

JANUARY 2025

PASSIVE FIRE PROTECTION SYSTEMS PLUMBING



ALLPROOF
INDUSTRIES

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WHAT IS THE BEST SOLUTION?

Installation

Floor

Wall

Ceiling

Pre Pour

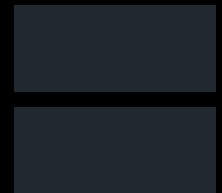
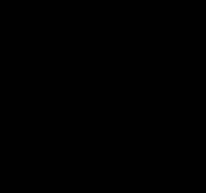
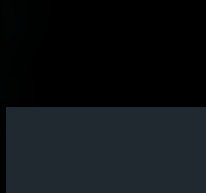
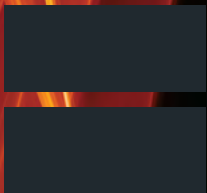
Post Pour

Concrete

Plasterboard

Plasterboard

Timber



This document features current test results at time of publication.
Contact Allproof for further information and the latest test results.

FIRE TESTING

Allproof industries has an extensive testing programme with independent IANZ accredited fire testing laboratories and is consistently working with Industry to provide exceptional products that can help overcome issues regularly faced on site.

The passive fire protection products offered from Allproof are designed to contain a fire in the compartment of origin, thus limiting the spread of fire and smoke for a limited period of time. The fire ratings and installation details are illustrated in this document.

All products are tested to AS1530.4 - 2014 and AS4072.1 - 2005.

The passive fire protection products designed to protect service penetrations are tested using an open/closed format. That is, the pipe is capped on the fire side during the test and is open on the non fire side. When fire testing plastic pipes, 2m of pipe projects out of the supporting construction (wall or floor) and is deemed to be representative of general pipe systems - soil, waste and vent, water supply and reticulation.



ADVANCED INTUMESCENT

At the core of the Allproof passive fire protection product range is the advanced intumescent technology. This enables Allproof to offer products with performance and design advantages for engineers and installers of passive fire protection products. Allproof's intumescent material expands when exposed to heat and as its volume increases with significant expansion pressure, it produces a stable char. The intumescent char formed is a poor conductor of heat, retarding heat transfer and retaining the integrity and insulation of service penetrations through otherwise fire-resistance rated walls, floors or ceilings.

ALLPROOF INTUMESCENT TECHNOLOGY:

- Flexible rubber-like composition allows easy handling
- Graphite based
- Moisture resistant
- Silver/grey in colour
- Excellent expansion pressure and volume
- Material stable after expansion



Activated Allproof Intumescent during fire testing in a plasterboard wall.

LOW PROFILE FIRE COLLARS



The low profile fire collars are designed to be installed in concrete, masonry fire rated walls and floors, and fire rated plasterboard walls. The Allproof fire collars consist of intumescent material encased in a steel surround with fixing tabs. The advanced intumescent technology allows Allproof to achieve a very low profile height of only 28mm.

When fire occurs the intumescent material expands against the steel surround as the flammable plastic pipe running through the collar

melts and burns away. The steel casing acts as an excellent heat sync ensuring fast activation of the intumescent, forming a stable fire resistant plug, maintaining both fire integrity and insulation.

Fire collars are designed to be exposed in a wall or floor application (i.e. face fixed). The collars should always be fixed to the underneath of the concrete floor. In wall situations one collar should be used on each exposed side of the fire rated wall.

SUITABLE FOR FITTING TO:

- Concrete floors
- Hollow core construction floors
- Rib & timber / ply infill floors
- Composite floors
- Cross laminated timber floors
- Plasterboard ceilings
- Concrete, masonry walls
- Cross laminated timber walls
- Plasterboard walls
- Speedpanel walls
- Hebel Powerpanel walls

Please contact us for further information for any results listed above but not available in this document.

FEATURES:

- Totally unaffected by water
- Unique low profile design
- Stainless or galvanized steel case
- Retro fitting - easy install slide tab
- For use on various penetrations

INSTALLATION INSTRUCTIONS:

1. Ensure substrate around pipe is flat and free from obstructions.
2. Open fire collar and position around pipe.
3. Slide tab through slot in fire collar and fold back 180° to secure.
4. Secure fire collar by using suitable fixings as per testing. Do not use fixings which rely on plastic or nylon components for grip.
5. Install only from underside on floor penetrations. Install fire collar on both sides for wall penetrations.
6. Allproof recommends any thermal or acoustic lagging maintains a 50mm separation to the fire collar.

CONCRETE SLAB TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER	WALL FRL	REPORT NUMBER
PVC PLASTIC PIPE								
40	70	2.0	ALLFC40	47	-/90/60	6017		
50	70	2.2	ALLFC50	57	-/90/60	4831		
65	70	2.7	ALLFC65	72	-/90/60	4831		
80	70	2.9	ALLFC80	87	-/90/60	4831		
100	70	3.2	ALLFC100	112	-/90/60	6017		
20	120	1.8	ALLFC25	28	-/120/120	5125		
40	150	2.0	ALLFC40	47	-/120/120	3788	-/120/120	5956
50	150	2.2	ALLFC50	57	-/120/120	3788	-/120/120	5957
65	150	2.7	ALLFC65	72	-/120/120	4100	-/180/180	4211
80	150	2.9	ALLFC80	87	-/120/120	3808	-/180/180	4211
100	150	3.2	ALLFC100	112	-/120/120	3788	-/120/120	3808
150	150	4.5	ALLFC150	162	-/120/120	4100	-/120/120	5957
225	150	6.0	ALLFC250	262	-/180/180	145430		
PVC PLASTIC PIPE - WITH SOCKET								
40	120	Socket	ALLFC40	47	-/240/180	5573		
50	150	Socket	ALLFC50	57	-/120/120	4465		
65	150	Socket	ALLFC65	72	-/120/120	4465		
80	150	Socket	ALLFC80	87	-/120/120	4465		
100	150	Socket	ALLFC100	112	-/120/120	3974		
150	150	Socket	ALLFC200	183	-/120/120	148721		
PVC PLASTIC STORMWATER PIPE								
175	150	5.5	ALLFC200	205	-/120/120	148721		
225	150	6.0	ALLFC250	262	-/240/180	143281-004		
HDPE PLASTIC PIPE								
90	120	3.5	ALLFC100	95	-/180/180	146150		
125	120	4.9	ALLFC150	130	-/45/45	146150		
50	150	3.0	ALLFC50	52	-/120/120	3974	-/120/120	4466
56	150	3.0	ALLFC50	58	-/120/120	4834		
63	150	3.0	ALLFC65	65	-/120/120	4834		
75	150	3.0	ALLFC80	77	-/120/120	3974	-/120/120	4836
110	150	4.3	ALLFC100	112	-/120/120	3974	-/120/120	4836
150	150	6.2	ALLFC150	162	-/120/120	4100		
PP-R PLASTIC PIPE (SDR 7.4)								
20	120	2.2	ALLFC25	28	-/120/120	5125		
25	120	3.5	ALLFC25	35	-/180/180	146150		
40	150	5.5	ALLFC40	42	-/120/120	4058	-/120/120	4836
50	150	7.2	ALLFC50	54	-/120/120	148721		
63	150	9.2	ALLFC65	67	-/60/45	148721		
75	150	10.3	ALLFC80	77	-/120/120	4058		
110	150	15.1	ALLFC100	112	-/90/90	4058		

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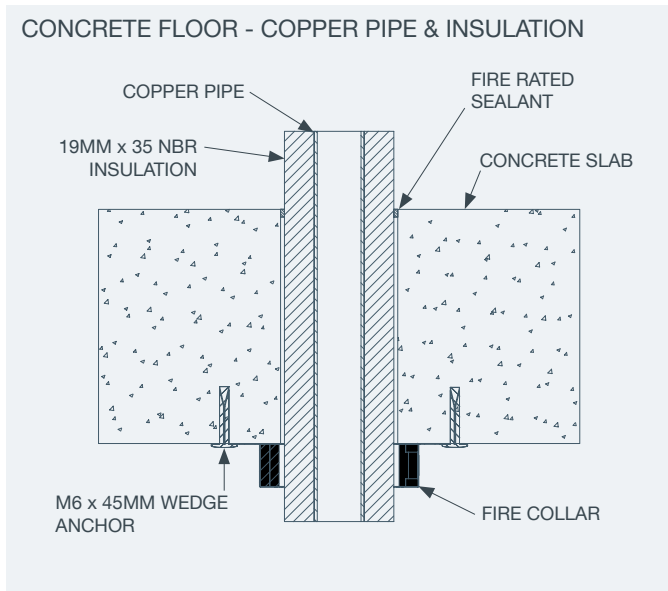
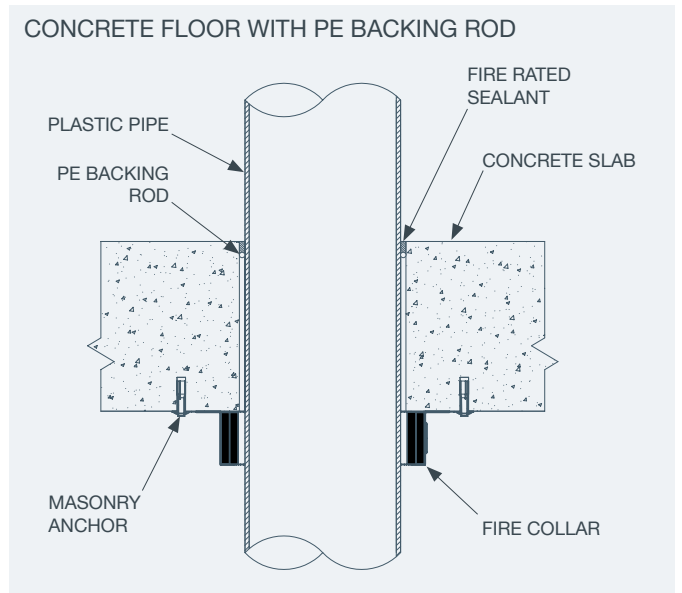
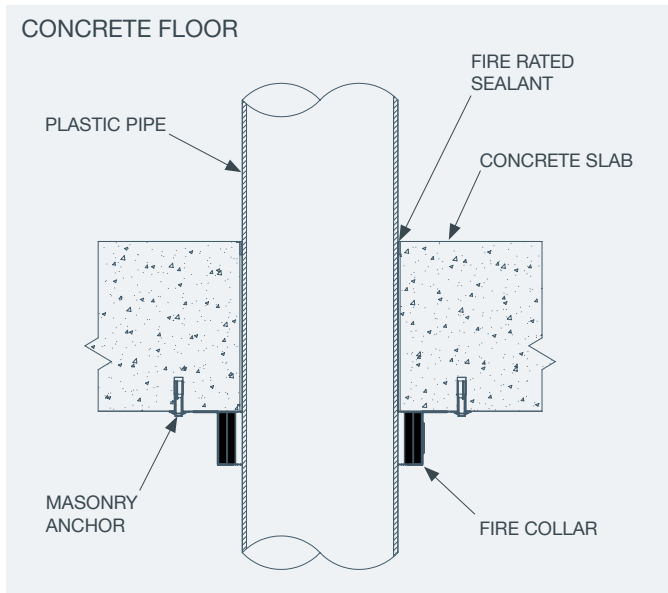
CONCRETE SLAB TEST RESULTS (CONTINUED):

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER	WALL FRL	REPORT NUMBER
RAUPIANO PP-MD								
40	120	1.8	ALLFC40	42	-/120/120	5169		
50	120	1.8	ALLFC50	52	-/120/120	5169		
75	120	1.9	ALLFC80	77	-/120/120	5169		
110	120	2.7	ALLFC100	112	-/120/120	5169		
D BLUE PP-MD								
40	120	1.8	ALLFC40	42	-/120/120	4467		
50	120	1.8	ALLFC50	52	-/240/240	5573		
75	120	2.3	ALLFC80	77	-/120/120	4467		
110	120	3.4	ALLFC100	112	-/240/240	5573		
PEX								
16 PEX	120	2.35	ALLFC25	28	-/120/120	5125		
20 PEX	120	2.95	ALLFC25	28	-/120/120	12424-001		
25 PEX	120	3.75	ALLFC25	28	-/120/120	5125		
32 PEX	120	2.8	ALLFC50	55	-/180/180	146150		
PB								
16 PB	120	1.7	ALLFC25	28	-/120/120	5125		
20 PB	120	2.1	ALLFC25	28	-/120/120	12424-001		
28 PB	120	2.8	ALLFC25	32	-/120/120	5125		
PEX/AL/PEX								
16 PEX/AL/PEX	120	2.0	ALLFC25	30	-/180/120	146150		
20 PEX/AL/PEX	120	2.0	ALLFC25	30	-/120/120	146150		
25 PEX/AL/PEX	120	2.8	ALLFC25	28	-/120/120	5125		
40 PEX/AL/PEX	120	4.0	ALLFC50	50	-/60/-	146150		
19MM WALL NBR INSULATED COPPER								
32	150		ALLFC65	75	-/120/90	148721		

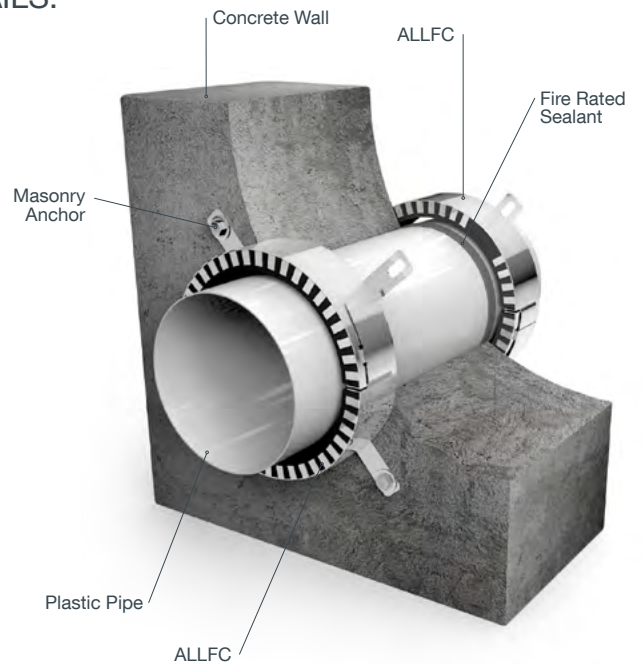
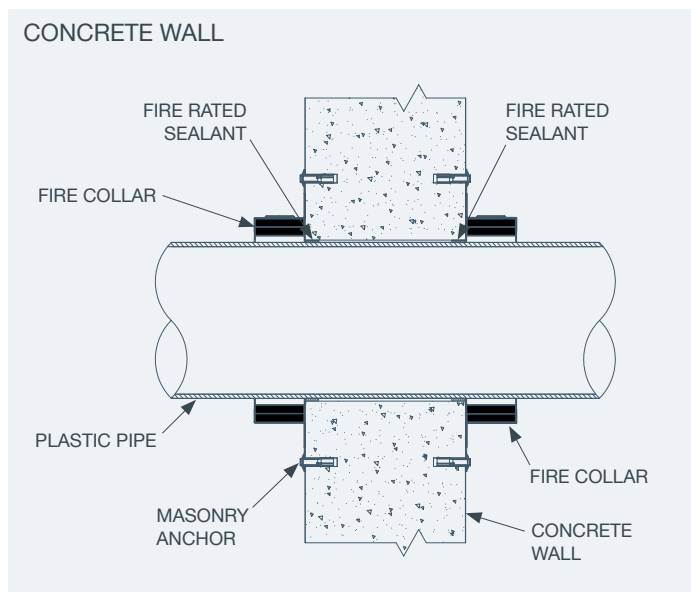
Fixing: Collars tested using M6x25 masonry anchors or M6x45mm Wedge Anchors.

For installations resulting in an annular gap of 4mm or greater insert PE backing rod prior to fire rated sealant.

ALLFC25 - 250 CONCRETE INSTALLATION DETAILS:



ALLFC25 - 250 CONCRETE INSTALLATION DETAILS:

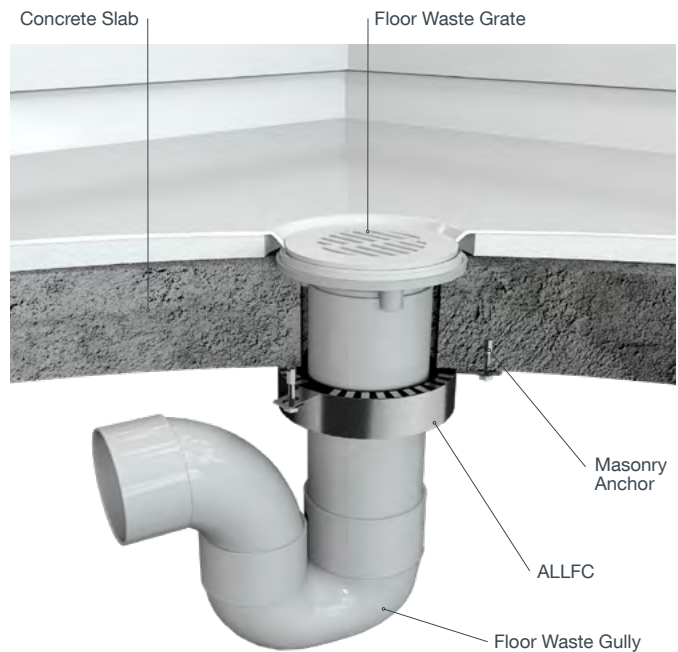
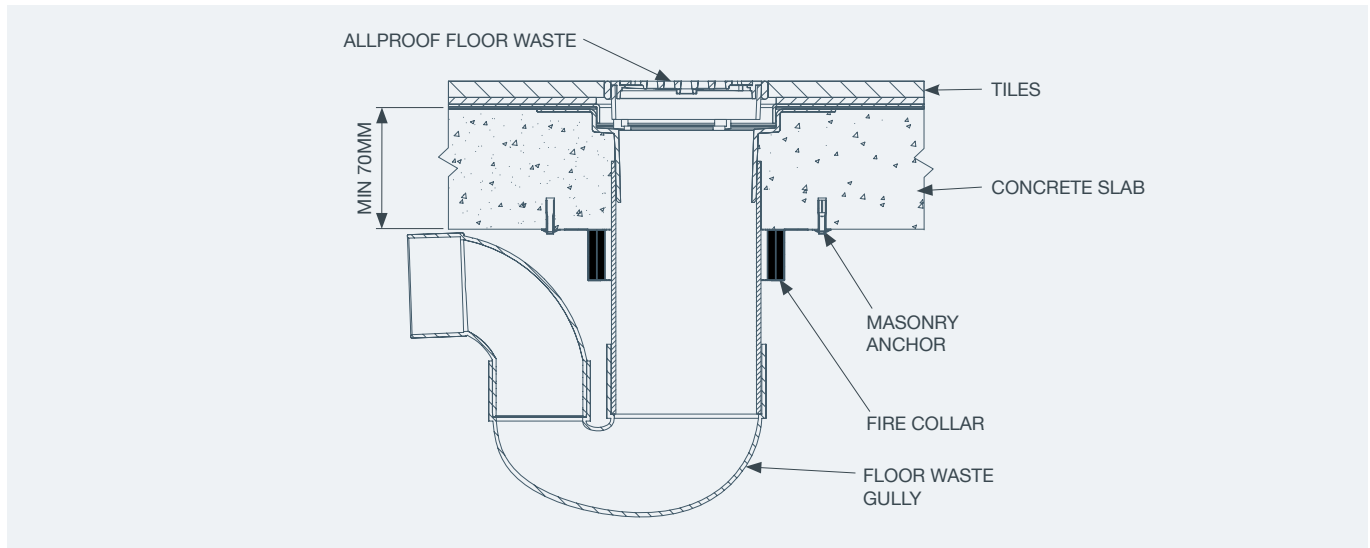


CONCRETE SLAB FLOOR WASTE TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE						
80	70	2.9	ALLFC80	92	-/120/120	10471
100	70	3.2	ALLFC100	117	-/120/-	10471
50	120	2.2	ALLFC50	57	-/180/120	145535
100	120	3.2	ALLFC100	112	-/120/120	5125
PVC PLASTIC PIPE - WITH SOCKET						
50	150	Socket	ALLFC50	60	-/120/120	148721
80	150	Socket	ALLFC80	87	-/120/-	145430
100	150	Socket	ALLFC100	112	-/120/-	148721
HDPE PLASTIC PIPE						
110	150	4.3	ALLFC100	112	-/120/120	145430

Fixing: Collars tested using M6x25 masonry anchors or M6x45mm Wedge Anchors.

FLOOR WASTE INSTALLATION DETAILS:



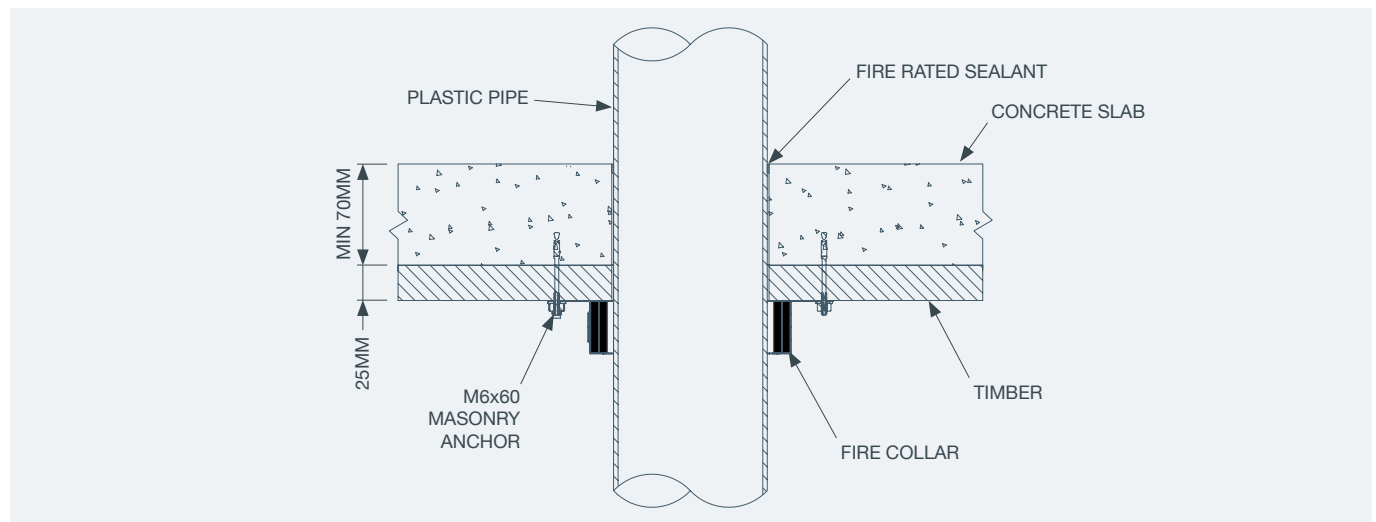
RIB & TIMBER INFILL TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	TIMBER DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE							
40	70	25	2.0	ALLFC40	52	-/120/120	10471
50	70	25	2.2	ALLFC50	67	-/120/120	10471
65	70	25	2.7	ALLFC65	77	-/120/120	10471
80	70	25	2.9	ALLFC80	92	-/120/120	10471
100	70	25	3.2	ALLFC100	117	-/120/90	10471
OTHER PLASTIC PIPE							
16 PEX	70	25	2.2	ALLFC25	28	-/90/60	143281-003
25 PEX	70	25	3.5	ALLFC25	28	-/60/30	143281-003
15 PB	70	25	1.6	ALLFC25	28	-/90/90	143281-003
28 PB	70	25	3.5	ALLFC25	32	-/90/90	143281-003
25 PEX/AL/PE	70	25	2.5	ALLFC25	28	-/90/60	143281-003
32 PP-R (SDR 11)	70	25	2.9	ALLFC40	40	-/90/90	143281-003

Fixing: Collars tested using M6x60 masonry anchors.

For installations resulting in an annular gap of 4mm or greater insert PE backing rod prior to fire rated sealant.

