AGNITEK PTY LTD

REGULATORY INFORMATION REPORT

Test standard: Sections 2 and 10 of AS 1530.4:2014
Reference Standard: AS 4072.1-2005 AMDT 1 (Rec:2016)
Test sponsor**:** Agnitek Pty Ltd
Products: Agnitek fire collars and sealants protecting various penetrations in a 1 hour fire-rated wall system
Job number**:** FRT251396
Revision: RIR1.0
Test date: 11 July 2025

Accredited for compliance with ISO/IEC 17025 – Testing

JENSEN HUGHES

Quality management

Revision	Date	Revision description		
RIR1.0	24 July 2025	Initial issue.		
		Prepared	**Reviewed**	**Authorised**
		Anthony Rosamilia	Mandeep Kamal	Mandeep Kamal
				

Jensen Hughes Fire Testing Pty Ltd
ABN 81 050 241 524
Formerly Warringtonfire Australia Pty Ltd[1]

[1] Warringtonfire Australia Pty Ltd was acquired by Jensen Hughes in December 2023. Jensen Hughes Fire Testing Pty Ltd is not affiliated, associated, authorised, or endorsed by Warringtonfire Australia Pty Ltd, Warringtonfire Testing and Certification Limited or its "Warringtonfire" or "Certifire" brands.

Executive summary

This report documents the findings of the fire resistance test of penetration systems in accordance with sections 2 and 10 of AS 1530.4:2014 with reference to AS 4072.1–2005 AMDT 1 (Rec:2016). The testing was done on 11 July 2025.

Jensen Hughes performed the test at the request of Agnitek Pty Ltd.

Table 1 provides details of the test assembly, and Table 2 provides a summary of the test specimen. A summary of the results is provided in Table 3.

Table 1 Test assembly

Item	Detail	
Separating element	1-hour fire rated plasterboard wall system	
Nominal separating element size	Width	1200 mm
	Height	1200 mm
	Thickness	90 mm
Number of penetration systems	Ten	
Restraint conditions	Restrained on all edges	

Table 2 Test specimen

System	Service	Fire-stopping protection	Local aperture size (mm)
B	1 × DN50 DWV uPVC pipe with DN50 straight coupling	AGNI-Collar50 with AGNI-Seal	Ø70
C	1 × DN65 DWV uPVC pipe with DN65 straight coupling	AGNI-Colla65 with AGNI-Seal	Ø80
F	1 × DN150 DWV uPVC pipe with DN150 straight coupling	AGNI-Collar150 with AGNI-Seal	Ø165
G	DN32 Blazemaster CPVC pipe	AGNI-Collar50 with AGNI-Seal	Ø70
H	DN25 uPVC pressure pipe	AGNI-Black	Ø49

Table 3 Test results

Penetration system/ control joint	Criteria	Results	Fire resistance level (FRL)
B	Structural adequacy	Not applicable	**-/60/60**
	Integrity	No failure at 61 minutes	
	Insulation	No failure at 61 minutes	
C	Structural adequacy	Not applicable	**-/60/60**
	Integrity	No failure at 61 minutes	
	Insulation	Failure at 60 minutes	
F	Structural adequacy	Not applicable	**-/60/60**
	Integrity	No failure at 61 minutes	
	Insulation	No failure at 61 minutes	
G	Structural adequacy	Not applicable	**-/60/60**
	Integrity	No failure at 61 minutes	
	Insulation	No failure at 61 minutes	
H	Structural adequacy	Not applicable	**-/60/60**
	Integrity	No failure at 61 minutes	
	Insulation	No failure at 61 minutes	

NOTE: The FRLs for the specimens B, C and F only apply to the tested orientation. As the FRL was only determined for one direction, an FRL cannot be assigned for the other direction.

Table of contents

1.0 Introduction

This report documents the findings of the fire resistance test of penetration systems in accordance with sections 2 and 10 of AS 1530.4:2014 with reference to AS 4072.1–2005 AMDT 1 (Rec:2016). The testing was done on 11 July 2025.

Jensen Hughes performed the test at the request of the test sponsor listed in Table 4.

Table 4 Test sponsor details

Test sponsor	Address
Agnitek Pty Ltd	8 Clare Street Bayswater VIC 3153 Australia

2.0 Test specimen

2.1 Schedule of components

Table 5 describes the test specimen and lists the schedule of components. These were provided by the test sponsor and surveyed by Jensen Hughes.

All measurements were done by Jensen Hughes – unless indicated otherwise.

Detailed drawings of the test specimen are provided in Appendix A.

Table 5 Schedule of components

Item	Description		
Separating element (SE)			
1.	Item name	Wall frame	
	Product name	Rondo 64 steel studs Rondo 64 steel noggings Rondo 64 steel tracks	
	Manufacturer	Rondo Building Services Pty Ltd	
	Size	Rondo 64 steel studs	64 mm × 36 mm × 0.50 BMT
		Rondo 64 steel noggings	64 mm × 28 mm × 0.50 BMT
		Rondo 64 steel tracks	64 mm × 28 mm × 0.50 BMT
	Material	Galvanised steel	
2.	Item name	Fire rated plasterboard	
	Product name	GYPROCK® FYRCHEK™ plasterboard	
	Manufacturer	CSR Building Products Ltd	
	Size	13 mm × 1200 mm × 3600 mm (cut to size)	
	Areal density	11 kg/m²	
3.	Item name	Button head screws	
	Product name	#8 × 12 mm, button head, needle point, zinc yellow screws	
	Manufacturer	CSR Building Products Ltd	
4.	Item name	Plasterboard screws	
	Product name	#6 × 32 mm, bugle head, needle point, fine thread plasterboard screws	
	Manufacturer	CSR Building Products Ltd	
5.	Item name	Masonry anchors	
	Product name	Ø6 × 50 mm, hexagonal flange head, zinc plated masonry screw anchor	
	Manufacturer	Bremick Fasteners	
6.	Item name	Acrylic sealant	
	Product name	GYPROCK® fire mastic acrylic sealant	
	Manufacturer	CSR Building Products Ltd	
SE	Overall size	1200 mm × 1200 mm × 90 mm	

Item	Description		
	Restraint conditions	Restrained on all edges	
	Installation	The wall system consisted of 64 mm deep wall framing (item 1) clad with one layer of fire rated plasterboard (item 2) on both the exposed and unexposed sides. The wall frame system (item 1) was secured to the test frame using masonry anchors (item 5) located at nominal 500 mm centres, starting 50 mm from both edges. The plasterboard (item 5) was secured to the steel frame system (item 1) using plasterboard screws (item 4), along the studs at 300 mm vertical centres. There was a nominal 5 mm perimeter gap between the edges of the plasterboard (item 1) and the test frame blockwork. The gap around the perimeter of the plasterboard (item 1) was filled with acrylic sealant (item 7) to the full depth of the plasterboard (item 1) and finished flush on both he exposed and the unexposed sides.	
Fire-stopping protections			
Sealant			
7.	Item name	Fire rated acrylic sealant	
	Product name	AGNI-Seal	
	Manufacturer	Agnitek Pty Ltd	
	Density	1510 kg/m^3	
	Batch number	SEGR600310124	
8.	Item name	Fire rated intumescent sealant	
	Product name	AGNI-Black	
	Manufacturer	Agnitek Pty Ltd	
	Density	1166 kg/m^3	
	Batch number	MR191124	
Fire collar			
10.	Item name	50 mm fire collar	
	Product name	AGNI-Collar50	
	Manufacturer	Agnitek Pty Ltd	
	Collar details	Outer diameter	88 mm
		Inner diameter	70 mm
		Depth	49 mm
		Number of fixing tabs	3
		Outer shell material	Powder coated mild steel
		Outer shell thickness	0.8 mm BMT
	Intumescent details	Number of layers	2
		Width	47 mm
		Thickness	3.5 mm
		Density	1232 kg/m^3
	Batch number	Not present	

