

# MAS310

## APPLICATION MANUAL

# FIRECAULK SEALANT

## DESCRIPTION

Allproof Firecaulk is a single component, non-sag, fire rated acrylic based sealant. An interior sealant for construction joints and the sealing of service penetrations in plasterboard, concrete floors and masonry wall constructions.

Allproof Firecaulk is specifically manufactured for sealing low movement interior joints (up to +/-25%) in masonry and plasterboard to provide a fire barrier for periods up to 4 hours.

## FEATURES

- Fire rating for gaps up to 40mm
- Good flexibility joint movement +/-25%
- Very easy to gun and gives a smooth finish
- Low odour and non-toxic
- Water clean up
- Prevents the passage of hot gases
- Paintable after 24 hours at 20°C
- Water resistant after cure
- Excellent adhesion to metal, wood, plasterboard, all masonry, AAC and hebel block
- Acoustic capabilities with a 67 STC rating in plasterboard construction
- VOC of <1 g/L

## RECOMMENDED USES

- To prevent the spread of fire and smoke in interior applications
- Sealing of gaps around pipes, cables, ducts and services which penetrate fire rated walls and floors
- For vertical and horizontal joints
- Interior applications requiring acoustic STC rating
- Interior perimeter sealing of door and window framing
- Interior sealing of gaps between faced and cladding panels to various building materials
- For new construction and remedial applications

## CLASSIFICATIONS/STANDARDS

- Fire resistance when tested in accordance with AS1530.4-2014 and AS4072.1-2005 and installed in accordance to manual guidelines. Rating dependant on overall wall system configuration
- VOC <1 g/L
- 67 STC - Rating dependant on overall wall system configuration



## APPLICATION INSTRUCTIONS

Follow design guidelines as given in this manual to ensure fire rating is achieved. Minimum sealant depth as quoted in the manual must be met to ensure fire rating is achieved

### General installation guidelines:

Allproof Firecaulk should be applied to a minimum depth of 6mm, maximum width of 40mm. The ratio of joints width to sealant depth should be approximately 2:1. Joint width should not be less than 6mm. The joint depth must allow a sealant depth, after installation of backing rod or bond breaking material, of a minimum of 6mm. Lap shear joints should have a bead width equal to or greater than twice the anticipated movement.

A conservative design practice, which uses a portion of the sealant's movement capability as a safety factor, is recommended. Sealants are subject to cohesive failure when the actual movement is greater than their rated capability. All joints must have closed cell backing rod or bond breaking tape to ensure 2 sided adhesion only.

## SURFACE PREPARATION

Clean all surfaces by removing foreign matter and contaminants such as oil, dust, grease, frost, water, surface dirt, old sealant and any protective coating. Porous substrates should be cleaned by grinding, saw cutting or blast cleaning (sand or water). Dust, loose particles, etc should be blown out of joints with oil free compressed air or vacuum cleaned. Non porous and plastic surfaces should be cleaned by solvent or mechanical means. Cleaning solvents should not be allowed to air dry or evaporate without being wiped with a clean, dry cloth.

## APPLICATION

- Install back-up material or joint filler as specified.
- Allproof Firecaulk should be dispensed from either the cartridge or sausage sachet by means of a hand or air operated caulking gun designed for such application (available from Allproof).
- Cartridges:** Measure the bead size and cut the nozzle at an angle to give the right bead size. Cut the cartridge and screw on the supplied nozzle. Place the cartridge in a suitable extrusion gun. Using the trigger on the gun extrude product from the sausage. To stop product flow, using the thumb, depress the catch plate mechanism located at the very rear of the gun.
- Sausages:** Measure the bead size and cut the nozzle at an angle to give the right bead size. Clip the end of the sausage and place the nozzle over the opened end. Place the sausage and nozzle into the caulking gun. Screw the top housing onto the housing on barrel. Using the trigger on the gun extrude product from the sausage. To stop product flow, using the thumb depress the catch plate mechanism located at the very rear of the gun.
- Apply Allproof Firecaulk in a continuous operation using positive pressure adequate to properly fill and seal the cavity.

- Tool Allproof Firecaulk with sufficient pressure to spread the sealant against the back-up material and onto the joint surfaces. A tool with a concave profile is recommended to achieve the correct profile.

## COVERAGE

### Lineal meters (approx.)

Size	W x D	W x D	W x D	W x D	W x D
300ml	10 x 10	20 x 10	20 x 13	20 x 16	20 x 32
600ml	3	1.5	1.15	0.93	0.46

Usage formula:  $\frac{W \times D \times L}{1000}$  = Litres

W = Width (mm) D = Depth (mm) L = Length (metres)

## CURE RATE

The cure rate is dependent on the bead size and is greatly affected by temperature, humidity and the presence of water and moisture on the substrate. Approximate cure rates at 23°C and 50% RH are as follows:

1mm – 1 day  
3mm – 5 days

## PAINTING

Allproof Firecaulk is paintable after full cure. A premium water based primer is recommended.

Where joint movement exceeds the flexibility of the paint, cracking of the paint may occur.

## NOTES:

- Allproof Firecaulk is not recommended for water immersion, exposed external joint sealing or areas subject to heavy traffic.
- Allproof Firecaulk should only be dry tooled.
- Allproof Firecaulk should not be applied to surfaces with special protective or cosmetic coatings without prior consultation with the manufacturer. Such surfaces include, but are not limited to, mirrors, reflective glass, or surfaces coated with Teflon, polyethylene or polypropylene.
- Allproof Firecaulk can be affected by water during cure.
- The sealant should not be applied or cured in areas where unusually high humidity or free water is present during the application or initial cure.
- Allproof Firecaulk should be allowed to cure prior to subjecting to any intermittent water exposure.
- Do not apply to surfaces with temperature under 5°C.

# COMPONENTS

Item	Description
1	<b>Name</b> Sealant
	<b>Material</b> Allproof Firecaulk
	<b>Installation</b> Refer to diagram
2	<b>Name</b> Backing rod
	<b>Material</b> Allproof PEF Backing Rod
	<b>Size</b> 25 to 30% wider diameter than gap for snug fit
3	<b>Name</b> Support Rigid Wall Construction
	<b>Material</b> Masonry, concrete, AAC, Speedpanel wall or Hebel panel wall
	<b>Size</b> Minimum wall thickness: 100mm For bare wall thickness less than 100mm, 13mm or 16mm fire resistant grade plasterboard strips at least 100mm wide around the opening shall be installed with necessary number of layers to form frames of the same height on both sides of wall to result in a total thickness of at least 100mm or 120mm. See Items 14 and 15.
4	<b>Name</b> Support Wall Construction for 1 Hour Applications
	<b>Material</b> Plasterboard lined wall
	<b>Size</b> Minimum wall thickness: 115mm
	<b>Specification</b> The wall system shall have a minimum wall thickness of 115mm and comprise steel stud framing lined on both faces with a minimum one layer of at least 13mm or 16mm thick fire resistant grade plasterboard and has been tested or otherwise assessed to achieve an FRL of -/60/60 or 60/60/60.
5	<b>Name</b> Support Wall Construction for 1.5 Hour Applications
	<b>Material</b> Plaster lined wall
	<b>Size</b> Minimum wall thickness: 115mm
	<b>Specification</b> The wall system shall have a minimum wall thickness of 115mm and comprise steel stud framing lined on both faces with a minimum one layer of at least 16mm thick fire resistant grade plasterboard and has been tested or otherwise assessed to achieve an FRL of -/90/90 or 90/90/90.
6	<b>Name</b> Support Wall Construction for 2 Hour Applications
	<b>Material</b> Plaster lined wall
	<b>Size</b> Minimum wall thickness: 115mm
	<b>Specification</b> The wall system shall have a minimum wall thickness of 115mm and comprise steel stud framing lined on both faces with a minimum two layers of at least 16mm thick fire resistant grade plasterboard and has been tested or otherwise assessed to achieve an FRL of -/120/120 or 120/120/120.
7	<b>Name</b> Support Wall Construction for 2 Hour Applications
	<b>Material</b> Plaster lined wall
	<b>Size</b> Minimum wall thickness: 115mm
	<b>Specification</b> The wall system shall have a minimum wall thickness of 115mm and comprise steel stud framing lined on the exposed side with two layers of 16mm thick fire resistant grade plasterboard and on the unexposed side with one layer 25mm thick Gyproc Shaftliner® plasterboard.

