

UL-AU CERTIFICATE

Certificate No. UL-AU-230006
Page 1/40
Date of Issue 2023-11-01

Certificate Holder Hilti (Aust.) Pty. Ltd
1G Homebush Bay Drive
PO Box 3217
Rhodes NSW 2138, Australia

Manufacturer Hilti AG,
Feldkircherstrasse 100
FL-9494 Schaan
Liechtenstein
Internet: www.hilti.com

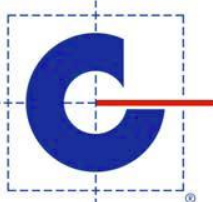
Production Sites (Factory) Hilti Plant 4a
Hilti Plant 5a
Hilti Plant 14

Certified Product Description Firestopping Cast In Device
Model(s) Hilti Firestop Cast In Device CP 680-P/PX
Trade Name or Trademark Hilti Firestop Cast In Device CP 680-P/PX
Rating Information Refer to Appendix A
Standard tested to AS 1530.4:2014 and AS 4072.1:2005
Test Report References See page 39 and 40
Listing Category and File Ref AUEC.RS5417
Additional Information and Conditions See page 2
Expiry date 2033-11-01



Stuart Foster
Certification Officer

JAS-ANZ



Certification Body

www.jas-anz.org/register

This is to certify that representative samples of the Product described herein ("Certified Product") have been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the UL-AU Mark Scheme requirements and JAS-ANZ accreditation requirements. The designated Certificate Holder is entitled to use the UL-AU Mark for the Certified Product manufactured at the production site(s) identified above, in accordance with the UL-AU Mark Scheme Service Agreement. Only those Products bearing the UL-AU Mark for Australia should be considered as being covered by UL's UL-AU Mark Service. This certificate shall remain valid through to the expiration date, unless terminated earlier in accordance with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior to the expiration date.

This Certificate remains the property of UL International New Zealand Ltd.

If the client provides copies of the certification documents to others, the documents shall be reproduced in their entirety.

All dates are in Year-Month-Day format (YYYY-MM-DD).

UL International New Zealand Ltd,
54 Tarndale Grove, Albany,
Auckland 0632, New Zealand.
+64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
Page 2/40
Date of Issue 2023-11-01

This certificate is evidence that prototypes of the nominated products and their configurations as detailed in Appendix A conform to the following parameters:

1. Have been tested to AS 1530.4:2014 and AS 4072.1:2005 or an equivalent or more severe test and the Fire Resistance Level (FRL) nominated in Appendix A was achieved by the prototype for each nominated assembly of service penetration, building element and protection method configuration, without the assistance of an active fire suppression system.
2. Test results are detailed in a confidential test report that may be available from the certificate holder upon request. The information regarding the test parameters is included in the confidential technical file.
 - (i) the method and conditions of the test;
 - (ii) form of construction of the tested prototype; and
 - (iii) that restraint complied with AS 1530.4.
3. Testing was conducted at multiple locations by suitably accredited laboratories that are accredited by a signatory to the International Accreditation Cooperation Mutual Recognition Arrangement (ILAC-MRA) as recognised by NATA who is also a signatory body to this Agreement. The data has been reviewed by UL against the relevant to accreditation schedules.

Certification Body

UL International New Zealand Ltd,
54 Tarndale Grove, Albany,
Auckland 0632, New Zealand.
+64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
Page 3/40
Date of Issue 2023-11-01

The UL Enhanced Mark shall appear on certified products only and shall be used only in accordance with the UL-AU Mark Scheme Service Terms Minimum size is not specified, as long as the Mark is legible. The following are **examples** of the format.



The file number that replaces E123456 and NC12345 in the above examples is; **RS5417**

The following Supplementary Information shall be placed adjacent to the Certification Mark;
**Firestopping - Fire Collars and Cassettes
AS 1530.4**

The UL Enhanced Mark may appear on a label, nameplate, or may be cast, stamped or molded into the product. When appearing on a label or nameplate, the Manufacturer's name or trademark along with a model number are also required on that same label or nameplate. If cast, stamped or molded, the Manufacturer's name or trademark and model number shall also appear elsewhere on the product.

All content shall be in accordance with the details provided on this Certificate.

PROCUREMENT

The Production site may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized suppliers can be found on UL's online directory at www.ul.com.

Certification Body

UL International New Zealand Ltd,
54 Tarndale Grove, Albany,
Auckland 0632, New Zealand.
+64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 4/40
 Date of Issue 2023-11-01

Appendix A

Conforming product configurations to achieve nominated FRL's

A.1 Specific Parts for Hilti Firestop CP 680-P/PX:

Technical description of product:

Hilti Firestop Cast-in Device CP 680-P/PX is a pipe closure device that is cast into rigid floors.

Hilti Firestop Cast-in Device CP 680-P/PX consists of a plastic housing, an intumescent inlay and rubber seal for the purpose of smoke and draft stop, air or water tightness and airborne sound insulation.

Hilti Firestop Cast-in Device CP 680-P/PX is supplied in several sizes – see table below.

Sleeve of CP 680 P/PX or extension sleeve can be cut to be flush with concrete surface or remain uncut

Pipe sealing size	For plastic pipes with nominal outside diameter range (mm)	For metal pipes (including copper, Ferrous or Brass)	For insulated metal pipes	
			nominal outside diameter range (mm)	nominal pipe insulation range (mm)
CP 680-P/PX 2"	32 - 63	Up to DN50	18 - 54	8 - 38
CP 680-P/PX 3"	50 - 75	DN25 to DN80		
CP 680-P/PX 4"	90 - 110	DN50 to DN100	54 - 76	14 - 40,5
CP 680-P/PX 6"	125 - 160	DN100 to DN150		

The assigned FRL in Appendix applicable to copper, brass and ferrous (steel and iron) also applies to other metal pipes with lower heat conductivity than the unalloyed steel and a melting point of minimum 1100 °C, e.g. low alloyed steel, cast iron, stainless steel, Ni alloys, galvanized steel.

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
Page 5/40
Date of Issue 2023-11-01

Intended use:

Hilti Firestop Cast-in Device CP 680-P/PX is intended to form a part of a penetration seal, which is used to maintain the fire resistance of a separating element (rigid floor) when and where services with plastic, composite pipes and insulated metal pipes as single penetrations pass through.

Annex 2 gives details of penetration for which fire resistance tests were carried out. This certificate covers assemblies installed in accordance with the provisions given in Annex 2.

For details on diameters, wall thicknesses, pipe materials, pipe insulation and pipe standards see Annex 2.

Pipes shall be perpendicular to the seal surface. The pipe penetration seal is intended for in piping systems for non-combustible liquids and fluids, for pneumatic dispatch systems and for pipes in centralised vacuum-cleaning systems.

The assessment does not cover the avoidance of destruction of the seal or of the abutting building element(s) by forces caused by temperature changes in case of fire. This has to be considered when designing the piping system.

A.1.1 DESCRIPTION OF THE PRODUCT AND ANCILLARY PRODUCT(S)

Hilti Firestop Cast-in Device CP 680-P/PX

The Cast-in device consists of a plastic housing, an inlay with different number of intumescent layers, and a rubber gasket.

In case of greater floor thicknesses (>150mm) the Cast-in device length can be increased through an extension tube.

Manifold adapter to create a spacing of 280 x 280 x 75 mm.

Technical product literature:

Installation instruction Hilti Firestop Cast-in Device CP 680-P/PX (according to Annex 3).

A.1.1.1 Abbreviations used in drawings

Abbreviation	Description
A ₁	Hilti Firestop Cast in CP 680-P/PX
A ₂	Manifold
C	Plastic Pipe
D	Pipe insulation
d _c	Pipe diameter (nominal outside diameter)
E	Building element (wall, floor)
s ₁	Minimum distance between single penetration seals
t _c	Pipe wall thickness
t _D	Insulation thickness
t _E	Thickness of the building element

Certification Body

UL International New Zealand Ltd,
54 Tarndale Grove, Albany,
Auckland 0632, New Zealand.
+64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 6/40
 Date of Issue 2023-11-01

Ld		Length of Insulation				
A.2 RESISTANCE TO FIRE CLASSIFICATION OF PENETRATION SEALS MADE OF HILTI FIRESTOP Cast-in Device CP 680-P/PX						
Overview intended use of pipes ¹ and reference to relevant section						
Application	Pipe material	Insulation	Diameter (mm)	Distance (s ₁) (mm)	FRL (Fire resistance Level)	Rigid floor ≥ 550 kg/m ³ Details (see section)
Wastewater Roof Drainage	PE (PE-HD)	-	40 - 160	200	-/240/240	2.2.1.1
				0	-/120/120	
	PE	-	50 - 160	200	-/180/180	2.2.1.2
				0	-/120/120	
	PE-S2 Geberit dB20	-	56 - 160	200	-/180/180	2.2.2
				0	-/120/120	
	PVC-U	-	63 - 160	200	-/180/180	2.2.3
				50 - 160	0	
	PP	-	40 - 160	200	-/180/180	2.2.7
				0	-/120/120	
Drinking water	PP-R	-	32 - 160	200	-/180/180	2.2.9
	PE-Xa	-	32 - 63	200	-/180/180	2.2.10
	PE-X	Elastomeric	40	200	-/180/180	2.2.11
Heating	Copper and Steel	Elastomeric	18 - 76	200	-/180/180	2.2.13
				200	-/120/120	2.2.14
		Glass wool	18 - 76	0	-/120/120	2.2.15
				Mineral wool	18 - 89	200
Elbow	PE (PE-HD)	-	110			200
	PVC					
Blank	-	-	-	200	-/180/180	2.2.22
				0	-/120/120	
Manifold	-	-	-	200	-/180/180	2.3

¹ According to technical literature of pipe manufacturers

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 7/40
 Date of Issue 2023-11-01

A.2.1 General information

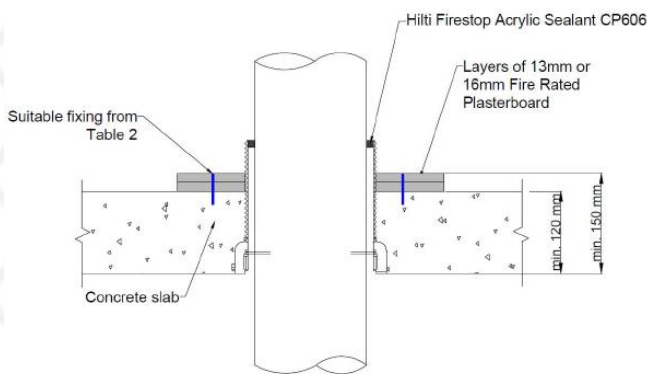
A.2.1.1 Rigid floor

The floor must have a minimum thickness of 150 mm and comprise concrete with a minimum density of 550 kg/m³.

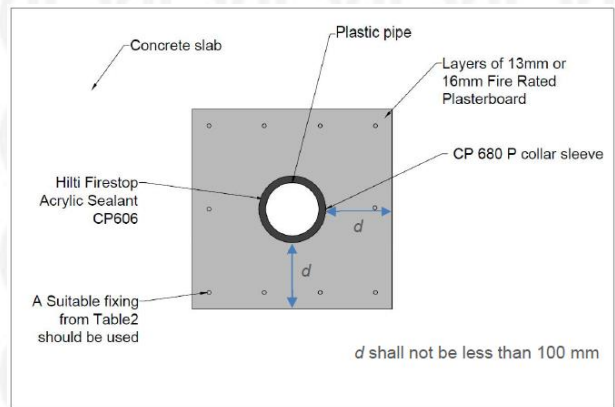
For situations where local aperture/beading is required for slabs less than 150 mm thick, 120 mm thick concrete slabs shall be fitted locally with a combination of 13 mm and 16 mm plasterboard covers to achieve an FRL -/120/120.

Concrete build up/aperture bedding detail:

Section view



Front view



A.2.1.2 Penetration seal:

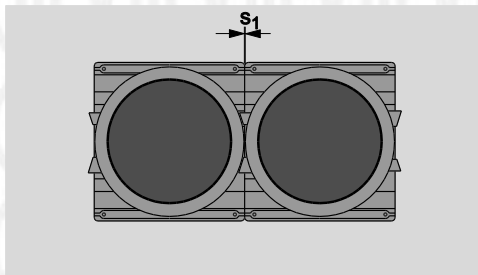
Single penetration;
 Hilti Firestop Cast-In CP 680-P/PX on the underside of the floor

A.2.1.3 Distance between penetrations:

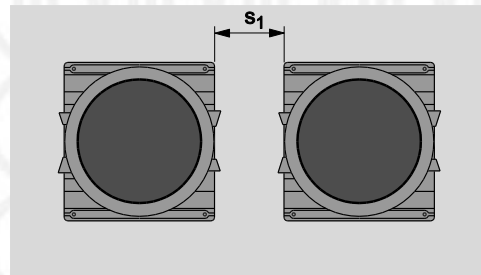
Minimum distance between Cast-In / annular gap edge (s_1):

A: Non-insulated pipes: s_1 (0 mm)
 Insulated pipes: s_1 (0 mm)

B: Non-insulated pipes: s_1 (200 mm)
 Insulated pipes: s_1 (0 mm)



Note: s_1 (0 mm) = FRL -/120/120



s_1 (200 mm) = FRL -/180/180

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 8/40
 Date of Issue 2023-11-01

A.2.1.4.1 Pipes provided with foamed elastomeric insulation.