Item	Description		
11.	Item name	65 mm fire collar	
	Product name	AGNI-Collar65	
	Manufacturer	Agnitek Pty Ltd	
	Collar details	Outer diameter	102 mm
		Inner diameter	84 mm
		Depth	49 mm
		Number of fixing tabs	3
		Outer shell material	Powder coated mild steel
		Outer shell thickness	0.8 mm BMT
	Intumescent details	Number of layers	2
		Width	47 mm
		Thickness	3.5 mm
		Density	1232 kg/m^3
	Batch number	Not present	
14.	Item name	150 mm fire collar	
	Product name	AGNI-Collar150	
	Manufacturer	Agnitek Pty Ltd	
	Collar details	Outer diameter	190 mm
		Inner diameter	170 mm
		Depth	79 mm
		Number of fixing tabs	6
		Outer shell material	Galvanised steel
		Outer shell thickness	0.8 mm BMT
	Intumescent details	Number of layers	3
		Width	76 mm
		Thickness	3.5 mm
		Density	1232 kg/m^3
	Batch number	Not present	
Services			
16.	Item name	DN50 DWV uPVC Pipe	
	Product name	PIPE KING BEP PVC 50 DWV PVCU 25/04/21	
	Manufacturer	Pipe King	
	Material	uPVC	
	Size	Outer diameter	56 mm
		Wall thickness	2.5 mm
	Item name	DN65 DWV uPVC Pipe	

Item	Description		
17.	Product name	PIPE KING BEP PVC 65 DWV PVCU 25/05/22	
	Manufacturer	Pipe King	
	Material	uPVC	
	Size	Outer diameter	68 mm
		Wall thickness	2.8 mm
20.	Item name	DN150 DWV uPVC Pipe	
	Product name	PIPE KING BEP PVC 150 DWV PVCU SN4SC 25/03/14	
	Manufacturer	Pipe King	
	Material	uPVC	
	Size	Outer diameter	160 mm
		Wall thickness	4.7 mm
21.	Item name	Sprinkler Pipe	
	Product name	TFP 1¼ [32MM] SDR 13.5 WP175 PSI (1210kPa) DN32 CPVC	
	Manufacturer	Blazemaster	
	Material	CPVC	
	Size	Outer diameter	42.4 mm
		Wall thickness	3.6 mm
22.	Item name	DN25 uPVC pressure pipe	
	Product name	BEP PVC Series 1 25 PVCU PN12 25.01.15 Syd AS/NZS1477 Lic 21919	
	Manufacturer	Pipe King	
	Material	uPVC	
	Size	Outer diameter	33.6 mm
		Wall thickness	2.2 mm
26.	Item name	DN50 straight coupling (socket)	
	Supplier	Pipe king	
	Size	Length	62 mm
		Wall thickness	2.2 mm
27.	Item name	DN65 straight coupling (socket)	
	Supplier	Pipe king	
	Size	Length	80 mm
		Wall thickness	2.5 mm
30.	Item name	DN150 straight coupling (socket)	
	Supplier	Pipe king	
	Size	Length	156 mm
		Wall thickness	3.4 mm
Fixings			
	Item name	Fire collar screws	

Item	Description	
31.	Product description	#10-8 × 50 mm, ZINC YELLOW PASSIVATE CHIPBOARDCSK RIBBED AS3566 PHILLIPS DRIVE
	Manufacturer	DRiLLX
	LOT	H230999
Penetration system B		
B	Service	1 × DN50 DWV uPVC pipe (item 16) with DN50 straight coupling (item 26)
	Service detail	The service was installed through the aperture in the separating element. The service protruded nominally 550 mm on the exposed side and extended 2000 mm on the unexposed side. Two lengths of pipe were combined using a straight coupling (item 26) to make full tested length. The straight coupling was installed such that it was wholly on the exposed side of separating wall butting up against the wall. The exposed side of the pipe system was capped using a uPVC end cap.
	Service support	The service was supported on the unexposed side of the separating element using channel struts and pipe clamps located nominally 500 mm and 1500 mm from the separating element to the centre of the channel strut.
	Aperture size	Ø70 mm
	Annular gap	7 mm
	Local fire-stopping protection	
	Protection	Fire rated acrylic sealant (item 7) was applied in the annular gap to a nominal depth of 13 mm, on both the exposed and unexposed sides. A 50 mm fire collar (item 10) was installed around the service on both the exposed and the unexposed sides, and fixed to the separating element using three fire collar screws (item 31).
Penetration system C		
C	Service	1 × DN65 DWV uPVC pipe (item 17) with DN65 straight coupling (item 27)
	Service detail	The service was installed through the aperture in the separating element. The service protruded nominally 550 mm on the exposed side and extended 2000 mm on the unexposed side. Two lengths of pipe were combined using a straight coupling (item 27) to make full tested length. The straight coupling was installed such that it was wholly on the exposed side of separating wall butting up against the wall. The exposed side of the pipe system was capped using a uPVC end cap.
	Service support	The service was supported on the unexposed side of the separating element using channel struts and pipe clamps located nominally 500 mm and 1500 mm from the separating element to the centre of the channel strut.
	Aperture size	Ø80 mm
	Annular gap	6 mm
	Local fire-stopping protection	
	Protection	Fire rated acrylic sealant (item 7) was applied in the annular gap to a nominal depth of 13 mm, on both the exposed and unexposed sides. A 65 mm fire collar (item 11) was installed around the service on both the exposed and the unexposed sides, and fixed to the separating element using three fire collar screws (item 31).
Penetration system F		

Item	Description	
F	Service	1 × DN150 DWV uPVC pipe (item 20) with DN150 straight coupling (item 30)
	Service detail	The service was installed through the aperture in the separating element. The service protruded nominally 550 mm on the exposed side and extended 2000 mm on the unexposed side. Two lengths of pipe were combined using a straight coupling (item 30) to make full tested length. The straight coupling was installed such that it was wholly on the exposed side of separating wall butting up against the wall. The exposed side of the pipe system was capped using a uPVC end cap.
	Service support	The service was supported on the unexposed side of the separating element using channel struts and pipe clamps located nominally 500 mm and 1500 mm from the separating element to the centre of the channel strut.
	Aperture size	Ø165 mm
	Annular gap	2.5 mm
	Local fire-stopping protection	
	Protection	Fire rated acrylic sealant (item 7) was applied in the annular gap to a nominal depth of 13 mm, on both the exposed and the unexposed sides. A 150 mm fire collar (item 14) was installed around the service on both the exposed and the unexposed sides, and fixed to the separating element using six fire collar screws (item 31).
Penetration system G		
G	Service	DN32 Blazemaster CPVC pipe (item 21)
	Service detail	The pipe was installed through the aperture in the separating element. The pipe protruded nominally 550 mm on the exposed side and 2000 mm on the unexposed side. The exposed side of the pipe was capped using a CPVC end cap.
	Service support	The service was supported on the unexposed side of the separating element using channel struts and pipe clamps located nominally 500 mm and 1500 mm from the separating element to the centre of the channel strut.
	Aperture size	Ø70 mm
	Annular gap	13.8 mm
	Local fire-stopping protection	
	Protection	Fire rated acrylic sealant (item 7) was applied in the annular gap to a nominal depth of 13 mm and finished flush, on both the exposed and the unexposed sides surface. A 50 mm fire collar (item 10) was installed around the service on both the exposed and the unexposed sides, and fixed to the separating element using two fire collar screws (item 31).
Penetration system H		
H	Service	DN25 uPVC pressure pipe (item 22)
	Service detail	The pipe was installed through the aperture in the separating element. The pipe protruded nominally 550 mm on the exposed side and 2000 mm on the unexposed side. The exposed side of the pipe was capped using a uPVC end cap.
	Service support	The service was supported on the unexposed side of the separating element using channel struts and pipe clamps located nominally 550 mm and 1500 mm from the separating element to the centre of the channel strut.
	Aperture size	Ø48.6 mm
	Annular gap	7.5 mm
	Local fire-stopping protection	

Item	Description	
	Protection	Fire rated intumescent sealant (item 8) was applied in the annular gap to a nominal depth of 13 mm and finished with 5 mm × 5 mm fillet, on both the exposed and the unexposed sides surface.