Item	Description		
8	<b>Name</b>	Support Floor Construction	
	<b>Material</b>	Reinforced concrete or Hebel floor with or without LYSAGHT BONDECK® steel deck	
	<b>Size</b>	Minimum floor thickness: 120mm	
9	<b>Name</b>	Metal Pipes	
	<b>Material</b>	Copper, brass or ferrous pipes	
	<b>Size</b>	<b>Pipe material</b>	<b>Max. Pipe OD (mm)</b>
		Copper, brass or ferrous pipes	32 - 65
			75 - 100
		Copper or ferrous pipes	125
			150
			200
	<b>Installation</b>	<p><b>For rigid walls and floors:</b> Installed in the apertures in rigid walls and floors and sealed to the barrier with a 50mm fillet of Allproof Firecaulk (Item 1) on either unexposed side or both sides.</p> <p>The 20mm annular gap between pipe and support construction is sealed with 30mm deep Allproof Firecaulk (Item 1) on either unexposed side or both sides and backed with Allproof PEF Backing Rod (Item 2).</p> <p><b>For flexible walls:</b> Installed in the apertures in rigid walls and floors and sealed to the barrier with a 20mm fillet of Allproof Firecaulk (Item 1) on both sides.</p> <p>The 20mm annular gap between pipe and support construction is sealed with a minimum 32mm deep Allproof Firecaulk (Item 1) on both sides.</p>	
10	<b>Name</b>	Telecommunication Cables with Cable Tray	
	<b>Material</b>	PVC insulated copper conducted telecommunication cables with or without a LT3-150-3 Burndy® Ladder-tray	
	<b>Cable size</b>	Single cable or maximum Ø100mm cable bundle comprised with maximum Ø20mm single cable in bundle	
	<b>Installation</b>	<p><b>For rigid walls and floors:</b> Installed in the apertures in rigid walls and floors and sealed to the barrier with a 50mm fillet of Allproof Firecaulk (Item 1) on either unexposed side or both sides.</p> <p>The 20mm annular gap between pipe and support construction is with Allproof Firecaulk (Item 1) on either unexposed side or both sides to full depth of floor/wall.</p> <p>Allproof Firecaulk shall be filled in gaps between cables.</p> <p><b>For flexible walls:</b> Installed in the apertures in flexible walls and sealed to the barrier with a 20mm fillet of Allproof Firecaulk (Item 1) on both sides.</p> <p>The 20mm annular gap between pipe and support construction is sealed with a minimum 32mm deep Allproof Firecaulk (Item 1) on both sides.</p> <p>Allproof Firecaulk shall be filled in gaps between cables.</p>	

Continued overleaf...

# COMPONENTS

## Continued

Item	Description
11	<p><b>Name</b> Power Cables with Cable Tray</p> <p><b>Material</b> PVC insulated copper conducted power cables with or without a LT3-150-3 Burndy® Ladder-tray</p> <p><b>Cable size</b> Single cable or maximum ø100mm cable bundle comprised with maximum ø20mm single cable in bundle</p> <p><b>Installation</b></p> <p><b>For rigid walls and floors:</b> Installed in the apertures in rigid walls and floors and sealed to the barrier with a 50mm fillet of Allproof Firecaulk (Item 1) on either unexposed side or both sides. The 20mm annular gap between pipe and support construction is with Allproof Firecaulk (Item 1) on either unexposed side or both sides to full depth of floor/wall. Allproof Firecaulk shall be filled in gaps between cables.</p> <p><b>For flexible walls:</b> Installed in the apertures in flexible walls and sealed to the barrier with a 20mm fillet of Allproof Firecaulk (Item 1) on both sides. The 20mm annular gap between pipe and support construction is sealed with a minimum 32mm deep Allproof Firecaulk (Item 1) on both sides. Allproof Firecaulk shall be filled in gaps between cables.</p>
12	<p><b>Name</b> Service Insulation Protection</p> <p><b>Material</b> Bradford Fibretex 350 blanked (foil faced)</p> <p><b>Size</b> 200mm wide x 50mm thick</p> <p><b>Installation</b> Metal pipes (Item 6) and cables with cable trays (Items 7 and 8) can optionally be wrapped with one layer of Fibretex blanket on each side of the floor or wall support construction and fixed in place with steel cable ties.</p>
13	<p><b>Name</b> Timber Composite Board Flooring</p> <p><b>Installation</b> Optionally installed on the topside of concrete floor slab. It is required the minimum sealant depth remain in the concrete part of floor.</p>
14	<p><b>Name</b> Plasterboard strips</p> <p><b>Thickness</b> 13mm or 16mm fire resistant grade plasterboard strips at least 100mm wide around the aperture.</p> <p><b>Installation</b> Fixed on each side 78mm Speedpanel wall or 75mm thick Hebel wall, around joints/opening with necessary number of layers to meet the required wall thickness.</p>
15	<p><b>Name</b> Support Rigid Wall Construction</p> <p><b>Material</b> 78mm thick Speedpanel wall or 75mm thick Hebel wall</p> <p><b>Installation</b> For 78mm thick Speedpanel wall or 75mm thick Hebel wall Powepanel walls, 13mm or 16mm fire resistant grade plasterboard strips shall be installed around joints/openings with the necessary number of layers to meet the required wall thickness in tables.</p>

# MASONRY CONSTRUCTION JOINTS

Masonry, concrete, AAC, Speedpanel wall or Hebel panel wall

JOINTS IN RIGID WALLS – 60 to 240 minutes integrity

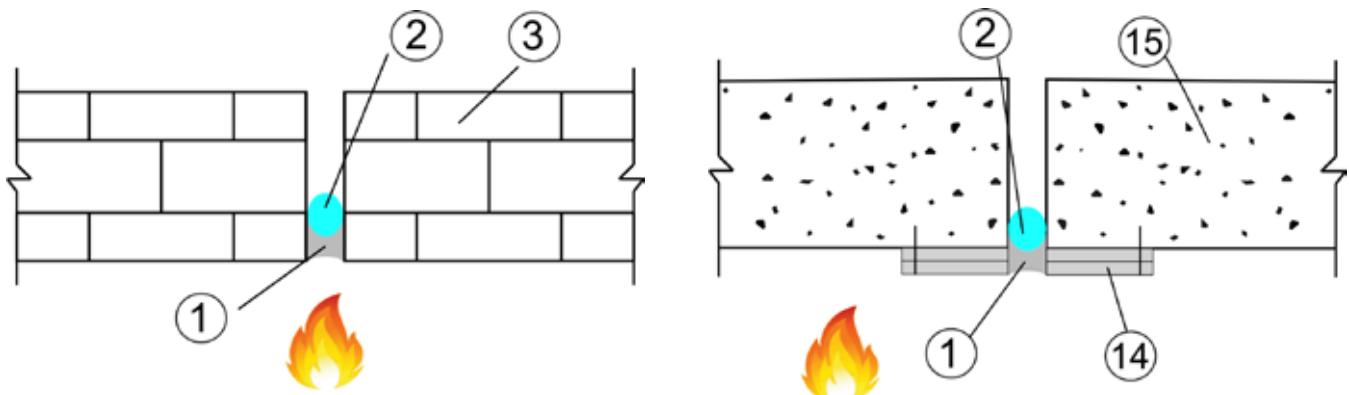


Figure 1: Sealant on exposed side of rigid wall

Max. Joint Width (mm)	Min. Sealant Depth (mm)	Backing Material	FRL			
			100mm Wall (Item 3 or 15)	120mm Wall (Item 3 or 15)	150mm Wall (Item 3 or 15)	170mm Wall (Item 3)
10	10	Backing rod (item 2)	-/120/60	-/120/60	-/180/60	-/180/60
20	10		-	-/120/30	-/180/30	-/240/30
25	20		-	-/120/30	-/180/30	-/240/30
30	20		-	-/120/30	-/180/30	-/240/30
40	20		-	-/120/30	-/180/30	-/240/30