The following types of foamed elastomeric insulation material may be used in direct contact ($s_1 \geq 0$ mm) to Hilti Firestop Cast-in Device CP 680-P/PX:

Producer	Approved Type of foamed elastomeric thermal isolation
Armacell GmbH	<ul style="list-style-type: none"> • Armaflex AF, Armaflex SH, Armaflex Ultima, Armaflex HT
NMC Group	<ul style="list-style-type: none"> • Insul-Tube (nmc), Insul-Tube H-Plus (nmc),
Kaimann GmbH	<ul style="list-style-type: none"> • Kaiflex KK plus, Kaiflex KK,
L'Isolante K-Flex	<ul style="list-style-type: none"> • l'Isolante K-Flex HT, l'Isolante K-Flex ECO, l'Isolante K-Flex ST, l'Isolante K-Flex H, l'Isolante K-Flex ST Plus

Named material may be used in form of an insulation hose, bandage/wrap or plates. If a protect insulation D_P is used, it should be made of the same elastomeric material as the thermal pipe isolation itself.

A.2.1.4.2 Pipes provided with stone wool insulation.

Type	Mineral wool insulation
Form	<ul style="list-style-type: none"> • Half shell, coated with aluminium foil
Material	<ul style="list-style-type: none"> • Mineral stone wool
Density	<ul style="list-style-type: none"> • ≥ 70 kg/m³
Melting point	<ul style="list-style-type: none"> • ≥ 1000 C°

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 9/40
 Date of Issue 2023-11-01

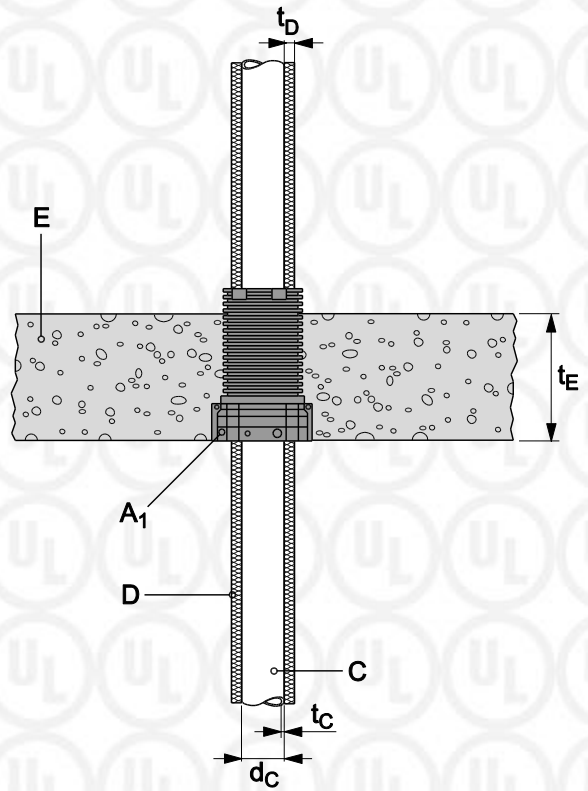
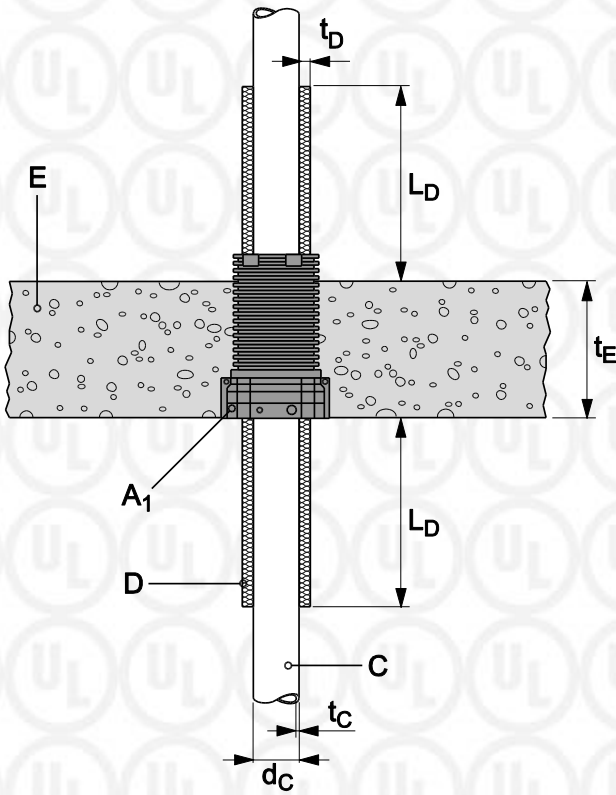
A.2.1.4.3 Pipes provided with glass wool fibre insulation.

Type	Mineral wool insulation
Form	<ul style="list-style-type: none"> • Half shell, coated with aluminium foil
Material	<ul style="list-style-type: none"> • Mineral glass wool
Density	<ul style="list-style-type: none"> • $\geq 35 \text{ kg/m}^3$

Pipe insulation

Local/Sustained pipe insulation (LS)

Continued/Sustained pipe insulation (CS)



For abbreviations see Annex A.1.1.1

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>

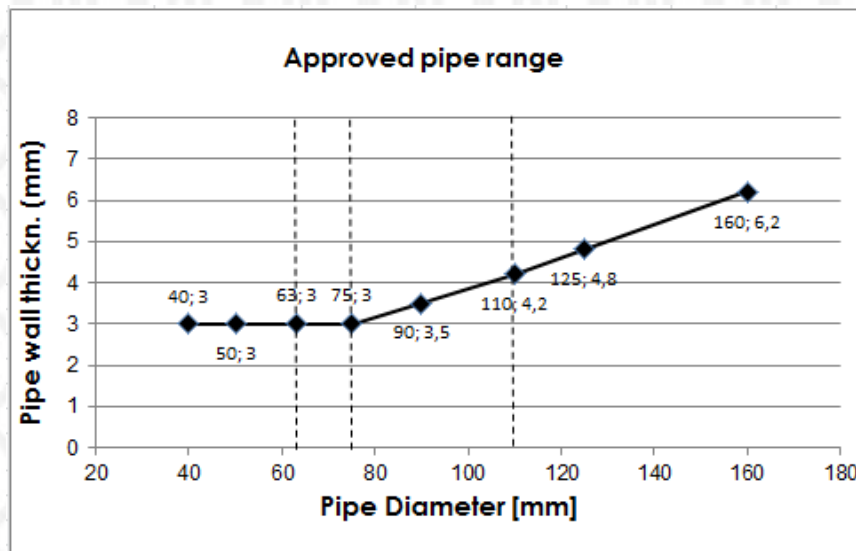


APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 10/40
 Date of Issue 2023-11-01

A.2.2 Penetrating services approved with CP 680-P/PX				
A.2.2.1 PE pipes (including HDPE, MDPE and PE 100)				
Distance of penetrations (s ₁): 200 mm				
A.2.2.1.1 PE pipes according to local requirements				
Distance of penetrations (s ₁): 0mm /200 mm (B)				
Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 0mm	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 2"	40	3.0	-/120/120	-/240/240
	50	3.0		
	63	3.0		
	40 - 63	3.0		
CP 680-P/PX 3"	75	3.0		
	90	3.5		
CP 680-P/PX 4"	110	4.2		
	90 - 110	3.5/4.2 ⁽¹⁾		
	125	4.8		
CP 680-P/PX 6"	160	6.2		
	125-160	4.8-6.2 ⁽¹⁾		

(1) interpolation of min. pipe wall thickness within pipe diameter range



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

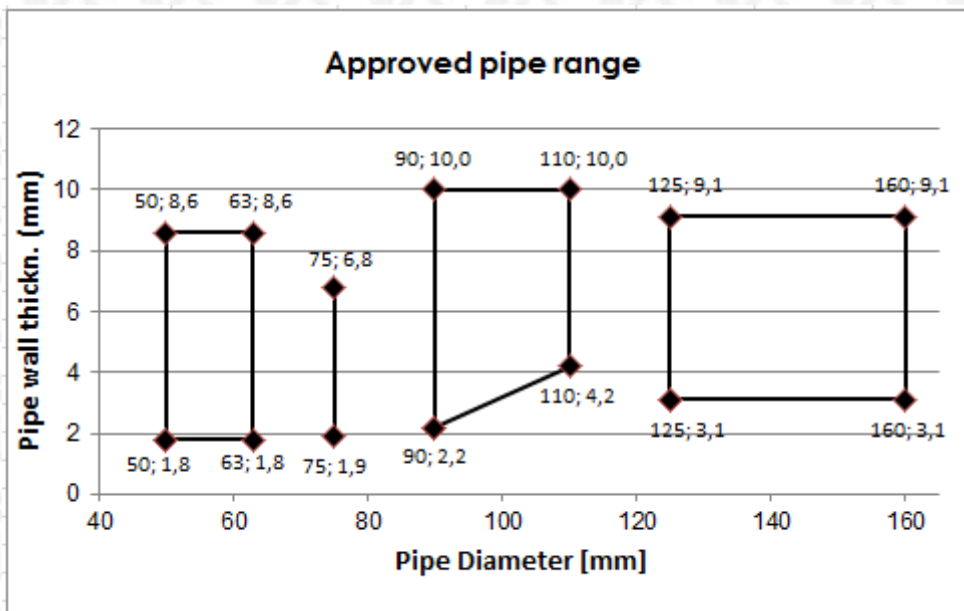
Certificate No. UL-AU-230006
 Page 11/40
 Date of Issue 2023-11-01

A.2.2.1.2 PE pipes (including HDPE, MDPE and PE 100) according to local requirements

Distance of penetrations (s₁): 0mm /200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 0mm	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 2"	50	2.9	-/120/120	-/180/180
	63	1.8		
	63	8.6		
	50 - 63	1.8/1.8⁽¹⁾ – 8.6		
CP 680-P/PX 3"	75	1.9		
	75	6.8		
	75	1.9⁽¹⁾ to 6.8		
CP 680-P/PX 4"	90	2.2		
	110	2.7		
	110	10.0		
	90 - 110	2.2/2.7⁽¹⁾ – 10.0		
CP 680-P/PX 6"	125	3.1		
	160	4.0		
	160	9.1		
	125-160	3,1/4,0 (1) - 9,1		

(1) interpolation of min. pipe wall thickness within pipe diameter range



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

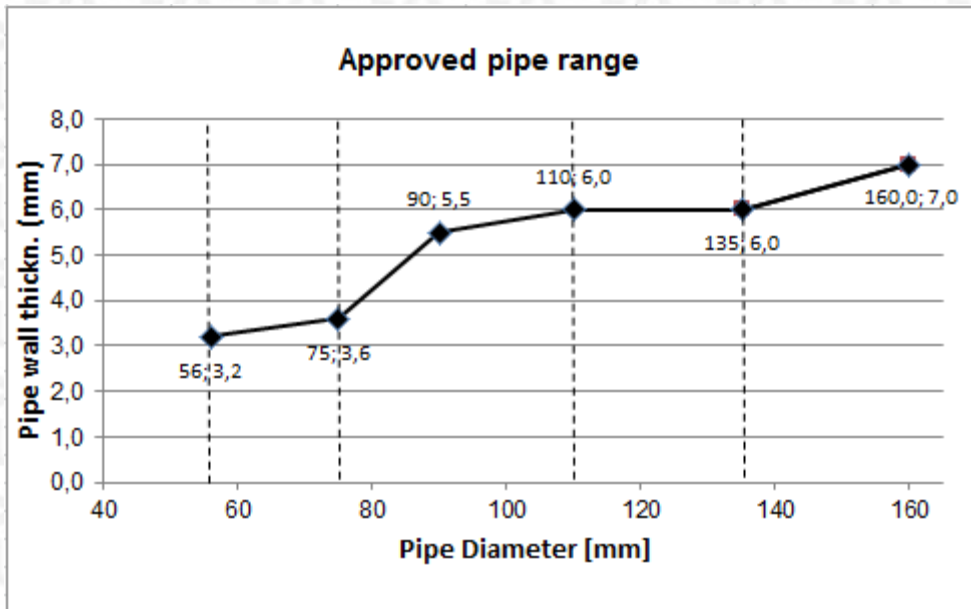
Certificate No. UL-AU-230006
 Page 12/40
 Date of Issue 2023-11-01