RIB & TIMBER INFILL STACK INSTALLATION DETAILS:

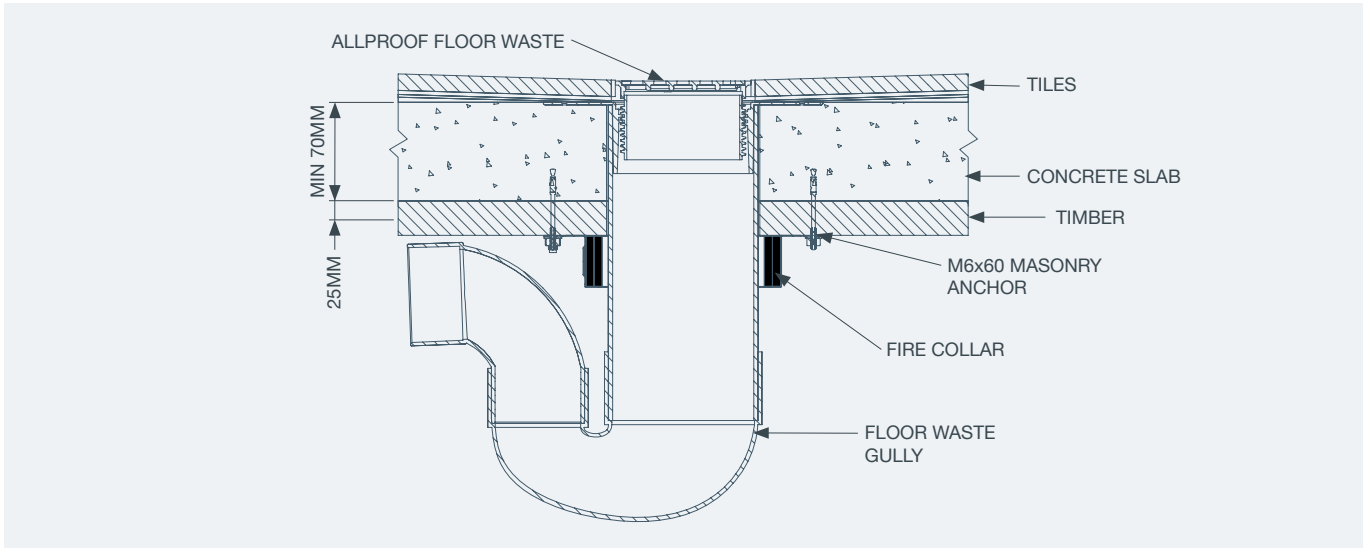


RIB & TIMBER INFILL FLOOR WASTE TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	TIMBER DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE							
80	70	25	2.9	ALLFC80	92	-/120/120	10471
100	70	25	3.1	ALLFC100	117	-/120/120	10471

Fixing: Collars tested using M6x60 masonry anchors.

RIB & TIMBER INFILL FLOOR WASTE INSTALLATION DETAILS:



HOLLOW CORE SLAB TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE						
20	150	1.8	ALLFC25	28	-/60/60	4687
40	150	2.0	ALLFC40	47	-/60/60	4687
50	150	2.2	ALLFC50	57	-/60/60	4687
65	150	2.7	ALLFC65	72	-/60/60	4687
80	150	2.9	ALLFC80	87	-/60/60	4687
100	150	3.2	ALLFC100	112	-/60/60	4687
150	150		ALLFC150	162	-/60/60	4687
PVC PLASTIC PIPE - WITH PVC SOCKETS						
40	150	2.4	ALLFC40	47	-/60/60	4687
100	150	3.3	ALLFC100	112	-/60/60	4687
HDPE PLASTIC PIPE						
50	150	3.0	ALLFC50	52	-/60/60	4687
80	150	3.0	ALLFC80	77	-/60/60	4687
100	150	4.3	ALLFC100	112	-/60/60	4687
160	150	6.2	ALLFC150	162	-/60/60	4687
PP-R PLASTIC PIPE (SDR 7.4)						
40	150	5.5	ALLFC40	55	-/60/60	4687
75	150	10.3	ALLFC80	85	-/60/60	4687
110	150	15.1	ALLFC100	112	-/60/60	4687
RAUPIANO PP-MD						
40	150	1.8	ALLFC40	44	-/60/60	4687
50	150	1.8	ALLFC50	54	-/60/60	4687
75	150	1.9	ALLFC80	79	-/60/60	4687
110	150	2.7	ALLFC100	114	-/60/60	4687
D BLUE PP-MD						
50	150	1.8	ALLFC50	52	-/60/60	4687
110	150	3.4	ALLFC100	112	-/60/60	4687
OTHER PLASTIC PIPE						
16 PEX	150	2.35	ALLFC25	28	-/60/60	4687
25 PEX	150	3.75	ALLFC25	28	-/60/60	4687
25 PEX/AL/PEX	150	2.8	ALLFC25	28	-/60/60	4687
16 PB	150	1.7	ALLFC25	28	-/60/60	4687
28 PB	150	2.8	ALLFC25	32	-/60/60	4687

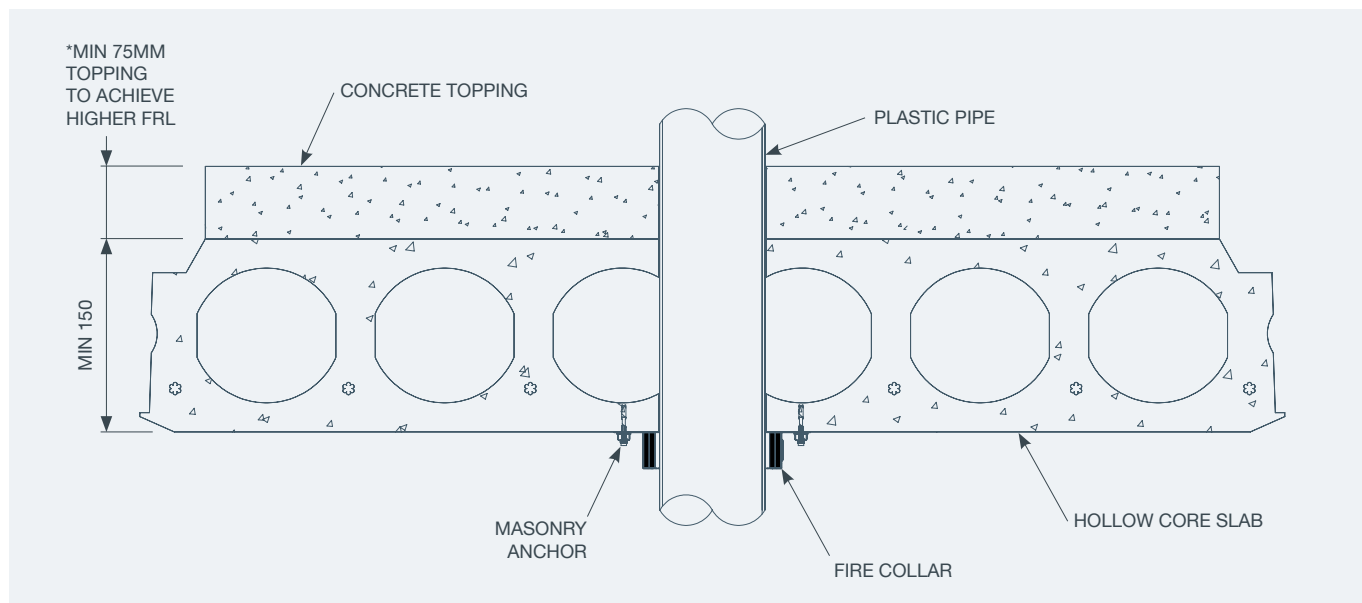
Fixing: Collars tested using M6x25 masonry anchors or M6x4.5 DBZ Wedge Anchors.

Note: FRL can be increased with the below floor depth specifications,

75mm concrete topping can be added to 150mm hollow core floor to achieve -/90/90 FRL.

Hollowcore floors with a minimum depth of 200mm will achieve -/90/90 FRL.

HOLLOW CORE SLAB INSTALLATION DETAILS:



*75mm concrete topping can be added to 150mm hollow core floor to achieve -/90/90 FRL.

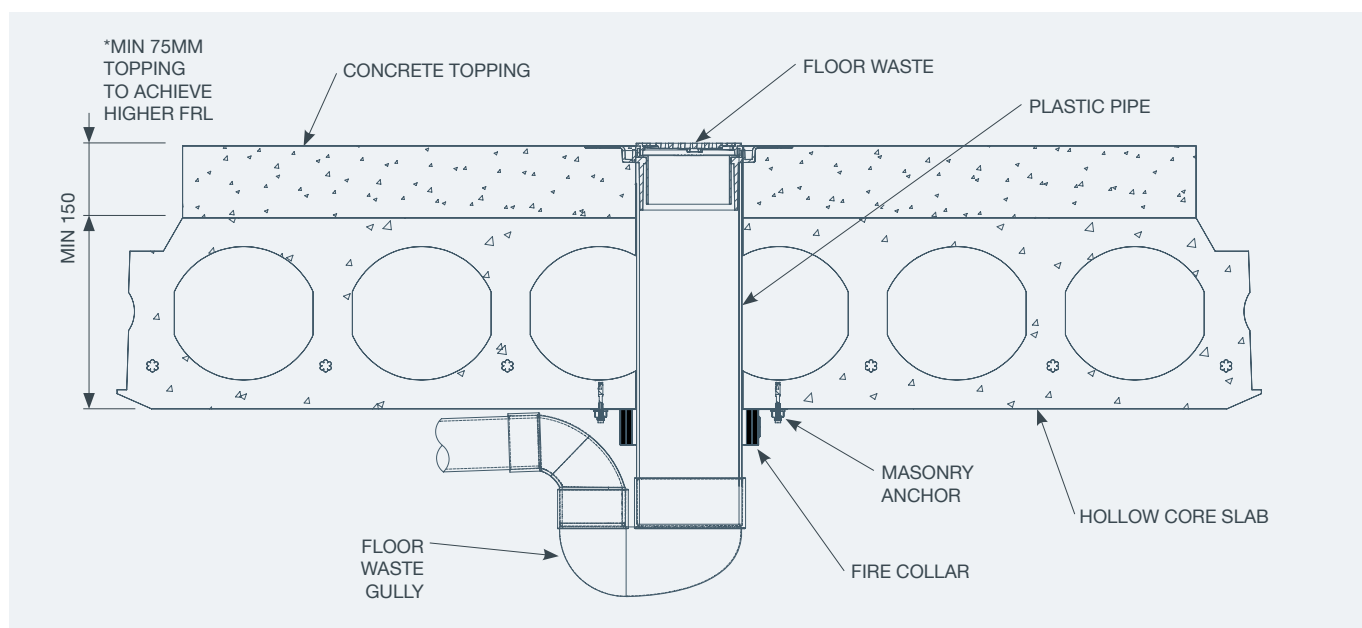
HOLLOW CORE SLAB FLOOR WASTE TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE						
80	150		ALLFC80	87	-/60/60	4687
100	150		ALLFC100	112	-/60/60	4687
80	200		ALLFC80	87	-/90/90	4687
100	200		ALLFC100	112	-/90/90	4687

Fixing: Collars tested using M6x25 masonry anchors or M6x4.5 DBZ Wedge Anchors.

Note: 75mm concrete topping can be added to 150mm hollow core floor to achieve -/90/90 FRL.

HOLLOW CORE SLAB FLOOR WASTE INSTALLATION DETAILS:



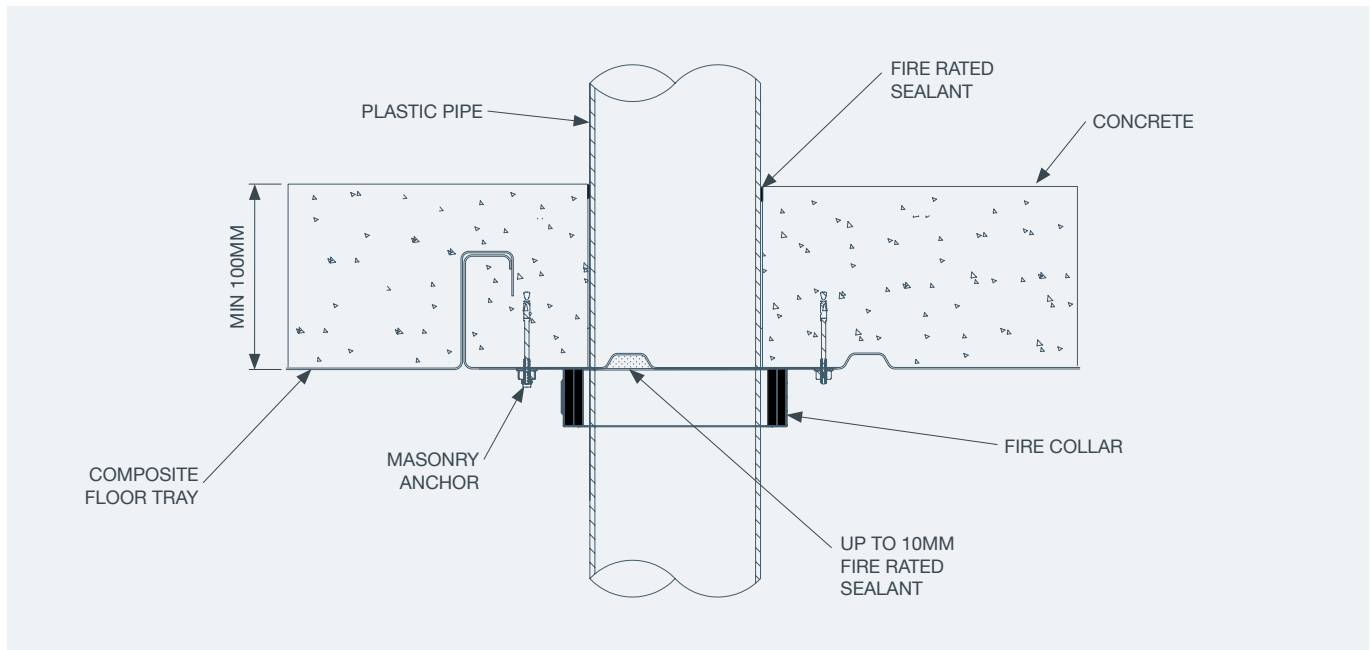
*75mm concrete topping can be added to 150mm hollow core floor to achieve -/90/90 FRL.

COMPOSITE FLOOR TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE						
40	70	2.5	ALLFC40	52	-/60/60	13920-01
50	70	2.2	ALLFC50	57	-/60/60	13920-01
65	70	2.7	ALLFC65	72	-/60/60	13920-01
80	70	2.9	ALLFC80	87	-/60/60	13920-01
100	70	3.2	ALLFC100	118	-/60/60	13920-01
40	100	2.0	ALLFC40	47	-/120/120	13920-01
50	100	2.2	ALLFC50	57	-/120/120	13920-01
65	100	2.7	ALLFC65	72	-/120/120	13920-01
80	100	2.9	ALLFC80	87	-/120/120	13920-01
100	100	3.2	ALLFC100	112	-/120/120	13920-01
PP-R PLASTIC PIPE (SDR 11)						
32	70	3.5	ALLFC40	37	-/60/60	13920-01
32	100	3.5	ALLFC40	37	-/120/120	13920-01
PEX PIPE						
16	70	2.7	ALLFC25	28	-/60/60	11267

Fixing: Collars tested using M6x26 masonry anchors.

COMPOSITE FLOOR INSTALLATION DETAILS:



Note: Collars can be installed on flat surfaces between the trough profiles in composite floors. Additionally fire rated sealant can be installed between tray and collar where profile changes up to 10mm. For any profile change greater than 10mm please refer to DIFC product selections.

CROSS LAMINATED TIMBER (CLT) FLOOR TEST RESULTS:

NOMINAL PIPE SIZE (MM)	TIMBER DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE						
40	105	2.0	ALLFC40	53	-/60/60	145432
50	105	2.2	ALLFC50	66	-/60/60	145432
65	110	2.7	ALLFC65	72	-/60/60	148131
80	110	2.9	ALLFC80	87	-/60/60	148131
100	105	3.2	ALLFC100	120	-/60/60	145432
PEX PIPE						
16	105	2.1	ALLFC25	26	-/45/45	145432
20	105	2.4	ALLFC25	30	-/30/30	145432
25	105	2.9	ALLFC25	35	-/30/30	145432

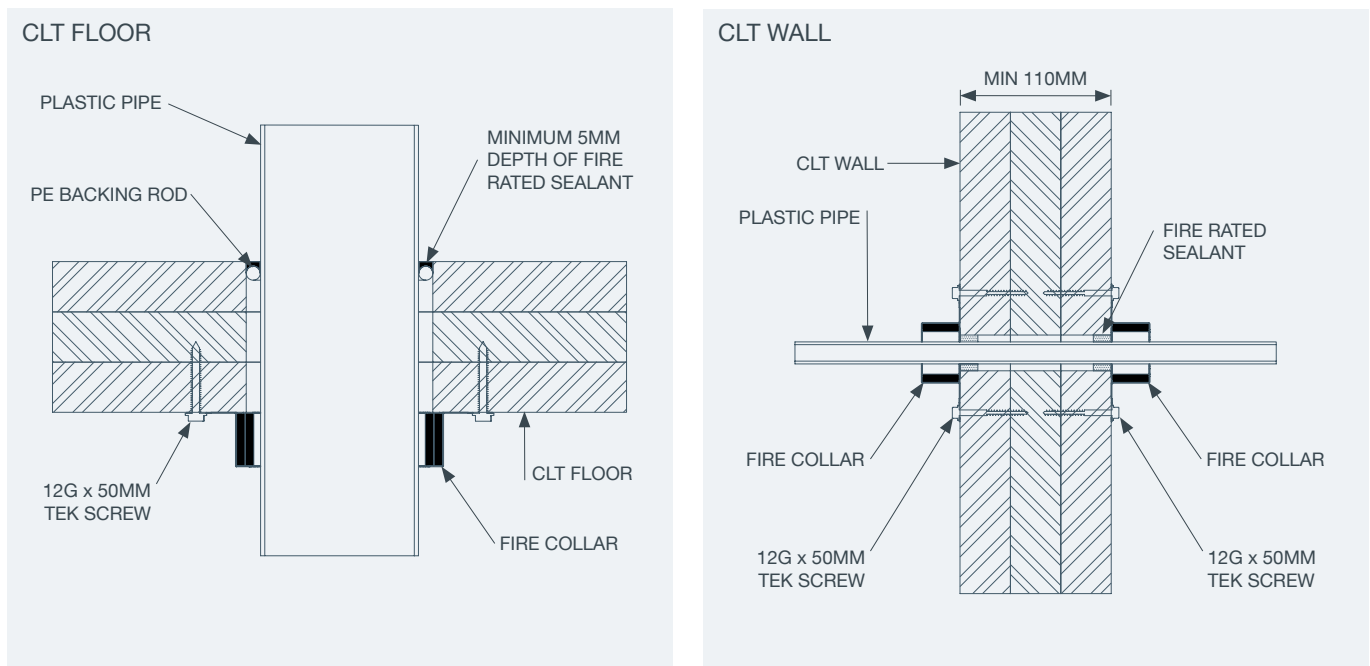
Fixing: Collars tested using Tek Screw 12G x 50mm.
 For installations resulting in an annular gap of 4mm or greater insert PE backing rod prior to fire rated sealant.

CROSS LAMINATED TIMBER (CLT) WALL TEST RESULTS:

NOMINAL PIPE SIZE (MM)	TIMBER DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	WALL FRL	REPORT NUMBER
PVC PLASTIC PIPE						
40	110	2.0	ALLFC40	53	-/60/60	148132
50	110	2.2	ALLFC50	66	-/60/60	148132
65	110	2.7	ALLFC65	78	-/60/60	148132
PEX PIPE						
16	110	2.3	ALLFC25	26	-/60/45	148132
20	110	2.7	ALLFC25	30	-/60/45	148132
25	110	3.2	ALLFC25	35	-/60/30	148132

Fixing: Collars tested using Tek Screw 12G x 50mm.

CROSS LAMINATED TIMBER INSTALLATION DETAILS:

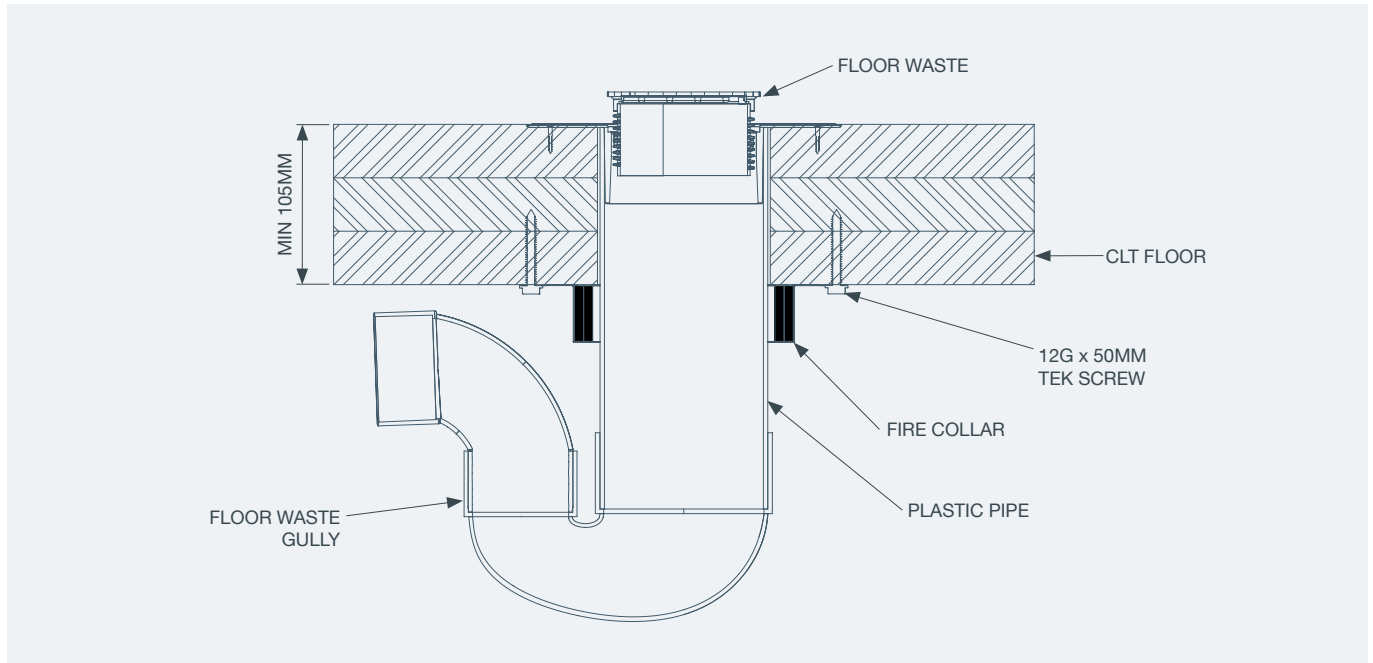


CROSS LAMINATED TIMBER (CLT) FLOOR WASTE TEST RESULTS:

NOMINAL PIPE SIZE (MM)	TIMBER DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE						
100	105	3.2	ALLFC100	120	-/60/-	145432

Fixing: Collars tested using Tek Screw 12G x 50mm.

CROSS LAMINATED TIMBER FLOOR WASTE INSTALLATION DETAILS:



2 X 13MM PLASTERBOARD CEILING TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD CEILING FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
40	2.0	ALLFC40	55	-/90/90	190268.1
50	2.5	ALLFC50	70	-/90/90	190268.1
65	2.7	ALLFC65	76	-/90/90	210371
80	2.9	ALLFC80	89	-/90/90	210371
100	3.5	ALLFC100	110	-/90/90	190268.1
150	4.5	ALLFC150	162	-/90/90	146206
PVC PLASTIC PIPE - WITH PVC SOCKETS					
40	Socket	ALLFC40	51	-/90/90	142100
50	Socket	ALLFC50	70	-/90/90	210371
65	Socket	ALLFC65	76	-/90/90	210371
80	Socket	ALLFC80	89	-/90/90	210371
100	Socket	ALLFC100	114	-/90/90	142100
POLYBUTE					
15	1.9	ALLFC25	19	-/90/90	142100
20	2.1	ALLFC25	25	-/90/90	142100
28	3.0	ALLFC25	32	-/90/90	142100
PP-R PLASTIC PIPE (SDR 7.4)					
20	2.8	ALLFC25	25	-/90/90	142100
25	3.5	ALLFC25	29	-/90/90	146206
PP-R PLASTIC PIPE (SDR 11)					
32	3.2	ALLFC40	40	-/90/90	190268.1
PEX PIPE					
16	2.4	ALLFC25	24	-/90/90	190268.1
20	2.8	ALLFC25	25	-/90/90	142100
25	3.5	ALLFC25	28	-/90/90	142100
32	4.4	ALLFC50	37	-/90/90	146206

Fixing: Collars tested using hollow wall anchors

Tested using a 190mm deep timber framing with two layers of 13mm fire rated plasterboard on the exposed side of the frame and 19mm particleboard flooring on the unexposed side of the frame. A total floor-ceiling thickness of 235mm. Fire collars are fixed using hollow wall anchors directly into plasterboard - not fixed into framing or studs. Fire rated sealant is applied in the space between the pipe and plasterboard on the exposed face and silicone sealant between the pipe and particleboard flooring on the unexposed face.