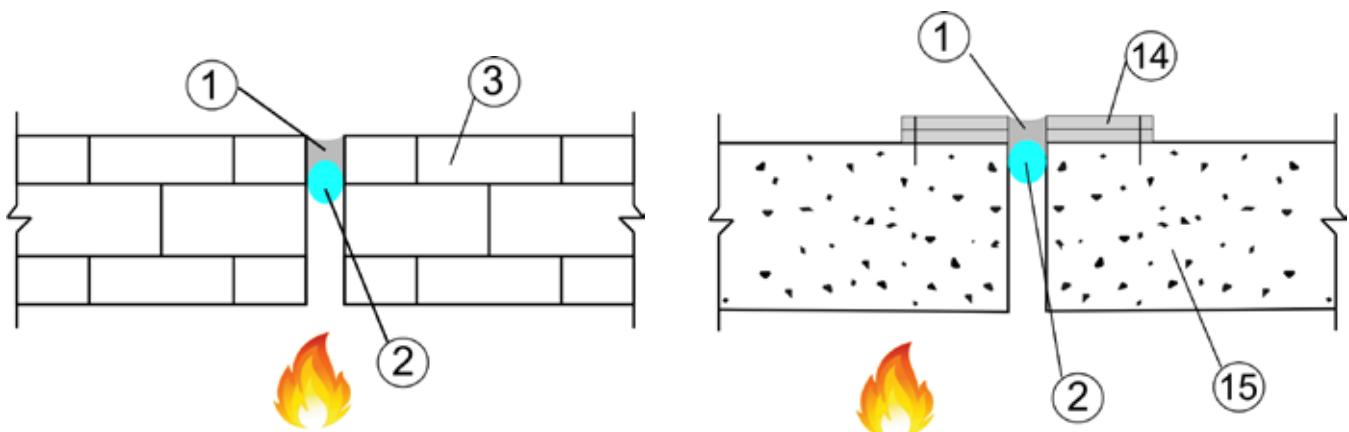


Figure 2: Sealant on unexposed side of rigid wall

Max. Joint Width (mm)	Min. Sealant Depth (mm)	Backing Material	FRL			
			100mm Wall (Item 3 or 15)	120mm Wall (Item 3 or 15)	150mm Wall (Item 3 or 15)	170mm Wall (Item 3)
10	10	Backing rod (item 2)	-/120/90	-/120/90	-/180/90	-/180/90
20	10		-	-/120/90	-/180/90	-/240/90
25	20		-	-/120/30	-/180/30	-/240/30
30	20		-	-/120/30	-/180/30	-/240/30
40	20		-	-/120/30	-/180/30	-/240/30

Key: (1) Allproof Firecaulk (2) Backing rod (3) Masonry, concrete, AAC

(14) Plasterboard strips (15) 78mm thick Speedpanel wall or 75mm thick Hebel wall

# MASONRY CONSTRUCTION JOINTS

Masonry, concrete, AAC, Speedpanel wall or Hebel panel wall

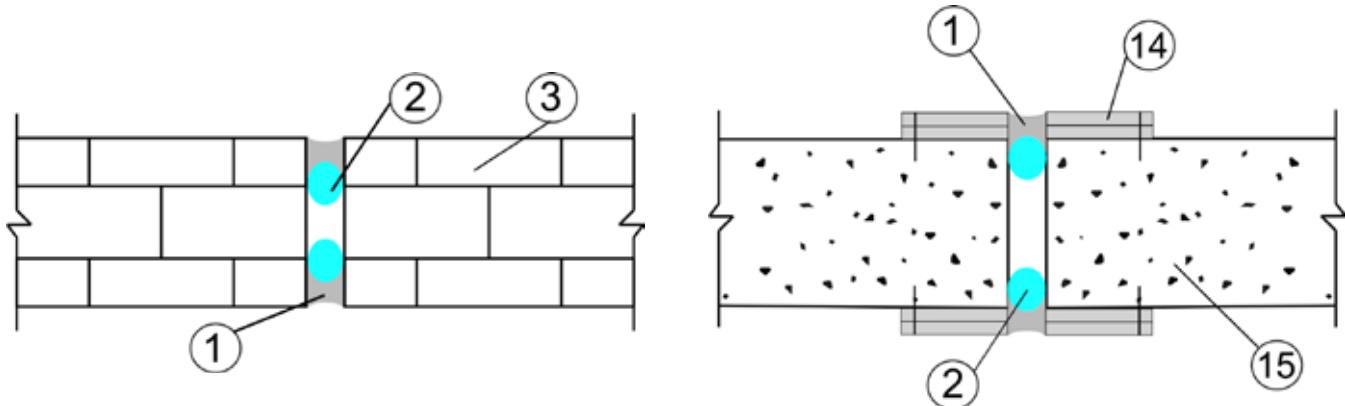


Figure 3: Sealant on both sides of rigid wall

Max. Joint Width (mm)	Min. Sealant Depth (mm)	Backing Material	FRL			
			100mm Wall (Item 3 or 15)	120mm Wall (Item 3 or 15)	150mm Wall (Item 3)	170mm Wall (Item 3)
10	10	Backing rod (item 2)	-/120/120	-/120/120	-/180/120	-/180/120
20	10		-	-/120/90	-/180/90	-/240/90
20	20		-	-/120/120	-/180/120	-/240/120
25	20		-	-/120/120	-/180/120	-/240/120
30	20		-	-/120/120	-/180/120	-/240/120
40	20		-	-/120/120	-/180/30	-/240/120

## JOINTS IN CONCRETE FLOORS – 120 to 240 minutes Integrity

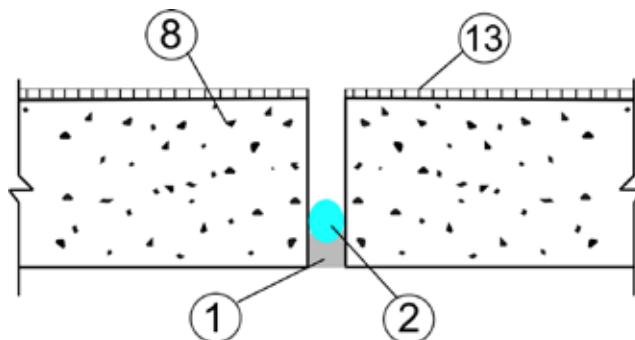


Figure 4: Sealant on exposed side of joints in concrete floors

Max. Joint Width (mm)	Min. Sealant Depth (mm)	Backing Material	FRL		
			120mm Concrete Floor	150mm Concrete Floor	170mm Concrete Floor
10	10	Backing rod (item 2)	-/120/120	-/180/120	-/180/120
20	10		-/120/30	-/180/30	-/240/30
25	20		-/120/30	-/180/30	-/240/30
30	20		-/120/30	-/180/30	-/240/30
40	20		-/120/30	-/180/30	-/240/30

Key: (1) Allproof Firecaulk (2) Backing rod (3) Masonry, concrete, AAC

(8) Reinforced concrete or Hebel floor (13) Optional timber composite board floor

(14) Plasterboard strips (15) 78mm thick Speedpanel wall or 75mm thick Hebel wall

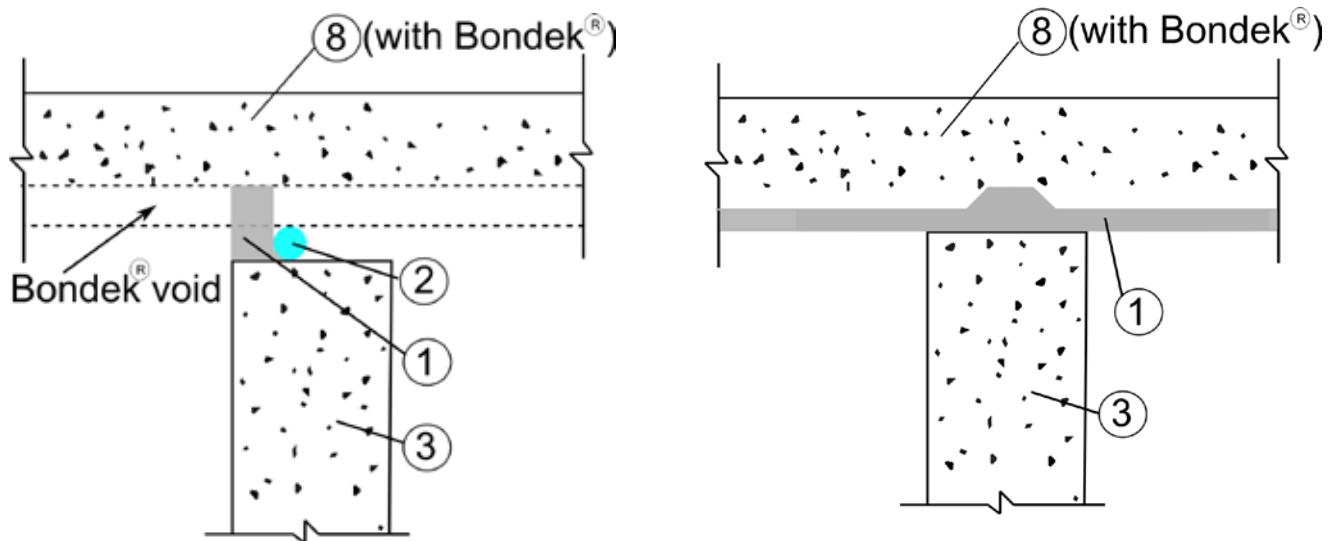


Figure 5: Deflection head abutting a floor with voids crossing rigid wall – sealant on one side