2.2 Installation details

Table 6 lists the installation details for the test specimen.

Table 6 Installation details

Item	Detail
Start date for construction of separating element	10 June 2025
Start date for installation of fire-stopping protection for the penetration systems	25 June 2025
Completion date for constructing and installing the test specimen	25 June 2025
Separating element constructed by	Representatives of Jensen Hughes
Fire-stopping protection for penetration systems installed by	Representatives of the test sponsor
Symmetry	Services B, C and F Asymmetrical: as the pipe coupling socket was only located on the exposed side of the wall. Services G and H were symmetrical.

3.0 Test procedure

Table 7 details the test procedure for this fire resistance test.

Table 7 Test procedure

Item	Detail	
Statement of compliance	The test was performed in accordance with the requirements of sections 2 and 10 of AS 1530.4:2014 appropriate for penetration systems.	
Variations	None	
Pre-test conditioning	The construction and installation of the test specimen was completed on 25 June 2025. The test specimen was subjected to normal laboratory temperatures and conditions between the completion of construction of the test specimen and the start of the test.	
Sampling / specimen selection	The laboratory was not involved in sampling or selecting the test specimen for the fire resistance test. The results obtained during the test only apply to the test samples as received and tested by Jensen Hughes.	
Ambient laboratory temperature	Start of the test	15 °C
	Minimum temperature	15 °C
	Maximum temperature	16 °C
Test duration	61 minutes	
Instrumentation and equipment	The instrumentation was provided in accordance with AS 1530.4:2014 as follows: + The furnace temperature was measured by four mineral insulated metal sheathed (MIMS) Type K thermocouples – with wire diameters not greater than 1 mm, an overall diameter of 3 mm, and the measuring junction insulated from the sheath. The thermocouples protruded a minimum of 25 mm from steel supporting tubes. + The unexposed side specimen temperatures were measured by Type K thermocouples with wire diameters less than 0.5 mm soldered to 12 mm diameter × 0.2 mm thick copper discs covered by 30 mm × 30 mm × 2.0 mm thick inorganic insulating pads. + A roving thermocouple was available to measure temperatures at positions that appeared hotter than the positions monitored by the fixed thermocouples. + Cotton pads were available during the test to assess the performance of the specimen under the criteria of integrity. + The furnace pressure was measured at approximately 700 mm above mid-height of the lowest penetration. It was monitored using a differential pressure transmitter. + All electronic data was sampled at 5 second intervals.	

4.0 Test measurements and results

Table 8 summarises the results the specimen achieved against the performance criteria listed in sections 2 and 10 of AS 1530.4:2014.

Table 9 in Appendix B includes observations of any significant behaviour of the specimen and details of the occurrence of the various performance criteria specified in AS 1530.4:2014.

Table 8 Test results

Penetration system	Criteria	Results	Fire resistance level (FRL)
B	Structural adequacy	Not applicable	**-/60/60**
	Integrity	No failure at 61 minutes	
	Insulation	No failure at 61 minutes	
C	Structural adequacy	Not applicable	**-/60/60**
	Integrity	No failure at 61 minutes	
	Insulation	Failure at 60 minutes	
F	Structural adequacy	Not applicable	**-/60/60**
	Integrity	No failure at 61 minutes	
	Insulation	No failure at 61 minutes	
G	Structural adequacy	Not applicable	**-/60/60**
	Integrity	No failure at 61 minutes	
	Insulation	No failure at 61 minutes	
H	Structural adequacy	Not applicable	**-/60/60**
	Integrity	No failure at 61 minutes	
	Insulation	No failure at 61 minutes	

NOTE: The FRLs for the specimens B, C & F only apply to the tested orientation. As the FRL was only determined for one direction, an FRL cannot be assigned for the other direction.

5.0 Application of test results

5.1 Test limitations

The results of these fire tests may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.

These results only relate to the behaviour of the specimen of the element of construction under the particular conditions of the test. They are not intended to be the sole criteria for assessing the potential fire performance of the element in use, and they do not necessarily reflect the actual behaviour in fires.

5.2 Variations from the tested specimen

This report details the methods of construction, test conditions and the results obtained when the specific element of construction described herein was tested following the procedure outlined in AS 1530.4:2014. Any significant variation with respect to size, constructional details, loads, stresses, edge or end conditions, other than that allowed under the field of direct application in the relevant test method, is not covered by this report.

It is recommended that any proposed variation to the tested configuration – other than as permitted under the field of direct application specified in Appendix C – should be referred to the test sponsor. They should then obtain appropriate documentary evidence of compliance from Jensen Hughes Fire Testing or another accredited testing authority.

5.3 Uncertainty of measurements

Because of the nature of fire resistance testing and the consequent difficulty in quantifying the uncertainty of measurement of fire resistance, it is not possible to provide a stated degree of accuracy for the result.

Appendix A Drawings of test assembly

The drawings of the test assembly in Figure 1 to Figure 11 were provided by Jensen Hughes.

The leaders in the drawings represent the items listed in section 2.1. All measurements – unless indicated – are in millimetres.