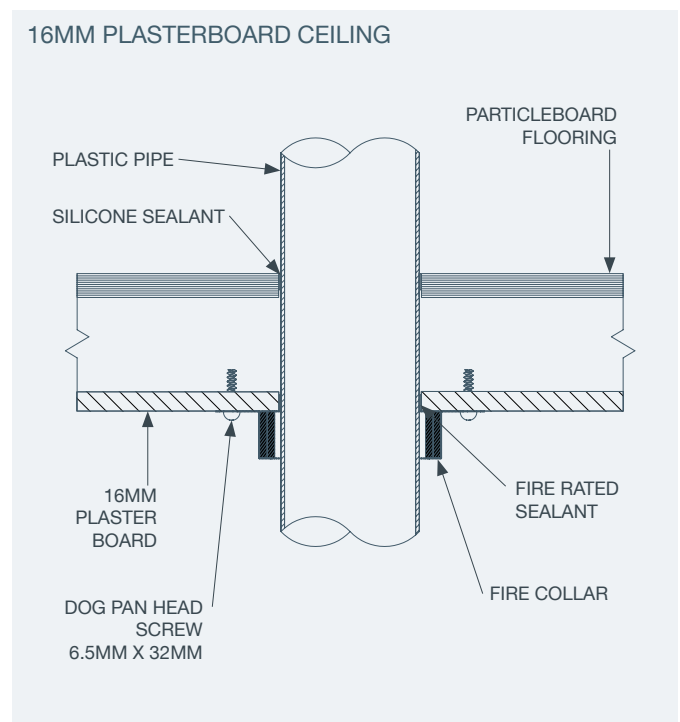
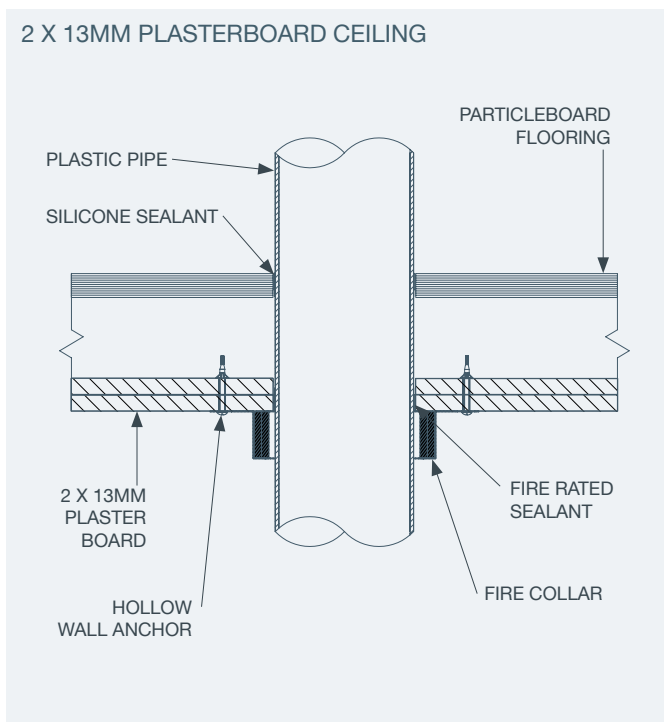
16MM PLASTERBOARD CEILING TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD CEILING FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
40	2.0	ALLFC40	55	-/60/60	148449
50	2.5	ALLFC50	70	-/60/60	148449
65	2.7	ALLFC65	76	-/60/60	148449
80	2.9	ALLFC80	89	-/60/60	148449
100	3.5	ALLFC100	110	-/60/60	148449
PEX PIPE					
16	2.3	ALLFC25	24	-/60/60	148449
20	2.7	ALLFC25	25	-/60/60	148449
25	3.2	ALLFC25	28	-/60/60	148449

Fixing: Collars tested using 6.5mm x 32mm dog pan head screw anchors

Tested using a 190mm deep timber framing with one layer of 16mm fire rated plasterboard on the exposed side of the frame and 19mm particleboard flooring on the unexposed side of the frame. A total floor-ceiling thickness of 225mm. Fire collars are fixed using 6.5mm x 32mm Dog Pan Head Screws directly into plasterboard - not fixed into framing or studs. Fire rated sealant is applied in the space between the pipe and plasterboard on the exposed face and silicone sealant between the pipe and particleboard flooring on the unexposed face.

PLASTERBOARD CEILING INSTALLATION DETAILS:



2 X 13MM PLASTERBOARD CEILING FLOOR WASTE TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD CEILING FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
80	2.9	ALLFC80	87	-/90/60	146206
100	3.5	ALLFC100	110	-/90/-	190268.1

Fixing: Collars tested using M4x8mm hollow wall anchors

Tested using a 190mm deep timber framing with two layers of 13mm fire rated plasterboard on the exposed side of the frame and 19mm particleboard flooring on the unexposed side of the frame. A total floor-ceiling thickness of 235mm. Fire collars are fixed using hollow wall anchors directly into plasterboard - not fixed into framing or studs. Fire rated sealant is applied in the space between the pipe and plasterboard on the exposed face and silicone sealant between the flange and particleboard flooring on the unexposed face.

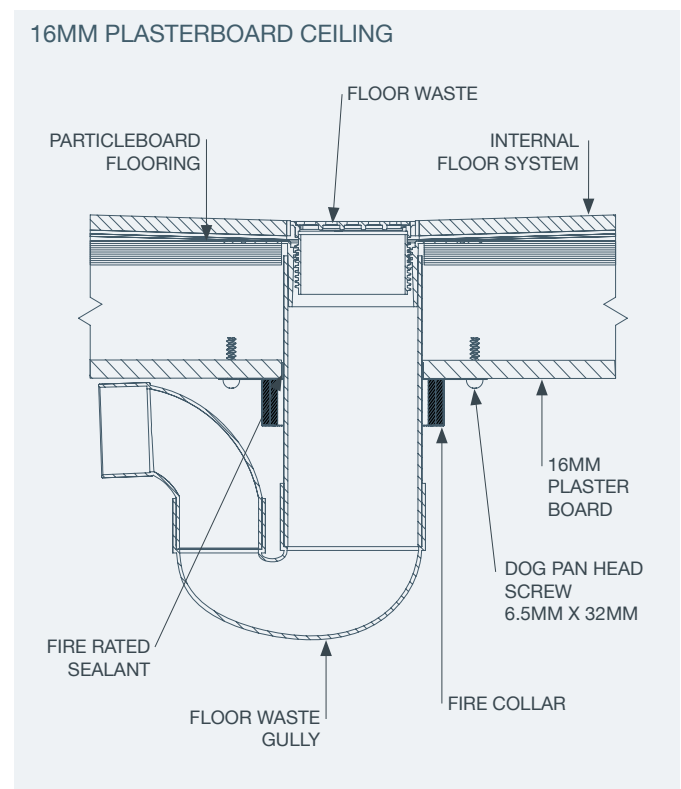
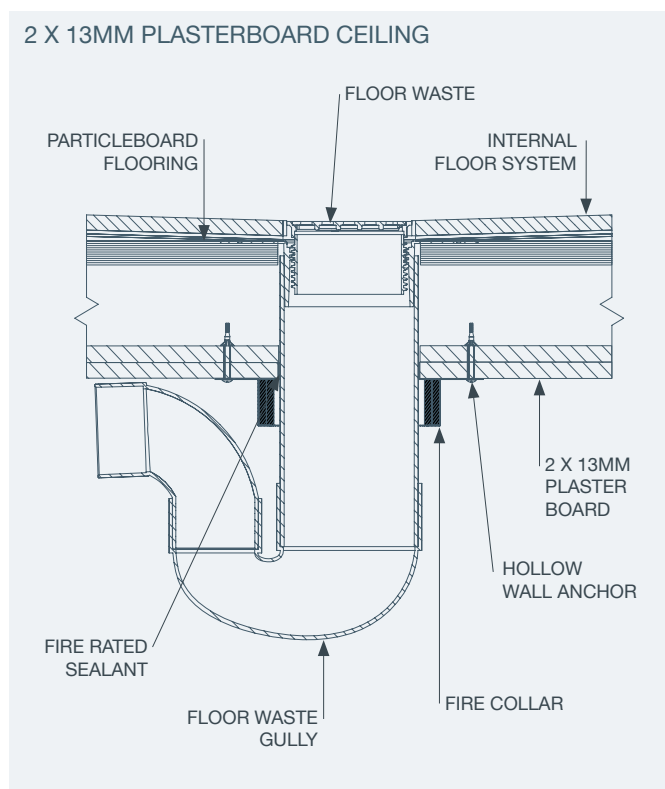
16MM PLASTERBOARD CEILING FLOOR WASTE TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD CEILING FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
80	2.9	ALLFC80	87	-/60/60	148449
100	3.5	ALLFC100	110	-/60/45	148449

Fixing: Collars tested using 6.5mm x 32mm Dog Pan Head Screw

Tested using a 190mm deep timber framing with one layer of 16mm fire rated plasterboard on the exposed side of the frame and 19mm particleboard flooring on the unexposed side of the frame. A total floor-ceiling thickness of 225mm. Fire collars are fixed using hollow wall anchors directly into plasterboard - not fixed into framing or studs. Fire rated sealant is applied in the space between the pipe and plasterboard on the exposed face and silicone sealant between the flange and particleboard flooring on the unexposed face.

PLASTERBOARD CEILING INSTALLATION DETAILS:



13MM PLASTERBOARD WALL TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
20*	1.9	ALLFC25	28	-/60/60	147932
25*	2.1	ALLFC25	30	-/60/60	13509
32*	2.9	ALLFC40	44	-/60/60	147932
40*	2.0	ALLFC40	47	-/60/45	143281-001
50*	2.2	ALLFC50	57	-/60/60	5572
65*	2.7	ALLFC65	72	-/60/60	5810
80*	2.9	ALLFC80	87	-/60/60	5572
100*	3.2	ALLFC100	112	-/60/60	5810
150*	4.5	ALLFC150	162	-/60/60	147932
PVC PLASTIC PIPE - WITH SOCKET					
40*	Socket	ALLFC40	48	-/60/45	180434.3
50*	Socket	ALLFC50	62	-/60/45	180434.3
65*	Socket	ALLFC65	72	-/60/60	146207
80*	Socket	ALLFC80	87	-/60/60	146207
100*	Socket	ALLFC100	117	-/60/60	180434.3
POLYBUTE					
12**	1.3	ALLFC25	16	-/60/60	148459
16**	2.1	ALLFC25	20	-/60/60	148459
20**	2.2	ALLFC25	25	-/60/60	148459
25**	2.8	ALLFC25	28	-/60/60	148459
32**	3.6	ALLFC50	37	-/60/60	148459
PEX PIPE					
16**	1.8	ALLFC25	20	-/60/60	148459
20**	2.2	ALLFC25	25	-/60/60	148459
25**	2.8	ALLFC25	28	-/60/60	148459
32*	4.4	ALLFC50	37	-/60/60	146207
RAUPIANO PP-MD					
40*	1.8	ALLFC40	47	-/60/45	143281-001
50*	1.8	ALLFC50	57	-/60/45	143281-001
75*	1.9	ALLFC80	77	-/60/60	147932
100*	2.7	ALLFC100	117	-/60/60	143281-001
D BLUE PP-MD					
50*	1.3	ALLFC50	57	-/90/60	180355.1
75*	1.3	ALLFC80	86	-/90/60	180355.1
110*	2.2	ALLFC100	121	-/90/60	180355.1
PE-RT/AL/PE-RT					
16*	2.2	ALLFC25	20	-/60/45	190083
20*	2.2	ALLFC25	25	-/60/45	190083
25*	2.7	ALLFC25	29	-/60/45	190083
32*	3.1	ALLFC40	38	-/60/45	190083
40*	4.3	ALLFC40	44	-/60/-	190083

Continued on next page.

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL*	REPORT NUMBER
OTHER PLASTIC PIPE					
20 PP-R (SDR 7.4)*	2.8	ALLFC25	25	-/60/60	148954
25 PP-R (SDR 11)*	2.3	ALLFC25	29	-/60/45	143281-001
32 PP-R (SDR 11)*	2.9	ALLFC40	38	-/60/60	13509
40 PP-R (SDR 11)*	3.7	ALLFC40	45	-/60/60	148954
16 PEX/AL/PEX*	2.0	ALLFC25	19	-/60/45	5810
20 PEX/AL/PEX*	3.1	ALLFC25	25	-/60/45	5810
20 PEX/AL/PE*	2.9	ALLFC25	30	-/60/60	13509
25 PEX/AL/PEX*	2.5	ALLFC25	28	-/60/60	147932
32 PEX/AL/PEX*	3.0	ALLFC40	37	-/60/-	147932
PLASTIC PIPE - IN WALL					
40 PVC*	2.0	ALLFC40	70	-/60/45	143281-001
40 PVC*	Socket	ALLFC40	70	-/60/60	147932
20 PB**	2.2	ALLFC25	45	-/60/60	148459
20 PEX**	2.2	ALLFC25	45	-/60/60	148459
25 PEX**	2.8	ALLFC25	45	-/60/-	148459
25 PP-R*	4.0	ALLFC25	45	-/60/45	5572

* Fixing: Hollow wall anchors

** Fixing: 6.5mm x 32mm dog pan head screw anchors

Tested using a 64mm wide steel stud with a single layer of 13mm fire rated plasterboard on each side of the frame. A total wall thickness of 90mm. Fire collars are fixed directly into plasterboard - not fixed into framing or studs in wall. Fire rated sealant is applied in the space between the pipe and plasterboard on both the exposed and unexposed face.

13MM PLASTERBOARD WALL WITH PATCH TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PATCH SIZE (MM)	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL*	REPORT NUMBER
PVC PLASTIC STORMWATER PIPE						
175		ALLFC200	400x400	202	-/60/60	148954
225		ALLFC250	450x450	252	-/60/60	148954

Fixing: Collars tested using 6.5mm x 32mm dog pan head screws

Tested using a 64mm wide steel stud with a single layer of 13mm fire rated plasterboard on each side of the frame and a 13mm fire rated plasterboard patch. A total wall thickness of 90mm. Fire collars are fixed using dog pan head screws 6.5mm x 32mm directly into plasterboard - not fixed into framing or studs in wall. Fire rated sealant is applied in the space between the pipe and plasterboard on both the exposed and unexposed face.

STANDARD NON-FIRE RATED 13MM PLASTERBOARD WALL TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
40	2.5	ALLFC40	52	-/30/30	13088
50	2.5	ALLFC50	67	-/30/30	13088
80	3.1	ALLFC80	92	-/30/30	13088
100	3.5	ALLFC100	117	-/30/30	13088
PVC PLASTIC PIPE - IN-WALL					
40	2.4	ALLFC40	70	-/30/30	13088
OTHER PLASTIC PIPE					
20 PEX	3.2	ALLFC25	25	-/30/30	13088
20 PB	2.4	ALLFC25	25	-/30/30	13088
32 PP-R (SDR 11)	3.7	ALLFC40	38	-/30/30	13088

Tested using a 92mm wide steel stud with a single layer of 13mm standard non-fire rated plasterboard on each side of the frame. A total wall thickness of 118mm. Fire collars are fixed using hollow wall anchors directly into plasterboard - not fixed into framing or studs in wall. Fire rated sealant is applied in the space between the pipe and plasterboard on both the exposed and unexposed face.

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
65	2.7	ALLFC65	72	-/30/30	148639
OTHER PLASTIC PIPE					
16 PEX	2.0	ALLFC25	19	-/30/30	148639
25 PEX	2.9	ALLFC25	30	-/30/30	148639
16 PB	2.0	ALLFC25	20	-/30/30	148639
25 PB	2.3	ALLFC25	32	-/30/30	148639

Tested using a 64mm wide steel stud with a single layer of 13mm standard non-fire rated plasterboard on each side of the frame. A total wall thickness of 90mm. Fire collars are fixed using 6.5mm x 32mm dog pan head screw anchors directly into plasterboard - not fixed into framing or studs in wall. Intumescent sealant is applied in the space between the pipe and plasterboard on both the exposed and unexposed face.

16MM PLASTERBOARD WALL TEST RESULTS:

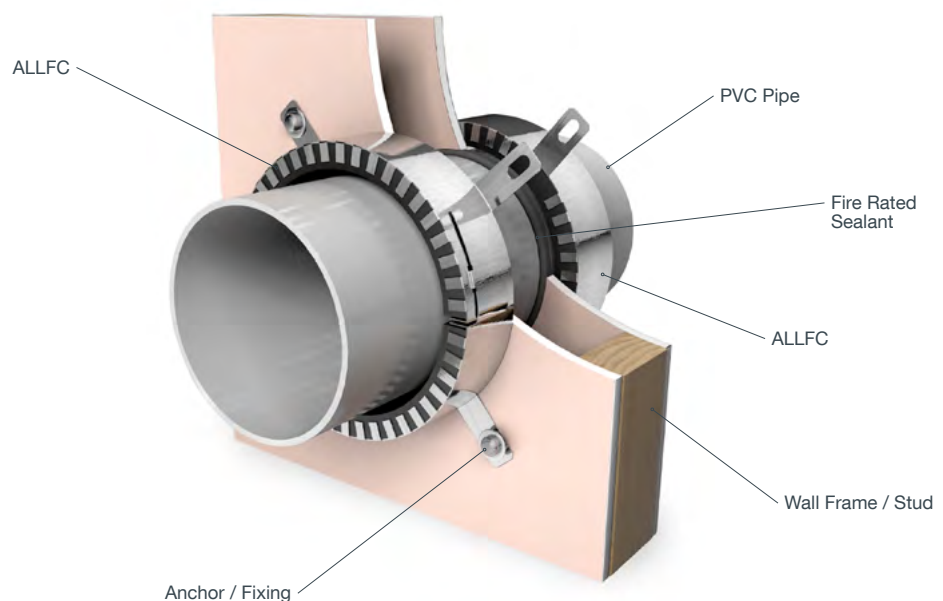
NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
40	2	ALLFC40	47	-/90/60	200379
PEX PIPE					
16	2	ALLFC25	19	-/90/60	200379
20	3	ALLFC25	25	-/90/60	200379
25	4	ALLFC25	30	-/90/60	200379
PEX PIPE - IN WALL					
16	2	ALLFC25	45	-/90/90	200379
20	3	ALLFC25	45	-/90/60	200379
25	4	ALLFC25	45	-/90/90	200379
OTHER PLASTIC PIPE - IN WALL					
25 PEX/AL/PE	4	ALLFC25	30	-/90/60	200379

Tested using a 64mm wide steel stud with a single layer of 16mm fire rated plasterboard on each side of the frame. A total wall thickness of 96mm. Fire collars are fixed using M8 hollow wall anchors to suit 10-16mm plasterboard- not fixed into framing or studs in wall. Fire rated sealant is applied in the space between the pipe and plasterboard on both the exposed and unexposed face.

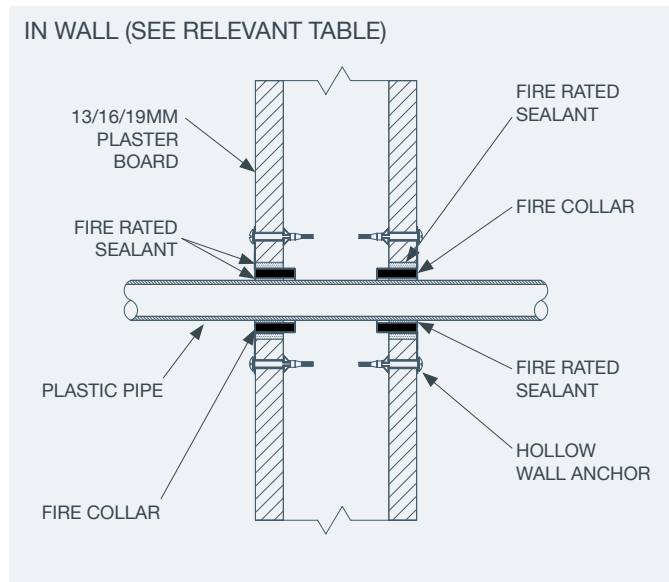
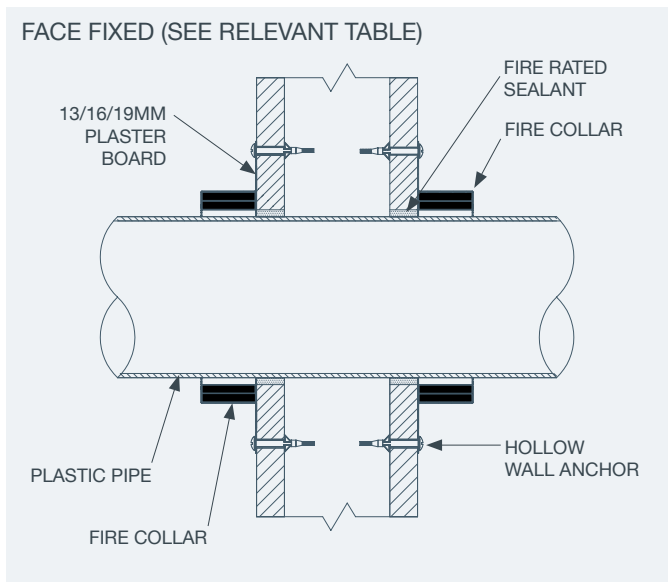
19MM PLASTERBOARD WALL TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
40	2.0	ALLFC40	47	-/120/90	4041
50	2.2	ALLFC50	57	-/120/90	3808
65	2.7	ALLFC65	72	-/120/90	4373
80	2.9	ALLFC80	87	-/120/90	4041
100	3.2	ALLFC100	112	-/120/90	4466
150	4.5	ALLFC150	162	-/90/60	4289
HDPE PLASTIC PIPE					
50	3.0	ALLFC50	52	-/120/120	4466
75	3.0	ALLFC80	77	-/120/90	4373
110	4.3	ALLFC100	112	-/120/90	4466
PP-R PLASTIC PIPE (SDR 7.4)					
40	5.5	ALLFC40	42	-/120/90	4373
50	6.9	ALLFC50	52	-/120/90	4373
63	8.6	ALLFC65	65	-/90/90	4584
75	10.3	ALLFC80	77	-/90/30	4584
110	15.1	ALLFC100	112	-/30/30	4584
PLASTIC PIPE - IN WALL					
40 PVC	2.2	ALLFC40	70	-/120/90	4101
100 PVC	3.3	ALLFC100	150	-/45/45	4101
25 PP-R (SDR 7.4)	3.7	ALLFC25	45	-/120/90	4101
25 PEX	3.7	ALLFC25	45	-/120/90	4101
22 PB	2.2	ALLFC25	45	-/120/90	4101

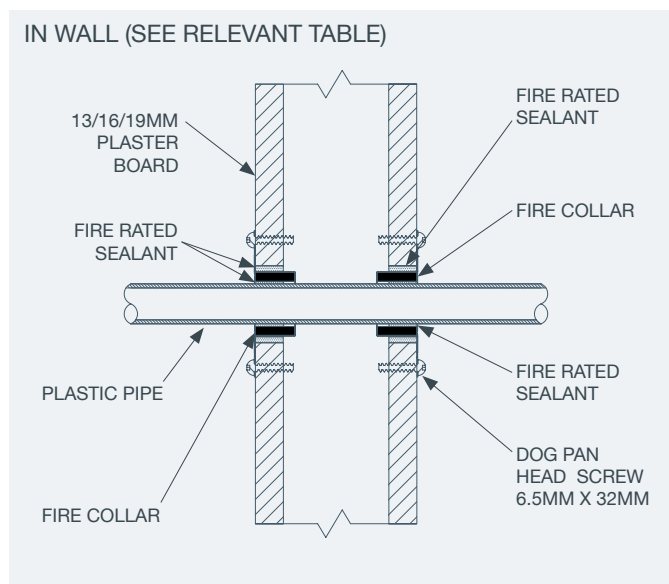
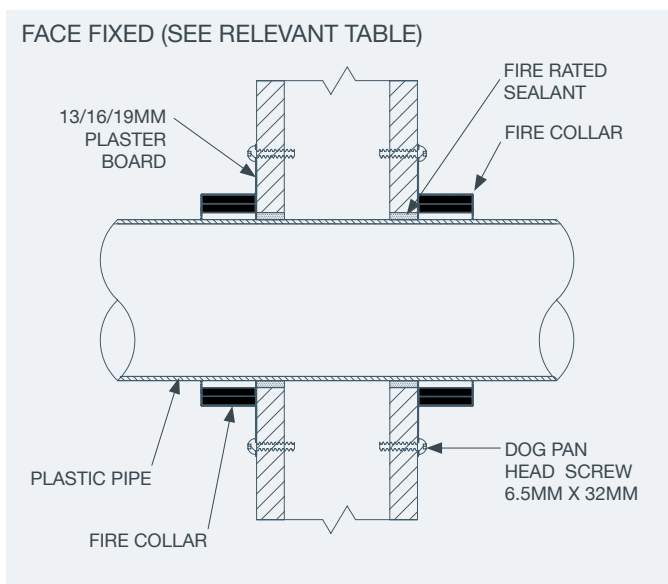
Tested using a 92mm wide steel stud with a single layer of 19mm fire rated plasterboard on each side of the frame. A total wall thickness of 130mm. Fire collars are fixed using hollow wall anchors directly into plasterboard - not fixed into framing or studs in wall. 25mm fire collars tested in the wall penetration not exposed outside of wall.