Max. Joint Width top of Bondeck® (mm)	Max. Joint Width bottom of Bondeck® (mm)	Min. Sealant Depth (mm)	Backing Material	FRL		
				120mm Wall (Item 3)	150mm Wall (Item 3)	170mm Wall (Item 3)
70	20	30	Backing rod (item 2)	-/120/30	-/180/30	-/240/30

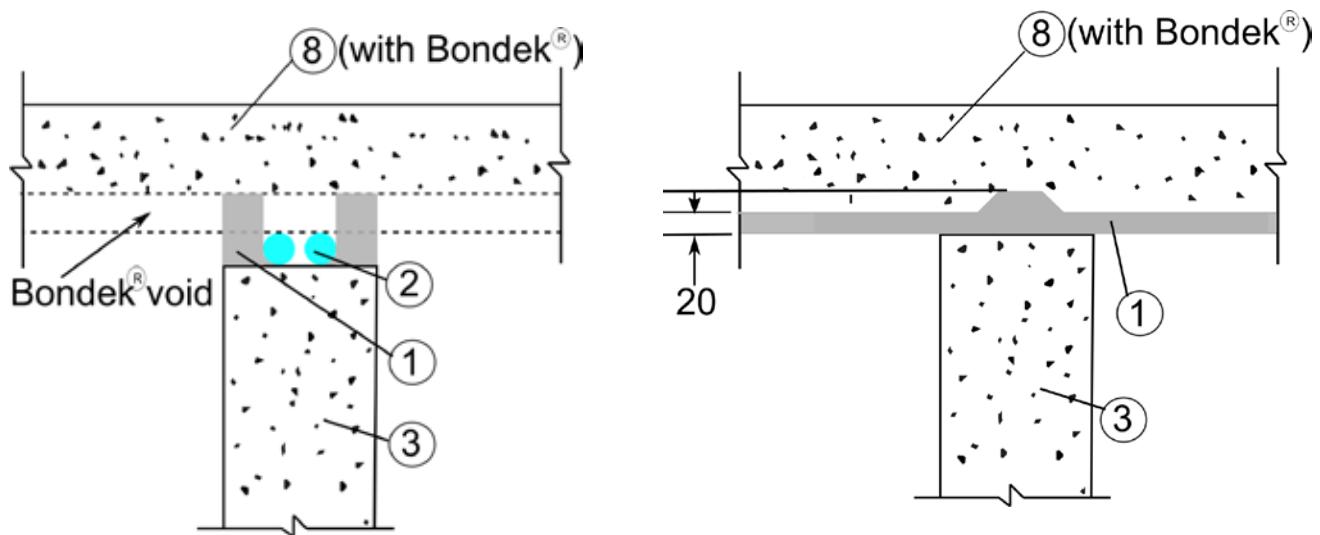


Figure 6: Deflection head abutting a floor with voids crossing rigid wall – sealant on both sides

Max. Joint Width top of Bondeck® (mm)	Max. Joint Width bottom of Bondeck® (mm)	Min. Sealant Depth (mm)	Backing Material	FRL		
				120mm Wall (Item 3)	150mm Wall (Item 3)	170mm Wall (Item 3)
70	20	30	Backing rod (item 2)	-/120/120	-/180/120	-/240/120

Key: (1) Allproof Firecaulk (2) Backing rod (3) Masonry, concrete, AAC

(8) Reinforced concrete or Hebel floor

# MASONRY CONSTRUCTION JOINTS

Masonry, concrete, AAC, Speedpanel wall or Hebel panel wall

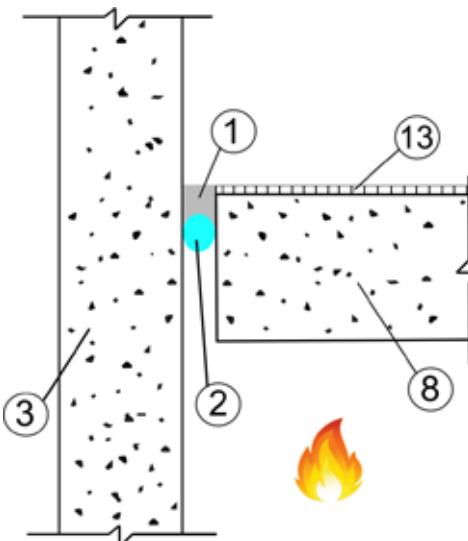


Figure 7: Perimeter joint between wall and floor  
– sealant on unexposed side

Max. Joint Width (mm)	Min. Sealant Depth (mm)	Backing Material	FRL		
			120mm Concrete Floor	150mm Concrete Floor	170mm Concrete Floor
10	10	Backing rod (item 2)	-/120/90	-/180/90	-/180/90
20	10		-/120/60	-/180/60	-/240/90
25	20		-/120/30	-/180/30	-/240/30
30	20		-/120/30	-/180/30	-/240/30
40	20		-/120/30	-/180/30	-/240/30

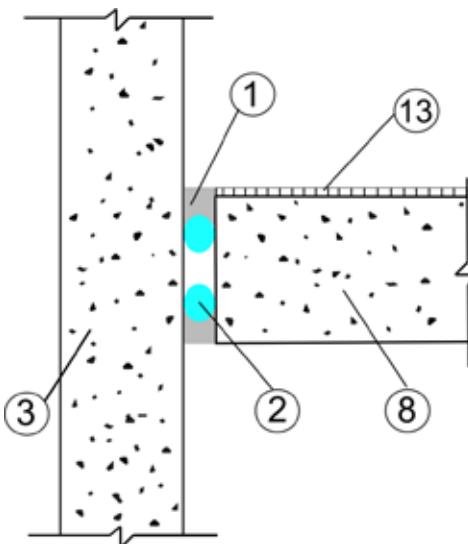


Figure 8: Perimeter joint between wall and floor  
– sealant on both sides

Max. Joint Width (mm)	Min. Sealant Depth (mm)	Backing Material	FRL		
			120mm Concrete Floor	150mm Concrete Floor	170mm Concrete Floor
10	10	Backing rod (item 2)	-/240/90	-/240/90	-/240/90
20	10		-/240/90	-/240/90	-/240/90
25	20		-/240/120	-/240/120	-/240/120
30	20		-/240/120	-/240/120	-/240/120
40	20		-/240/120	-/240/120	-/240/120

Key: (1) Allproof Firecaulk (2) Backing rod (3) Masonry, concrete, AAC

(8) Reinforced concrete or Hebel floor (13) Optional timber composite board flooring