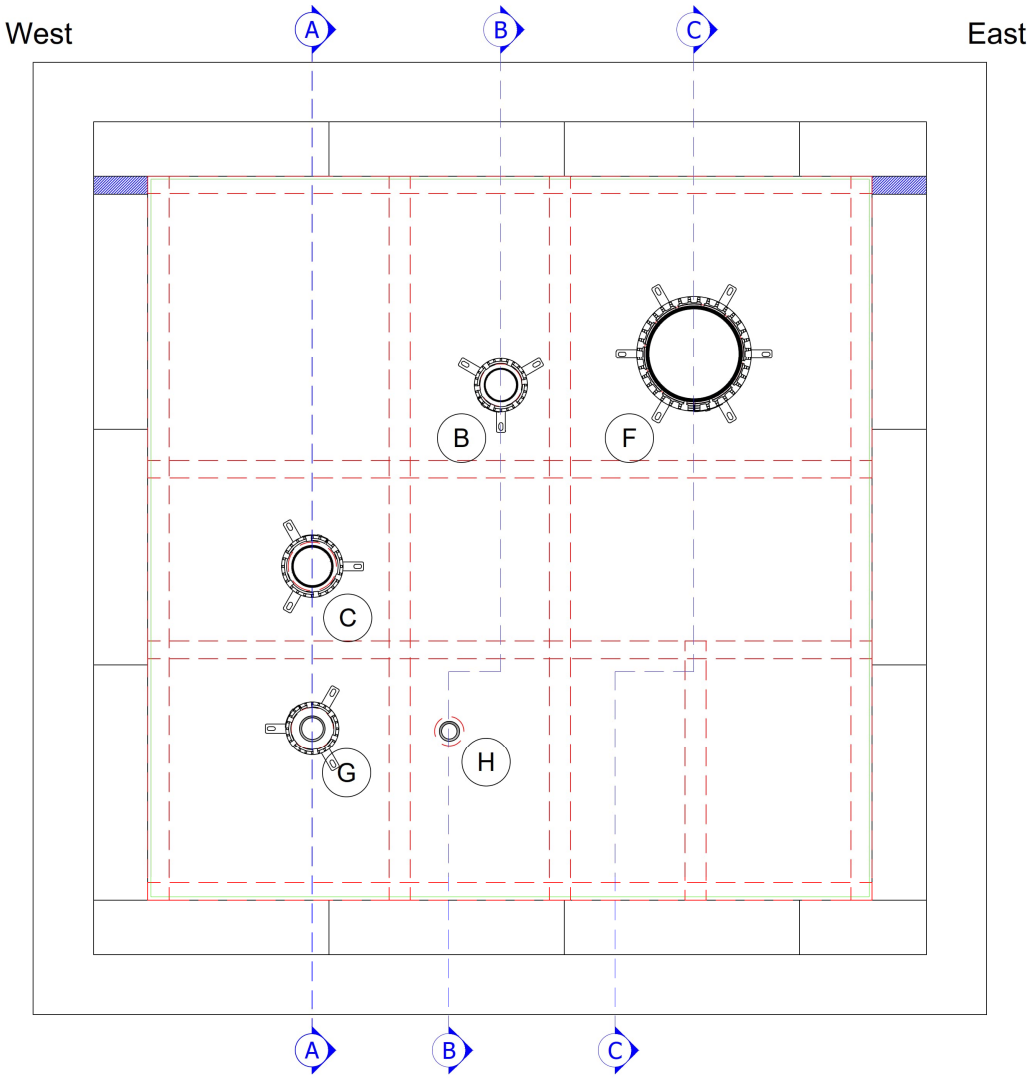

Figure 1 Elevation view of test specimen and their designation (unexposed side)

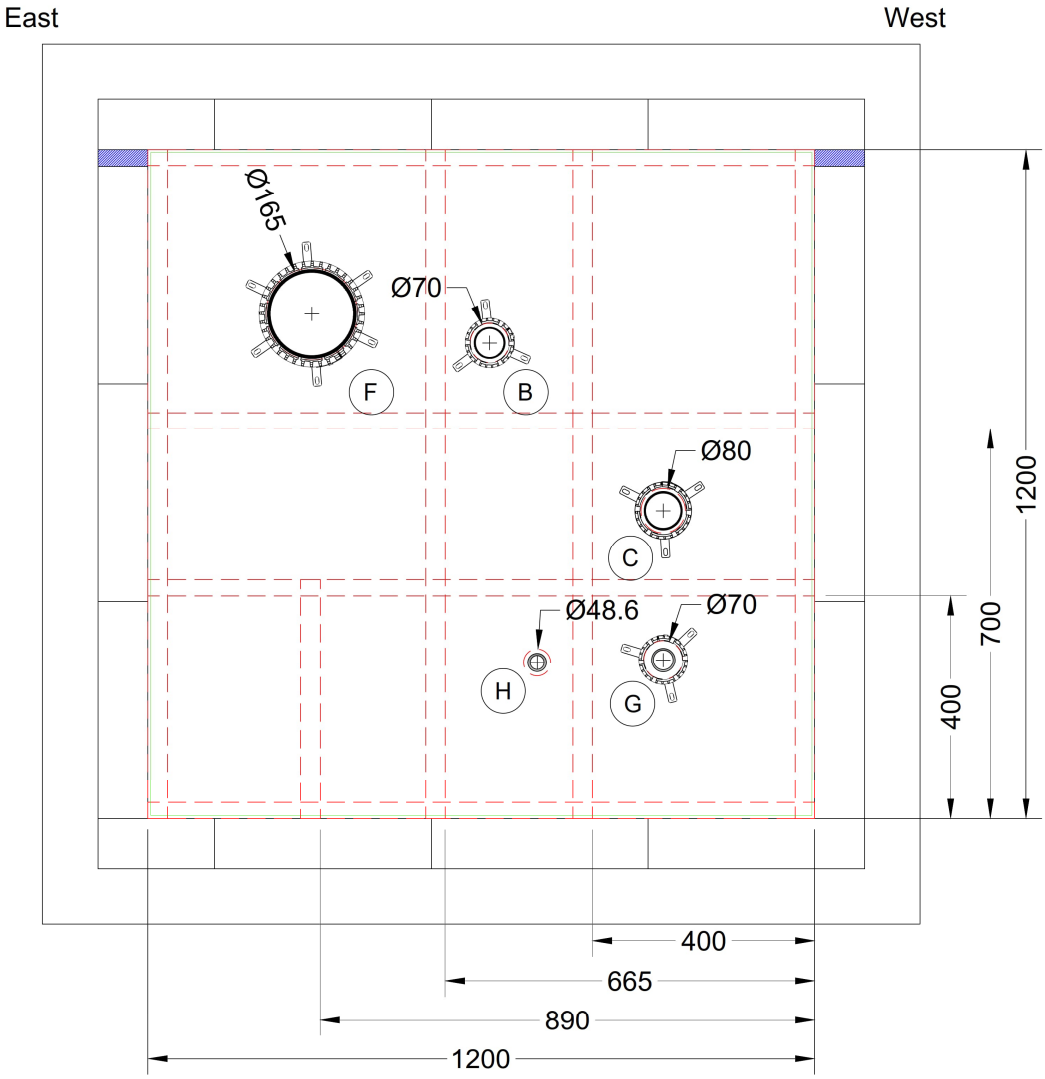

Figure 2 Elevation view of test specimen and their designation (exposed side)