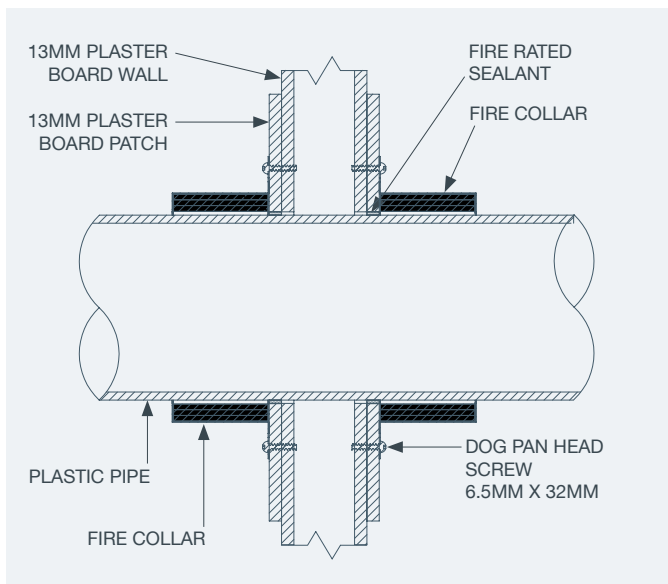
13/16/19MM PLASTERBOARD INSTALLATION DETAILS:



13MM PLASTERBOARD DOG PAN SCREW INSTALLATION DETAILS:



13MM PLASTERBOARD PATCH INSTALLATION DETAILS:



2 X 13MM PLASTERBOARD WALL TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL*	REPORT NUMBER
PEX PIPE					
16	2.6	ALLFC25	19	-/120/120	44185300.1
20	2.9	ALLFC25	25	-/120/120	44185300.1
25	3.7	ALLFC25	28	-/120/120	44185300.1

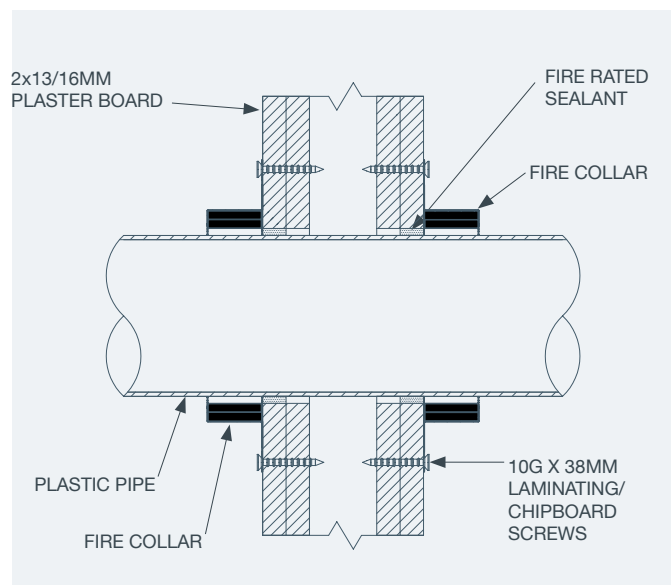
Tested using a 64mm wide steel stud with a single layer of 2 x 13mm fire rated plasterboard on each side of the frame. A total wall thickness of 116mm. Fire collars are fixed using 2 x 10G x 38mm laminating or chipboard screws directly into plasterboard - not fixed into framing or studs in wall. Fire rated sealant is applied in the space between the pipe and plasterboard on both the exposed and unexposed face.

2 X 16MM PLASTERBOARD WALL TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
40	2.0	ALLFC40	47	-/120/120	5680
50	2.2	ALLFC50	57	-/120/120	5680
65	2.7	ALLFC65	72	-/120/120	5680
80	2.9	ALLFC80	87	-/120/120	5680
100	3.2	ALLFC100	112	-/120/120	5680
PEX PIPE					
16	2.6	ALLFC25	19	-/120/120	5680
OTHER PLASTIC PIPE					
20 PEX/AL/PEX	3.1	ALLFC25	25	-/120/120	5680

Tested using a 64mm wide steel stud with a single layer of 2 x 16mm fire rated plasterboard on each side of the frame. A total wall thickness of 128mm. Fire collars are fixed using 10G x 40mm laminating or chipboard screws directly into plasterboard - not fixed into framing or studs in wall. Fire rated sealant is applied in the space between the pipe and plasterboard on both the exposed and unexposed face.

2 X 13/16MM PLASTERBOARD INSTALLATION DETAILS:



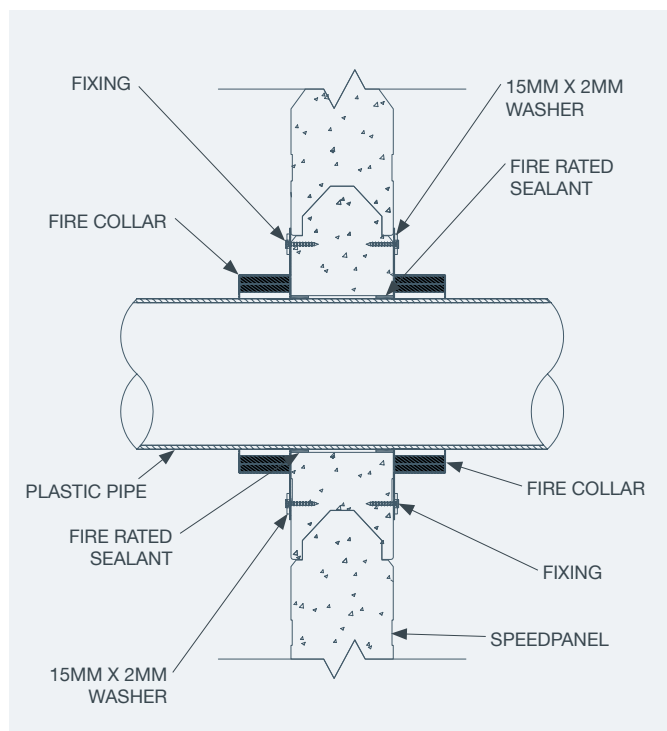
SPEEDPANEL TEST RESULTS:

NOMINAL PIPE SIZE (MM)	PANEL DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	WALL FRL	REPORT NUMBER
PVC PLASTIC PIPE						
50	78	2.3	ALLFC50	63	-/120/120	190283.1
65	78	2.3	ALLFC65	63	-/120/120	180434.5
80	78	3	ALLFC80	70	-/120/120	180434.5
100	78	3.0	ALLFC100	114	-/120/120	190283.1
150	78	4.2	ALLFC150	165	-/120/90	190283.1
HDPE PLASTIC PIPE						
50	78	3.0	ALLFC50	60	-/120/90	190283.1
110	78	4.3	ALLFC100	114	-/120/90	190283.1

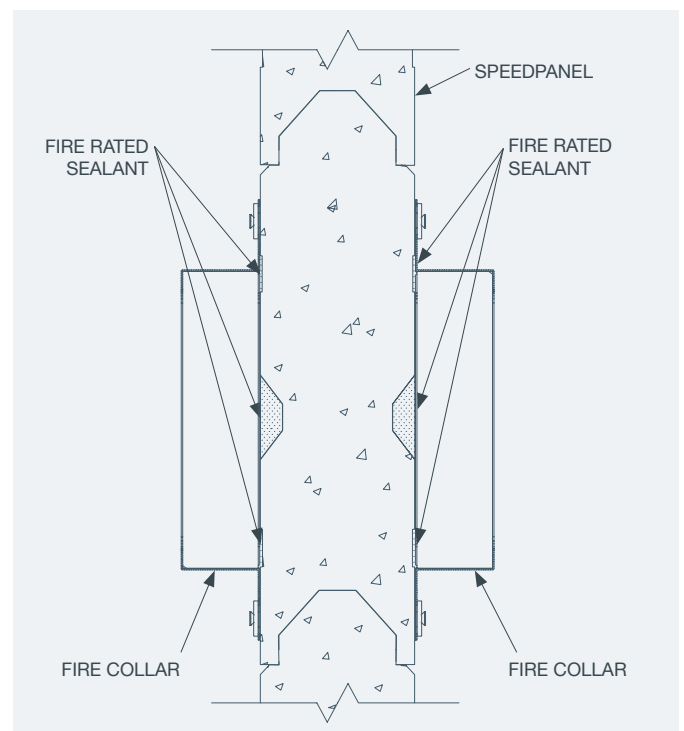
Fixing: Collars tested using 10G x 38mm needle point screws with Ø15mm x 2mm thick washers.

Note: Fire rated sealant installed between Speedpanel and collar where profile changes (see 'Profile Detail').

SPEEDPANEL INSTALLATION DETAILS:



SPEEDPANEL PROFILE DETAIL:



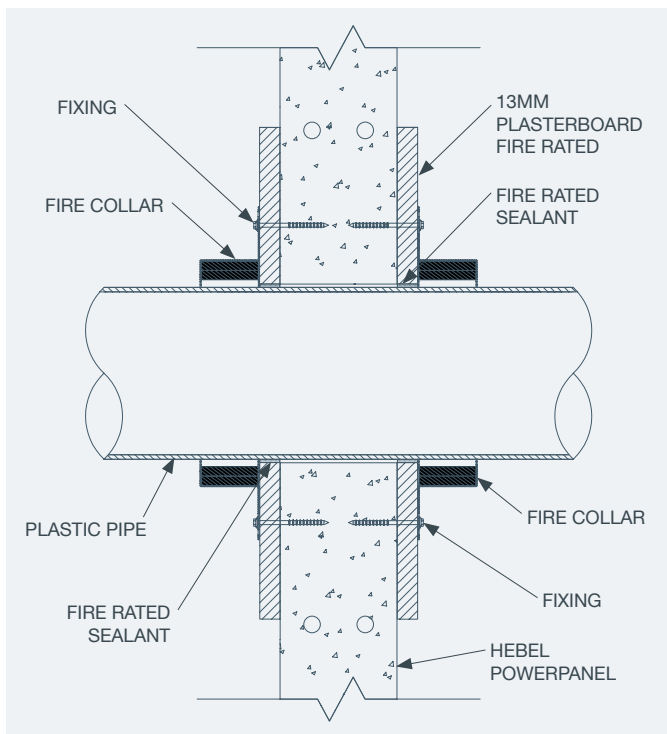
HEBEL POWERPANEL WITH PLASTERBOARD PATCH TEST RESULTS:

NOMINAL PIPE SIZE (MM)	PANEL DEPTH (MM)	PLASTER-BOARD (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	WALL FRL	REPORT NUMBER
PVC PLASTIC PIPE							
40	75	13	2.0	ALLFC40	47	-/120/120	180434.5
50	75	13	2.2	ALLFC50	57	-/120/120	180434.5
65	75	13	2.7	ALLFC65	72	-/120/120	180434.5
80	75	13	2.9	ALLFC80	87	-/120/120	180434.5
100	75	13	3.2	ALLFC100	112	-/120/120	180434.5
PEX PIPE							
16	75	13	2.6	ALLFC25	19	-/120/120	180434.5
20	75	13	2.9	ALLFC25	25	-/120/120	180434.5
25	75	13	3.7	ALLFC25	28	-/120/120	180434.5
OTHER PLASTIC PIPE							
20 PEX/AL/PEX	75	13	3.1	ALLFC25	25	-/120/120	180434.5

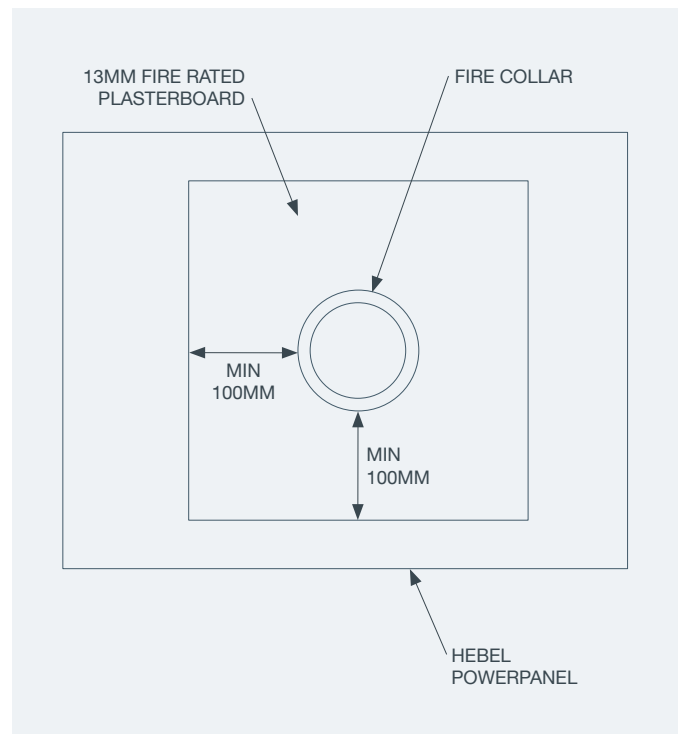
Fixing: 14-10 x 65mm hex head type 17 screws.

Note: Fire rated plasterboard patch to be a minimum 100mm length in each direction from the edge of the collar.

HEBEL POWERPANEL WITH FIRE RATED PLASTERBOARD PATCH INSTALLATION DETAILS:

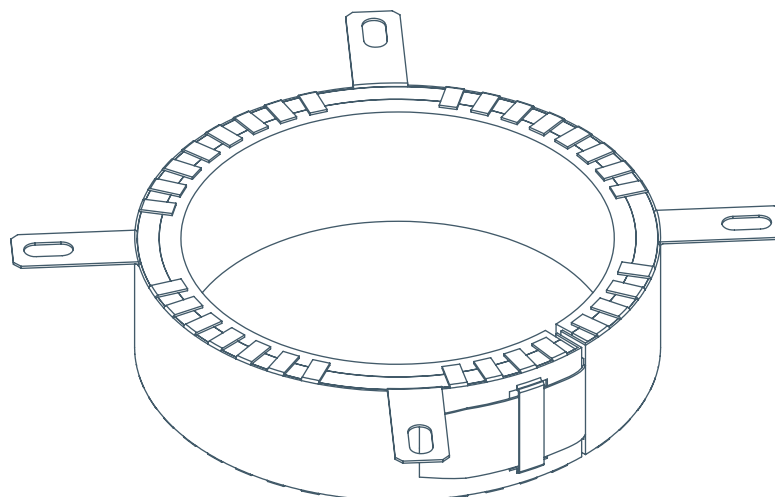
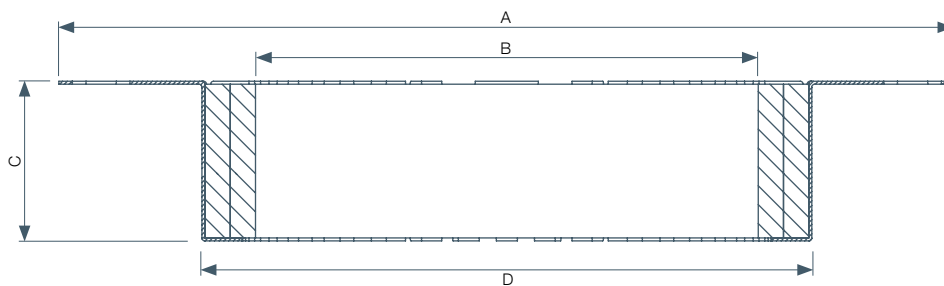


HEBEL POWERPANEL WITH FIRE RATED PLASTERBOARD PATCH FRONT DETAIL:



PIPE COLLAR DIMENSIONS

CODE	NOM. PIPE DIAMETER	OUTSIDE DIAMETER (A)	INSIDE DIAMETER (B)	COLLAR HEIGHT (C)	COLLAR DIAMETER (D)	# OF FIXING TABS
ALLFC25GALV	25mm	100mm	31mm	28mm	44mm	2
ALLFC40SS ALLFC40GALV	40mm	121mm	50mm	28mm	63mm	2
ALLFC50SS ALLFC50GALV	50mm	122mm	63mm	28mm	88mm	3
ALLFC65SS ALLFC65GALV	65mm	136mm	77mm	28mm	102mm	3
ALLFC80SS ALLFC80GALV	80mm	154mm	95mm	28mm	120mm	3
ALLFC100SS ALLFC100GALV	100mm	213mm	120mm	38mm	145mm	4
ALLFC150SS ALLFC150GALV	150mm	258mm	165mm	54mm	190mm	6
ALLFC200SS	200mm	319mm	203mm	102mm	242mm	6
ALLFC250SS	225mm	370mm	253mm	102mm	292mm	6



SOLUTION FOCUSED PASSIVE FIRE SYSTEMS



ALLPROOF
1-800-368-2727
FOR USE BY INSTALLER
SEE INSTRUCTIONS FOR PROPER USE
AND SAFETY INFORMATION
APPLICATOR: *John Smith*
DATE: *08/21/2014*

ALLPROOF
1-800-368-2727
FOR USE BY INSTALLER
SEE INSTRUCTIONS FOR PROPER USE
AND SAFETY INFORMATION
APPLICATOR: *John Smith*
DATE: *08/21/2014*





CAST-IN COLLARS

Allproof Cast In Fire Collars are designed to reduce the labour content of passive fire rating plumbing pipe penetrations on concrete floors that are poured on site. Simply fix the base to the formwork on site and the plumbing pipe penetration is located complete with passive fire protection. This eliminates the need for core drilling of penetrations after the floor is poured and retro fitting a fire collar or wrap. Once the floor is poured and formwork stripped, simply cut off the top of the Cast In Collar and install pipe.

SUITABLE FOR FITTING WITHIN:

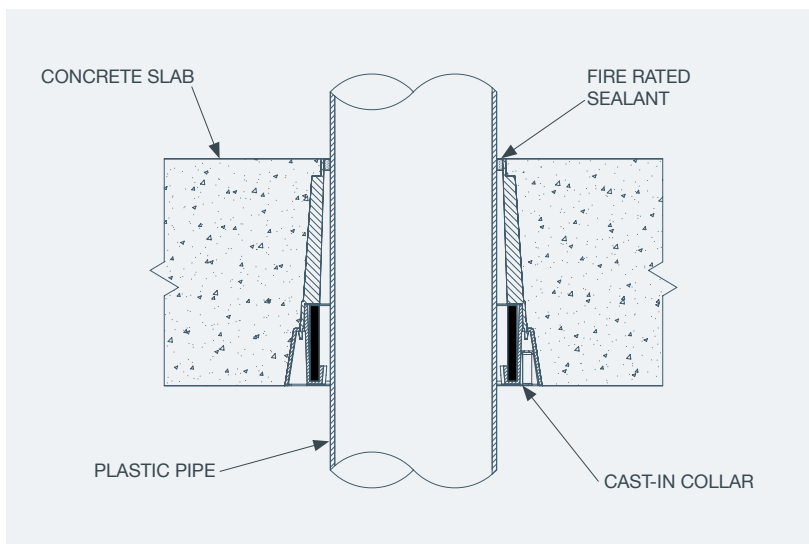
- Solid masonry floors

FEATURES:

- 250mm overall height
- Sturdy construction for casting in
- Multiple fixing positions
- Made from recycled PP



INSTALLATION DETAILS:



INSTALLATION INSTRUCTIONS:

1. Fix to formwork in correct location.
2. Pour concrete floor.
3. Remove formwork ensuring galvanised steel ring is exposed.
4. Cut plastic collar to desired height.
5. Install pipework.
6. Seal gap between pipe and collar on top side of floor with fire rated sealant.
7. Allproof recommends any thermal or acoustic lagging maintains a 50mm separation to the fire collar.

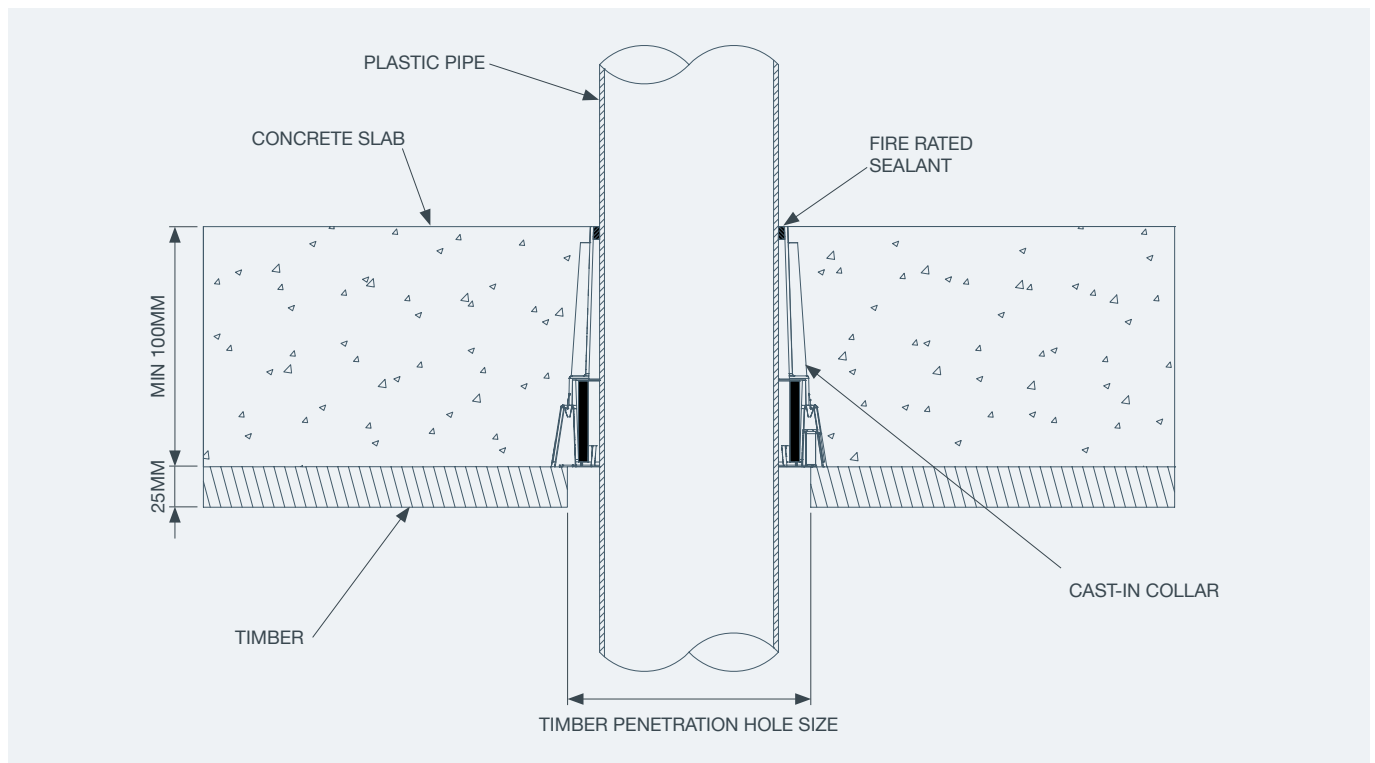
CONCRETE SLAB TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE					
40	120	2.0	CIFC50S	-/180/180	5573
50	120	2.2	CIFC50S	-/240/180	5573
65	120	2.7	CIFC80S	-/240/180	5573
80	120	2.9	CIFC80S	-/240/180	5573
100	120	3.0	CIFC100S	-/240/180	13411
150	120	4.5	CIFC150S	-/180/120	45052500.2
PVC PLASTIC PIPE - WITH SOCKET					
40	120	Socket	CIFC50S	-/180/180	145535
50	120	Socket	CIFC50S	-/180/180	145535
65	120	Socket	CIFC80S	-/180/180	145535
80	120	Socket	CIFC80S	-/180/180	145535
100	120	Socket	CIFC100S	-/240/180	13411
HDPE PLASTIC PIPE					
40	120	3.0	CIFC50S	-/240/180	5573
50	120	3.0	CIFC50S	-/120/120	11057
56	120	3.0	CIFC50S	-/120/120	11057
63	120	3.0	CIFC80S	-/120/120	11057
75	120	3.0	CIFC80S	-/120/120	11057
90	120	3.5	CIFC100S	-/120/120	11057
110	120	4.3	CIFC100S	-/240/120	200098.1
PP-R PLASTIC PIPE (SDR 7.4)					
40	120	5.5	CIFC50S	-/240/120	5573
110	120	15.1	CIFC100S	-/180/180	5573
RAUPIANO PP-MD					
40	120	1.8	CIFC50S	-/240/180	5573
50	120	1.8	CIFC50S	-/120/120	4466
75	120	1.9	CIFC80S	-/120/120	4466
110	120	2.7	CIFC100S	-/240/180	13411
D-BLUE PP-MD					
40	120	1.8	CIFC50S	-/120/120	4467
50	120	1.8	CIFC50S	-/240/180	5573
75	120	2.3	CIFC80S	-/120/120	4467
90	120	2.8	CIFC100S	-/120/120	4467
110	120	3.4	CIFC100S	-/240/180	13411

RIB & TIMBER INFILL TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	TIMBER DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	TIMBER PENETRATION HOLE SIZE (MM)	PRODUCT CODE	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE							
40	100	25	2.0	89	CIFC50S	-/90/90	145087-001
50	100	25	2.2	89	CIFC50S	-/120/120	145087-001
65	100	25	2.7	120	CIFC80S	-/120/120	145087-001
80	100	25	2.9	120	CIFC80S	-/120/120	145087-001
100	100	25	3.2	145	CIFC100S	-/90/90	145087-001
RAUPIANO PP-MD							
50	100	25	1.8	89	CIFC50S	-/120/120	145087-001

RIB & TIMBER INFILL INSTALLATION DETAILS:



LOW CAST-IN COLLARS



Allproof low cast-in collars are designed to suit 40-150mm PVC pipe penetrations. The low cast-in collar is installed in a similar manner to the standard cast-in collar. The main difference with the lowcast-in collar is that the pipe acts as the riser to the required height during the concrete pour. The pipe should be capped to prevent concrete entering the pipework during construction.