# MASONRY / FLEXIBLE WALL JUNCTIONS

Masonry, concrete or AAC. Plasterboard lined wall

## JOINTS IN OR BETWEEN WALLS – 60 to 120 minutes Integrity

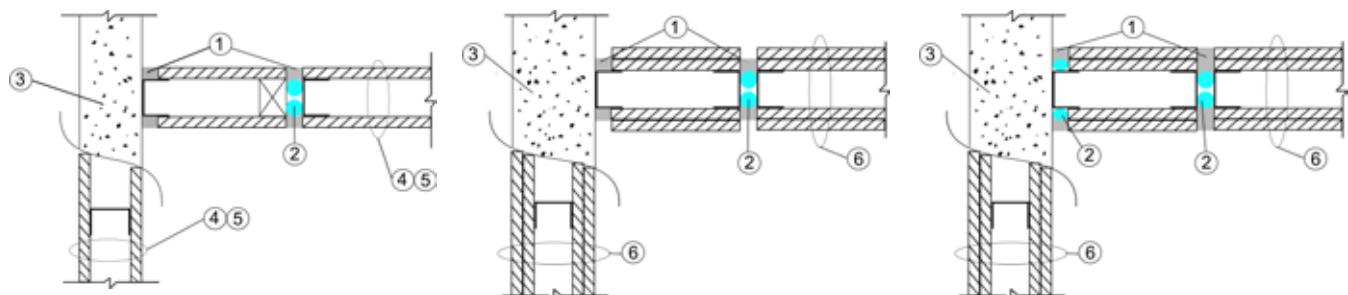


Figure 9: Joints in or between walls – sealant on both sides

Max. Joint Width (mm)	Min. Sealant Depth (mm)	Location	Backing Material	FRL*			
				60 minute wall <sup>1</sup> (item 4)	90 minute wall <sup>1</sup> (item 5)	120 minute wall <sup>2</sup> (item 6)	120 minute wall <sup>3</sup> (item 6)
20	13	Wall abutment	Track or stud	-/60/60	-	-	-
20	13	Control joint	Backing rod (item 2)	-/60/60	-	-	-
20	16	Wall abutment	Track or stud	-	-/90/90	-	-
20	16	Control joint	Backing rod (item 2)	-	-/90/90	-	-
20	16	Wall abutment	Track or stud	-	-	-/120/120	-
20	16	Control joint	Backing rod (item 2)	-	-	-/120/90	-
20	16	Wall abutment	Track or stud	-	-	-	-/120/120
20	30	Control joint	Backing rod (item 2)	-	-	-	-/120/120

\*Minimum wall thickness: 115mm

Key:

- ① Allproof Firecaulk
- ② Backing rod
- ③ Masonry, concrete, AAC
- ④ Plasterboard lined wall with FRL of -/60/60 or 60/60/60
- ⑤ Plasterboard lined wall with FRL of -/90/90 or 90/90/90
- ⑥ Plasterboard lined wall with FRL of -/120/120 or 120/120/120

# MASONRY / FLEXIBLE WALL JUNCTIONS

Masonry, concrete or AAC. Plasterboard lined wall

## PERIMETER JOINTS BETWEEN WALLS – 60 to 120 minutes Integrity

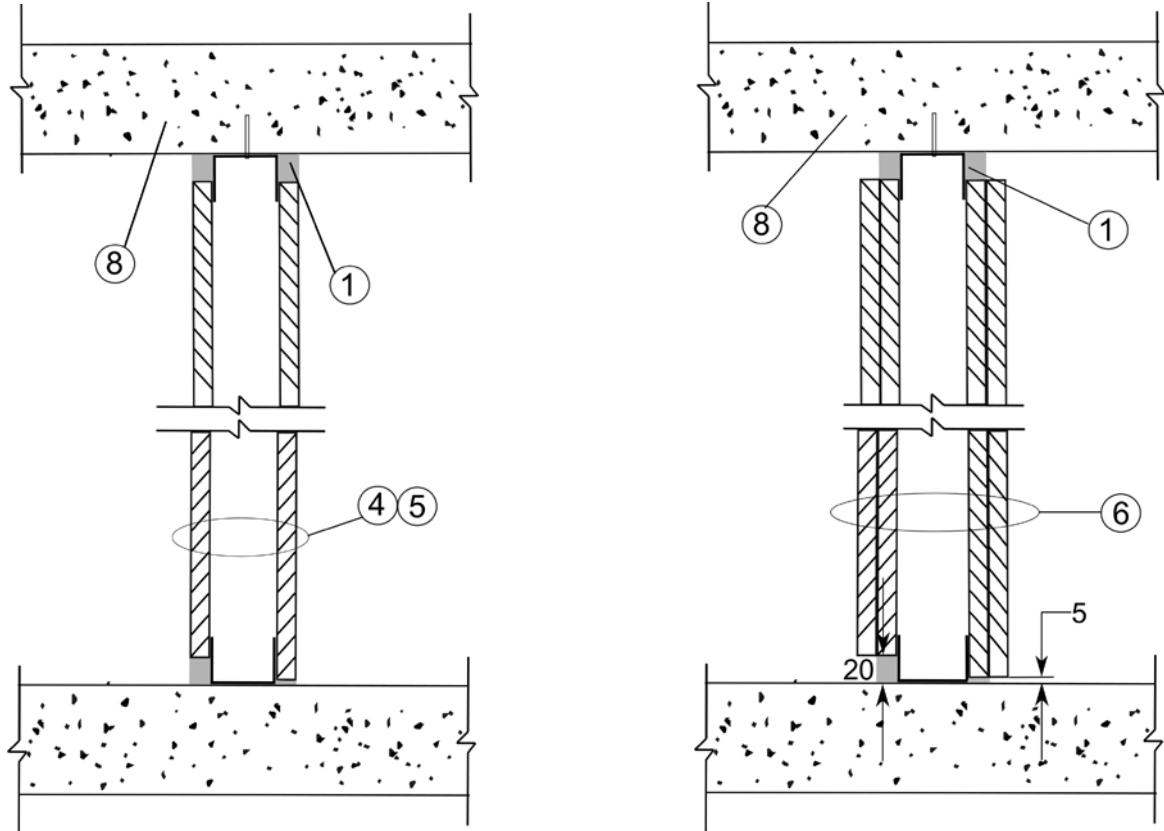


Figure 10: Perimeter joint between wall and floor – sealant on both sides

Max. Joint Width (mm)	Min. Sealant Depth (mm)	Location	Backing Material	FRL*		
				60 minute wall <sup>1</sup> (item 4)	90 minute wall <sup>1</sup> (item 5)	120 minute wall <sup>2</sup> (item 6)
20	13	Head	Track or plate	-/60/60	-	-
20	16	Head	Track or plate	-	-/90/90	-
20	32	Head	Track or plate	-	-	-/120/120

\*Minimum wall thickness: 115mm

Key: (1) Allproof Firecaulk (4) Plasterboard lined wall with FRL of -/60/60 or 60/60/60

(5) Plasterboard lined wall with FRL of -/90/90 or 90/90/90

(6) Plasterboard lined wall with FRL of -/120/120 or 120/120/120

(8) Reinforced concrete or Hebel floor

## Speedpanel wall or Hebel panel wall. Plasterboard lined wall

### JOINTS IN OR BETWEEN WALLS – 120 minutes Integrity

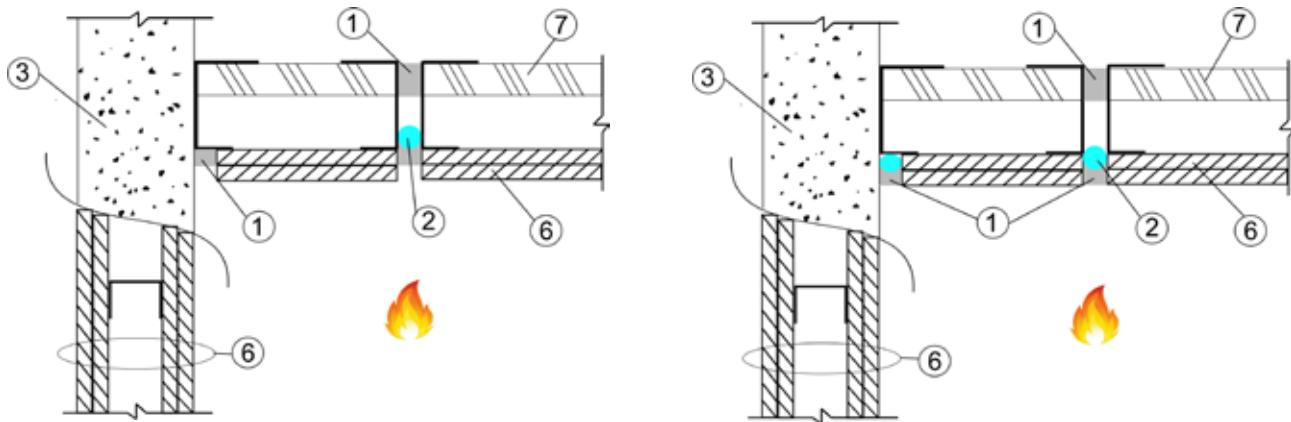


Figure 11: Joints in or between walls – sealant on both sides

Max. Joint Width (mm)	Min. Sealant Depth (mm)	Location	Backing Material	FRL*	
				120 minute wall <sup>1</sup> (item 6 and 7)	120 minute wall <sup>2</sup> (item 6 and 7)
20	16	Wall abutment	Track or stud	-/120/120	-
20	32	Control joint	Backing rod (item 2)	-/120/120	-
20	16	Wall abutment	Track or stud	-	-/120/120
20	16	Control joint	Backing rod (item 2)	-	-/120/60
20	25	Control joint	Backing rod (item 2)	-	-/120/120