A.2.2.2 PE-S2 pipes, designation “Geberit Silent dB20”

Distance of penetrations (s₁): 0mm /200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 0mm	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 2”	56	3.2	-/120/120	-/180/180
	56	3.2		
CP 680-P/PX 3”	75	3.6		
	56 - 75	3.2/3.6⁽¹⁾		
CP 680-P/PX 4”	90	5.5		
	110	6.0		
	90 - 110	5.5/6.0⁽¹⁾		
CP 680-P/PX 6”	135	6,0		
	160	7,0		
	135 - 160	6,0/7,0⁽¹⁾		

⁽¹⁾ interpolation of min. pipe wall thickness within pipe diameter range



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

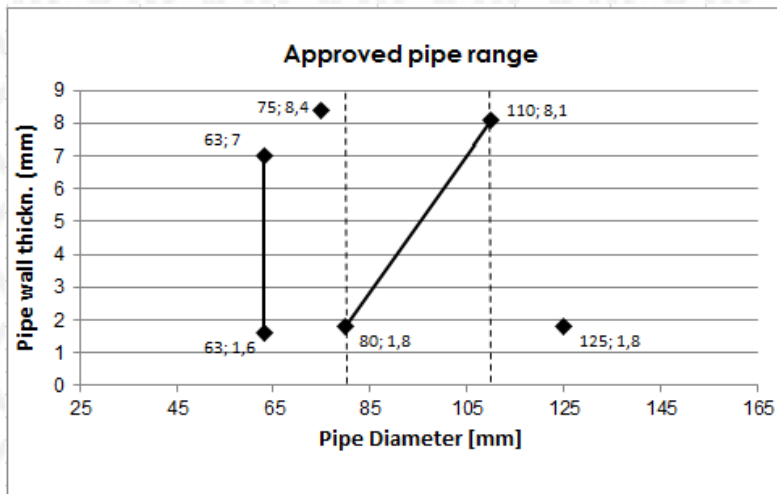
Certificate No. UL-AU-230006
 Page 13/40
 Date of Issue 2023-11-01

A.2.2.3 PVC INCLUDING PVC-U AND PVC-SC pipes acc. to local requirements

Distance of penetrations (s₁): 200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 2"	63	1.6	-/180/180
	63	7.0	
	63	1.6 – 7.0	
CP 680-P/PX 3"	75	8.4	
CP 680-P/PX 4"	80	1.8	
	110	8.1	
	80 - 110	1.8/8.1⁽¹⁾	
CP 680-P/PX 6"	125	1.8	

⁽¹⁾ interpolation of min. pipe wall thickness within pipe diameter range



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

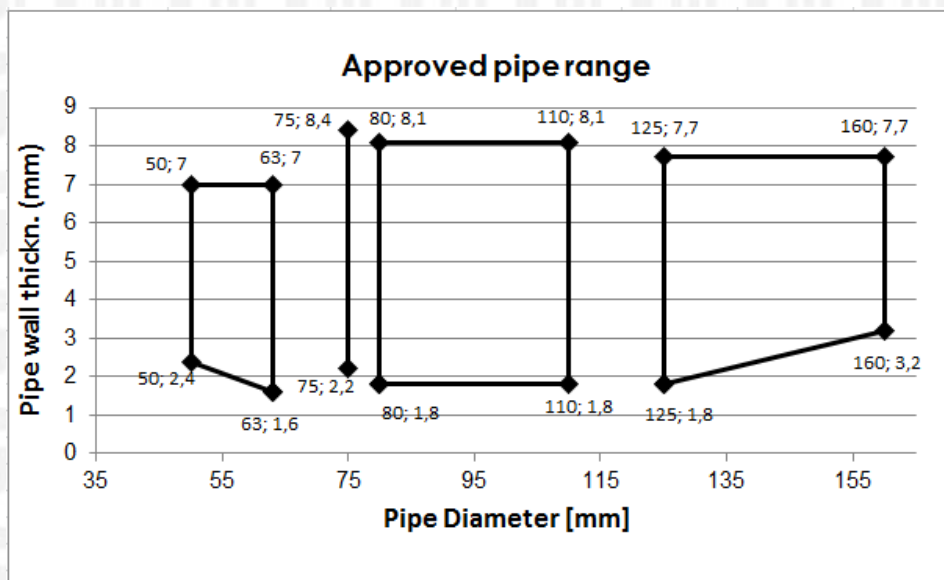
Certificate No. UL-AU-230006
 Page 14/40
 Date of Issue 2023-11-01

A.2.2.4 PVC pipes INCLUDING PVC-U AND PVC-SC acc. to local requirements

Distance of penetrations (s₁): 0 mm (A)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 0mm
CP 680-P/PX 2"	50	2.4	-/120/120
	63	1.6	
	63	7.0	
	50 - 63	1.6/1.6⁽¹⁾ - 7.0	
CP 680-P/PX 3"	75	2.2	
	75	8.4	
	75	2.2 – 8.4	
CP 680-P/PX 4"	80	1.8	
	110	1.8	
	110	8.1	
	80 - 110	1.8/1.8⁽¹⁾ – 8.1	
CP 680-P/PX 6"	125	1.8	
	160	3.2	
	160	7.7	
	125-160	1,8/3,2(1) - 7,7	

(1) interpolation of min. pipe wall thickness within pipe diameter range



Certification Body

UL International New Zealand Ltd,
 54 Tardale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 15/40
 Date of Issue 2023-11-01

A.2.2.5 uPVC pipes in stacked/straight configuration. Pipe protected with Hilti CP 680 P/PX cast in collar through concrete floor fire separating element

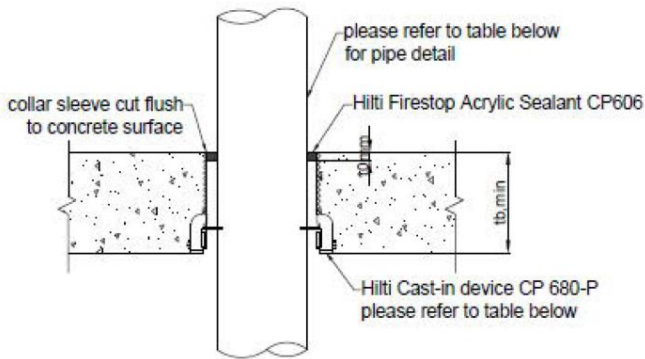
The bare concrete floor separating element thickness (t_b min) must have a minimum thickness of 150 mm. The FRL of the concrete floor separating element governs the FRL of the penetration sealing system.

FRL -/240/240 solution, t_b , min = 150 mm

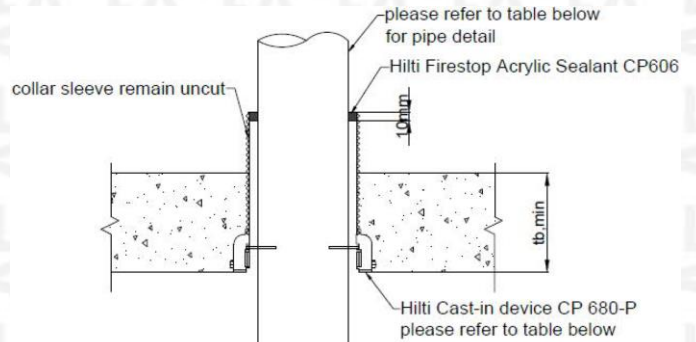
In all pipe configurations, the annular gap between the service pipe and the collar or the sleeve extension shall be filled with Hilti Firestop Acrylic Sealant CP606 to a depth of not less than 10 mm.

If concrete slab thickness is greater than 200 mm, a sleeve coupler or a PVC pipe of appropriate size shall be used to extend the overall collar height up to at least the slab thickness. The sleeve can be flush with the slab top level or remain uncut. The approval also covers uPVC pipe in collar before the concrete pour.

uPVC stack pipe with sleeve cut flush



uPVC stack pipe with sleeve uncut



Collar size	Pipe nominal size, DN (mm)	Nominal total pipe wall thickness (mm)	Hilti collar CP 680P configuration	Sealant configuration	FRL t_b , min = 150mm
CP 680-P/PX 2"	40	2	Cast in collar sleeve can be cut or remain uncut	10 mm depth of CP 606 applied in the annular gap between the pipe and the collar sleeve	-/240/240
	50	2.2			
	65	2.7			
CP 680-P/PX 3"	80	2.9			
CP 680-P/PX 4"	100	3.5			
CP 680-P/PX 6"	150*	5	Cast in collar sleeve shall remain uncut at all times		

* Collar sleeve shall remain uncut at all times.

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



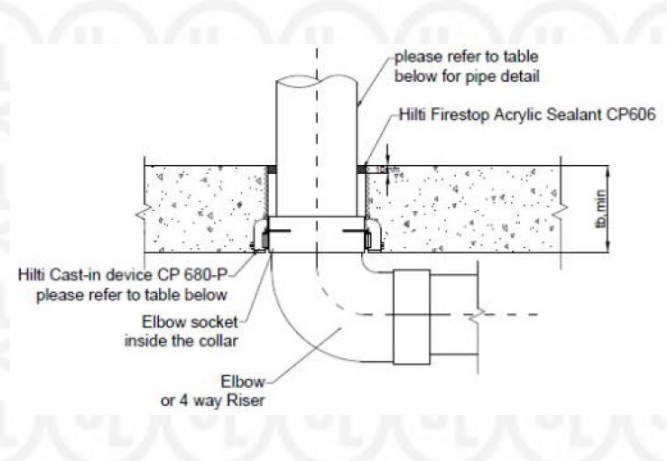
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 16/40
 Date of Issue 2023-11-01

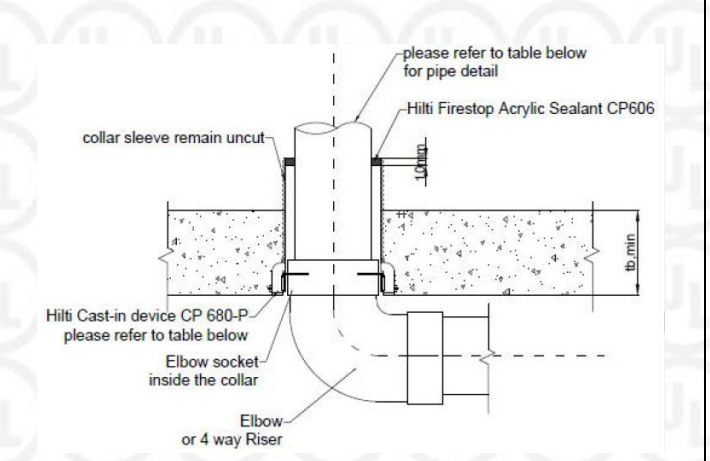
A.2.2.6 uPVC pipes with elbow inside collar protected with Hilti CP 680 P/PX cast in collar through concrete floor fire separating element

The bare concrete floor separating element thickness (t_b , min) shall have a minimum thickness of 150 mm. The FRL of the concrete floor separating element governs the FRL of the penetration system.

uPVC pipe with elbow inside with sleeve cut flush



uPVC pipe with elbow inside with sleeve uncut



Collar size	Pipe nominal size, DN (mm)	Nominal total pipe wall thickness (mm)	Hilti collar CP 680P/PX configuration	Sealant configuration	FRL t_b , min = 150mm
CP 680-P/PX 2"	40	2	Cast in collar sleeve can be cut or remain uncut	10 mm depth of CP 606 applied in the annular gap between the pipe and the collar sleeve	-/240/240
	50	2.2			
	65	2.7			
CP 680-P/PX 3"	80	2.9			
CP 680-P/PX 4"	100	3.5			
CP 680-P/PX 6"	150	5			

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
Page 17/40
Date of Issue 2023-11-01

A.2.2.7 PP pipes according to local requirements

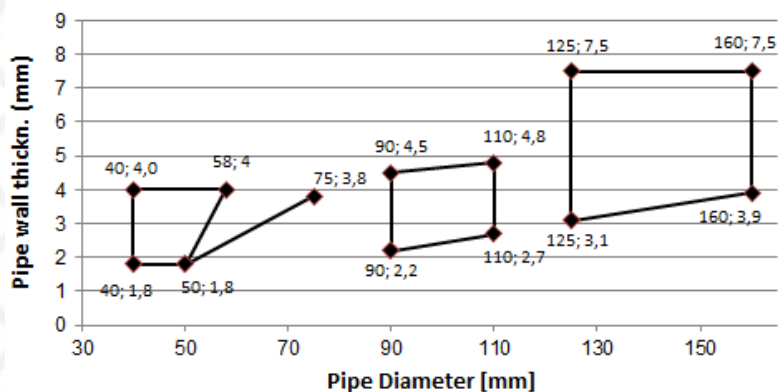
Designation: Cloes “Blue Power”, Cloes “PhoNoFire”, “Geberit Silent PP”, Marley Silent, Ostendorf “Skolan-dB”, Pipelife “Master 3”, POLOPLAST “Polokal NG”, “POLOPLAST Phonex AS”, POLOPLAST “Polokal 3S”, “POLOPLAST Polokal XS”, Rehau “Raupiano Plus”, Wavin “AS”, KeKelit “Phonex AS”, Wavin “SiTech”, Valsire “Triplus”, Valsire “Silere”, Marley “dBlue”