SUITABLE FOR FITTING WITHIN:

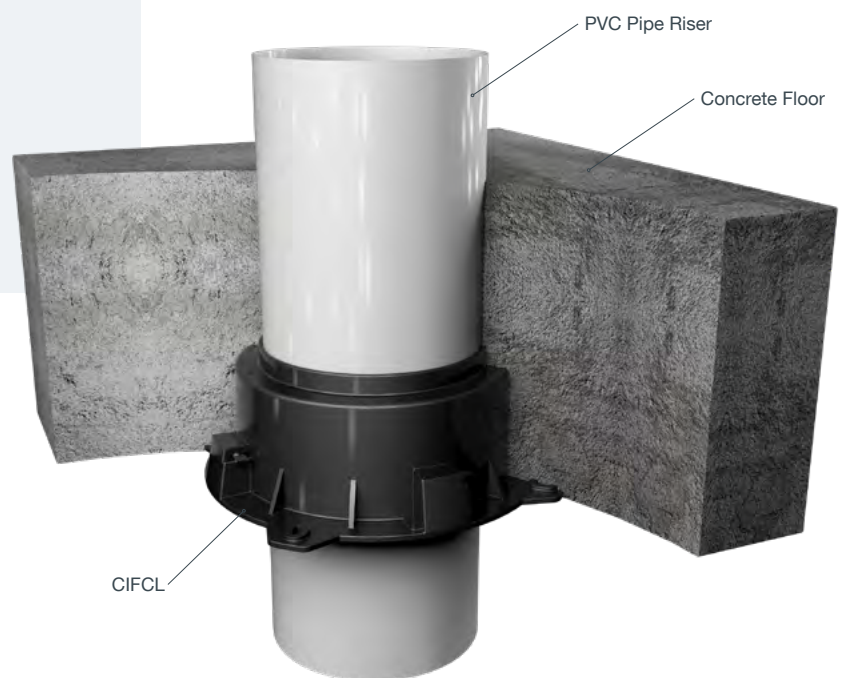
- Solid masonry floors

FEATURES:

- Sturdy construction for casting in
- Multiple fixing positions
- Made from recycled PP

INSTALLATION INSTRUCTIONS:

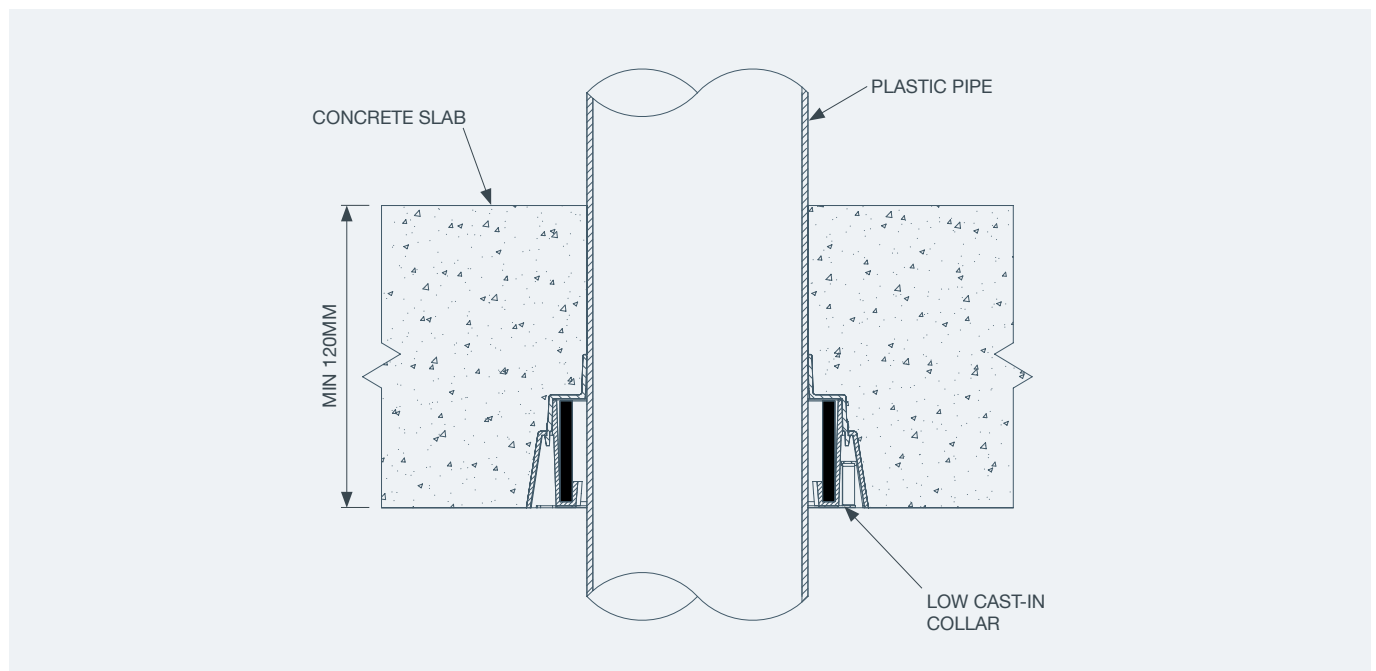
1. Fix collar to formwork in correct location.
2. Install pipe and cap.
3. Pour concrete floor.
4. Remove formwork ensuring galvanised steel ring is exposed.
5. Cut pipe to desired height.
6. Allproof recommends any thermal or acoustic lagging maintains a 50mm separation to the fire collar.



CONCRETE SLAB TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE					
40	120	2.0	CIFC40S L	-/240/240	5573
50	120	2.2	CIFC50S L	-/240/180	5573
65	120	2.7	CIFC65S L	-/240/180	5573
80	120	2.9	CIFC80S L	-/240/180	5573
100	120	3.2	CIFC100S L	-/240/180	5573
150	150	4.5	CIFC150S L	-/120/120	145430
PVC PLASTIC PIPE - WITH SOCKET					
40	120	Socket	CIFC40S L	-/120/120	200399
50	120	Socket	CIFC50S L	-/120/120	200399
65	120	Socket	CIFC65S L	-/180/180	200399
80	120	Socket	CIFC80S L	-/180/120	200399
100	150	Socket	CIFC100S L	-/180/180	145430
HDPE PLASTIC PIPE					
110	120	4.3	CIFC100S L	-/240/180	5573
RAUPIANO PP-MD					
110	120	2.7	CIFC100S L	-/240/180	5573
D-BLUE PP-MD					
110	120	3.4	CIFC100S L	-/240/180	5573

INSTALLATION DETAILS:



CAST-IN FIRE RATED FLOOR WASTE KITS



Allproof cast-in floor waste collar kits provide a fully fire rated solution for floor waste penetrations.

KIT INCLUDES:

- Cast In fire Collar (High or Low)
- Fire Rated Floor Waste System

INSTALLATION INSTRUCTIONS:

1. Fix to formwork in correct location.
2. Pour concrete floor.
3. Remove formwork.
4. Cut plastic collar to desired height.
5. Install pipework and fire rated floor waste kit.
6. Allproof recommends any thermal or acoustic lagging maintains a 50mm separation to the fire collar.



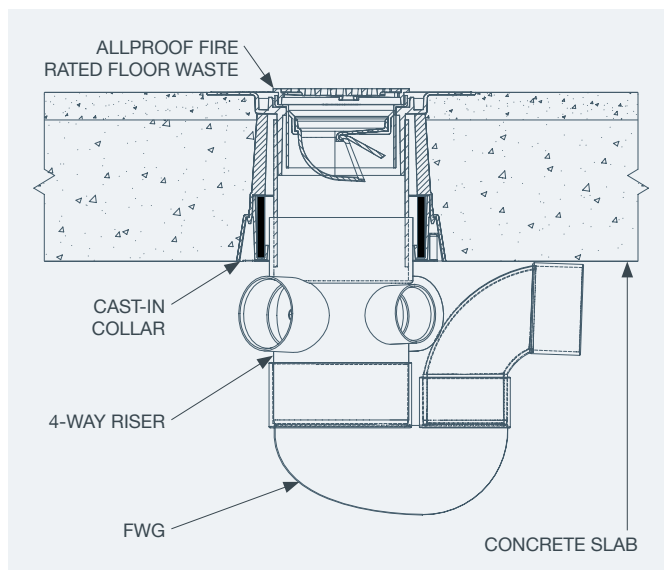
SUITABLE FOR FITTING WITHIN:

- Solid masonry floors

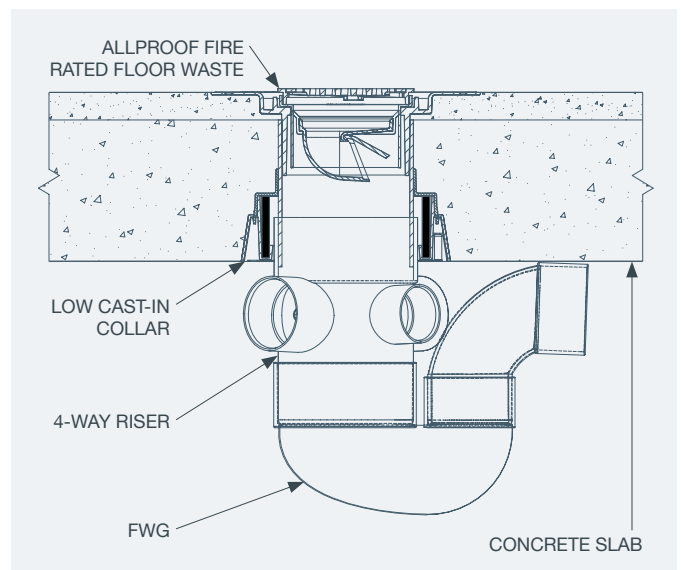
FEATURES:

- Sturdy construction for casting in
- Multiple fixing positions
- Unique fire rated floor waste system

CIFC FLOOR WASTE KIT INSTALLATION DETAILS:



CIFCL FLOOR WASTE KIT INSTALLATION DETAILS:



CONCRETE SLAB TEST RESULTS:

All testing on 120mm thick concrete floor slab unless otherwise noted.

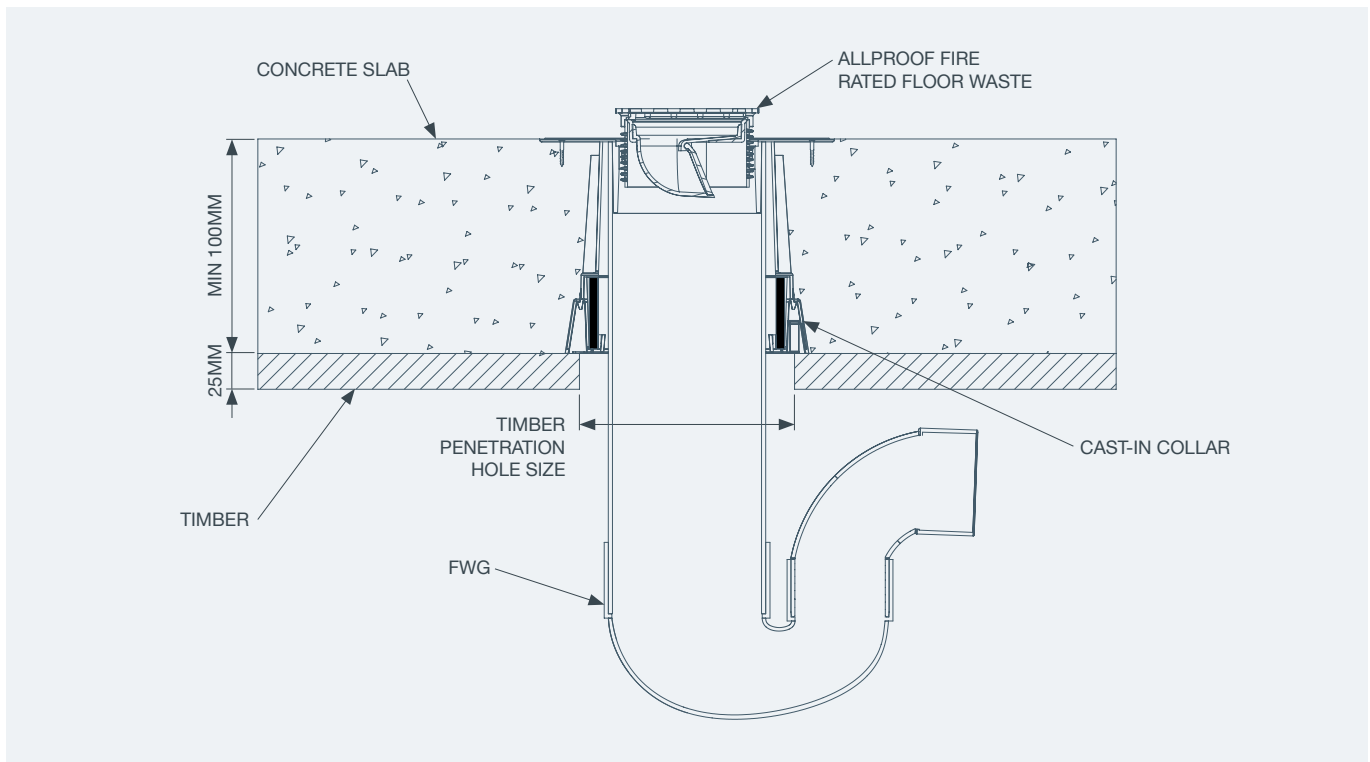
NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	FIRE PROTECTION PRODUCT	SOCKET*	FLOOR FRL	REPORT NUMBER
CIFC WITH PVC PIPE SOCKET CONNECTIONS					
80	80mm Socket	CIFC80S	50mm	-/240/240	5950
100	100mm Socket	CIFC100S	30mm	-/240/240	5950
CIFCL WITH PVC PLASTIC PIPE					
80	Pipe Only	CIFC80S L	-	-/180/120	146150
100	Pipe Only	CIFC100S L	-	-/180/180	5950
CIFCL WITH PVC PIPE SOCKET CONNECTIONS					
80	80mm Socket	CIFC80S L	45mm	-/120/90	5950
100	100mm Socket	CIFC100S L	33mm	-/180/180	5950

* Refers to the socket length within the fire collar

RIB & TIMBER INFILL FLOOR WASTE TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	TIMBER DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	TIMBER PENETRATION HOLE SIZE (MM)	FIRE PROTECTION PRODUCT	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE							
100	100	25	3.2	145	CIFC100S	-/120/120	145087-001

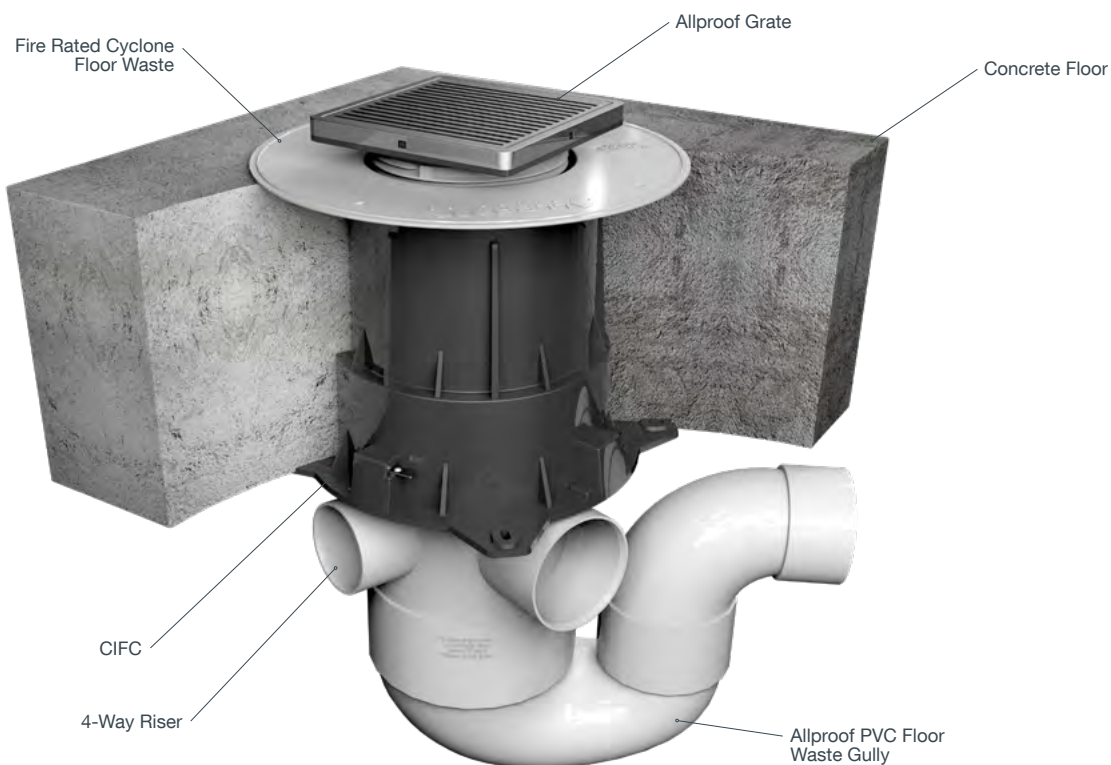
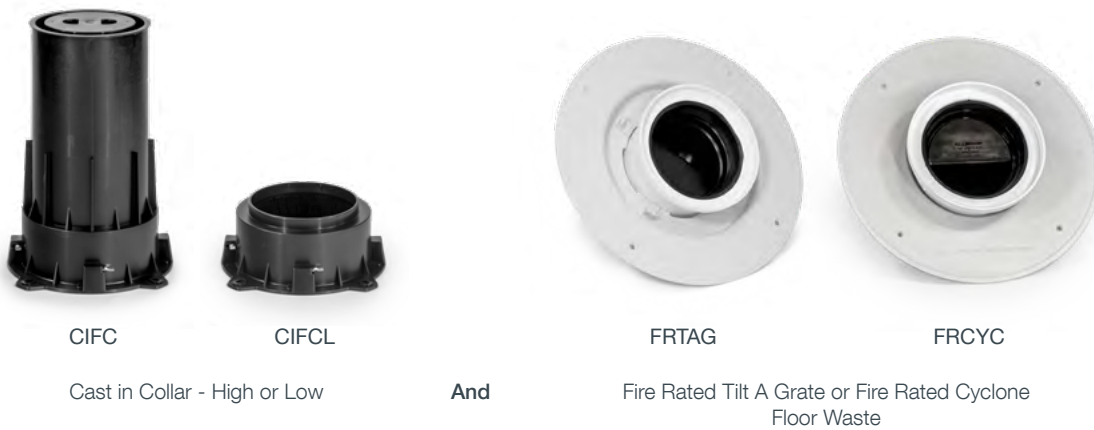
RIB & TIMBER INFILL INSTALLATION DETAILS:



CAST-IN KIT CODES:

CODE	DESCRIPTION
80MM	
CIFC80L FRTAG	80mm Low Cast-In Fire Collar and Fire Rated Tilt a Grate Floor Waste System
CIFC80L FRCYC	80mm Low Cast-In Fire Collar and Fire Rated Cyclone Floor Waste System
CIFC80 FRTAG	80mm High Cast-In Fire Collar and Fire Rated Tilt a Grate Floor Waste System
CIFC80 FRCYC	80mm High Cast-In Fire Collar and Fire Rated Cyclone Floor Waste System
100MM	
CIFC100L FRTAG	100mm Low Cast-In Fire Collar and Fire Rated Tilt a Grate Floor Waste System
CIFC100L FRCYC	100mm Low Cast-In Fire Collar and Fire Rated Cyclone Floor Waste System
CIFC100 FRTAG	100mm High Cast-In Fire Collar and Fire Rated Tilt a Grate Floor Waste System
CIFC100 FRCYC	100mm High Cast-In Fire Collar and Fire Rated Cyclone Floor Waste System

KIT INCLUDES:



DROP IN FIRE COLLARS



Allproof Drop In Fire Collars (DIFC'S) provide a simple and effective passive fire rating option for thin concrete floors or trapezoidal steel tray concrete floors. These composite floors feature profile changes on the underside of the slab and make it difficult to fire rate with a conventional fire collar fixed to the underside of a floor slab.

INSTALLATION INSTRUCTIONS:

1. Core drill hole to specified diameter to suit pipe size.
2. Install drop in fire collar fixing with two metal pin anchors. (Floor waste installs require the tabs to be recessed into the slab).
3. Ensure collar on underside of slab is exposed no greater than 80mm and recessed in slab no more than 5mm.
4. Insert pipework through collar.
5. Seal gaps between concrete/collar and collar/pipe with a minimum 5mm depth of Allproof MAS310 or Bostik Fireban One fire rated sealant.
6. Allproof recommends any thermal or acoustic lagging maintains a 50mm separation to the fire collar.

SUITABLE FOR FITTING WITHIN:

- Thin concrete floors (minimum 70mm)
- Trapezoidal steel tray concrete floors (composite floors)
- Cross laminated timber floors

FEATURES:

- Installed and fixed from top side of slab
- Can be retrofit around pipe
- Made from Galvanised steel



COMPOSITE FLOOR AND FLAT SLAB ASSESSMENTS:

Allproof DIFCs have been tested and assessed to provide a passive fire protection system for composite floor and flat slab penetrations on a range of plumbing services. The assessment found that Allproof DIFCs FRL is equal to the FRL of composite floor with tray profiles on the underside of the slab ranging from 0mm to 210mm.