\*Minimum wall thickness: 115mm

### PERIMETER JOINTS BETWEEN WALLS & FLOORS – 120 minutes Integrity

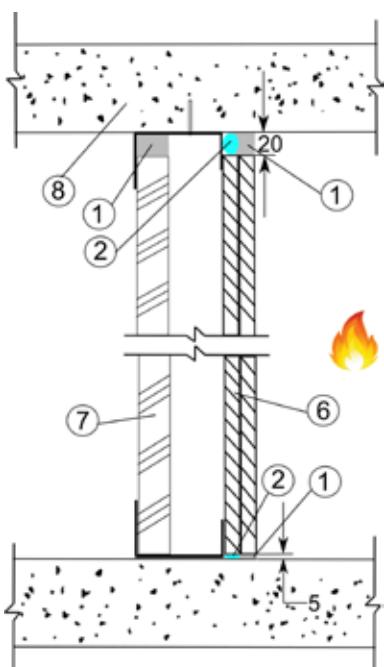


Figure 12: Perimeter joint between wall and floor – sealant on both sides

Max. Joint Width (mm)	Min. Sealant Depth (mm)	Location	Backing Material	FRL*	
				120 minute wall (item 6 and 7)	
20	25	Head	Track or plate	-/120/120	

\*Minimum wall thickness: 115mm

Key: (1) Allproof Firecaulk (2) Backing rod (3) Masonry, concrete, AAC  
 (6) Plasterboard lined wall with FRL of -/120/120 or 120/120/120  
 (7) Gyproc Shaftliner® plasterboard  
 (8) Reinforced concrete or Hebel floor

# METAL PIPES

Masonry, concrete, AAC, Speedpanel wall or Hebel panel wall

CONCRETE FLOORS – 120 to 240 minutes Integrity

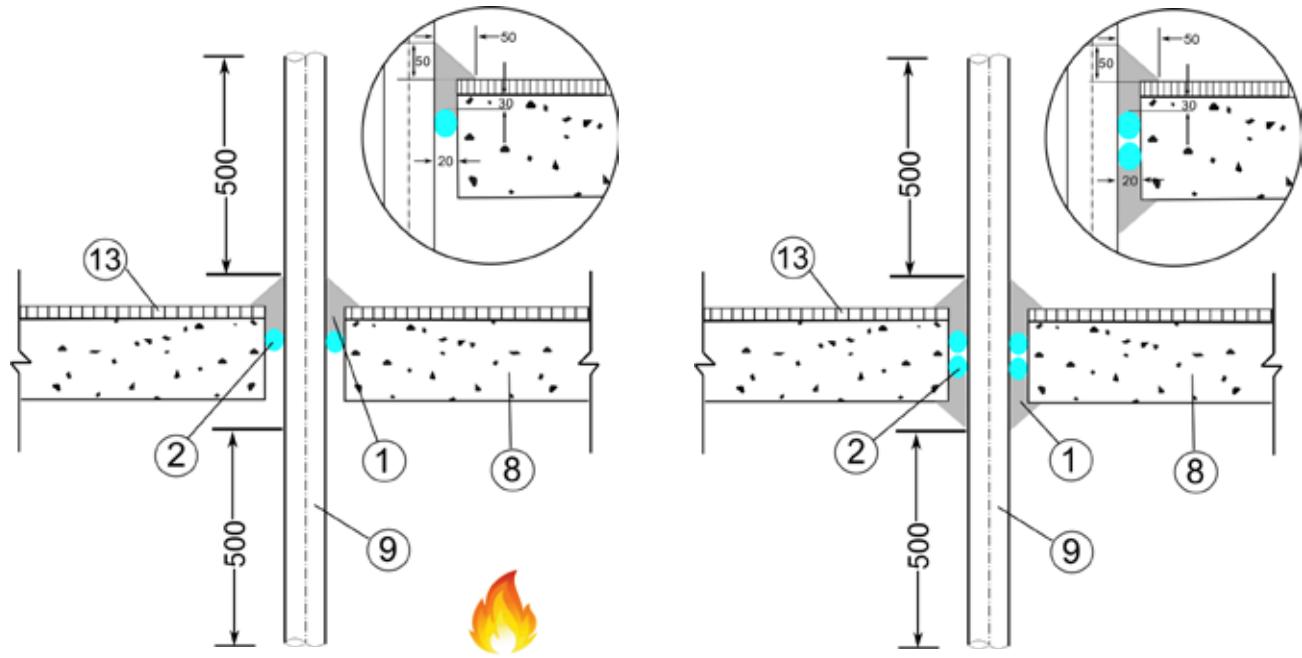


Figure 13: Un-insulated pipe with sealant on top or both sides through concrete floor

Min. Sealant Depth in concrete (mm)	Min. Sealant Fillet size (mm)	Location	Backing Material	FRL
				Min. 120mm concrete floor
30	50	Unexposed side only	Backing rod (item 2)	-/120/-
30	50	Both sides	Backing rod (item 2)	-/240/-

Key: ① Allproof Firecaulk ② Backing rod

⑧ Reinforced concrete or Hebel floor ⑨ Copper, brass or ferrous pipes

⑯ Optional timber composite board flooring

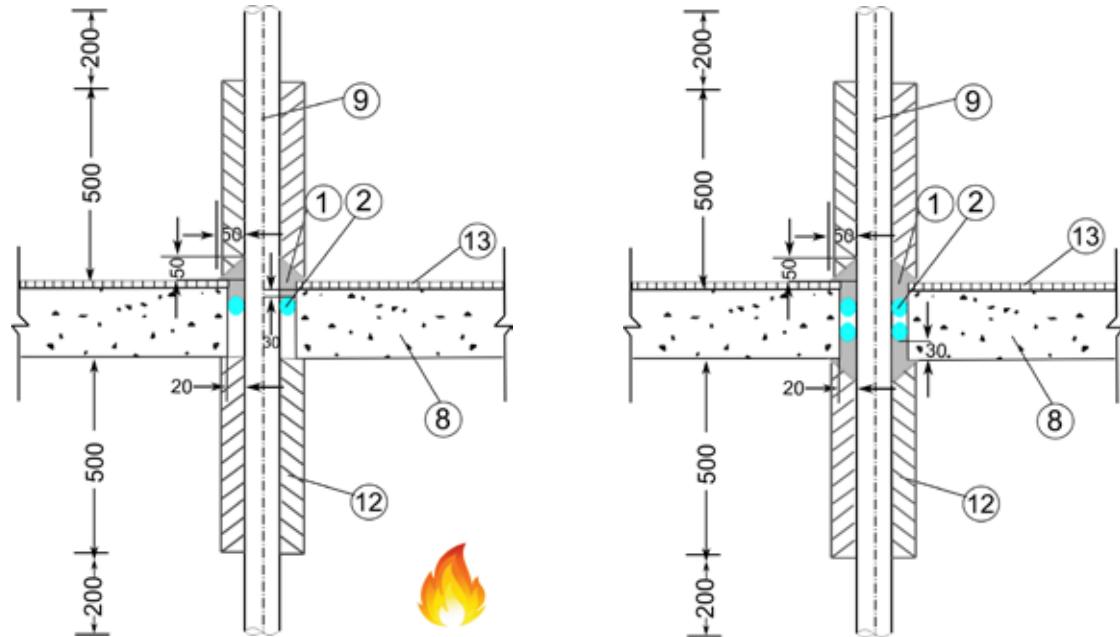


Figure 14: Insulated pipe with sealant on top or both sides through concrete floor

Min. Sealant Depth in concrete (mm)	Min. Sealant Fillet size (mm)	Location	Backing Material	FRL		
				120mm concrete floor	150mm concrete floor	170mm concrete floor
30	50	Unexposed side only	Backing rod (item 2)	-/120/120	-/180/120	-/240/120
30	50	Both sides	Backing rod (item 2)	-/120/120	-/180/120	-/240/120