Distance of penetrations (s₁): 0mm /200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 0mm	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 50	40	1.8	-/120/120	-/180/180
	50	1.8		
	58	4.0		
	40 - 58	1.8 – 1.8/4.0⁽¹⁾		
CP 680-P/PX 75	50	1.8		
	75	3.8		
	50 - 75	1.8/3.8⁽¹⁾		
CP 680-P/PX 110	90	2.2		
	90	4.5		
	110	2.7		
	110	4.8		
	110	5.3		
	90 - 110	2.2/2.7⁽¹⁾ – 5.3		
CP 680-P/PX 6”	125	3.1	-/120/120	-/180/180
	160	3.9		
	160	7.5		
	125-160	3.1/3.9 (1) – 7.5		

(1) interpolation of min. pipe wall thickness within pipe diameter range

Approved pipe range



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



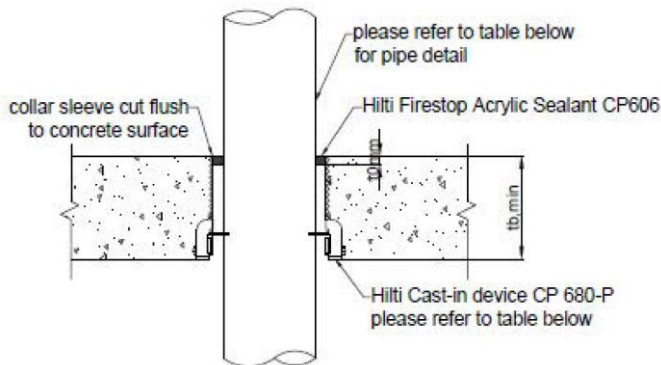
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 18/40
 Date of Issue 2023-11-01

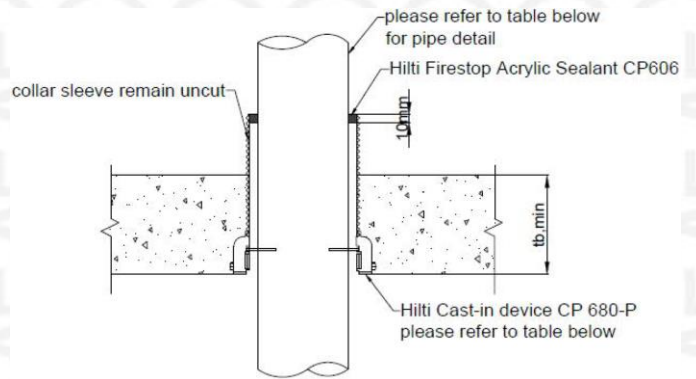
A.2.2.8 PP-MD pipes in stacked/straight configuration. Pipe protected with Hilti CP 680 P/PX cast in collar through concrete floor fire separating element

The bare concrete floor separating element thickness (tb, min) shall have a minimum thickness of 120 mm.

PP-MD stack pipe with sleeve cut flush



PP-MD stack pipe with sleeve uncut



Collar size	Pipe nominal size, DN (mm)	Nominal total pipe wall thickness (mm)	Hilti collar CP 680P configuration	Sealant configuration	FRL tb, min = 120mm*
CP 680-P/PX 2"	40	1.8	Cast in collar sleeve can be cut or remain uncut	10 mm depth of CP 606 applied in the annular gap between the pipe and the collar sleeve	-/120/120
	50	1.8			
CP 680-P/PX 3"	75	1.9			
CP 680-P/PX 4"	100	2.7			

* For FRL -/120/120 solution, tb, min = 120 mm

To achieve an FRL of -/120/120 on a 120 mm bare concrete floor, leave the CP 680 P/PX uncut. No build up is required.

If the CP 680 P/PX collar is to be cut flush, a minimum concrete floor separating element thickness (including Local aperture building/build-up) required is 150 mm. Local aperture building/build-up is allowed using layers of 13 mm or 16 mm thick fire grade plasterboard to increase the concrete floor thickness to minimum 150 mm. Please refer to Section A.2.1.1 for aperture building/build-up details.

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

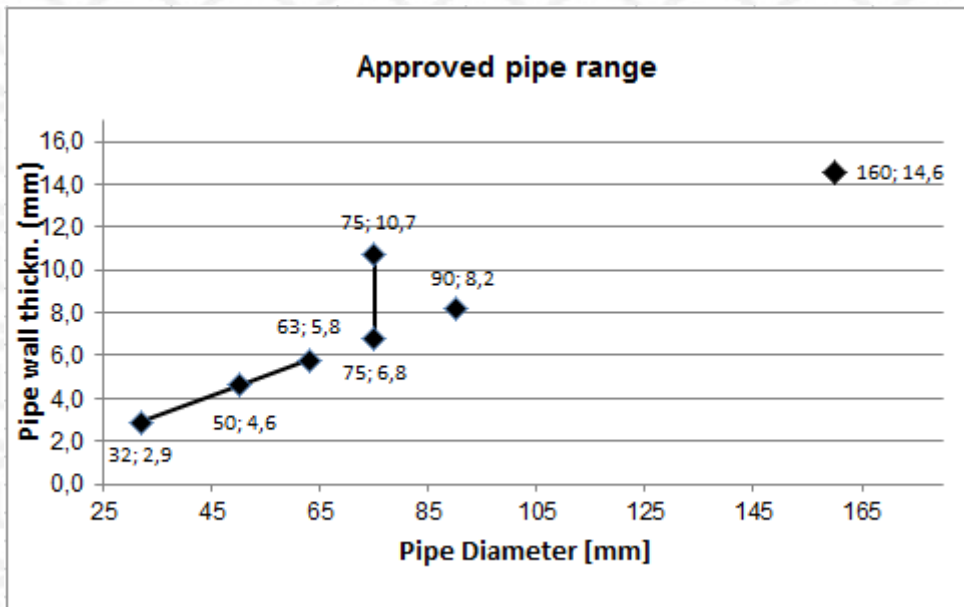
Certificate No. UL-AU-230006
 Page 19/40
 Date of Issue 2023-11-01

A.2.2.9 PP-R pipes designation “Aquatherm”

Distance of penetrations (s₁): 200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 200mm	
CP 680-P/PX 2”	32	2.9	-/180/180	
	50	4.6		
	63	5.8		
	32 - 63	2.9/5.8 ⁽¹⁾		
CP 680-P/PX 3”	75	6.8		
	75	10.7		
	75	6.8 – 10.7		
CP 680-P/PX 4”	90	8.2		
CP 680-P/PX 6”	160	14.6		-/180/180

(1) interpolation of min. pipe wall thickness within pipe diameter range



Certification Body

UL International New Zealand Ltd,
 54 Tardale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

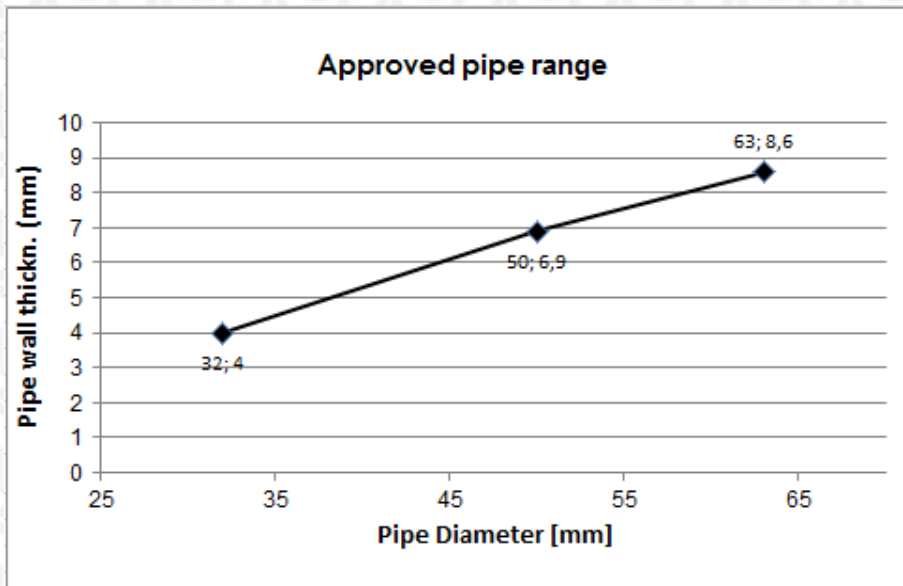
Certificate No. UL-AU-230006
 Page 20/40
 Date of Issue 2023-11-01

A.2.2.10 PE-Xa pipes designation “Rehau Rautitan Flex”

Distance of penetrations (s₁): 200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 2”	32	4.0	-/180/180
	50	6.9	
	63	8.6	
	32 - 63	4.4/8.6 ⁽¹⁾	

(¹) interpolation of min. pipe wall thickness within pipe diameter range



Certification Body

UL International New Zealand Ltd,
 54 Tardale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



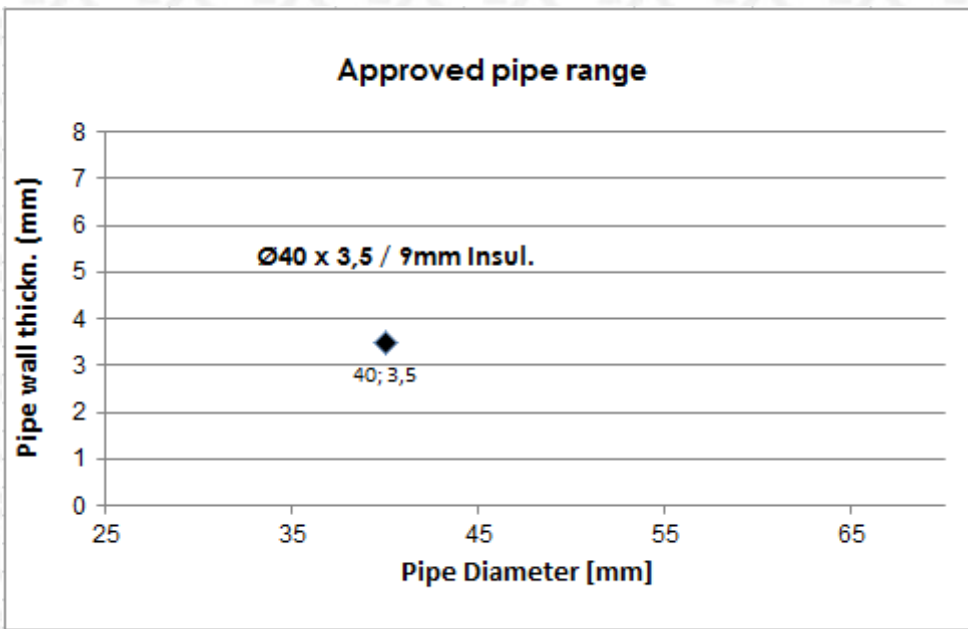
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 21/40
 Date of Issue 2023-11-01

A.2.2.11 PE-X pipes designation “Geberit Mepla”, elastomeric foamed thermal pipe insulation,

Distance of penetrations (s₁): 200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	Pipe insulation thickness (mm), CS	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 2”	40	3.5	9.0	-/180/180 -



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
Page 22/40
Date of Issue 2023-11-01

A.2.2.12 Metal pipes protected with Hilti CP 606 in rigid floors

The floor must have a minimum bare concrete separating element thickness of 120 mm. Aperture framing/beading shall be applied to achieve necessary thickness of 150 mm locally. Build up is not required for floors with thickness equal to or greater than 150 mm.

The metal pipe must be positioned in the core hole such that the annular gap on all sides is maximum of 25 mm. The gap must be filled with Hilti CP 606 to a minimum depth of 30 mm backed with PE backing rod or mineral stone/rock wool. Annular gaps beyond 25 mm and up to 60 mm are allowed provided that the gap is sealed with CP 606 to a min depth of 30 mm backed with 33% compressed mineral wool with a minimum density of 60 kg/m³ as shown in Figure C below. Where the annular gap is inconsistent around the pipe (i.e., less than 25 mm on one side and greater than 25 mm on the other side), 33% compressed mineral wool is only required in those areas where the gap is over 25 mm. The backing rod may be omitted if CP 606 sealant is applied to the full depth of the floor with a maximum annular gap of 25 mm. If the annular gap is zero, Hilti CP 606 can be applied in a 30 mm high x 5 mm thick fillet around the pipe as shown in Figures B and E.