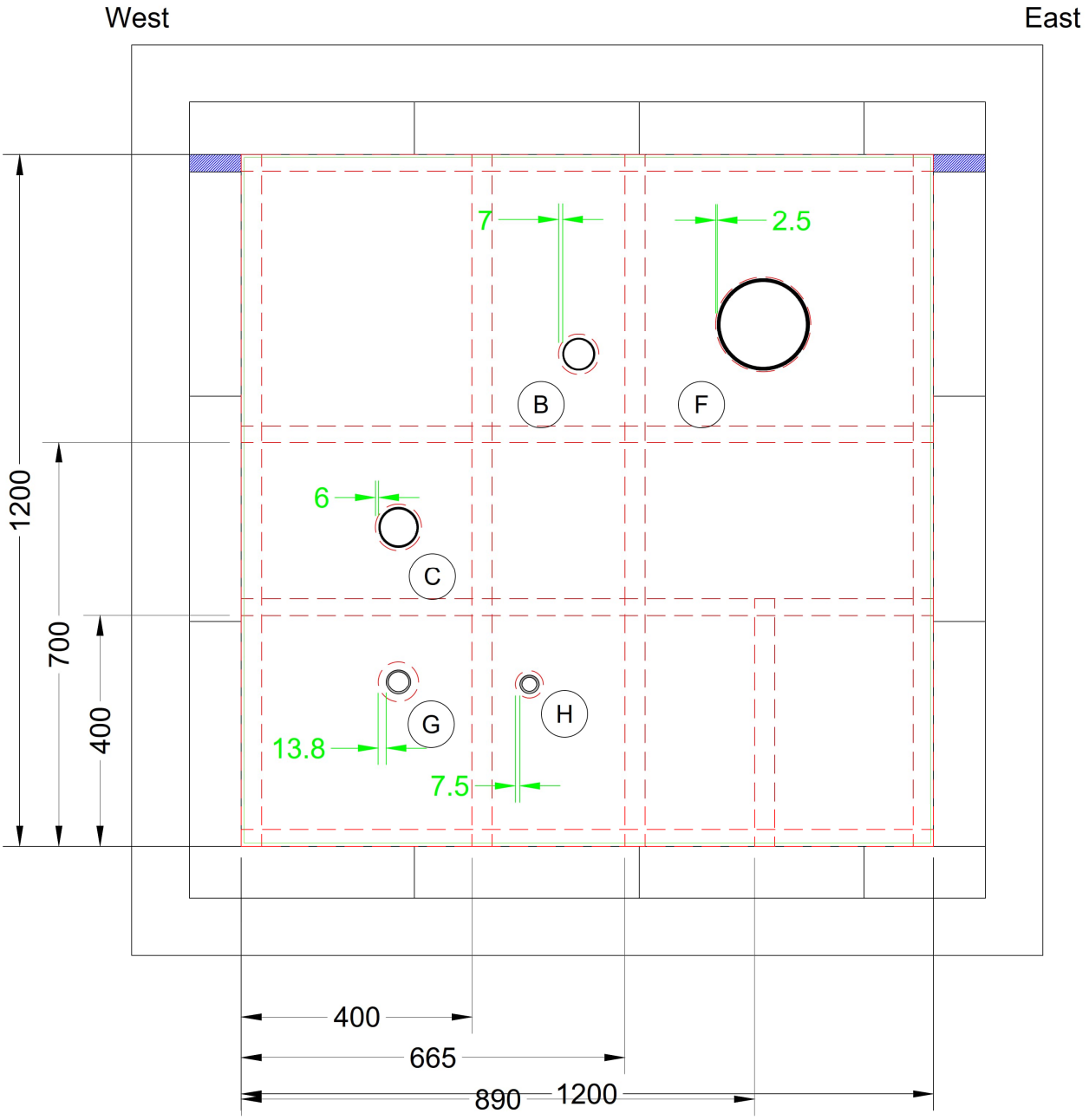

Figure 3 Elevation view of test specimen with aperture sizes, frame locations and annular gaps (unexposed side)