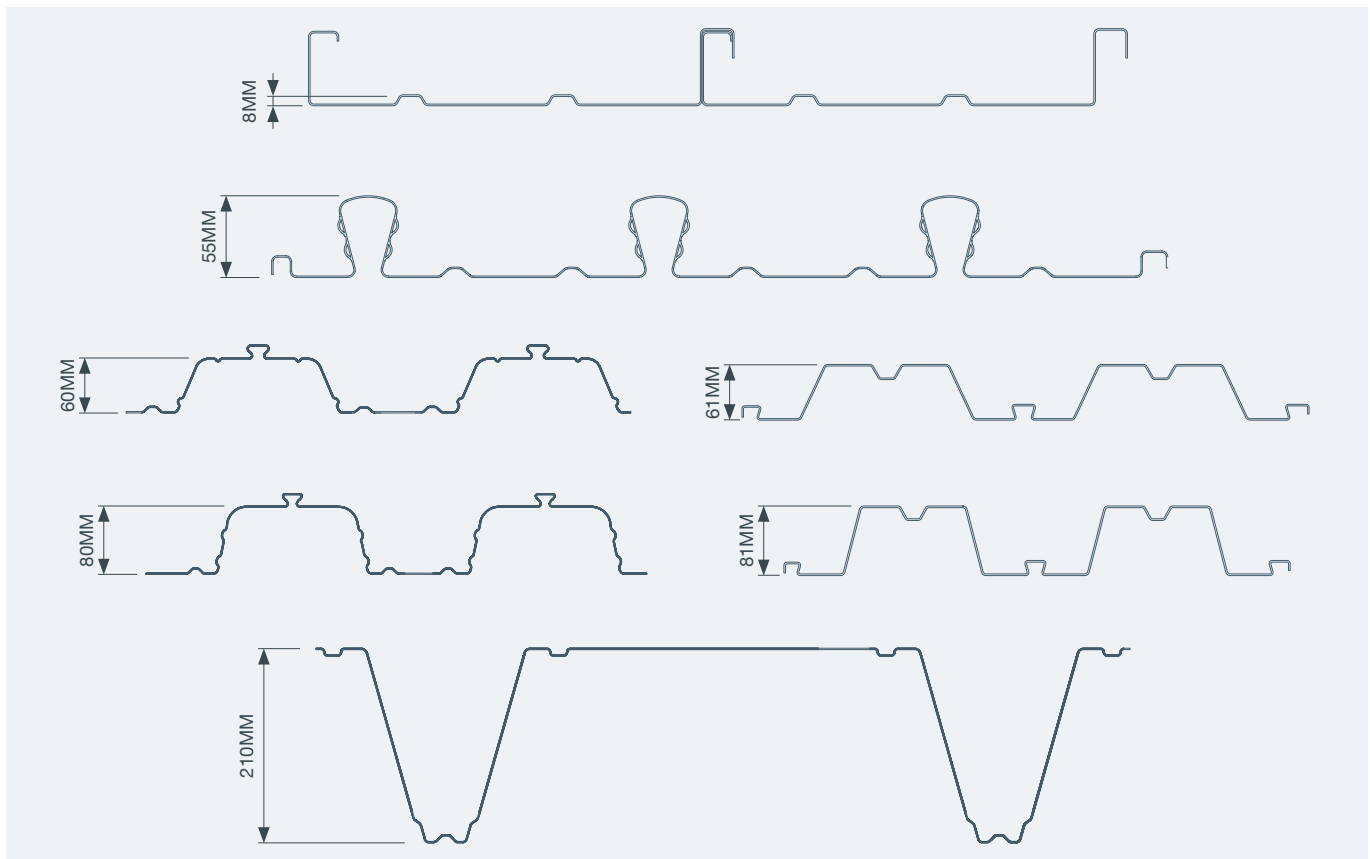
Tray and concrete slab FRL's are variable by adjusting the minimum depth at the shallowest section of the profile, refer to tray suppliers documentation for further information. Allproof DIFC's have been assessed to provide an FRL for a minimum depth of 70mm and minimum depth of 100mm at the shallowest section of the profile.

Reference assessment numbers 12424-03, 13920-01 and 12424-002 for stack and floor waste results.

PIPE MATERIAL	PIPE SIZES (MM)	DIFC PRODUCT	MIN DEPTH (MM)	FRL
PVC Stack	40, 50, 65, 80, 100 & 150	40, 50, 65, 80, 100 & 150	70	-/60/60
			100	-/120/120
PVC Stack (Socket Connection)	40, 50, 65, 80 & 100	40, 50, 65, 80 & 100	70	-/60/60
			100	-/120/120
PVC FWG	80 & 100	80 & 100	70	-/60/60
			100	-/120/120
HDPE Stack	40, 50, 80, 100 & 150	40, 50, 80, 100 & 150	70	-/60/60
			100	-/120/120
HDPE FWG	100	100	70	-/60/60
			100	-/120/120
D-Blue	50, 75, 100 & 150	50, 80, 100 & 150	70	-/60/60
			100	-/120/120
PP-R SDR9	32, 40, 110 & 125	32, 40, 100 & 125	70	-/60/60
			100	-/120/120
PP-R SDR11	32 & 40	32 & 40	70	-/60/60
			100	-/120/120

Socket Connection: Pipe socket connection located within aperture of DIFC.
 Penetration Hole Sizes: See "DIFC COLLAR DIMENSIONS" on page 48.

ASSESSED COMPOSITE FLOOR TRAY PROFILES



COMPOSITE FLOOR TEST RESULTS:

Tests that fall outside the assessments for Allproof DIFC's.

NOMINAL PIPE SIZE (MM)	MIN SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
OTHER PLASTIC PIPE						
20 PPR SDR 7.4	70	2.8	DIFC32	57	-/120/60	146205
25 PPR SDR 7.4	70	3.5	DIFC32	57	-/120/60	146205
16 PEX	70	2.2	DIFC32	57	-/120/120	143281-002
20 PEX	70	2.4	DIFC32	57	-/120/60	146205
25 PEX	70	3.5	DIFC32	57	-/120/60	143281-002
15 PB	70	1.6	DIFC32	57	-/120/90	143281-002
20 PB	70	2.5	DIFC32	57	-/120/60	146205
28 PB	70	3.5	DIFC32	57	-/120/120	143281-002
25 PEX/AL/PE	70	2.5	DIFC32	57	-/120/60	143281-002

Tested on a composite concrete floor with 70mm minimum thickness and 130mm maximum thickness. Profile change of 60mm.

COMPOSITE FLOOR WASTE TEST RESULTS:

Floor waste tests that fall outside the assessments for Allproof DIFC's.

NOMINAL PIPE SIZE (MM)	MIN SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE						
50	70		DIFC50	86	-/120/60	146205

Tested on a composite concrete floor with 70mm minimum thickness and 130mm maximum thickness. Profile change of 60mm.

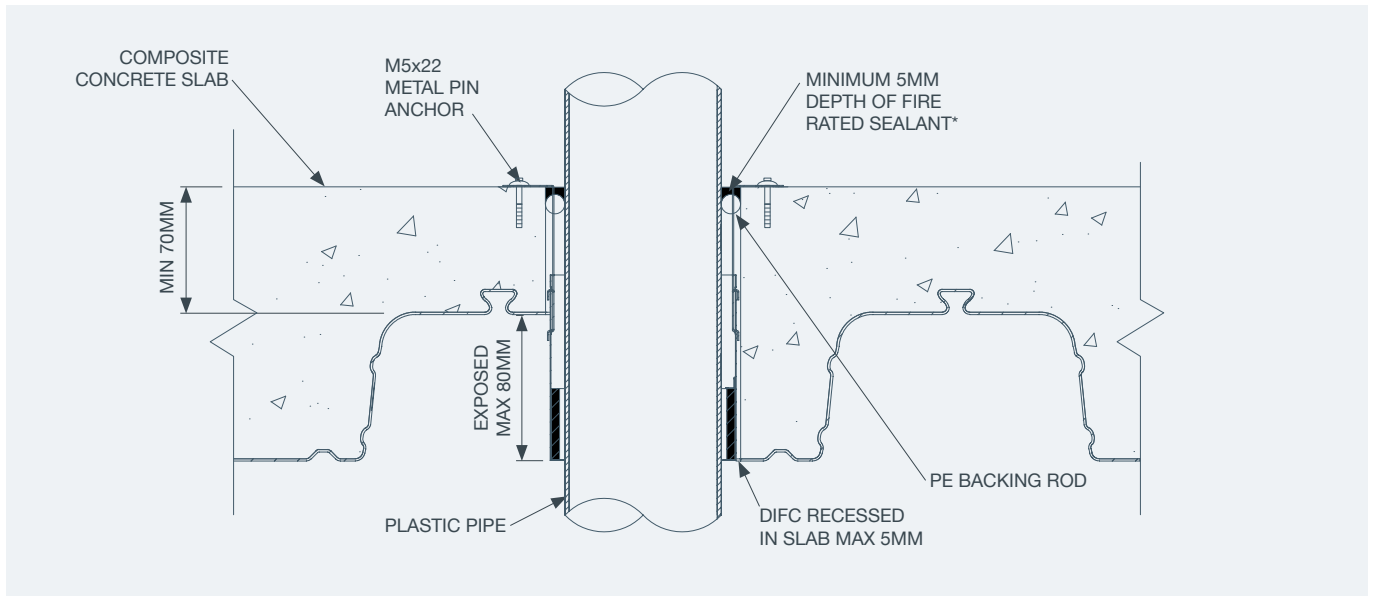
FLAT SLAB TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	FIRE PROTECTION PRODUCT	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
HDPE PIPE						
90	150	3.5	DIFC100	142	-180/120	149096
125	150	4.9	DIFC125	162	-/180/180	149096

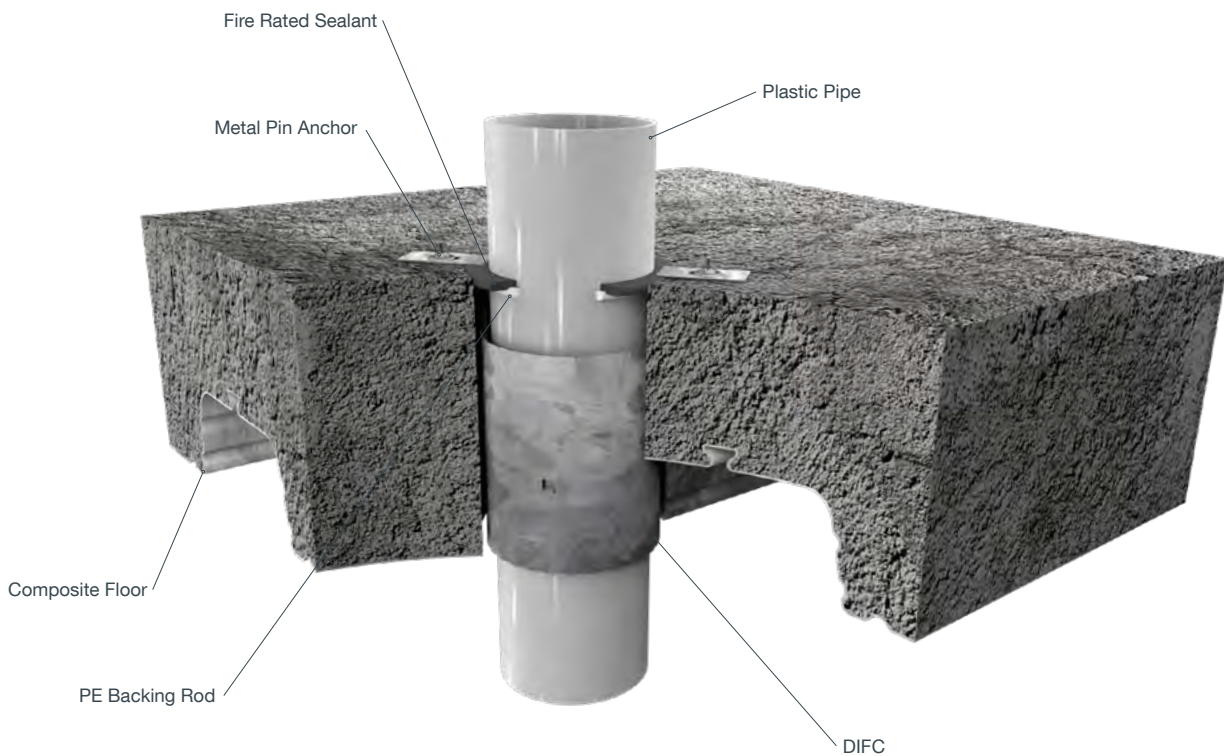
FLOOR WASTE FLAT SLAB TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	FIRE PROTECTION PRODUCT	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE						
80	70	2.9	DIFC80	112	-/120/120	10471
100	70	3.2	DIFC100	142	-/120/90	10471

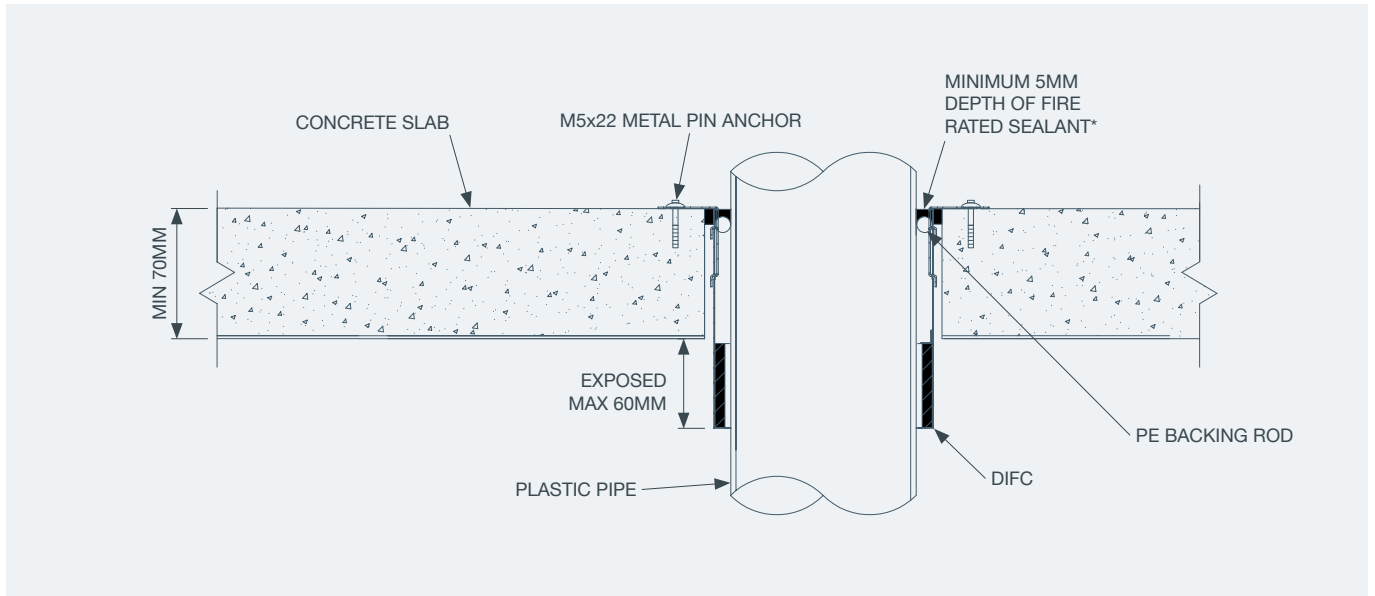
COMPOSITE FLOOR INSTALLATION DETAILS:



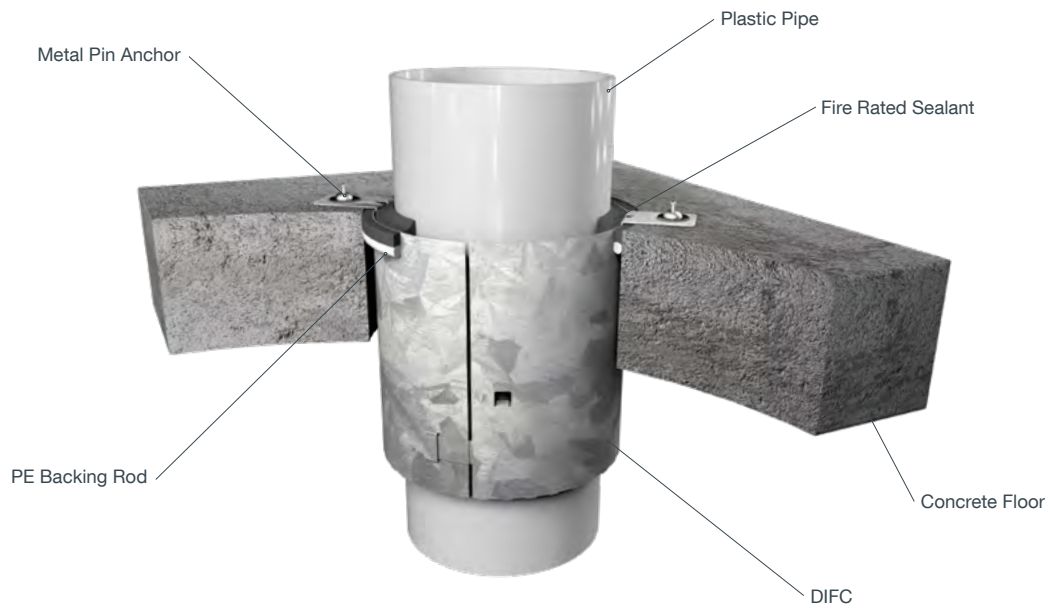
* 15mm minimum depth of fire rated sealant for the DIFC150.



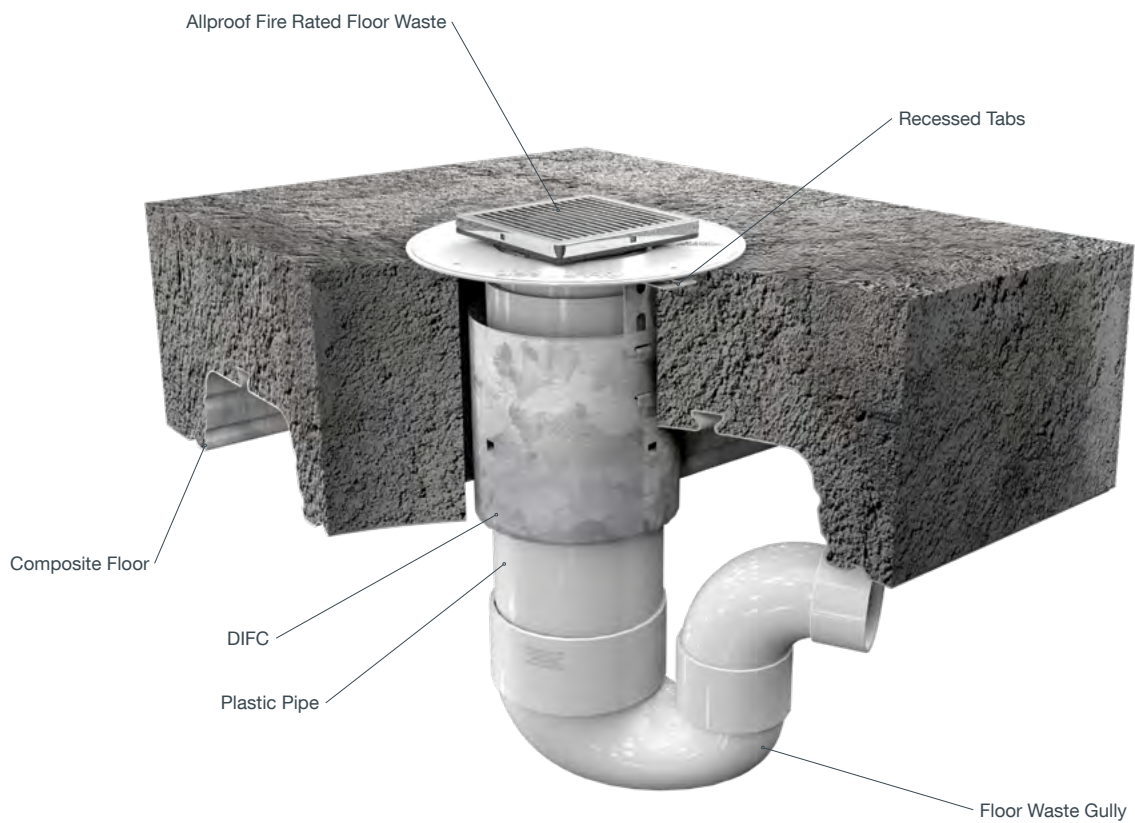
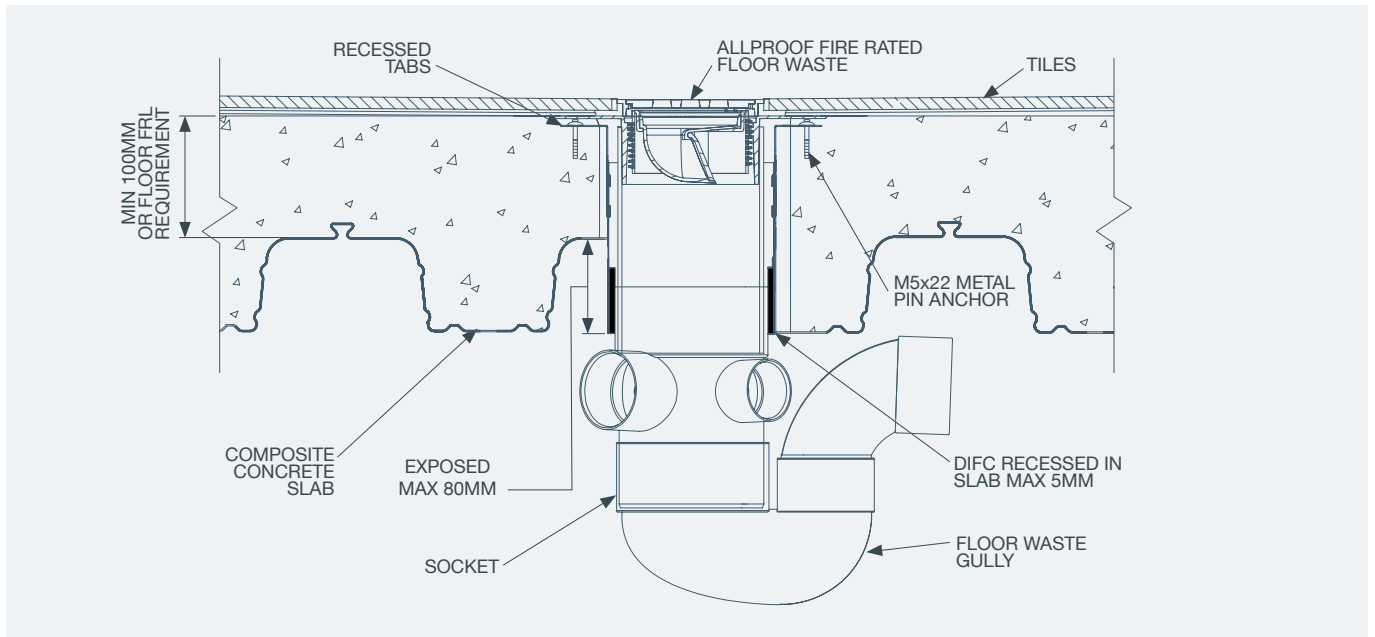
FLAT SLAB INSTALLATION DETAILS:



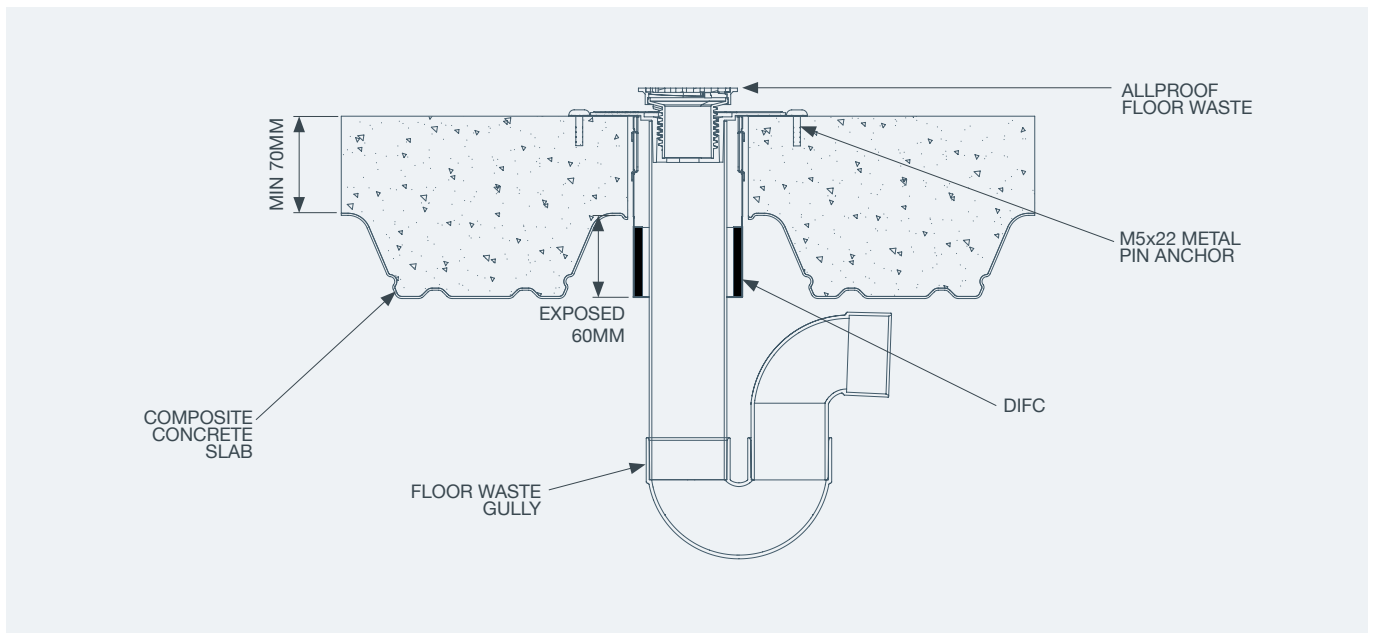
* 15mm minimum depth of fire rated sealant for the DIFC150.