The FRL assigned applies to the insulation configuration where PVC pipe section or Hilti cast in collar CP 680 P/PX casted in floor remains in the concrete floor.

PEF backing rod can be open or closed, sealant can be filled to full depth of the floor with a maximum annular gap of 25 mm, so that the use of backing rod can be ignored.

The metal pipe shall be copper, brass and ferrous (steel and iron) pipes specified in the table below, stainless and galvanised pipes are also included.

Pipe insulation can either be mineral stone/rock wool with greater density and thickness, or 38 mm and 50 mm thick Brandford Fibertex 450. Moreover, any equivalent mineral insulation fibre insulation with a minimum density of 80 kg/m³ and a minimum thickness of 38 mm can optionally be used. Mineral stone/rock wool insulation must be overlapped by a minimum length equivalent to the pipe diameter. Such overlap is not required for preformed mineral stone/rock wool section.

If concrete slab thickness is greater than 200 mm, a sleeve coupler f a PVC pipe of appropriate size shall be used to extend the overall collar height up to at least the slab thickness.

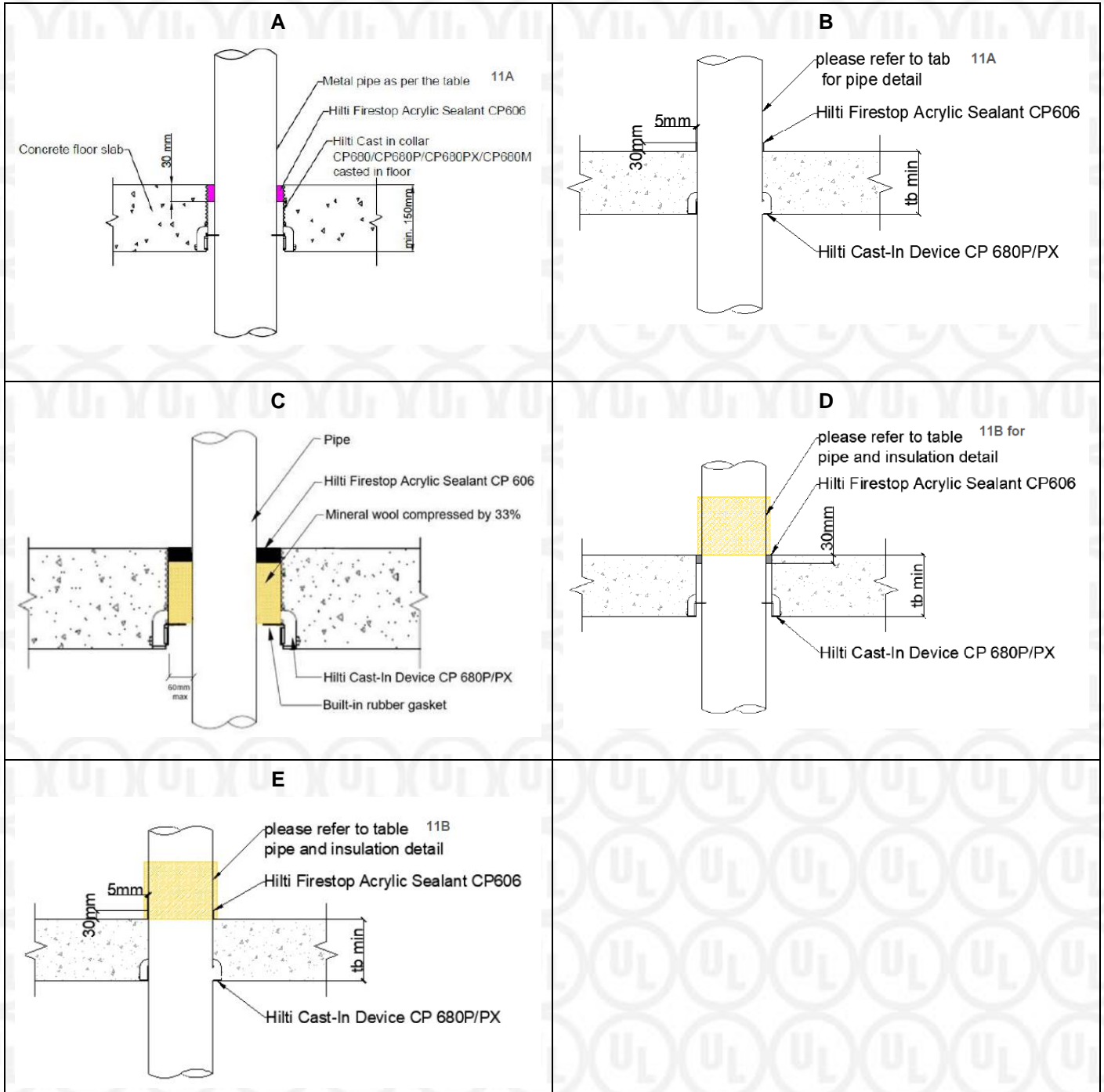
Certification Body

UL International New Zealand Ltd,
54 Tarndale Grove, Albany,
Auckland 0632, New Zealand.
+64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 23/40
 Date of Issue 2023-11-01



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 24/40
 Date of Issue 2023-11-01

A.2.2.12.1 Metal pipe configuration as per Figure A								
Metal pipe material	Collar size*	Pipe nominal size, DN (mm)	Min. pipe wall thickness (mm)	Allowable annular seal width (mm)	Sealant depth (mm)	Backing config.	Pipe insulation configuration	FRL
Copper, ferrous or brass	2" or 3"	23-65	0.91	25, or up to 60 mm with mineral wool infill (figure C)	30	PEF backing rod, CF 116, CF-F 750 GV, CF 126 or mineral rock wool	None	-/240/-
	3", 4" or 6"	80-100	1.22					-/120/-
		100-125	1.42					
Copper, ferrous (steel and iron)	6"	125-150	1.63					

*Note: Where there are two or more options for Hilti collar CP 680 P size, the max annular gap of 25 mm must be taken into consideration.

A.2.2.12.2 Metal pipe configuration as per Figure C									
Metal pipe material	Collar size*	Pipe nominal size, DN (mm)	Min. pipe wall thickness (mm)	Allowable annular seal width (mm)	Sealant depth (mm)	Backing config.	Pipe insulation config. *	Insulation length	FRL
Copper, ferrous or brass	2" or 3"	23-65	0.91	25, or up to 60 mm with mineral wool infill (figure C)	30	PEF backing rod, CF 116, CF-F 750 GV, CF 126 or mineral rock wool	Mineral stone/rock wool insulation or performed mineral stone/rock wool insulation installed on top side of the floor only	365	-/240/120
		80-100	1.22					500	
			100-125					1.42	
Copper, ferrous (steel and iron)	6"	125-150	1.63				725	-/120/120	

*Note: 38 mm or 50 mm thick Bradford Fibertex 450 insulation can be optionally used. Moreover, any equivalent mineral fibre insulation with a minimum density of 80 kg/m³ and a minimum thickness of 38 mm can optionally be used.

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



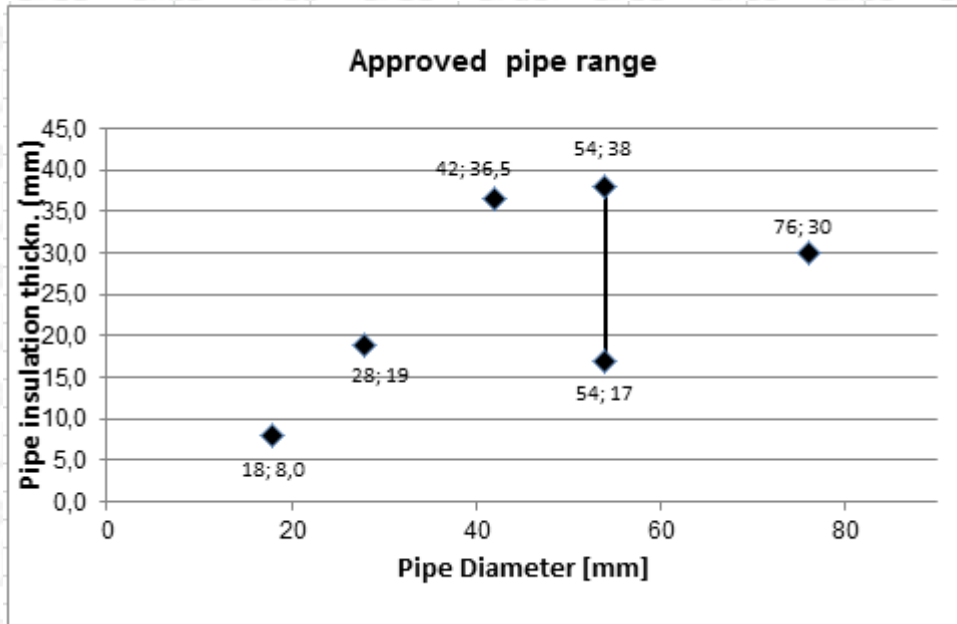
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 25/40
 Date of Issue 2023-11-01

A.2.2.13 Copper pipes including metal pipes, sustained (CS) elastomeric foamed thermal pipe insulation

Distance of penetrations (s₁): 200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	Pipe insulation thickness (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 2"	18	1.0	8.0	-/180/180
	28	1.5	19.0	
CP 680-P/PX 3"	18	1.0	32.0	
CP 680-P/PX 4"	42	1.5	36.5	
	54	2.0	17.0	
CP 680-P/PX 6"	54	2.0	38.0	
	76	2.0	30	



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 26/40
 Date of Issue 2023-11-01

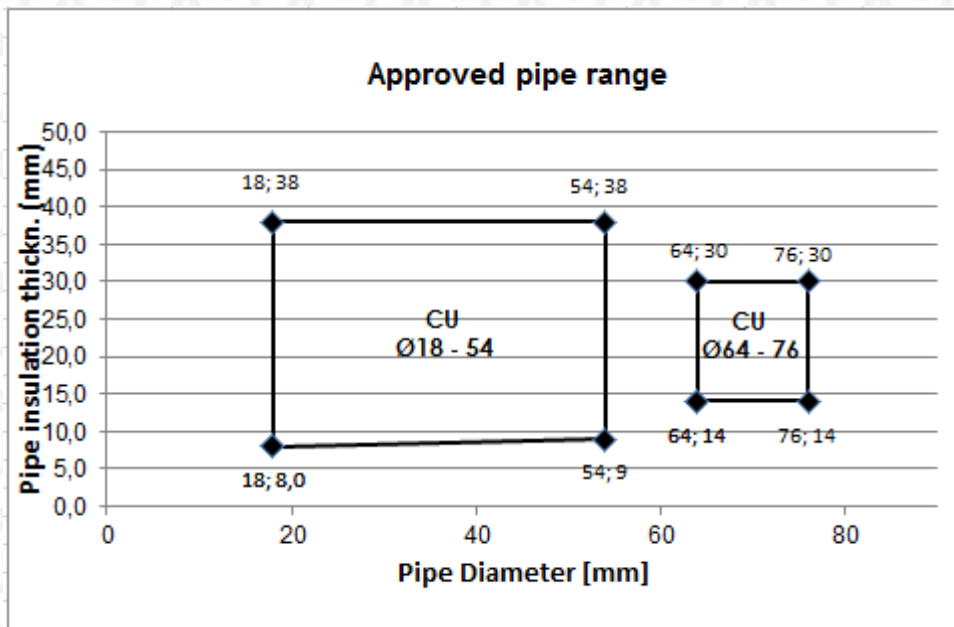
A.2.2.14 Copper pipes including metal pipes, with sustained (CS) elastomeric foamed thermal pipe insulation

Distance of penetrations (s₁): 200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	Pipe insulation thickness (mm)	FRL (Fire Resistance Level with Distance (s ₁) 200mm)
CP 680-P/PX 2" CP 680-P/PX 3" CP 680-P/PX 4" CP 680-P/PX 6"	18 - 54	1.0/2.0 ⁽¹⁾	8.0 – 38.0 ⁽³⁾	-/120/120
	64 - 76	1.0/2.0 ⁽¹⁾	14.0 – 30.0 ⁽³⁾	

