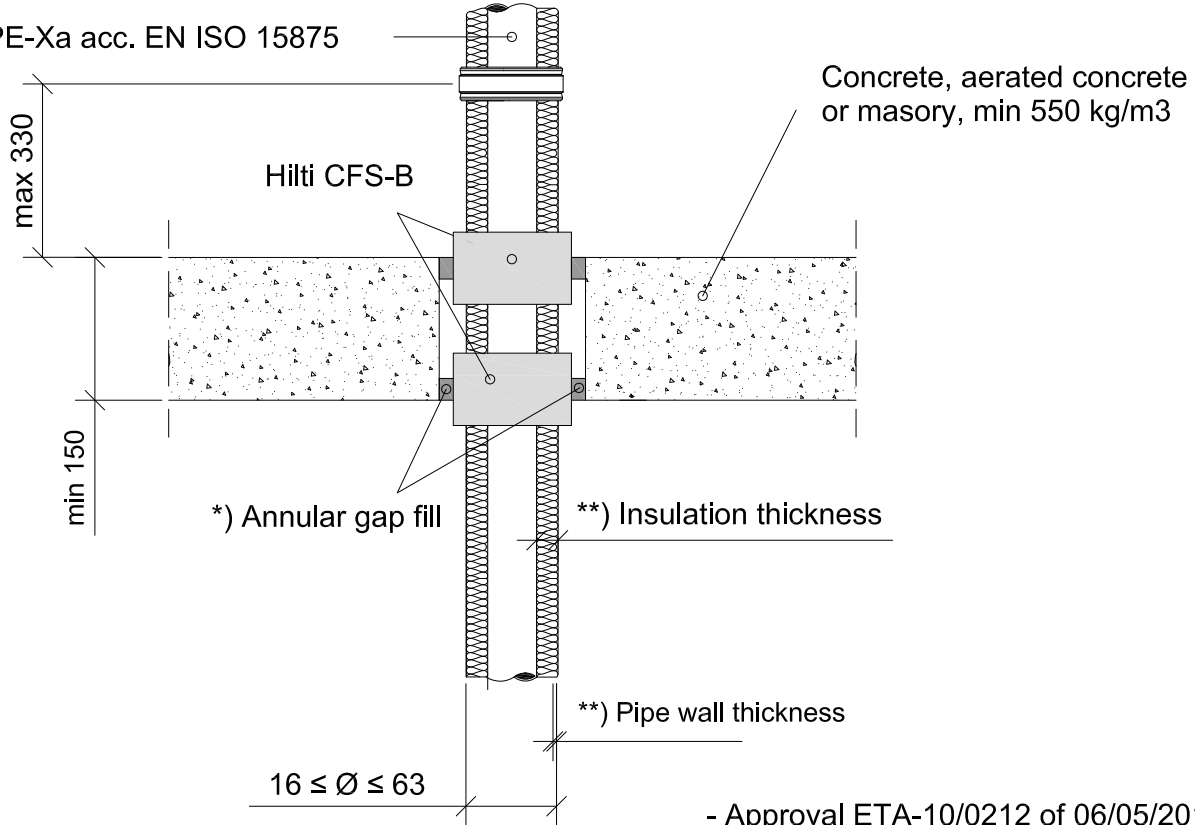
REV  
00

No scale

All units are in millimetres

Fire Rating EI 180 U/C

\*\* ) PE-Xa acc. EN ISO 15875



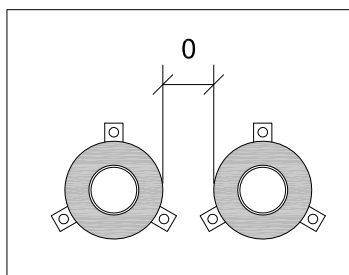
- Approval ETA-10/0212 of 06/05/2014
- Reaction to fire acc EN 13501-1
- Fire resistance test acc EN 1366-3
- Installation according to Hilti instructions

\* ) Annular gap fill material

Gap with (mm)	Annular Gap Fill
3-50	Cementitious mortar acc EN 998-2, class M10 or gypsum over the entire thickness of the floor.

\*\* ) Pipe wall thickness and insulation

Pipe Ø	Pipe wall thickness	Insulation thickness			
		From		To	
		Small Ø	Large Ø	Small Ø	Large Ø
16-63	2.2-8.6	8.0	9.0	32.0	39.0



Zero distance between annular gap

\*\* ) List of approved elastomeric combustibile insulation types

Product	Approved tpe of foamed elastomeric thermal insulation
Armacell GmbH	Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	Insul-Tube (nmc), Insul-Tube H-plus (nmc)
Kaimann GmbH	Kaiflex KK plus, Kaiflex KK
L`isolante K-Flex	L`isolante K-Flex HT, L`isolante K-Flex ECO, L`isolante K-Flex ST, L`isolante K-Flex H, L`isolante K-Flex ST Plus