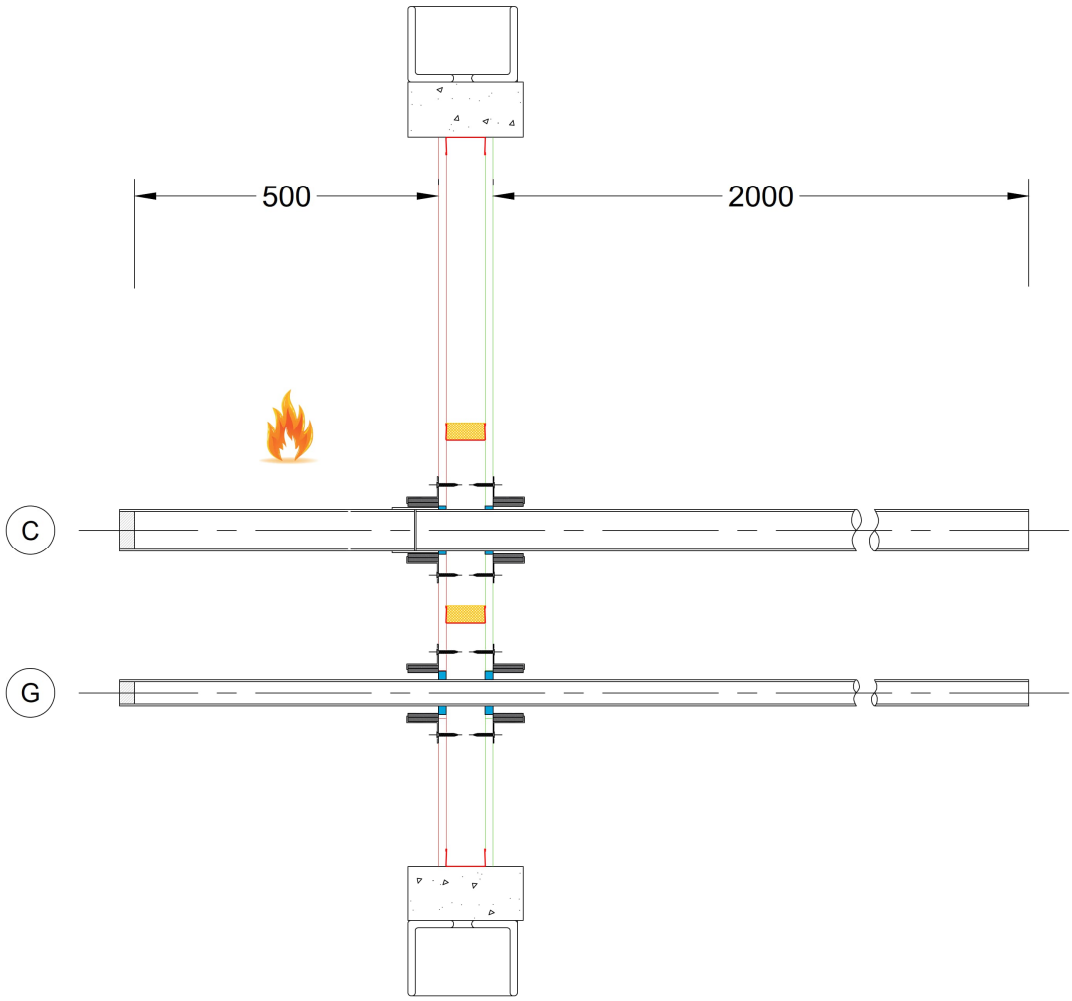

Figure 4 Vertical cross-section A-A

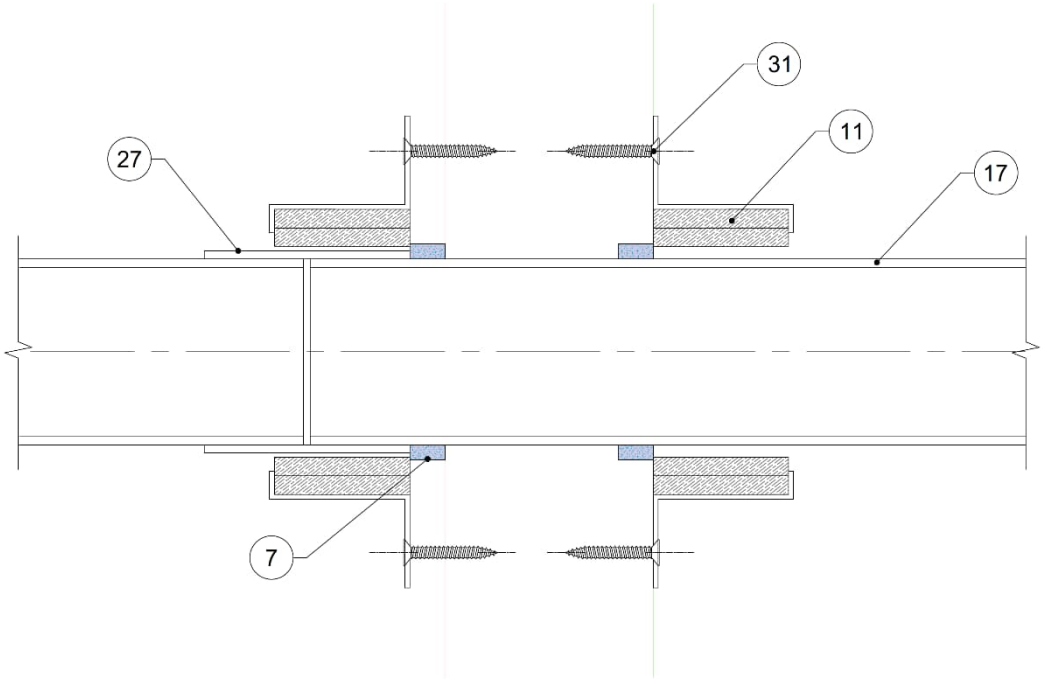

Figure 5 Vertical cross-section of Specimen C

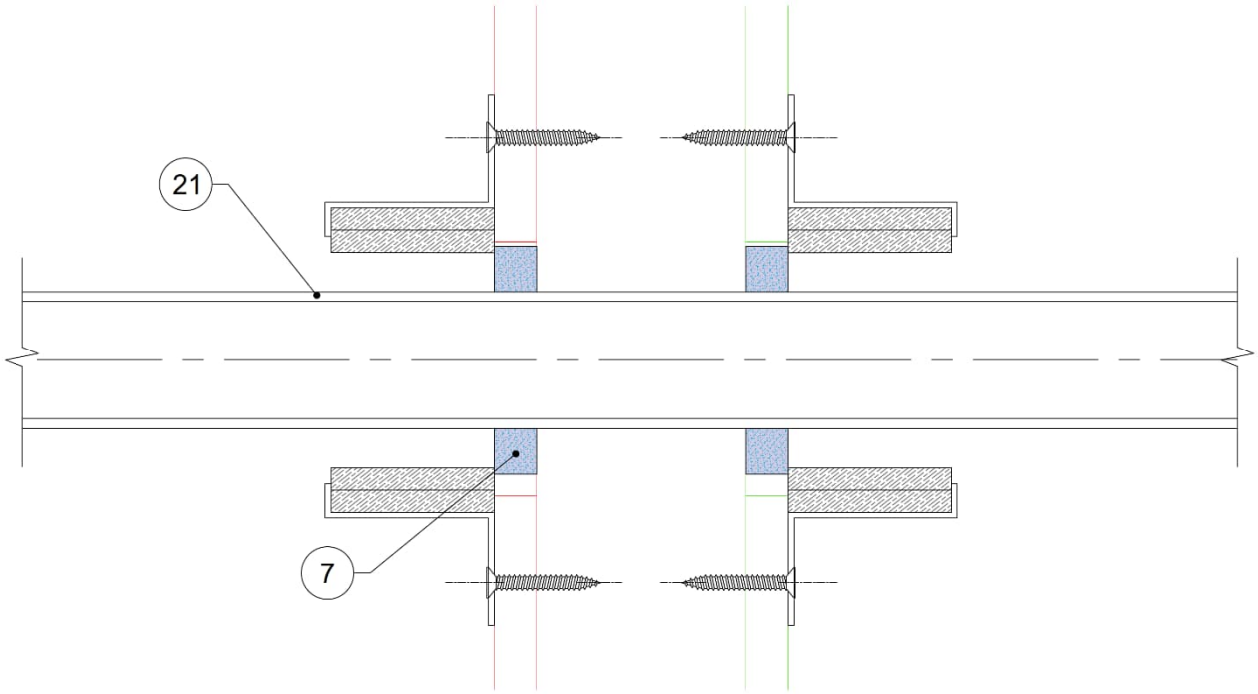

Figure 6 Vertical cross-section of Specimen G

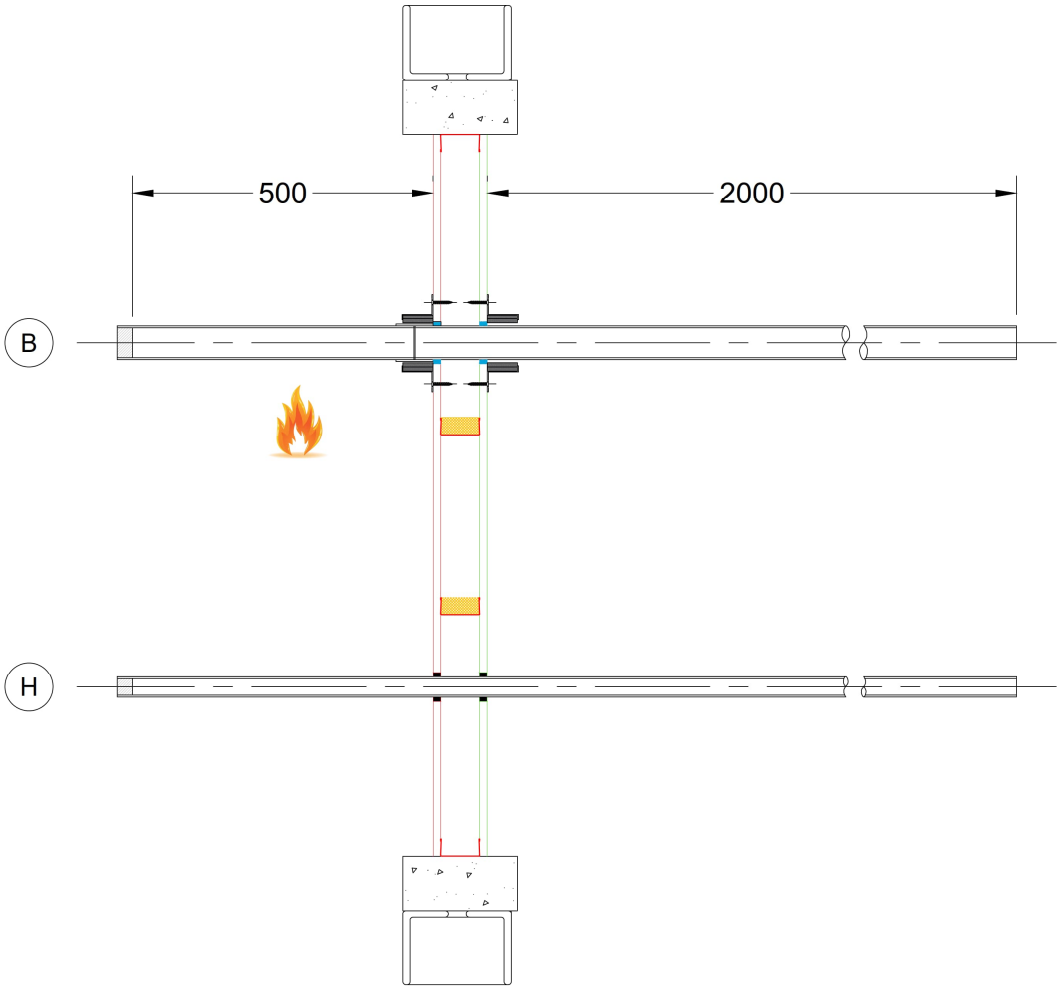

Figure 7 Vertical cross-section B-B

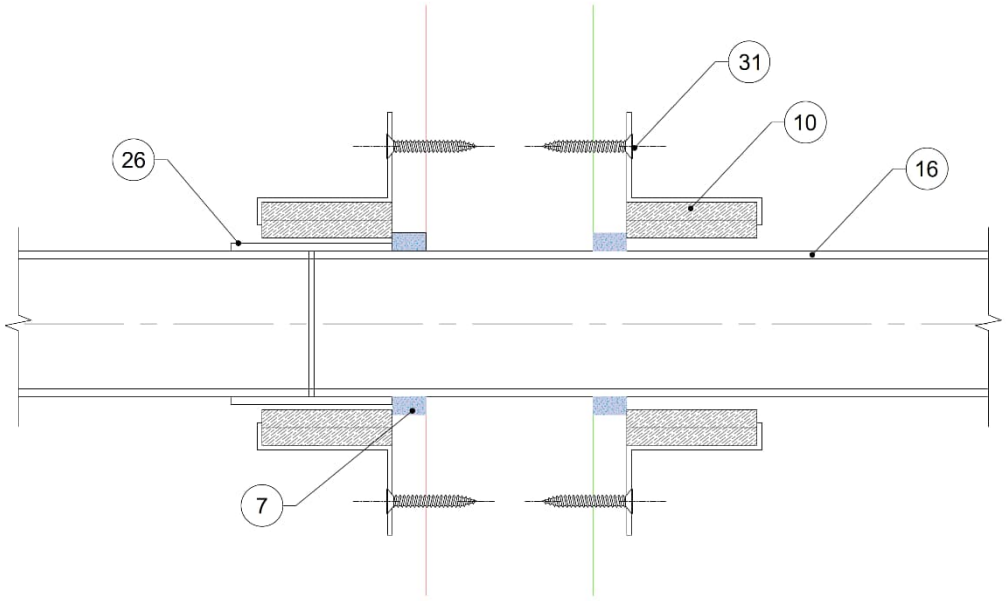

Figure 8 Vertical cross-section of Specimen B

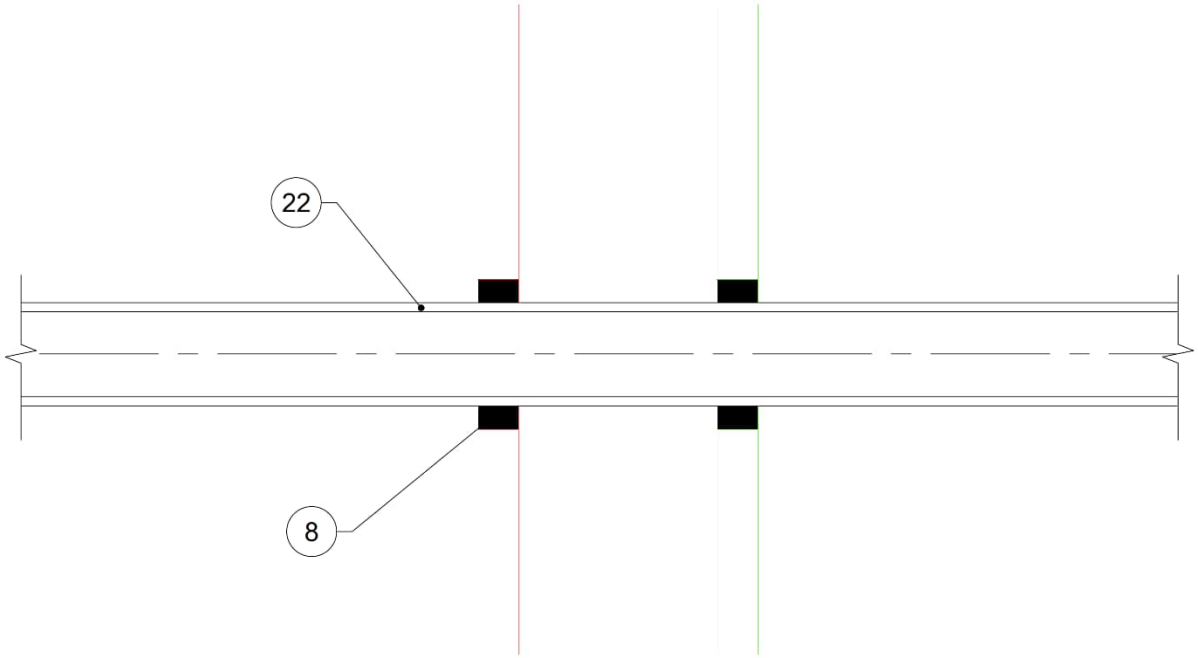

Figure 9 Vertical cross-section of Specimen H

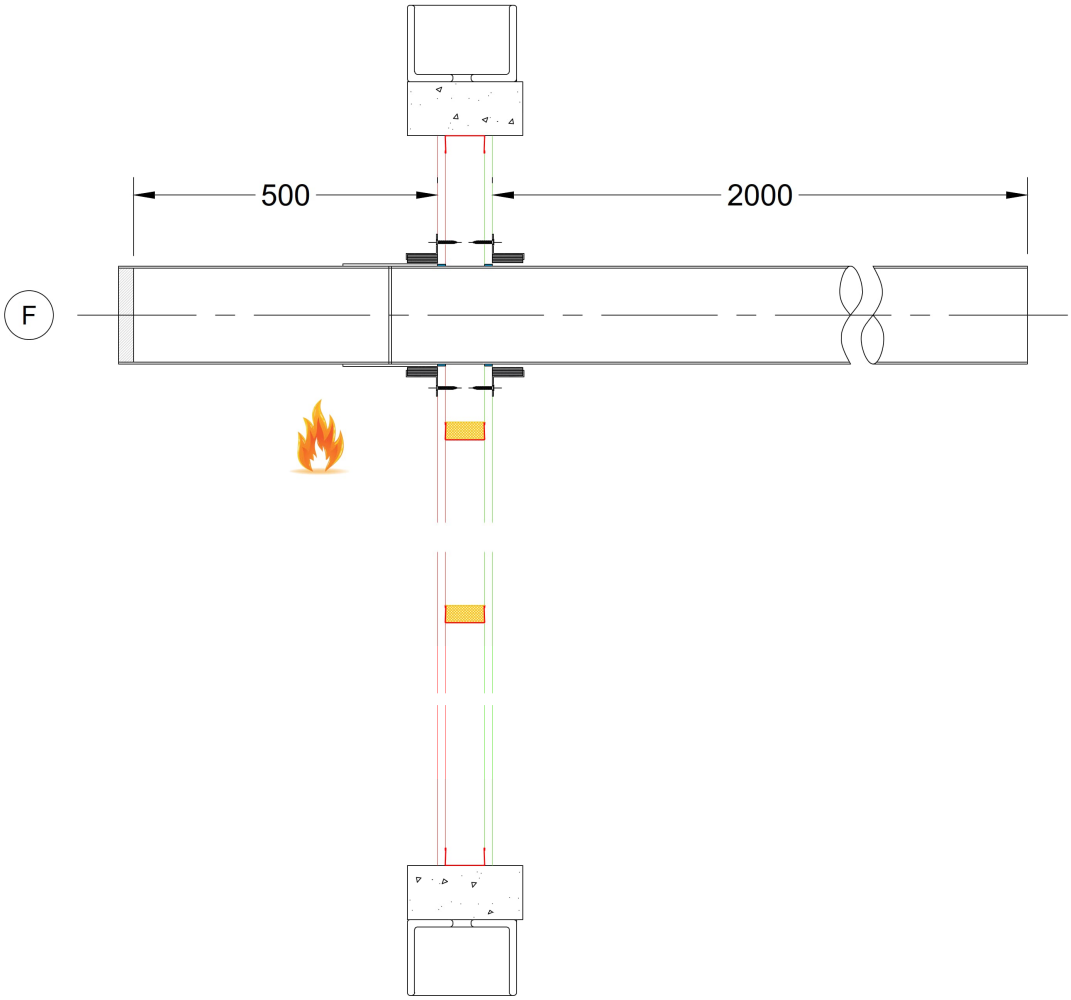

Figure 10 Vertical cross-section C-C

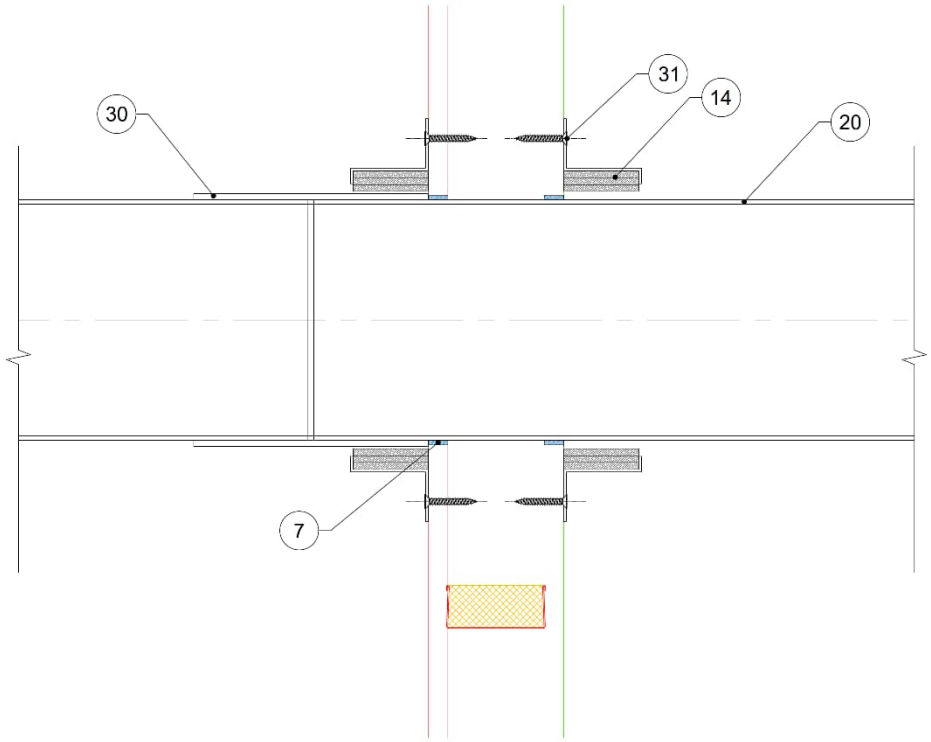

Figure 11 Vertical cross-section of Specimen F

Appendix B Test observations

Table 9 shows the observations of any significant behaviour of the specimen during the test.

Table 9 Test observations

Time		Observation
Min	Sec	
Penetration system B		
0	00	Fire resistance test commenced, and the average initial temperature of the specimen was approximately 16 °C.
2	05	Smoke emissions had begun emitting through the end of the pipe.
2	43	Smoke emissions had increased.
5	05	Smoke emissions had ceased.
15	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
30	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
45	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
60	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
61	00	Test stopped.
Penetration system C		
0	00	Fire resistance test commenced, and the average initial temperature of the specimen was approximately 16 °C.
3	27	Smoke emissions had begun emitting through the end of the pipe.
5	05	Smoke emissions had ceased.
15	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
30	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
45	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
60	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
60	**55**	**TC008, on the service, recorded a temperature of 196 °C.** **Failure of insulation in accordance with clause 2.13.3(b) of AS 1530.4:2014, where the temperature of thermocouple TC008 exceeded the initial temperature by more than 180 K.**
61	00	Test stopped.
Penetration system F		
0	00	Fire resistance test commenced, and the average initial temperature of the specimen was approximately 16 °C.
3	37	Smoke emissions had begun emitting through the end of the pipe.
5	42	The pipe had deformed between the supports.