⁽¹⁾ interpolation of min. pipe wall thickness within pipe diameter range

⁽³⁾ interpolation of min. pipe insulation within pipe diameter range



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



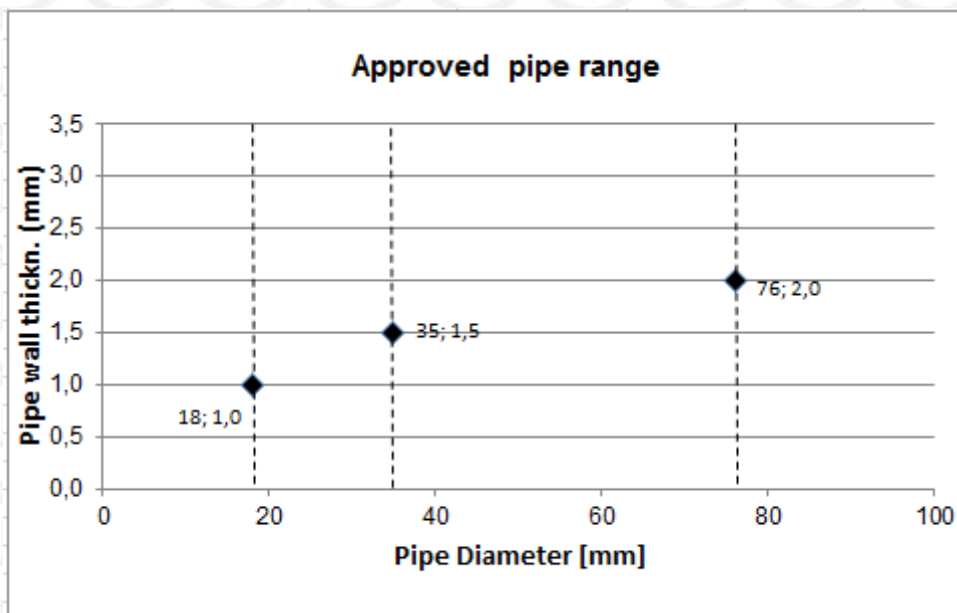
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 27/40
 Date of Issue 2023-11-01

A.2.2.15 Copper pipes including metal pipes, with local sustained (LS) mineral glass wool thermal pipe insulation

Distance of penetrations (s_1): 200 mm (B)

Collar size (A_1)	Pipe diameter d_c (mm)	Pipe wall thickness t_c (mm)	Pipe insulation thickness (mm)	FRL (Fire Resistance Level) with Distance (s_1) 200mm
CP 680-P/PX 2"	18	1.0	20.0	-/120/120
CP 680-P/PX 3"	35	1.5	20.0	
CP 680-P/PX 4"	76	2.0	20.0	



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



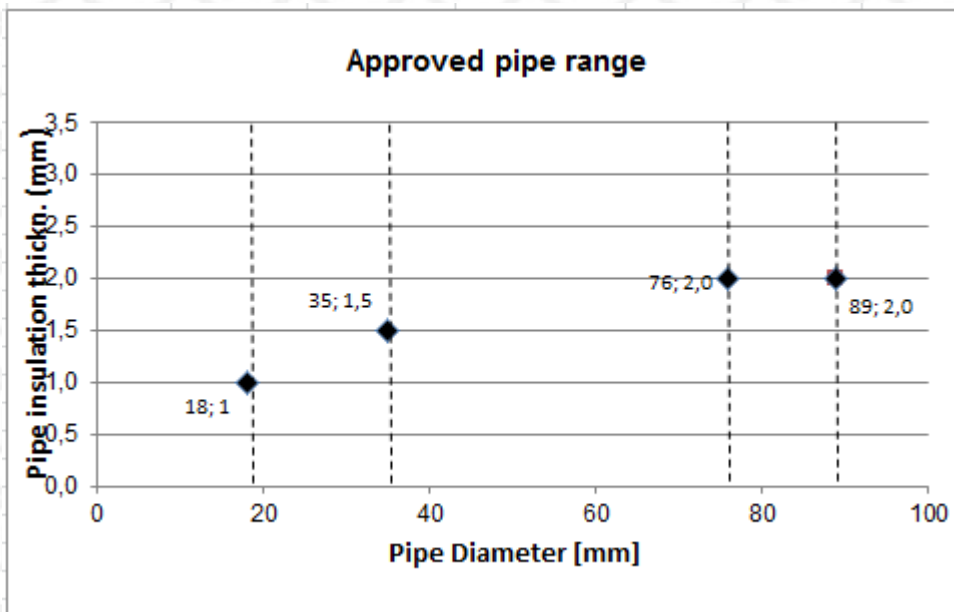
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 28/40
 Date of Issue 2023-11-01

A.2.2.16 Copper pipes including metal pipes, with local sustained (LS) mineral stone wool thermal pipe insulation

Distance of penetrations (s₁): 200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	Pipe insulation thickness (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 2"	18	1.0	20.0	-/180/180
CP 680-P/PX 3"	35	1.5	20.0	
CP 680-P/PX 4"	76	2.0	20.0	
CP 680-P/PX 6"	89	2.0	20.0	



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



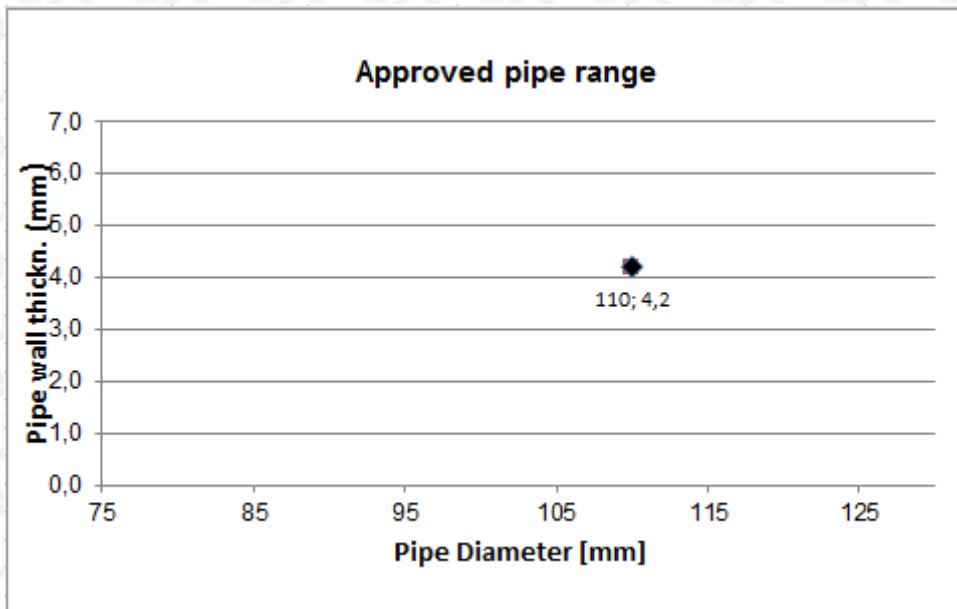
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 29/40
 Date of Issue 2023-11-01

A.2.2.17 PE pipes (including HDPE, MDPE and PE 100) according to local requirements with 87° elbow, PVC pipes INCLUDING PVC-U AND PVC-SC acc. to local requirements with 87° elbow

Distance of penetrations (s₁): 200 mm (B)

Collar size (A ₁)	Pipe diameter d _c (mm)	Pipe wall thickness t _c (mm)	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 4"	110	4.2	-/180/180



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 30/40
 Date of Issue 2023-11-01

For FRL -/240/240 solution, t_b , min = 150 mm

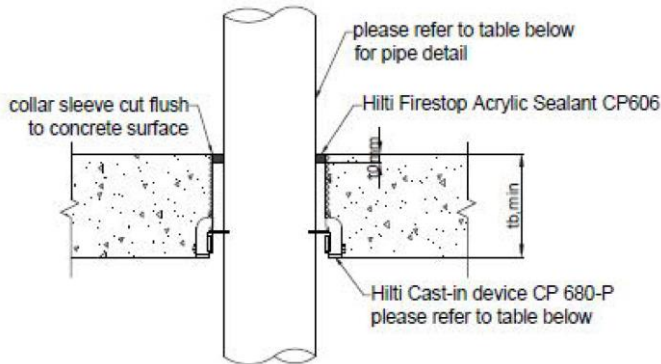
Hilti collar CP 680 P configuration 1 (CC1): Hilti cast in collar CP 680 P/PX collar sleeve can remain uncut or cut flush during the installation.

Hilti collar CP 680 P/PX configuration 2 (CC2): Hilti cast in collar CP 680 P/PX collar sleeve must remain uncut during the installation, for this collar configuration.

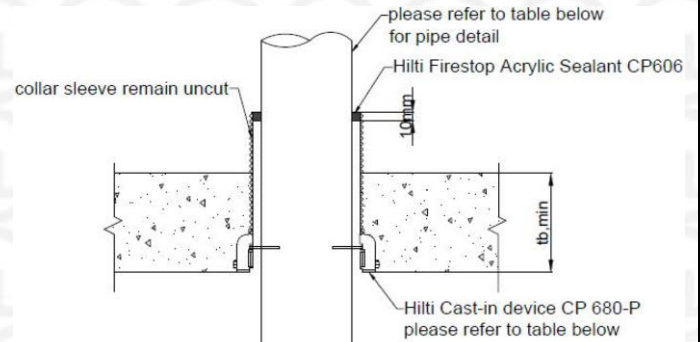
A.2.2.18 HDPE pipes in stacked/straight configuration with sleeve uncut

The bare concrete floor separating element thickness (t_b , min) shall have a minimum thickness of 150 mm. The FRL of the concrete floor separating element governs the FRL of the penetration system.

HDPE stack pipe with sleeve cut flush



HDPE stack pipe with sleeve uncut



Collar size	Pipe nominal size, DN (mm)	Nominal total pipe wall thickness (mm)	Hilti collar CP 680P/PX configuration	Sealant configuration	FRL t_b , min = 150mm
CP 680-P/PX 2"	40-60	2	Cast in collar sleeve can be cut or remain uncut	10 mm depth of CP 606 applied in the annular gap between the pipe and the collar sleeve	-/240/240
CP 680-P/PX 3"	70	3			
CP 680-P/PX 4"	90, 100	3.5, 4.3			
CP 680-P/PX 6"	125-150	4.9-6.2			

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



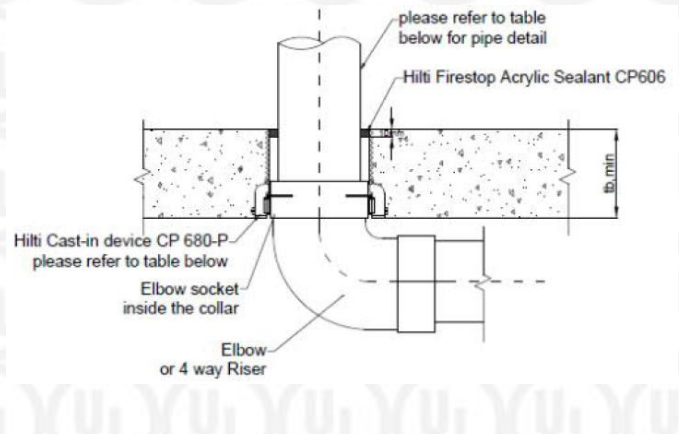
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 31/40
 Date of Issue 2023-11-01

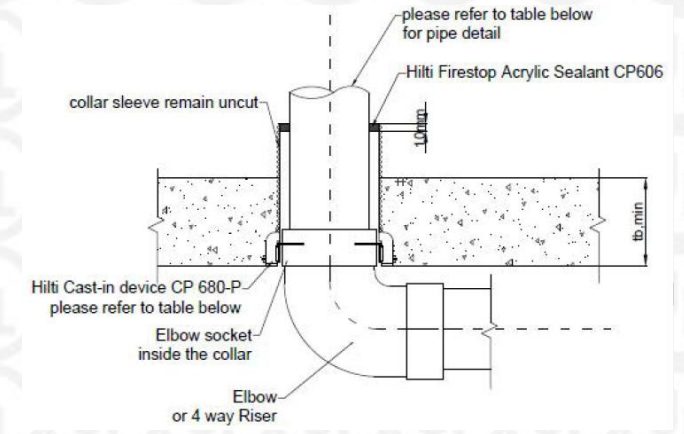
A.2.2.19 HDPE pipes with elbow inside collar protected with Hilti CP 680 P/PX cast in collar through concrete floor fire separating element

The bare concrete floor separating element thickness (t_b , min) shall have a minimum thickness of 150 mm. The FRL of the concrete floor separating element governs the FRL of the penetration system.