#### MASONRY, CONCRETE, AAC, SPEEDPANEL WALL or HEBEL PANEL WALL – 120 minutes Integrity

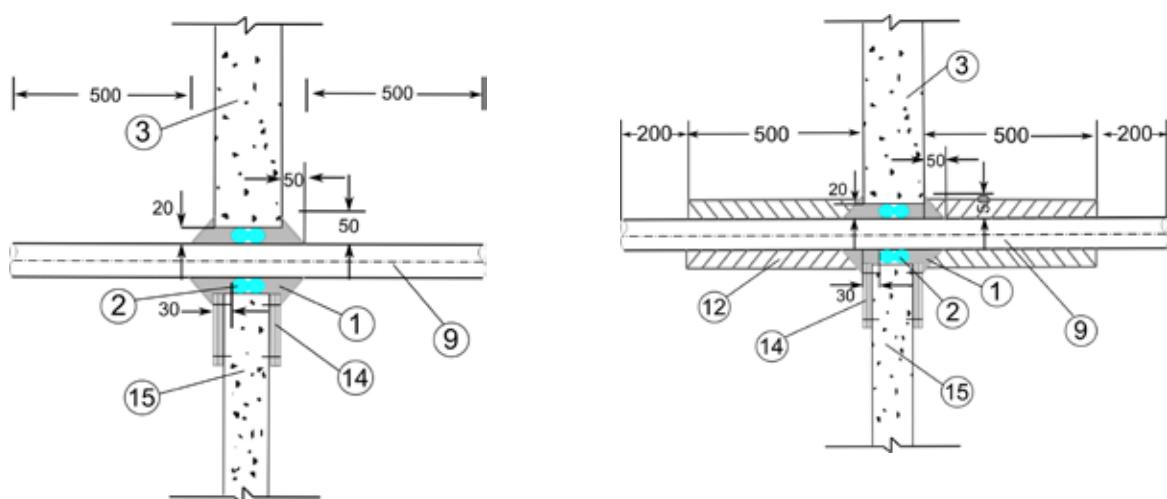


Figure 15: Pipe and insulated pipe on both sides in rigid walls

Key:

- (1) Allproof Firecaulk (2) Backing rod (3) Masonry, concrete, AAC
- (8) Reinforced concrete or Hebel floor (9) Copper, brass or ferrous pipes
- (12) Service insulation protection (13) Optional timber composite board flooring
- (14) Plasterboard strips (15) 78mm thick Speedpanel wall or 75mm thick Hebel wall

# METAL PIPES

Masonry, concrete, AAC, Speedpanel wall or Hebel panel wall

MASONRY, CONCRETE, AAC, SPEEDPANEL WALL or HEBEL PANEL WALL

– 120 minutes integrity

Min. Sealant Depth in annular gap (mm)	Max. Sealant Fillet size (mm)	Insulation	Backing Material	FRL
				Min. 120mm wall (item 3 or 15)
30	50	Un-insulated	Backing rod (item 2)	-/120/-
30	50	Insulated	Backing rod (item 2)	-/120/120

PLASTERBOARD LINED WALL – 120 minutes integrity

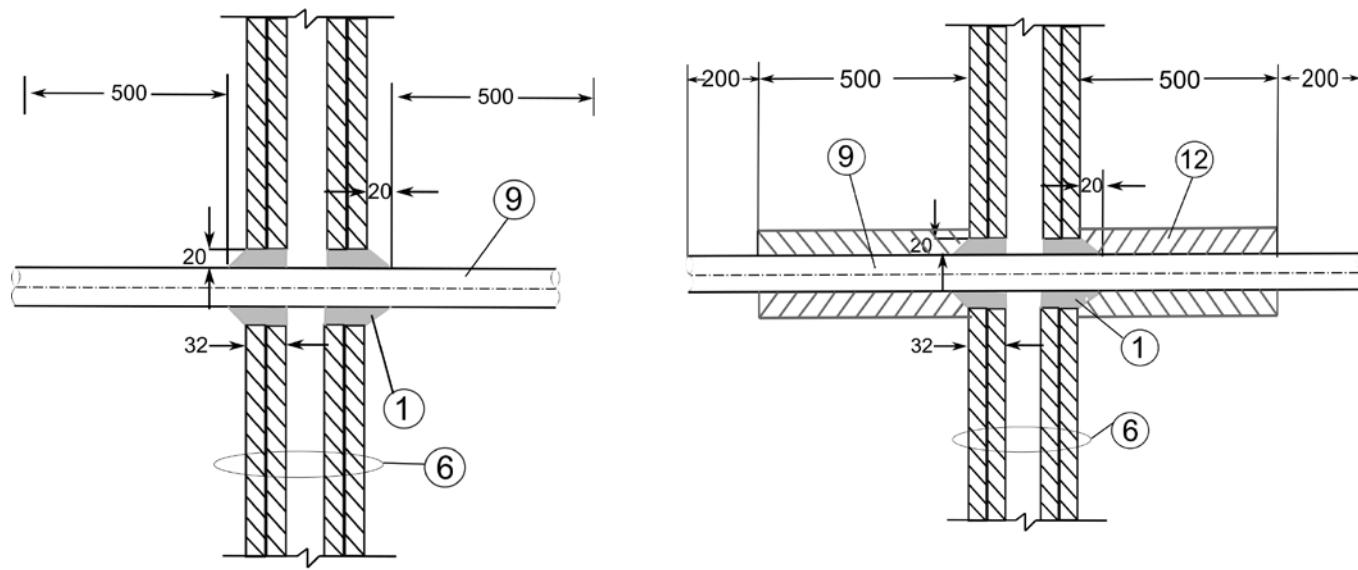


Figure 16: Pipe and insulated pipe on both sides of flexible walls

Min. Sealant Depth in annular gap (mm)	Max. Sealant Fillet size (mm)	Insulation	FRL
			Min. 120mm wall (item 3 or 15)
32	20	Un-insulated	-/120/-
30	50	Insulated	-/120/120

Key: (1) Allproof Firecaulk (6) Plasterboard lined wall with FRL of -/120/120 or 120/120/120

(9) Copper, brass or ferrous pipes (12) Service insulation protection

# CABLES

Telecommunications or power cables with or without cable trays

CONCRETE FLOORS – 120 minutes integrity

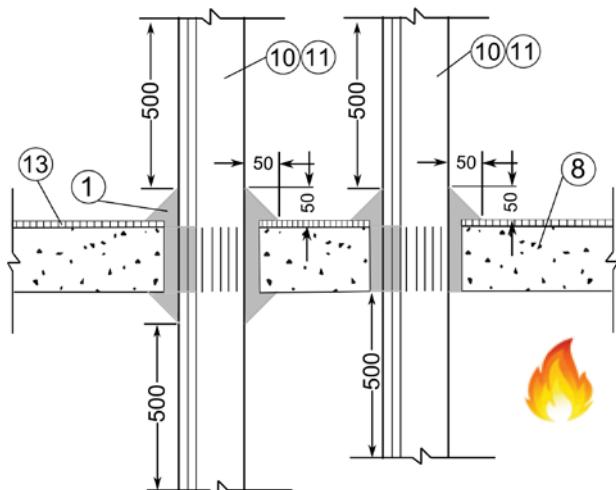


Figure 17: Un-insulated cables through concrete floor

Min. Sealant Depth in annular gap (mm)	Max. Sealant Fillet size (mm)	Location	FRL
			Min. 120mm floor
Floor thickness	50	Both sides	-/120/30
Floor thickness	50	Unexposed side only	-/120/30

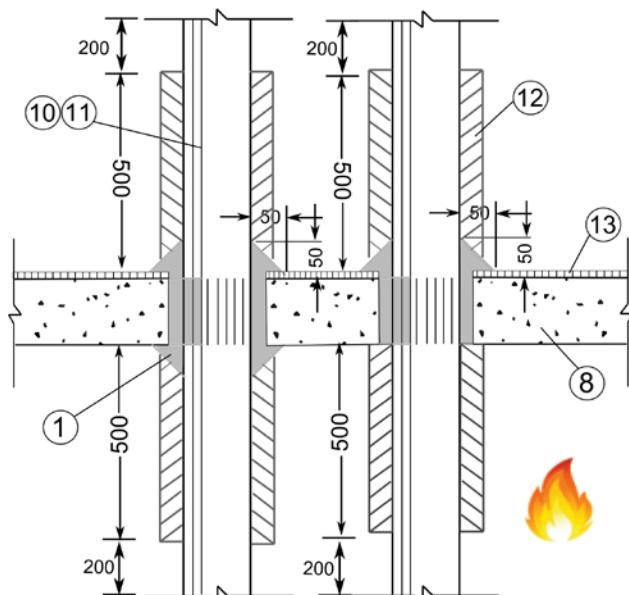


Figure 18: insulated cables through concrete floor

Min. Sealant Depth in annular gap (mm)	Max. Sealant Fillet size (mm)	Location	FRL
			Min. 120mm floor
Floor thickness	50	Both sides	-/120/120
Floor thickness	50	Unexposed side only	-/120/120