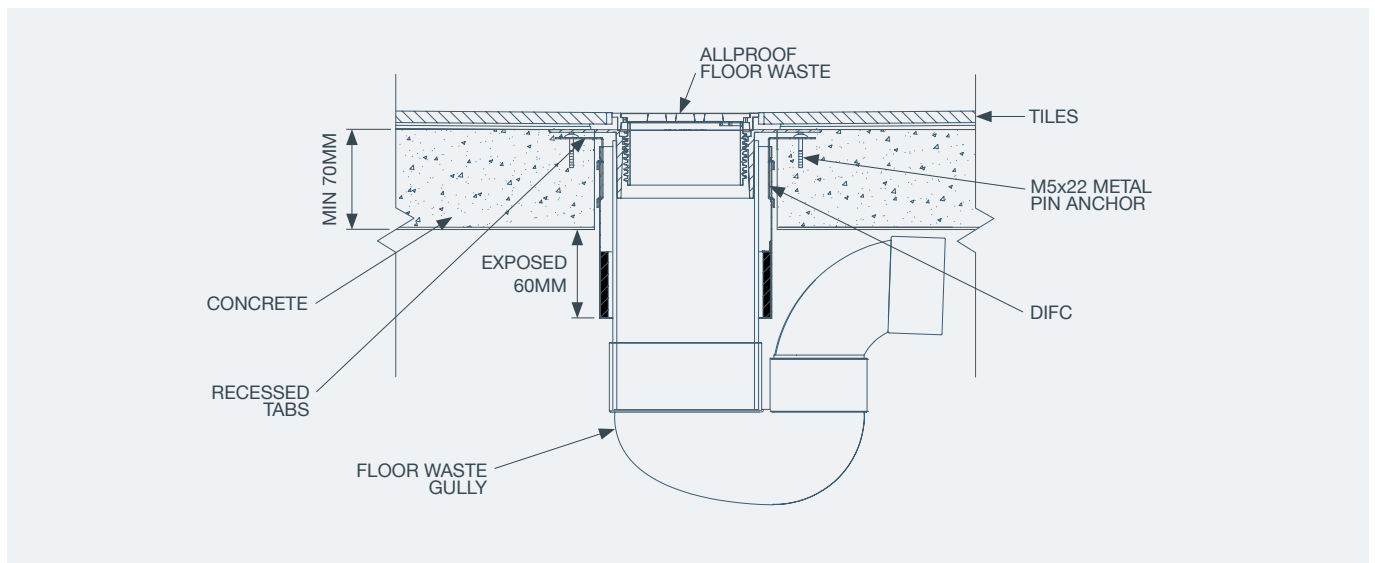
COMPOSITE FLOOR WASTE INSTALLATION DETAILS:



50MM COMPOSITE FLOOR WASTE INSTALLATION DETAILS:



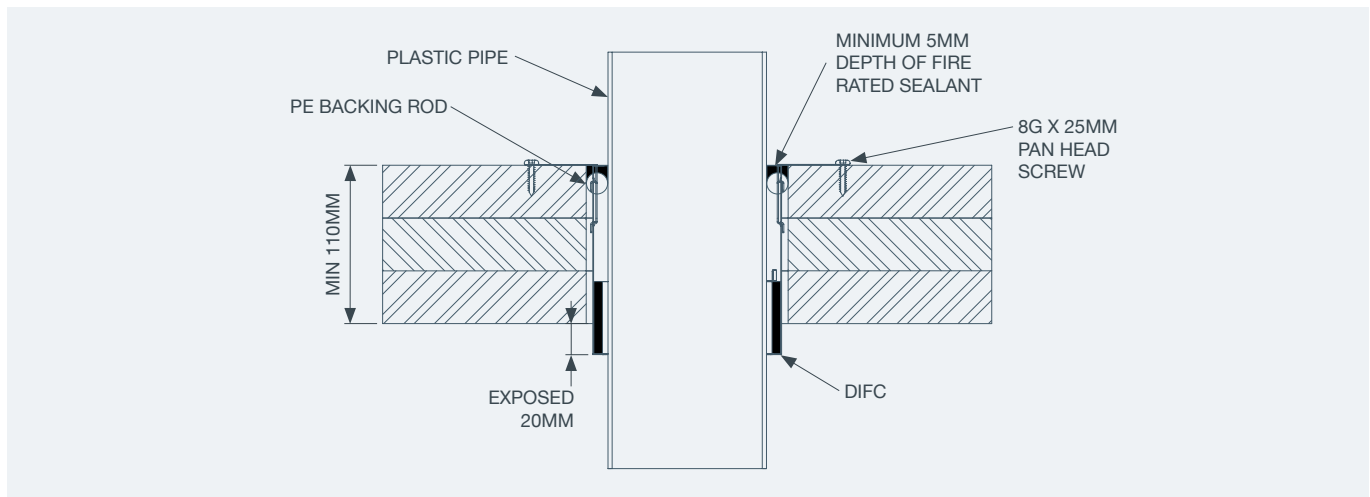
FLAT SLAB FLOOR WASTE INSTALLATION DETAILS:



CROSS LAMINATED TIMBER (CLT) TEST RESULTS:

NOMINAL PIPE SIZE (MM)	TIMBER DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE						
25	110	2.1	DIFC32	57	-/60/60	146208
40	110	2.0	DIFC40	72	-/60/60	146208
50	110	2.2	DIFC50	88	-/60/60	146208
65	110	2.7	DIFC65	102	-/60/60	148131
80	110	2.9	DIFC80	112	-/60/60	148131
100	110	3.2	DIFC100	142	-/60/60	146208
PEX PIPE						
15	110	2.1	DIFC32	57	-/60/60	146208
20	110	2.4	DIFC32	57	-/60/60	146208
25	110	2.9	DIFC32	57	-/60/60	146208
32	110	3.8	DIFC40	72	-/60/60	148131

CROSS LAMINATED TIMBER STACK INSTALLATION DETAILS:

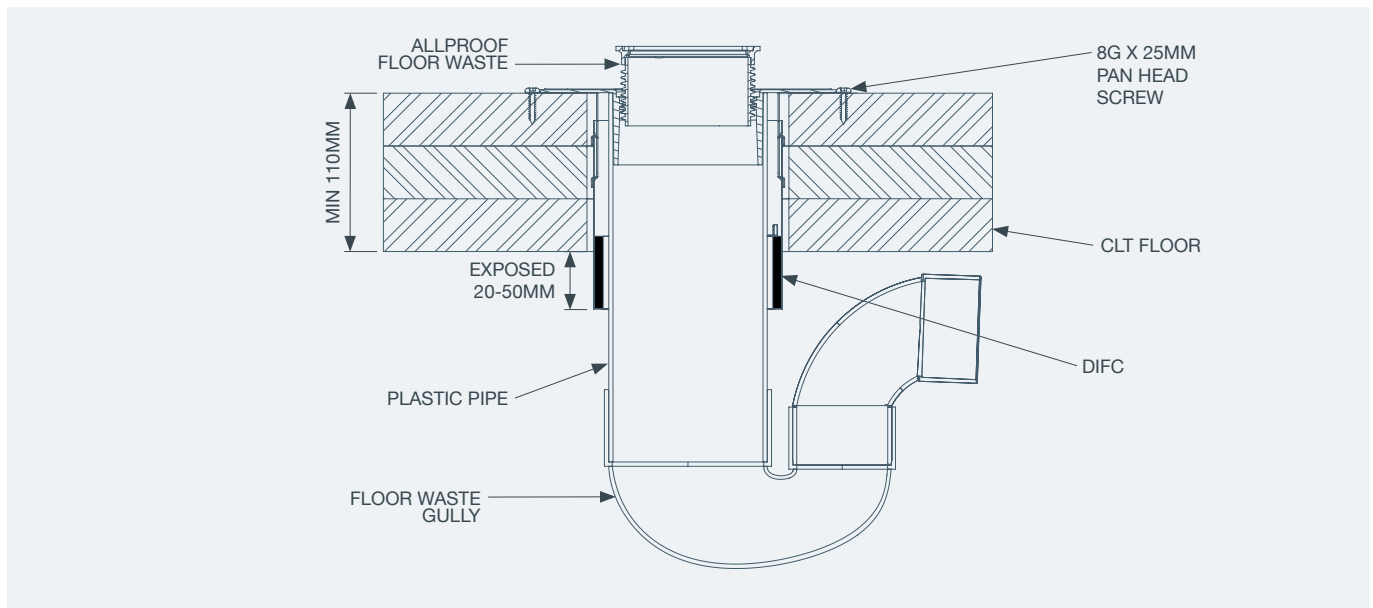


FLOOR WASTE CROSS LAMINATED TIMBER (CLT) TEST RESULTS:

NOMINAL PIPE SIZE (MM)	TIMBER DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	SOCKET	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE							
50	110	2.2	DIFC50		88	-/60/60	146208
80*	110	2.9	DIFC80		112	-/60/60	148131
100*	110	3.2	DIFC100		142	-/60/-	148131

*80mm and 100mm DIFC require 50mm exposure on underside of CLT floor.

CROSS LAMINATED TIMBER STACK INSTALLATION DETAILS:



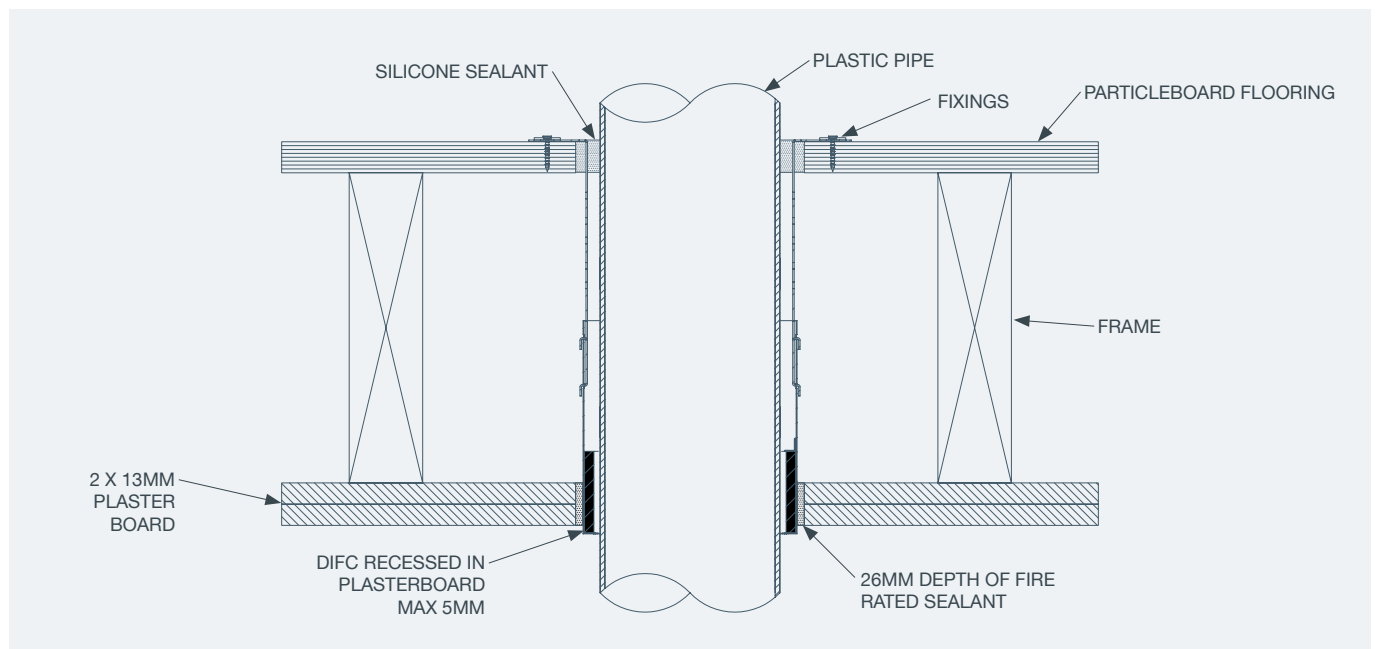
2 X 13MM PLASTERBOARD CEILING TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL	REPORT NUMBER
PVC PLASTIC PIPE					
40	2	DIFC40	78	-/90/90	190268.1
50	2.5	DIFC50	88	-/90/90	190268.1
100	3.5	DIFC100	140	-/90/90	190268.1

Fixing: 6G x 32mm Plasterboard screws

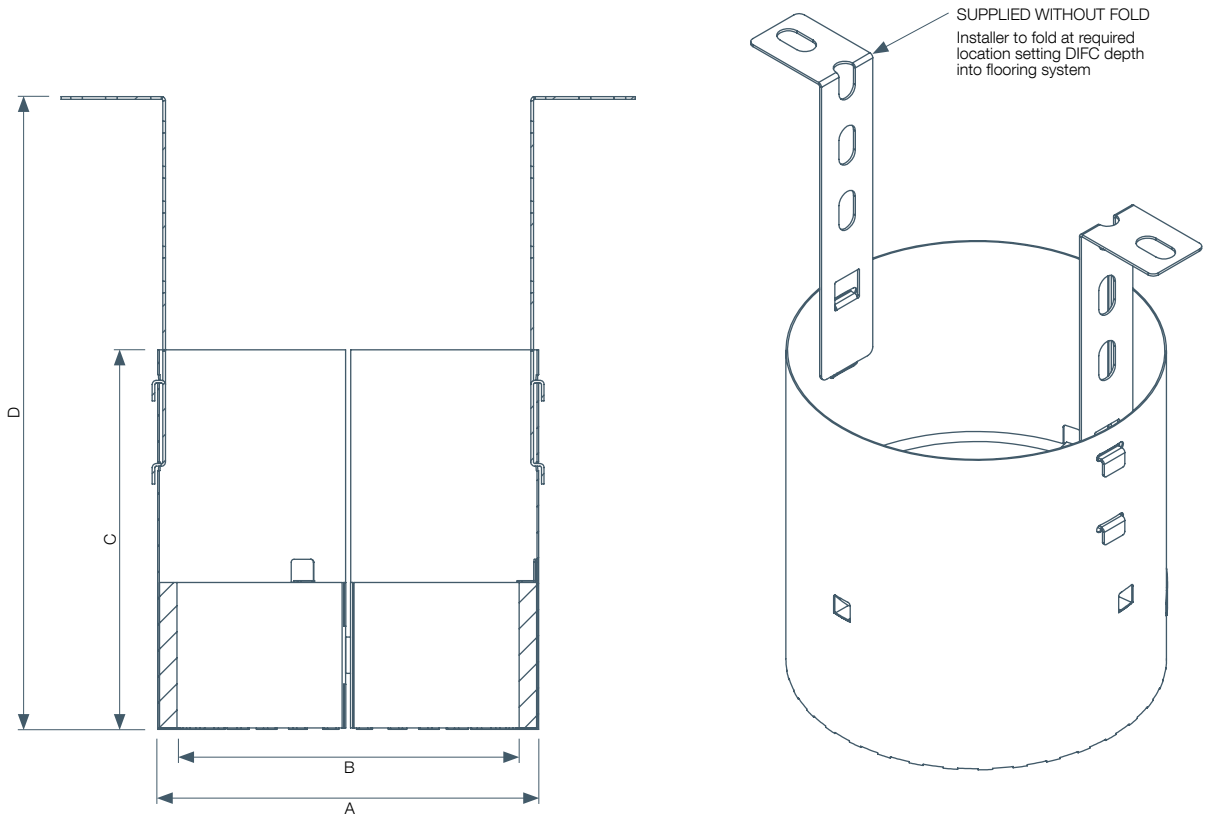
Tested using a 190mm deep timber framing with two layers of 13mm fire rated plasterboard on the exposed side of the frame and 19mm particleboard flooring on the unexposed side of the frame. A total floor-ceiling thickness of 235mm. DIFCs fixed using 6Gx32mm plasterboard screws with M6x16 washers into the particleboard flooring on the unexposed side - not fixed into framing or studs. DIFCs extended 5mm from face of the ceiling on the exposed side. Fire rated sealant is applied in the space between the DIFC and plasterboard at a depth of 26mm on the exposed face and silicone sealant between the pipe and particleboard flooring on the unexposed face.

PLASTERBOARD CEILING INSTALLATION DETAILS:

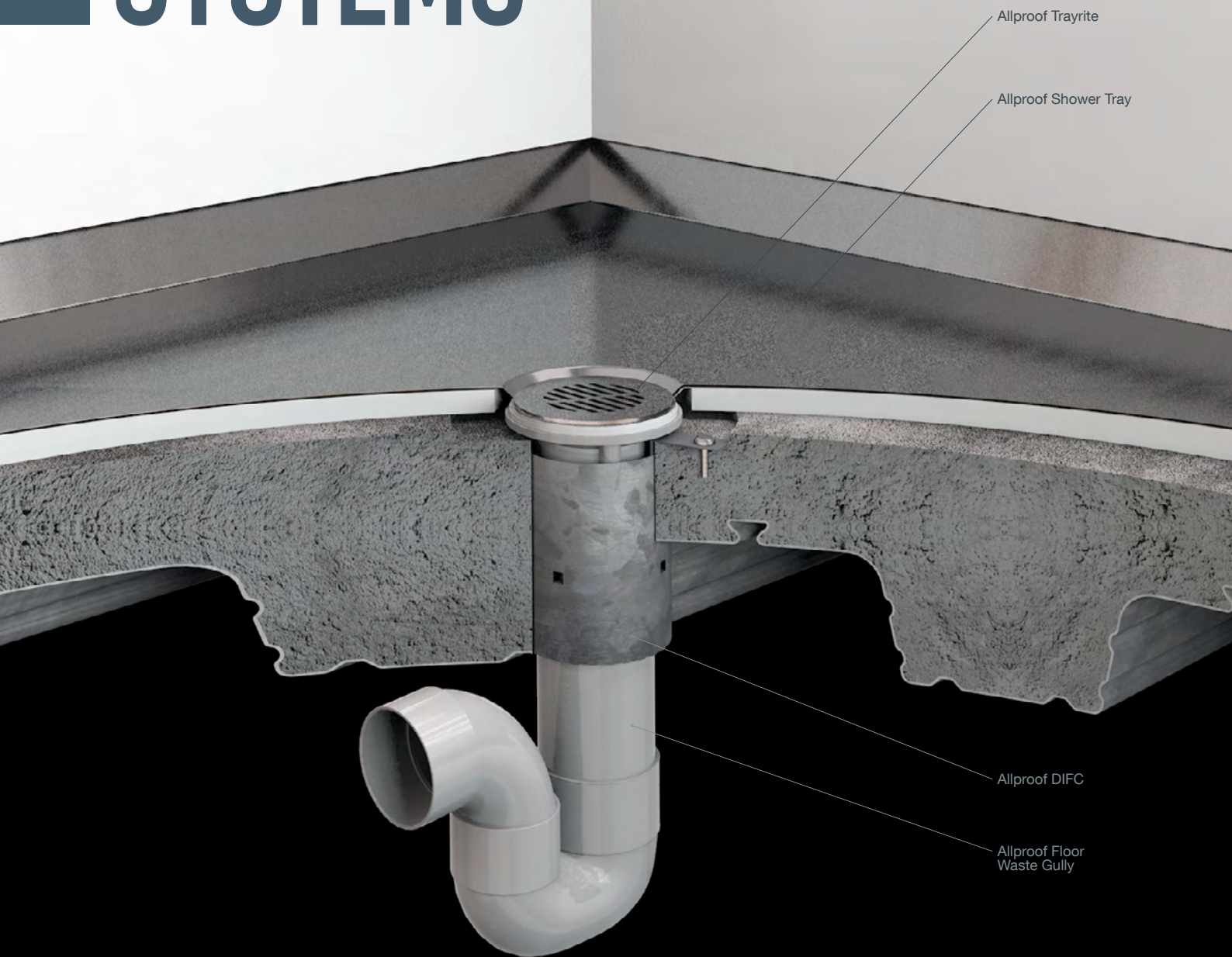


DIFC COLLAR DIMENSIONS:

CODE	CONCRETE PENETRATION HOLE SIZE (MM)	OUTER DIAMETER (A)	INNER DIAMETER (B)	CYLINDER LENGTH (C)	MIN - MAX DEPTH (D)
DIFC32 X210	57	48	35	130	130 - 210
DIFC40 X210	72	66	53	130	130 - 210
DIFC50 X210	86	79	66	130	130 - 210
DIFC65 X210	102	92	78	130	130 - 210
DIFC80 X210	112	106	92	130	130 - 210
DIFC100 X210	142	131	118	130	130 - 210
DIFC125 X210	162	154	133	130	130 - 210
DIFC150 X210	202	187	161	130	130 - 210



INTEGRATED DRAINAGE AND PASSIVE FIRE SYSTEMS



Allproof Trayrite

Allproof Shower Tray

Allproof DIFC

Allproof Floor
Waste Gully

WALLTHROUGH



The Wallthrough is ideal for apartment and hotel room entry points where a multi service penetration point is needed through a fire rated plasterboard wall.

The Allproof Industries Wallthrough can be installed before the services or retrofit into the fire rated plasterboard substrate allowing for adaptability in the Project. The Wallthrough is made from stainless steel to be a solid and robust passive fire penetration solution.

The Wallthrough consists of a stainless sleeve internally lined with intumescent which reacts to heat closing the penetration. Services are run through the sleeve with an NBR block seal installed around the services on both sides. Fire rated sealant is then applied over the NBR block seal completing a smoke seal. The installation is then finalised with a 300mm wide length of FIREFLY Penowrap around the services overlapping the Wallthrough and secured with foil tape and stainless steel cable ties. See installation instructions for full details.

SUITABLE FOR FITTING TO:

- Plasterboard Walls

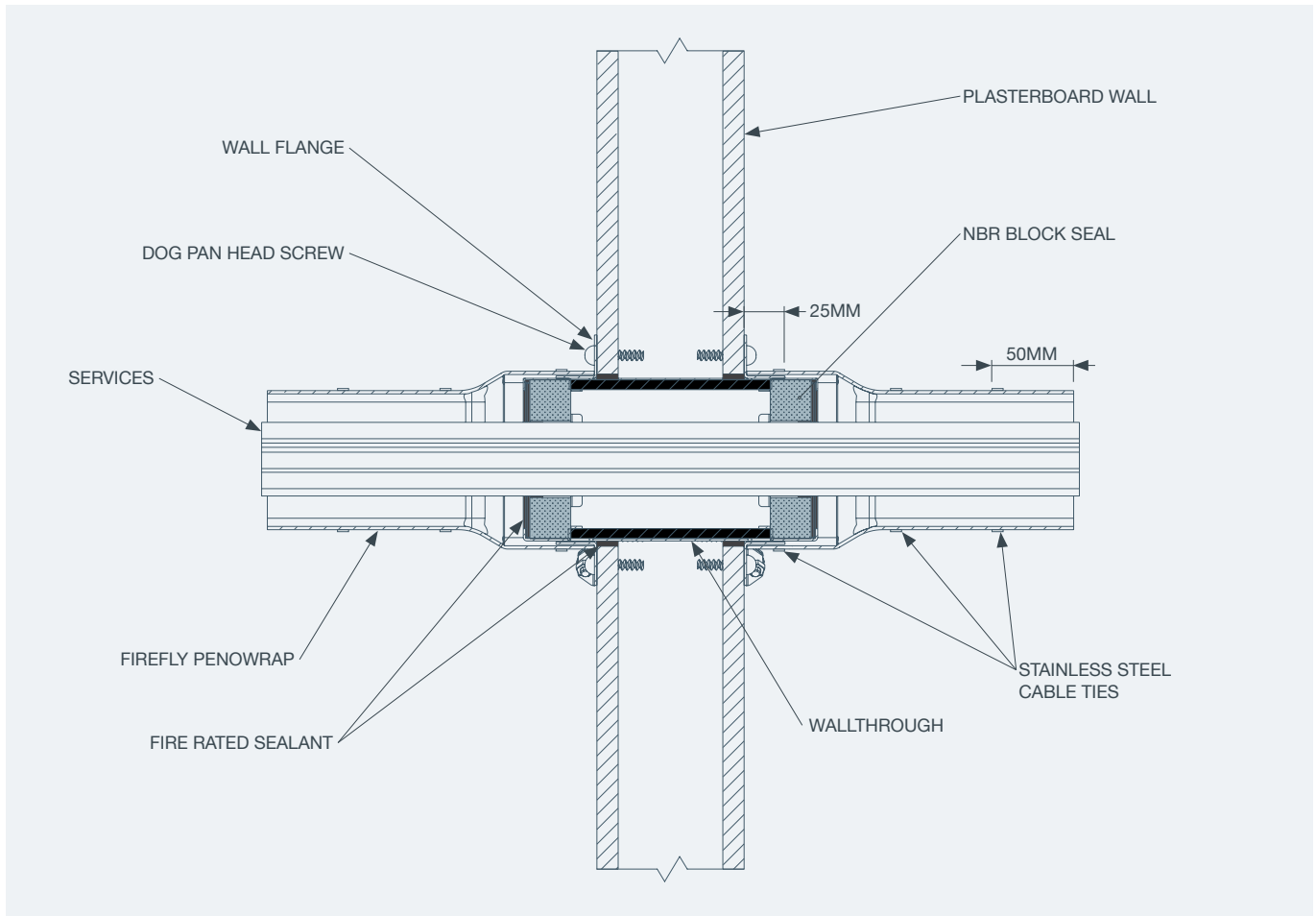
FEATURES:

- Totally unaffected by water
- No need to frame out penetration
- Multi-service solution
- Low profile flange
- Retro or pre-service install fitting

INSTALLATION INSTRUCTIONS:

1. Cut penetration through plasterboard wall 305mm x 105mm.
2. Install Wallthrough sleeve.
3. Seal aperture between Wallthrough sleeve and plasterboard wall with fire rated sealant to depth of plasterboard and maximum width of 5mm on both sides of wall.
4. Install friction fit flange around sleeve, tension sleeve using flange fixing screws and secure to plasterboard wall using Dog Pan Head Screw anchors.
5. Remove NBR block seal and install services.
6. Refit block seal around the individual service shapes.
7. Apply sealant between block seal and Wallthrough.
8. Apply sealant between block seal and services
9. Install 300mm wide FIREFLY Penowrap around wallthrough box perimeter and services, FIREFLY Penowrap should overlap by 100mm and taped at join using foil backed tape.
10. Secure in position using stainless steel cable ties, 1st cable tie to be positioned 25mm from wall face around Wallthrough. 3rd cable to be 50mm from end of FIREFLY Penowrap with second cable secured at an equal distance between the 1st and the 3rd

PLASTERBOARD WALL INSTALLATION DETAILS:



PLASTERBOARD WALL TEST RESULTS:

DESCRIPTION	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	WALL FRL*	REPORT NUMBER
MIXED SERVICES				
1 x 20mm PEX Pipe				
1 x 20mm Lagged PEX Pipe (19mm Wall x 22mm NBR Lagging)				
1 x 40mm Galvanised Steel Sprinkler Pipe				
4 x Fire Alarm Cables				
1 x 16mm 3 Core Mains Cable		305x105	-/60/45	148954
4 x Fire Alarm Cables				
2 x CAT6 Cables				
2 x Fire Optic Cables				

Fixing: Collars tested using 6.5mm x 32mm Dog Pan Head Screw

Tested using a 64mm wide steel stud with a single layer of 13mm fire rated plasterboard on each side of the frame. A total wall thickness of 90mm.