HDPE pipe with elbow inside with sleeve cut flush



HDPE pipe with elbow inside with sleeve uncut



Collar size	Pipe nominal size, DN (mm)	Nominal total pipe wall thickness (mm)	Hilti collar CP 680P/PX configuration	Sealant configuration	FRL t_b , min = 150mm
CP 680-P/PX 2"	40-60	3	Cast in collar sleeve can be cut or remain uncut	10 mm depth of CP 606 applied in the annular gap between the pipe and the collar sleeve	-/240/240
CP 680-P/PX 3"	70	3			
CP 680-P/PX 4"	90-100	3.5, 4.3			
CP 680-P/PX 6"	125-150	4.9-6.2			

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



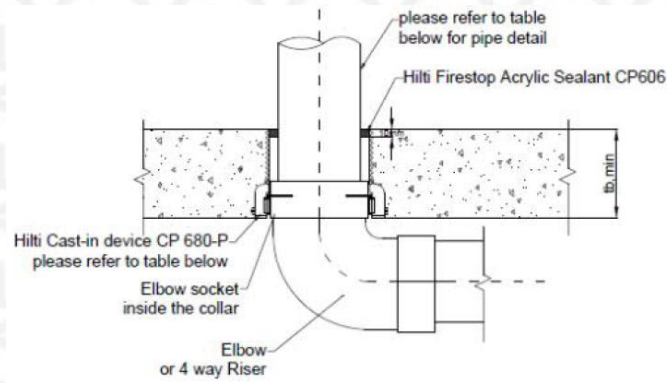
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 32/40
 Date of Issue 2023-11-01

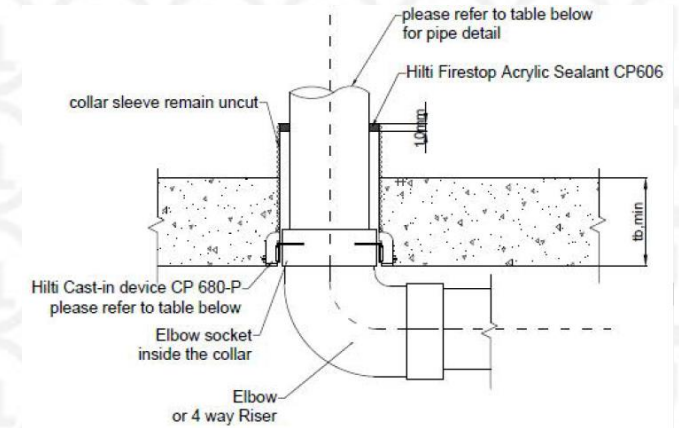
A.2.2.20 uPVC-SC pipes with elbow inside collar protected with Hilti CP 680 P/PX cast in collar through concrete floor fire separating element

The bare concrete floor separating element thickness (t_b , min) shall have a minimum thickness of 150 mm. The FRL of the concrete floor separating element governs the FRL of the penetration system.

uPVC-SC pipe with elbow inside with sleeve cut flush



uPVC-SC pipe with elbow inside with sleeve uncut



Collar size	Pipe nominal size, DN (mm)	Nominal total pipe wall thickness (mm)	Hilti collar CP 680P/PX configuration	Sealant configuration	FRL t_b , min = 150mm
CP 680-P/PX 4"	100	3.5	Cast in collar sleeve can be cut or remain uncut	10 mm depth of CP 606 applied in the annular gap between the pipe and the collar sleeve	-/240/240
CP 680-P/PX 6"	150	5	Cast in collar sleeve shall remain uncut at all times		

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



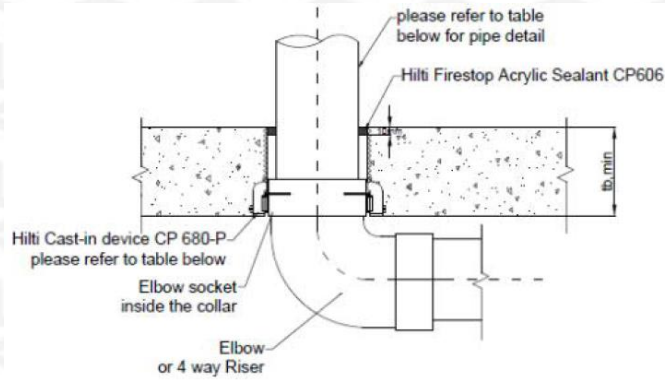
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 33/40
 Date of Issue 2023-11-01

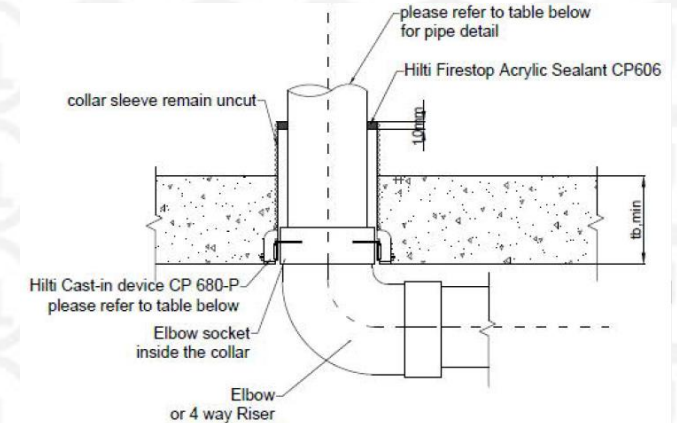
A.2.2.21 uPVC pipes with elbow inside collar protected with Hilti CP 680 P/PX cast in collar through concrete floor fire separating element

The bare concrete floor separating element thickness (t_b , min) shall have a minimum thickness of 150 mm. The FRL of the concrete floor separating element governs the FRL of the penetration system.

uPVC pipe with elbow inside with sleeve cut flush



uPVC pipe with elbow inside with sleeve uncut



Collar size	Pipe nominal size, DN (mm)	Nominal total pipe wall thickness (mm)	Hilti collar CP 680P/PX configuration	Sealant configuration	FRL t_b , min = 150mm
CP 680-P/PX 2"	40	2	Cast in collar sleeve can be cut or remain uncut	10 mm depth of CP 606 applied in the annular gap between the pipe and the collar sleeve	-/240/240
	50	2.2			
	65	2.7			
CP 680-P/PX 3"	80	2.9			
CP 680-P/PX 4"	100	3.5			
CP 680-P/PX 6"	150	5			

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



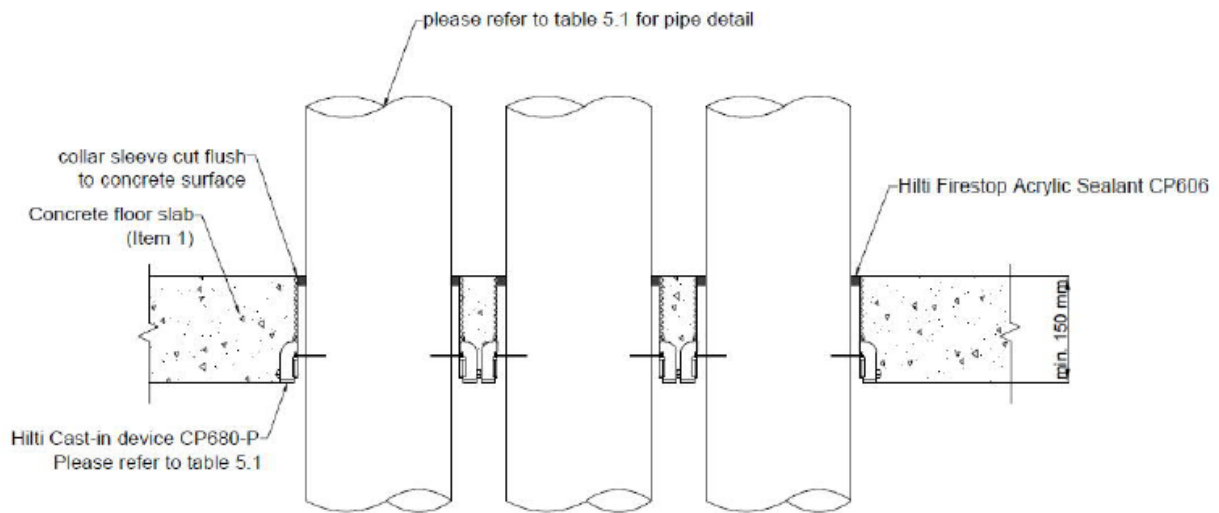
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
Page 34/40
Date of Issue 2023-11-01

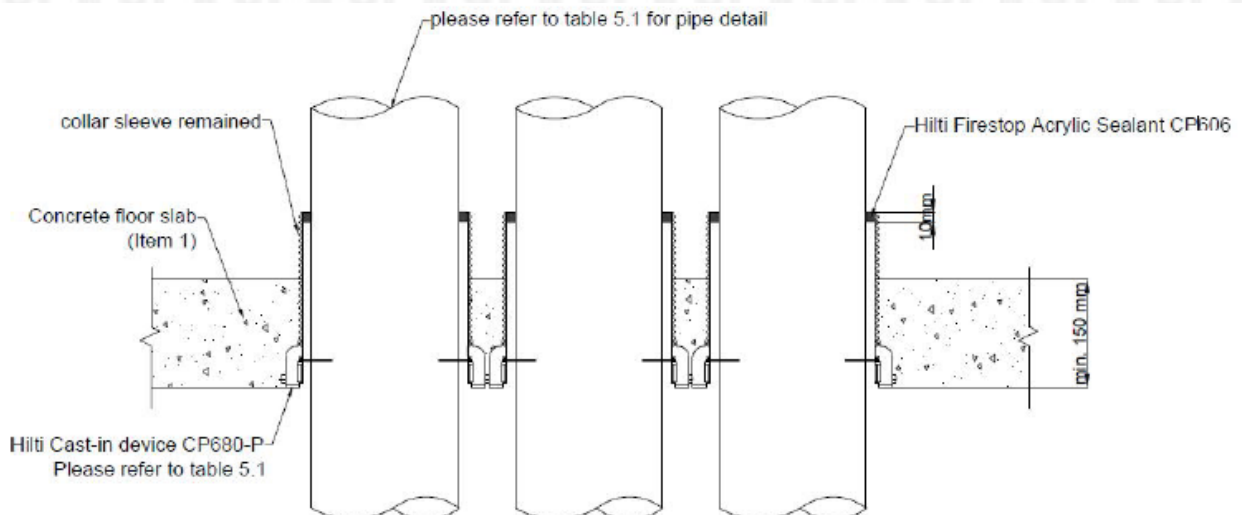
A.2.2.22 Multiple stack pipe penetrations protected with Hilti CP 680 P/PX cast in collar through concrete floor fire separating element

The bare concrete floor separating element thickness (t_b , min) shall have a minimum thickness of 150 mm. The FRL of the concrete floor separating element governs the FRL of the penetration system.

Multiple stack pipe with sleeve cut flush



HDPE stack pipe with sleeve uncut



Certification Body

UL International New Zealand Ltd,
54 Tarndale Grove, Albany,
Auckland 0632, New Zealand.
+64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
Page 35/40
Date of Issue 2023-11-01

Pipe config.	Pipe material	Collar size*	Pipe nominal size, DN (mm)	Hilti collar CP 680 P/PX config.	Sealant config.	FRL tb, min = 150 mm
Multiple collars connected in a row	UPVC, UPVC-SC, HDPE	2", 3", 4"	All approved systems up to DN 110	Cast in collar sleeve can be cut or remain uncut	10 mm depth of CP 606 applied in the annular gap between the pipe and the collar sleeve	-/240/240
		6"	All approved systems up to DN 160	Cast in collar sleeve shall remain uncut at all times		-/240/240
	PP-MD*	2", 3", 4"	All approved systems up to DN 110	Cast in collar sleeve can be cut or remain uncut		-/120/120
	Copper, ferrous or brass	2", 3", 4", 6"	All approved systems up to DN 125	Cast in collar sleeve can be cut or remain uncut with insulation	30 mm depth of CP 606 applied in the annular gap between or in a fillet around the pipe	-/240/120
	Copper, ferrous (steel or iron)	6"	All approved systems up to DN 150			-/120/120
	Copper, ferrous or brass	2", 3", 4", 6"	All approved systems up to DN 125	Cast in collar sleeve can be cut or remain uncut without insulation		-/240/-
	Copper, ferrous (steel or iron)	6"	All approved systems up to DN 150			-/120/-

*Only PP-MD less than 110 mm is included as per the above table, if PP-MD is present in a multiple collar configuration with other type of pipes, the FRL of the whole system is limited to -/120/120.