5	52	The pipe deformed at the end of pipe, sagging down.

Time		Observation
Min	Sec	
8	50	Smoke emissions had begun emitting through the base of the pipe.
15	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
30	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
45	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
60	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
61	00	Test stopped.
Penetration system G		
0	00	Fire resistance test commenced, and the average initial temperature of the specimen was approximately 15 °C.
4	20	Smoke emissions had begun emitting through the end of the pipe.
6	23	Smoke emissions had ceased.
8	29	Smoke emissions had begun emitting through the base of the pipe.
15	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
30	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
45	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
60	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
61	00	Test stopped.
Penetration system H		
0	00	Fire resistance test commenced, and the average initial temperature of the specimen was approximately 16 °C.
3	07	Smoke emissions had begun emitting through the end of the pipe.
10	23	Smoke emissions had ceased.
15	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
30	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
45	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
60	00	The test specimen continued to maintain integrity and insulation in accordance with AS 1530.4:2014.
61	00	Test stopped.

Appendix C Direct field of application

The text, figures and tables in this appendix have been taken from section 10 of AS 1530.4:2014.

C.1 General

The results of the fire test contained in the test report are directly applicable without reference to the testing authority to similar constructions where one or more of the changes set out in clauses 10.12.2 to 10.12.6 of AS 1530.4:2014 have been made.

C.2 Separating elements

Results obtained for sealing systems in various types of masonry and concrete construction may be applied as follows:

- For elements manufactured from similar types of concrete or masonry, the results of the prototype test may be applied to materials of density within ±15% of the tested specimen. For greater variations, the opinion of a registered testing authority shall be obtained.