Key: (1) Allproof Firecaulk (8) Reinforced concrete or Hebel floor

(10) telecommunication cables & cable tray (11) Power cables with cable tray

(12) Service insulation protection (13) Optional timber composite board flooring

# CABLES

Telecommunications or power cables with or without cable trays

MASONRY, CONCRETE, AAC, SPEEDPANEL WALL or HEBEL PANEL WALL

- 120 minutes integrity

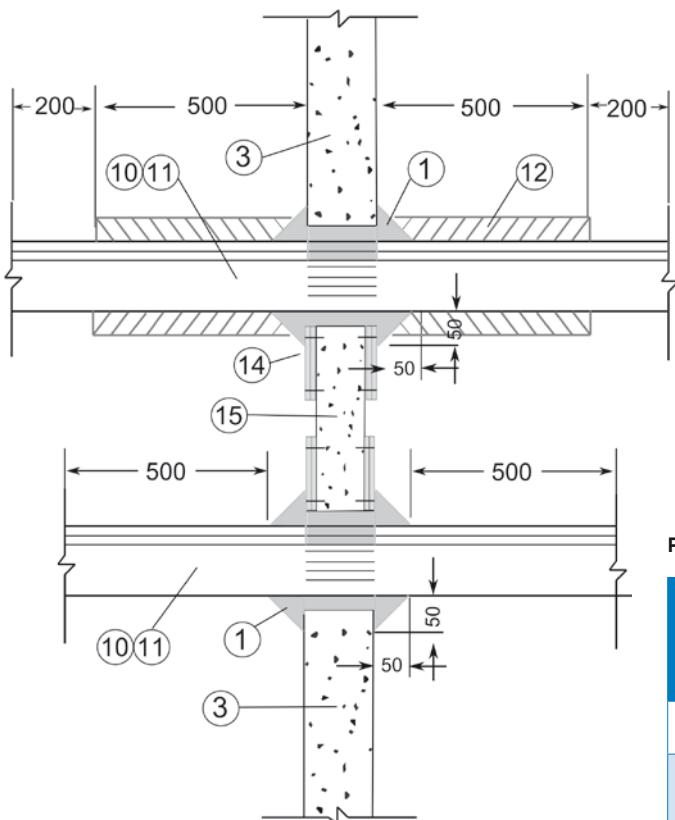


Figure 19: Cables with sealant on both sides in rigid walls

Min. Sealant Depth in annular gap (mm)	Max. Sealant Fillet size (mm)	Location	FRL
			Min. 120mm Wall (item 3 or 15)
Wall thickness	50	Un-insulated	-/120/30
Wall thickness	50	Insulated	-/120/120

PLASTERBOARD LINED WALL - 120 minutes integrity

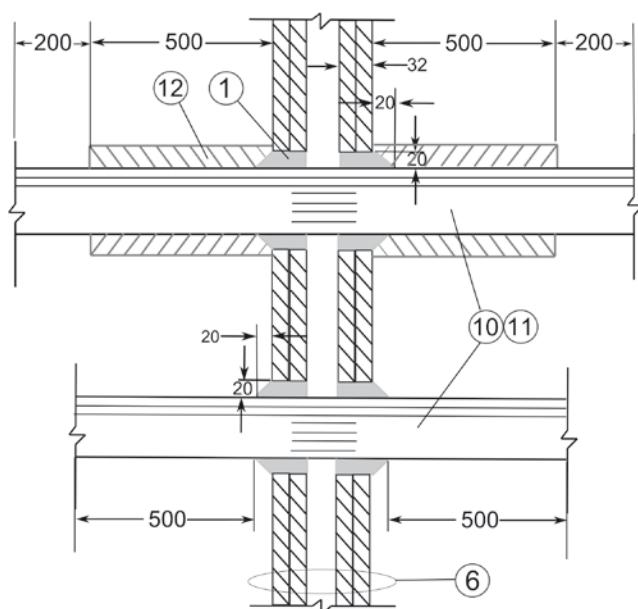


Figure 20: Cables with sealant on both sides in flexible walls

Min. Sealant Depth in annular gap (mm)	Max. Sealant Fillet size (mm)	Location	FRL
			Min. 115mm Wall (item 6)
32	20	Un-insulated	-/120/30
32	20	Insulated	-/120/120

Key: (1) Allproof Firecaulk (3) Masonry, concrete, AAC (6) Plaster lined wall

(10) Telecommunication cables & cable tray (11) Power cables with cable tray (12) Service insulation protection

(14) Plasterboard strips (15) 78mm thick Speedpanel wall or 75mm thick Hebel wall

# BLANK SEALS

## Masonry, concrete or AAC. Plasterboard lined wall

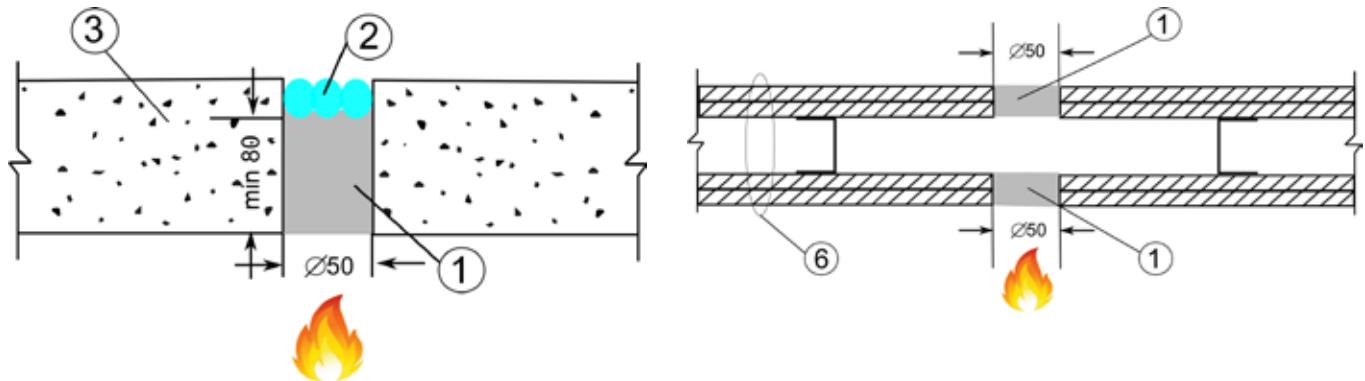


Figure 21: Blank seal in rigid and flexible walls

Max. Hole ø (mm)	Min. Sealant Depth (mm)	Backing Material	FRL			
			120mm wall <sup>1</sup> (item 3)	150mm wall <sup>1</sup> (item 3)	170mm wall <sup>1</sup> (item 3)	115mm wall <sup>1</sup> (item 6)
50	80	Backing rod (item 2)	-/120/120	-/180/180	-/240/240	-
50	32	-	-	-	-	-/120/120

Key: (1) Allproof Firecaulk (2) Backing rod (3) Masonry, concrete, AAC  
(6) Plaster lined wall

### Disclaimer:

Information given in this publication is given to the best of our knowledge and in good faith. Allproof NZ is not responsible if recipients of test reports, assessments or literature misinterpret the contents and wrongly use products based on those interpretations. No liability is accepted for error or omissions in this document. Allproof NZ reserves the right to change the specification without notice.

### Copyright 2018

This document is a property of Allproof NZ and may not be copied, used or disclosed in whole or in part except with the prior written permission of Allproof NZ or if it has been furnished under contract with another party as specified in the contract. The copyright and the foregoing restriction on copying, use and disclosure extend to all media in which this information may be embodied.

**Allproof Industries**

[allproof.com](http://allproof.com)