Certification Body

UL International New Zealand Ltd,
54 Tarndale Grove, Albany,
Auckland 0632, New Zealand.
+64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 36/40
 Date of Issue 2023-11-01

A.2.2.22 Blank seals		
With CFS PL firestop plug on top		
Distance of penetrations (s ₁): 0mm /200 mm (B)		
Collar size (A ₁)	FRL (Fire Resistance Level) with Distance (s ₁) 0mm	FRL (Fire Resistance Level) with Distance (s ₁) 200mm
CP 680-P/PX 2"	-/120/120	-/180/180
CP 680-P/PX 3"		
CP 680-P/PX 4"		
CP 680-P/PX 6"		

Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 37/40
 Date of Issue 2023-11-01

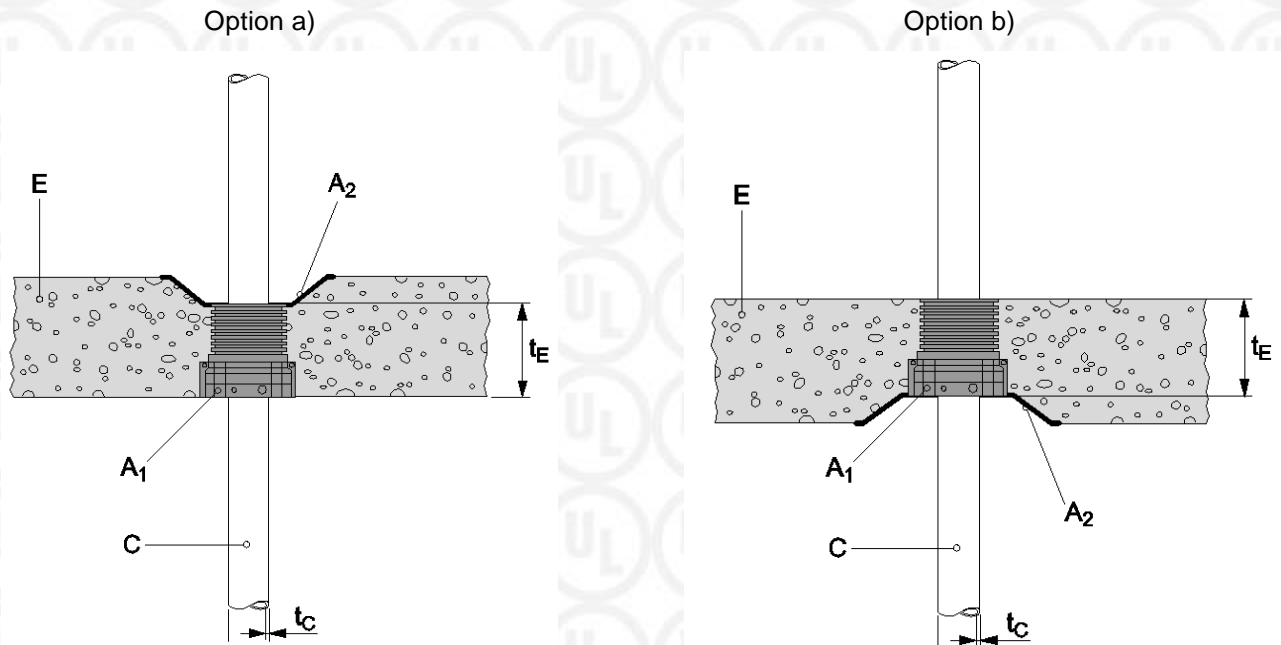
A.2.3 Penetrating services approved for CP 680-P/PX with “Manifold”

The floor must have a minimum thickness of 150 mm and comprise concrete with a minimum density of 550 kg/m³.

Penetration seal:

- Pipes classified in the section 2.2.1 to 2.2.21 can be sealed with a Hilti Firestop Cast-in device CP 680-P/PX with a Manifold adapter if the requirements of the options a) or b) given below are respected (the conditions to expose the intumescent layer of the Cast-in device to a potential fire have to be maintained):
 - a) the bottom side of the Cast-in device A₁ must be installed flush with the bottom side of the floor, the manifold A₂ is positioned on top of the Cast-in device
 - b) the bottom side of the manifold A₂ must be installed flush with the bottom side of the floor, the Cast-in device A₁ is positioned directly on top of the manifold
- the remaining floor thickness t_E around the Cast-in device must be ≥150 mm

Manifold:



Certification Body

UL International New Zealand Ltd,
 54 Tarndale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



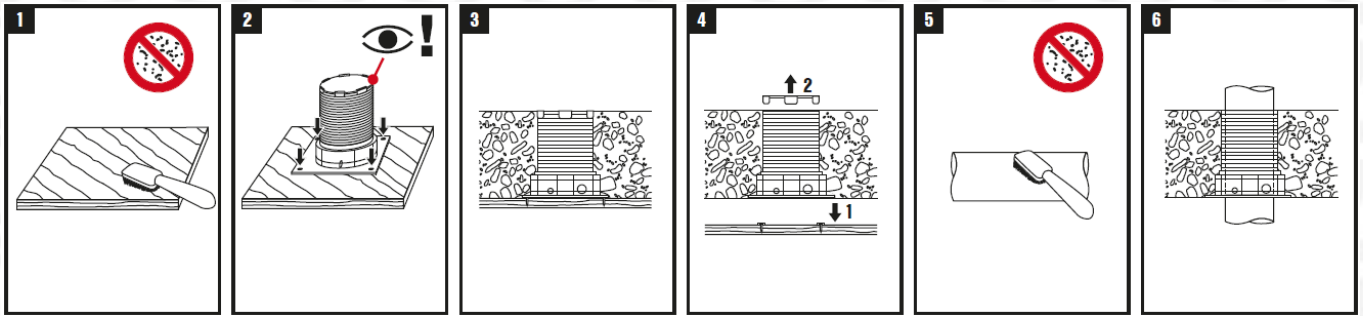
APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
 Page 38/40
 Date of Issue 2023-11-01

A.3 INSTALLATION OF THE PRODUCT AND ANCILLARY PRODUCT(S)

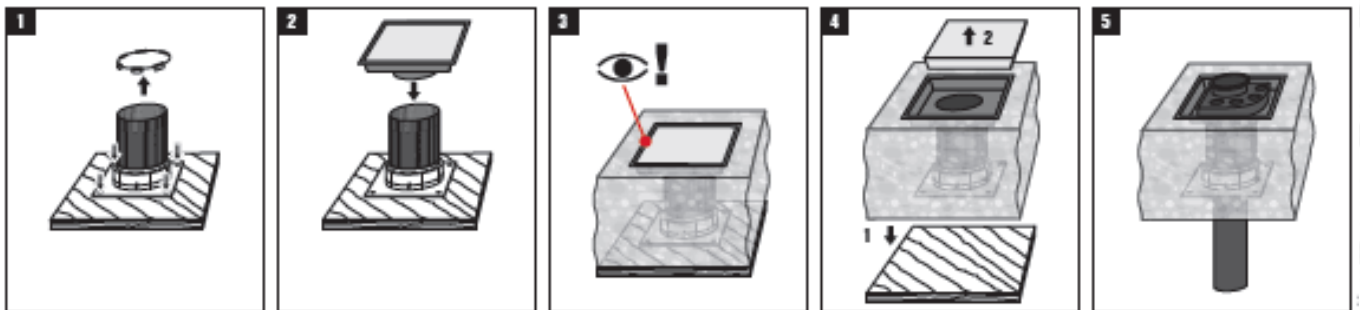
The arrangement and installation of Hilti Firestop Collar CP 680-P/PX shall be done in accordance with the details given below and in Annex 2 for the penetration seal(s).

3.1 CP 680-P/PX installation

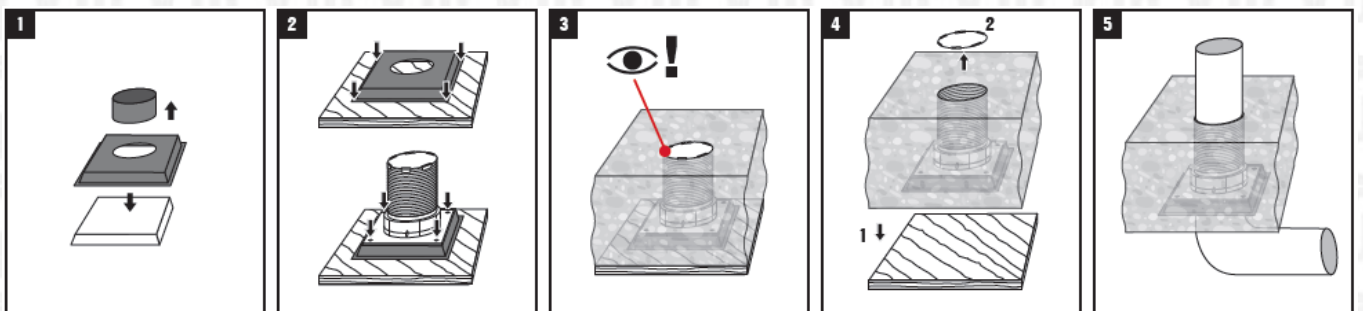


3.2 Manifold installation

3.2.1 CP 680-P/PX with Manifold installed top side



3.2.2 CP 680-P/PX with Manifold installed bottom side



Certification Body

UL International New Zealand Ltd,
 54 Tardale Grove, Albany,
 Auckland 0632, New Zealand.
 +64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
Page 39/40
Date of Issue 2023-11-01

Appendix B**Test report details – report reference.**

Name of Test Institute	Owner	Number of Report	Date of Test	Test standard
Warringtonfire Australia Pty Ltd	HILTI (Aust.) Pty Ltd P.O. Box 3217 Rhodes NSW 2138 Australia	FRT180461 R1.0 date 29.05.2019	04/03/2019	AS1530.4-2014
Warringtonfire Australia Pty Ltd	HILTI (Aust.) Pty Ltd P.O. Box 3217 Rhodes NSW 2138 Australia	FRT180462 R2.0 date 29.05.2019	05/03/2019	AS1530.4-2014
Warringtonfire Australia Pty Ltd	HILTI (Aust.) Pty Ltd P.O. Box 3217 Rhodes NSW 2138 Australia	FRT180463 R1.0 date 29.05.2019	06/03/2019	AS1530.4-2014
Warringtonfire Australia Pty Ltd	HILTI (Aust.) Pty Ltd P.O. Box 3217 Rhodes NSW 2138 Australia	FRT190095 R1.0 date 26.06.2019	30/05/2019	AS1530.4-2014
Warringtonfire Australia Pty Ltd	HILTI (Aust.) Pty Ltd P.O. Box 3217 Rhodes NSW 2138 Australia	FRT190130 R2.0 date 31.07.2019	11/07/2019	AS1530.4-2014
WFRGENT nv	HILTI AG Feldkircher Str. 100 LI-9494 Schaan	16820A, date 25.11.2014	13/11/2014	EN 1366-3: 2009
WFRGENT nv	HILTI AG Feldkircher Str. 100 LI-9494 Schaan	17037A, date 30.04.2015	17/03/2015	EN 1366-3: 2009
WFRGENT nv	HILTI AG Feldkircher Str. 100 LI-9494 Schaan	17156A, date 29.07.2015	18.05.2015	EN 1366-3: 2009
WFRGENT nv	HILTI AG Feldkircher Str. 100 LI-9494 Schaan	17256A, date 20.08.2015	17/07/2015	EN 1366-3: 2009
WFRGENT nv	HILTI AG Feldkircher Str. 100 LI-9494 Schaan	17158B, date 09.10.2015	18/05/2015	EN 1366-3: 2009
WFRGENT nv	HILTI AG Feldkircher Str. 100 LI-9494 Schaan	17416B, date 20.11.2015	07/10/2015	EN 1366-3: 2009
Warringtonfire Australia Pty Ltd	HILTI (Aust.) Pty Ltd 1G Homebush Bay Dr Rhodes NSW 2138 Australia	FRT180322.2, date 10/01/2019	24/10/2018	AS1530.4-2014

Certification Body

UL International New Zealand Ltd,
54 Tarndale Grove, Albany,
Auckland 0632, New Zealand.
+64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>



APPENDIX - UL-AU CERTIFICATE

Certificate No. UL-AU-230006
Page 40/40
Date of Issue 2023-11-01

Name of Test Institute	Owner	Number of Report	Date of Test	Test standard
WFRGENT nv	HILTI AG Feldkircher Str. 100 LI-9494 Schaan	17764B, date 01.08.2016	14/06/2016	EN 1366-3: 2009
WFRGENT nv	HILTI AG Feldkircher Str. 100 LI-9494 Schaan	18667A, date 06.03.2018	04/12/2017	EN 1366-3: 2009
WFRGENT nv	HILTI AG Feldkircher Str. 100 LI-9494 Schaan	19692A, date 24.04.2020	28/05/2019	EN 1366-3: 2009
WFRGENT nv	HILTI AG Feldkircher Str. 100 LI-9494 Schaan	19930A, date 10.04.2020	15/10/2019	EN 1366-3: 2009

Certification Body

UL International New Zealand Ltd,
54 Tarndale Grove, Albany,
Auckland 0632, New Zealand.
+64 9 415 3355, customerservice.anz@ul.com,
<http://newzealand.ul.com>