Wallthrough fixed using Dog Pan Head screw anchors directly into the plasterboard - not fixed into framing or studs in wall. Fire rated sealant is applied in the space between the wallthrough and plasterboard as well as between the service and NBR block seal on both the exposed and unexposed face.

FIRE PLATES



The Fire plate systems has been created to cater to a Cast-in Rocket fitting that creates a void on the underside of a flat slab substrate in a 50mm or 100mm FWG location. The 2x piece Fire Plate covers the void created by the Rocket fitting in the flat slab. It is fixed in place to secure the plates to the slab with an ALLFC placed over the Fire Plate and fixed through the cut out tab positions. The shape of the Fire Plate allows flexibility for changing the position when other services are connected or are around the FWG location.

SUITABLE FOR FITTING TO:

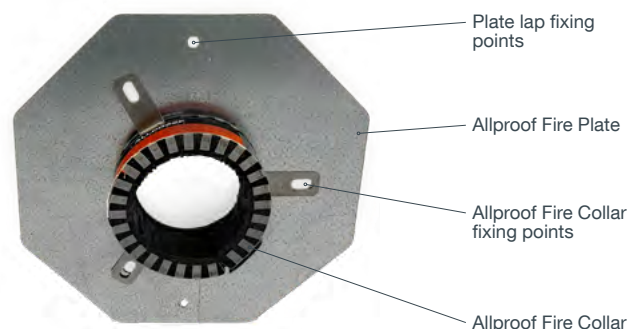
- Concrete Floors

FEATURES:

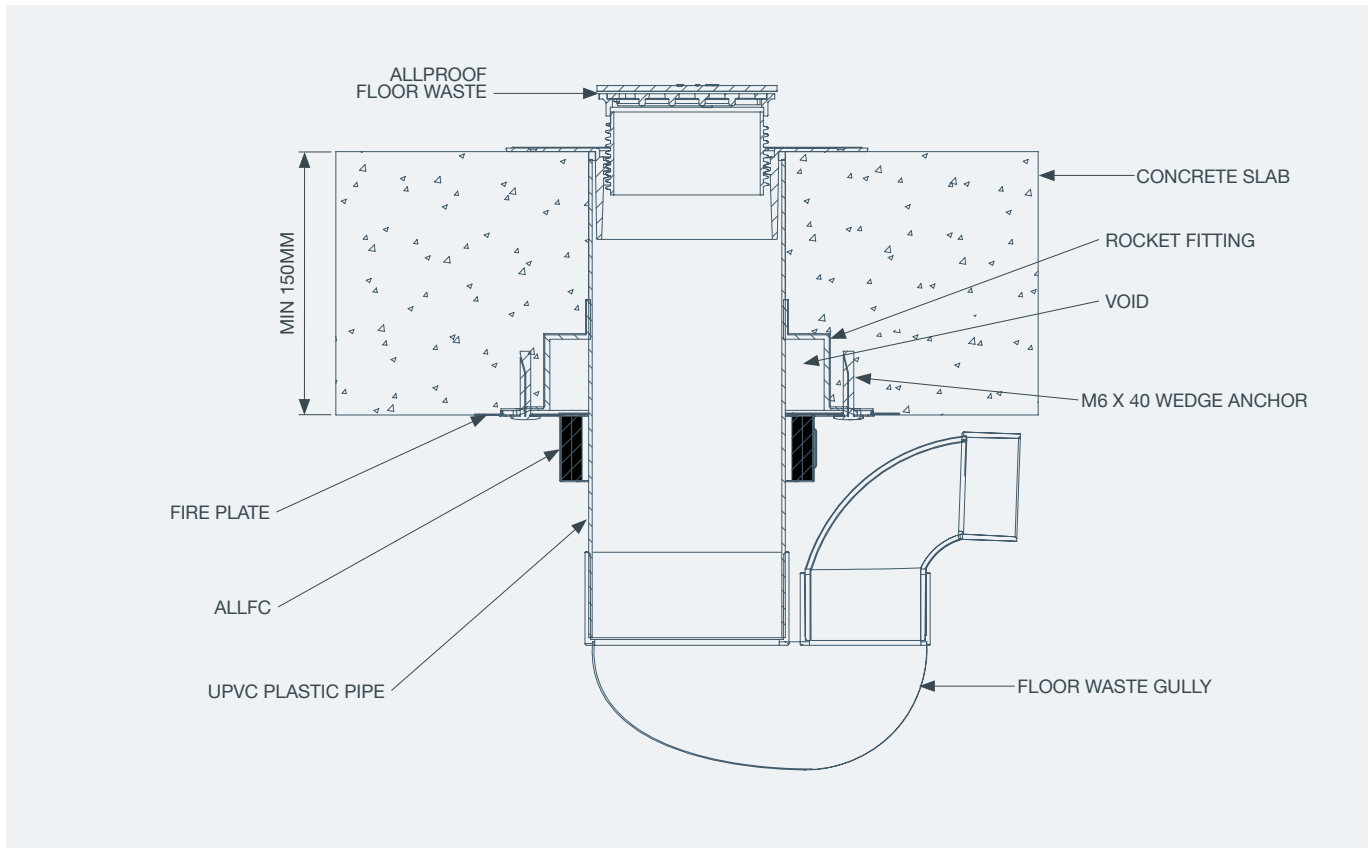
- Totally unaffected by water
- Retro or pre-service install fitting

INSTALLATION INSTRUCTIONS:

1. Install floor waste pipe work
2. Ensure substrate around Rocket fitting is flat and free from obstructions.
3. Place plates around the uPVC pipe so it is centred and the plate lap fixing holes are aligned. Position plate so fixing points avoid obstructions when drilling, mark and set plate aside.
4. Drill fixing holes with a Masonry drill bit into the concrete slab to a depth that accommodates a 6 x 40mm wedge anchor.
5. Position plates and drive anchors into the concrete on plate lap fixing holes to secure in place.
6. Open fire collar and position around pipe.
7. Slide tab through slot in fire collar and fold back 180° to secure.
8. Secure fire collar by using 6 x 40mm wedge anchor as per testing. Do not use fixings which rely on plastic or nylon components for grip.
9. Install only from underside on floor penetrations.
10. Allproof recommends any thermal or acoustic lagging maintains a 50mm separation to the fire collar.



CONCRETE FLOOR INSTALLATION DETAILS:



CONCRETE FLOOR TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PVC FITTING VOID (MM)	FIRE PROTECTION PRODUCT	FLOOR FRL	REPORT NUMBER
PVC PLASTIC PIPE						
50	150	2.5	110x45	FP50 + ALLFC50	-/180/180	149096
100	150	3.5	160x45	FP100 + ALLFC100	-/180/180	149096

Fixing: M6 x 40 Wedge Anchor

Tested to max voids 110mm x 45mm (50mm) and 160mm x 45mm (100mm) on 150mm depth concrete slab.

FIRE WRAPS

Fire wraps are designed to be installed in solid construction walls and floors and consist of a layer(s) of intumescent sealed in a polyethylene sleeve. The sleeve features a strip of double sided tape to enable easy installation.

When a fire occurs the intumescent seal is activated and expands into the penetration cavity as the burning plastic pipe melts. When the intumescent seal expands it forms a fire resistant plug in the penetration, preventing the spread of fire.

The Fire Wrap is designed to have the ends of intumescent material meet around the circumference of the pipe. No overlap will exist, allowing pipe to be centrally located within a core hole. For pipe sizes up to 100mm, only one layer of intumescent material is required, ensuring core holes can be kept to a minimum size. Allproof Fire Wraps have been tested on a variety of plastic pipes and are available in stock sizes from 40-150mm.



SUITABLE FOR FITTING WITHIN:

- Concrete, masonry and porous concrete wall constructions
- Concrete floor construction
- Plasterboard penetrations (with Fireband)

FEATURES:

- Water resistant
- Advanced intumescent technology allows smaller core holes
- Simple to use - easy to install
- For use on various plastic pipes
- Removable “pipe wrap installed” label for pipe work/wall

INSTALLATION INSTRUCTIONS:

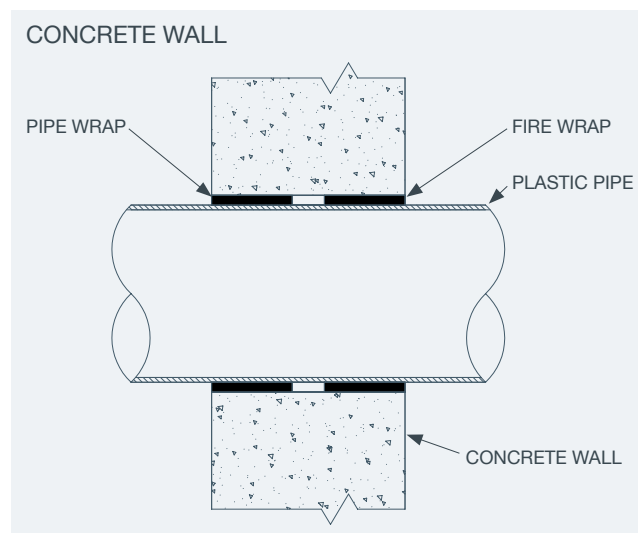
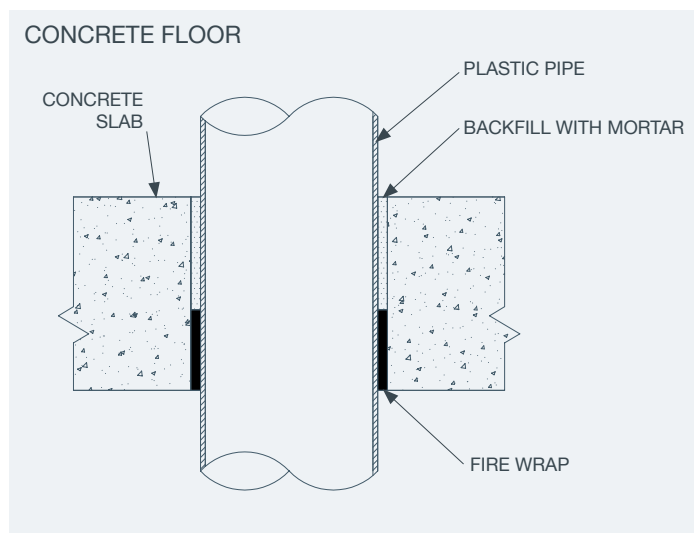
1. Position Fire Wrap around circumference of pipe and remove backing from the self adhesive strip and join ends together.
2. Slide wrap into position ensuring wrap is located entirely within depth of the wall or floor. For floor applications, the wrap should be flush with the underside of the floor. For wall applications, two wraps are required - one from each side; each wrap should be flush with the outside wall.
3. If there is a space between the concrete and the outer side of the wrap and above the wrap, backfill the space with mortar.
4. The polyethylene sleeve can be removed and intumescent strip taped in place if the core hole is very tight.
5. For plasterboard wall applications, an Allproof Fireband must be used.

CONCRETE SLAB TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER	WALL FRL	REPORT NUMBER
PVC PLASTIC PIPE								
40	150	2.0	FW40	62	-/120/120	3788	-/120/120	5957
50	150	2.2	FW50	72	-/120/120	3808	-/120/120	3808
65	150	2.7	FW65	87	-/180/180	3655	-/120/120	5956
80	150	2.9	FW80	102	-/120/120	3808	-/180/180	4211
100	150	3.2	FW100	127	-/120/120	3655	-/180/120	4211
150	150	4.5	FW150	192	-/90/90	4058	-/120/120	4836
HDPE PLASTIC PIPE								
50	150	3.0	FW50	67	-/120/120	4100	-/120/120	4836
56	150	3.0	FW50	73	-/120/120	11057		
63	150	3.0	FW65	80	-/120/120	11057		
75	150	3.0	FW65	92	-/120/120	4100		
90	150	3.5	FW100	107	-/120/120	11057		
110	150	4.3	FW100	127	-/120/120	4100		
150	120	6.2	FW150 + PR150*	192	-/180/180	5573		
PP-R PLASTIC PIPE (SDR 7.4)								
40	150	5.5	FW40	57	-/120/120	4100	-/180/180	4211
75	150	10.3	FW80	92	-/120/120	4100	-/180/180	4211
110	150	15.1	FW100	127	-/120/120	4100	-/120/120	4836
125	150	17.1	FW125	152			-/180/180+	4211
RAUPIANO PP-MD								
40	120	1.8	FW40	57	-/120/120	5169		
50	120	1.8	FW50	67	-/120/120	5169		

*0.9 Perforated ring fixed to underside of slab. Contact Allproof for details.
+ 75mm Wide Double Layer Fire Wrap Used.

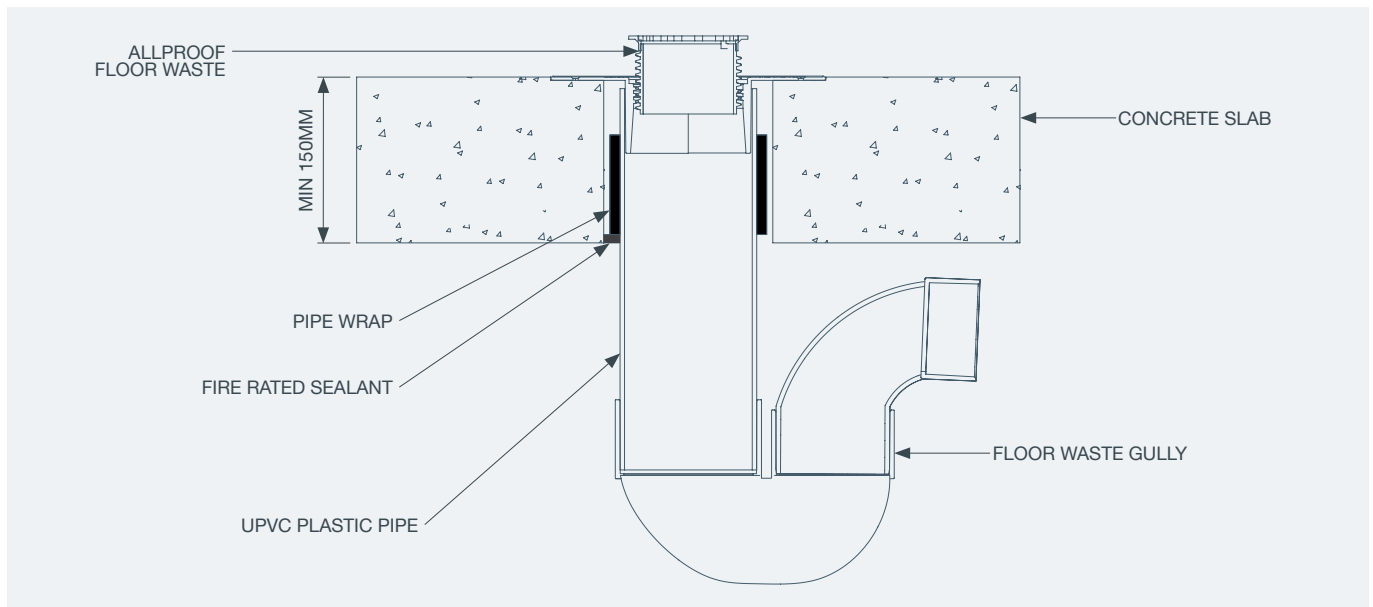
CONCRETE INSTALLATION DETAILS:



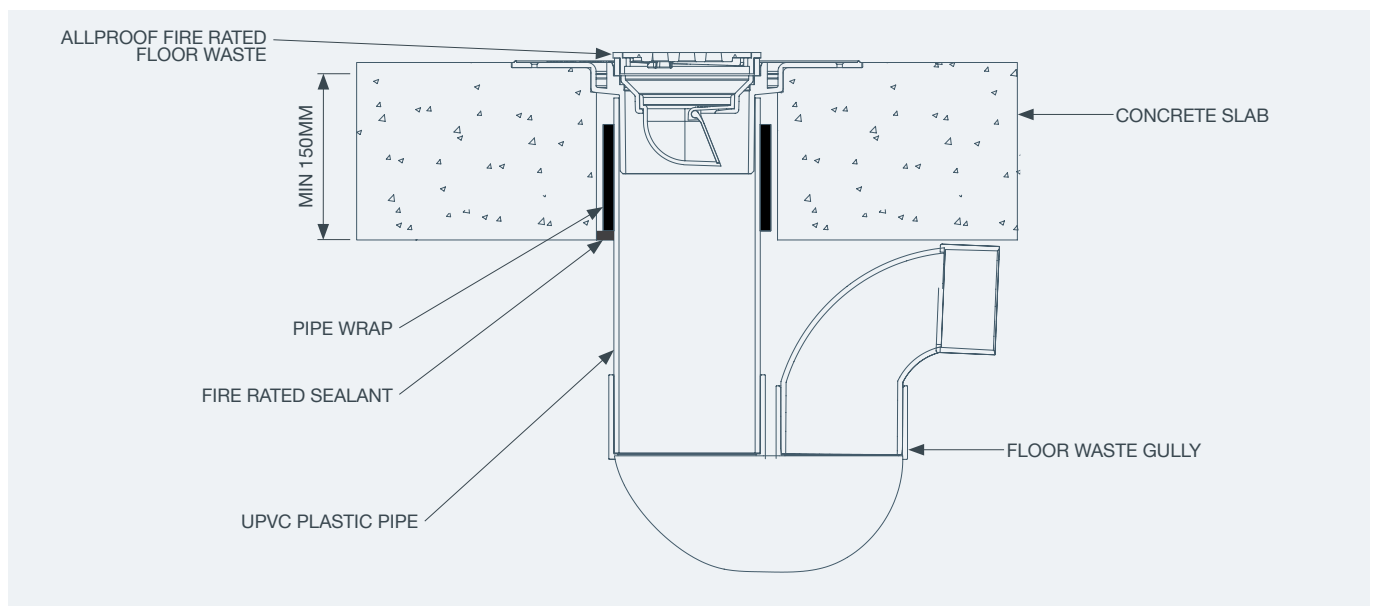
FLOOR WASTE CONCRETE SLAB TEST RESULTS:

NOMINAL PIPE SIZE (MM)	SLAB DEPTH (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	FLOOR FRL	REPORT NUMBER
STANDARD FLOOR WASTE						
80	150	2.9	FW80	102	-/60/-	146111
FIRE RATED FLOOR WASTE						
80	150	2.9	FW80	102	-/90/90	146111

STANDARD FLOOR WASTE INSTALLATION DETAILS:



FIRE RATED FLOOR WASTE INSTALLATION DETAILS:

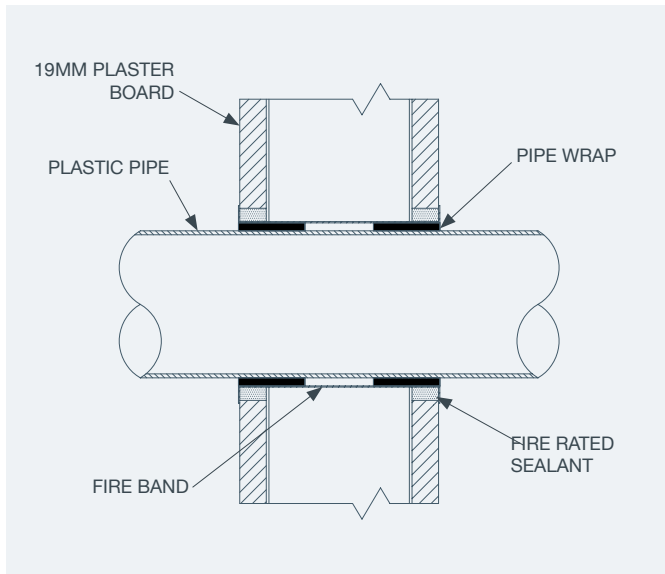


FIRE BANDS

Designed for the fire protection of plasterboard walls penetrated by plastic pipes, Fire Bands are rolled galvanized steel sleeves with two slide tabs fixed through a corresponding slot and fold back tabs for fixing to the plasterboard. An Allproof pipe wrap is installed on each face of the plasterboard within the Fire Band. When a fire occurs the intumescent pipe wraps contained within the steel Fire Band activate, filling the band with a fire resistant seal.



INSTALLATION DETAILS:



SUITABLE FOR:

- Plasterboard wall penetrations

FEATURES:

- Easy to use and install

INSTALLATION INSTRUCTIONS:

1. Open fire band around pipe, slide tabs through slot and fold back 180° to secure. Slide into plasterboard wall penetration.
2. Install an Allproof pipe wrap on each face of the plasterboard wall (two per fire band).
3. Seal gap between the Fire Band and the plasterboard of both wall faces with fire rated sealant.

PLASTERBOARD WALL TEST RESULTS:

NOMINAL PIPE SIZE (MM)	NOMINAL PIPE WALL THICKNESS (MM)	PRODUCT CODE	PENETRATION HOLE SIZE (MM)	PLASTERBOARD WALL FRL*	REPORT NUMBER
PVC PLASTIC PIPE					
40	2.0	FB40+FW40	65	-/120/90	4041
65	2.7	FB65+FW65	90	-/120/90	4041
80	2.9	FB80+FW80	105	-/90/60	4289
100	3.2	FB100+FW100	130	-/90/90	4289
HDPE PLASTIC PIPE					
50	3.0	FB50+FW50	70	-/120/90	4466
75	3.0	FB75+FW75	95	-/120/90	4466
100	4.3	FB100+FW100	130	-/120/90	3808
PP-R (SDR 7.4)					
40	5.5	FB40+FW40	60	-/120/120	4584
63	8.6	FB65+FW65	83	-/120/90	4584
110	15.1	FB100+FW100	130	-/120/90	4584

Tested using a 92mm wide steel stud with a single layer of 19mm plasterboard on each side of the frame. A total wall thickness of 130mm. Fire rated sealant is applied in the space between the fire band and plasterboard on both the exposed and unexposed face.



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