- Test results obtained in conjunction with hollow concrete blocks may be used in a solid concrete element of the same overall thickness. The reverse does not apply.
- Results obtained from framed wall systems may be applied to the performance of a system in concrete, masonry or solid gypsum blocks of greater or equal thickness to that of the tested prototype. The reverse does not apply.
- Results obtained from framed wall systems may be applied to similar walls having studs of the same material with sizes greater than the tested prototype.
- Results obtained from a prototype test may be applied to framed wall systems of similar construction but having thicker facings of the same material applied to the studs.

C.3 Electrical and communication cables

Where standard configurations are used for electrical and communication cables, the results of tests may be applied to all PVC and XLPE insulated and PVC sheathed power and communication cables with copper conductors, provided the results are for the same penetration sealing system in the same separating element and all of the specimens achieved the designated FRL or greater.

Note: For information on recommended standard configurations for electrical and communication cables, see Appendix D.

C.4 Plastic pipes

C.4.1 General

In addition to the requirements of clause 10.12.2 of AS 1530.4:2014, test results may be directly applied to masonry and concrete elements thicker than the tested prototype when installed in accordance with figure 10.12.5.1 of AS 1530.4:2014.

Results obtained from a particular test shall not be applied to plastics pipes of different diameters, wall thicknesses or material types.

Results obtained from tests on penetrations through vertical separating elements shall not be used to assess performance in horizontal elements, and vice versa.

As penetration seals for plastic pipes are dependent for activation upon exposure to fire conditions, they shall always be installed with the same orientation and fire exposure as was established in the fire resistance test.

C.4.2 Services not perpendicular to the fire separation

Penetrations not perpendicular to the plane of the element are acceptable, provided the fire-stopping system has similar exposure and dimensions to the tested prototype.

Jensen Hughes Fire Testing Pty Ltd
ABN 81 050 241 524

Melbourne – NATA accredited laboratory

409-411 Hammond Road
Dandenong South Vic 3175
Australia
T: +61 3 9767 1000