

Cavity barrier for fire protected timber – Cross Laminated Timber

Fire testing to AS1530 Part 4 is required and the FRL of the cavity barrier as fire tested with timber members is either -45/45 or -/60/60 depending of system FRL

Siderise has been fire tested to AS1530 Part 4 for both CLT and standard timber construction cavity barriers

- (f) The FRL of cavity barriers in *fire-protected timber* construction must be determined in accordance with [Schedule 5](#) applying the criteria for control joint systems specified in Section 10 of AS 1530.4 with the cavity barrier system fitted within an opening between timber members exposed directly to the furnace heating conditions.

Table 1 Cavity barrier requirements

System Required FRL	-/60/60 or -/90/90	-/120/120, -/180/180 or -/240/240
Cavity barrier required FRL	-/45/45	-/60/60

C1.13 Fire-protected timber: Concession

Fire-protected timber may be used wherever an element is *required* to be *non-combustible*, provided—

- (a) the building is—
 - (i) a separate building; or
 - (ii) a part of a building—
 - (A) which only occupies part of a *storey*, and is separated from the remaining part by a *fire wall*; or
 - (B) which is located above or below a part not containing *fire-protected timber* and the floor between the adjoining parts is provided with an FRL not less than that prescribed for a *fire wall* for the lower *storey*; and
- (b) the building has an *effective height* of not more than 25 m; and
- (c) the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with [Specification E1.5](#); and
- (d) any insulation installed in the cavity of the timber building element *required* to have an FRL is *non-combustible*; and
- (e) cavity barriers are provided in accordance with [Specification C1.13](#).



Fire resistance

Specification C1.13

Cavity barriers for fire-protected timber

Deemed-to-Satisfy Provisions

1. Scope

This Specification sets out requirements for cavity barriers in *fire-protected timber* construction.

2. Requirements

- (a) Cavity barriers must be provided in the following locations where *fire-protected timber* is used in any of the listed elements:
 - (i) At concealed cavities adjacent to junctions between *fire-resisting* floor/ceiling assemblies and *fire-resisting* walls.
 - (ii) At concealed cavities adjacent to junctions between *fire-resisting* floor/ceiling assemblies and *fire-resisting* or *non-combustible external walls*.
 - (iii) At concealed cavities adjacent to junctions between *fire-resisting* walls and *fire-resisting* or *non-combustible external walls*.
 - (iv) Around the perimeter of door and window openings in *fire-resisting* construction.
- (b) Cavity barriers must be installed so they are tight fitting and are able to withstand thermal expansion and structural movement without the loss of seal against fire and smoke.
- (c) In addition to cavity barriers *required* by [Clause 2\(a\)](#), horizontal and vertical cavity barriers are to be provided to wall cavities within, around or adjacent to *fire-protected timber* elements as follows:
 - (i) Horizontal cavity barriers — at not more than 5 m centres.
 - (ii) Vertical cavity barriers — at not more than 10 m centres.
- (d) Cavity barriers must—
 - (i) achieve the performance specified in [Table 1](#) based on the highest FRL of the elements they are mounted within or seal against; or
 - (ii) consist of—
 - (A) timber with the minimum thickness specified in [Table 1](#); or
 - (B) polythene-sleeved mineral wool or mineral wool slabs or strips placed under compression to achieve the minimum thickness specified in [Table 1](#).
- (e) Cavity barriers provided around openings may be formed by the window or door frame if—
 - (i) the frame is constructed of steel or timber with the minimum thickness specified in [Table 1](#) for timber; and
 - (ii) the frame is tightly fitted to rigid construction and mechanically fixed in position.
- (f) The FRL of cavity barriers in *fire-protected timber* construction must be determined in accordance with [Schedule 5](#) applying the criteria for control joint systems specified in Section 10 of AS 1530.4 with the cavity barrier system fitted within an opening between timber members exposed directly to the furnace heating conditions.
- (g) Notwithstanding anything to the contrary in [Schedule 5](#) or AS 1530.4, the test results from (f) may be used when the *fire-protected timber* is constructed from timber having a nominal density at least equal to the tested timber.

Table 1 Cavity barrier requirements

System <i>Required</i> FRL	—/60/60 or —/90/90	—/120/120, —/180/180 or —/240/240
Cavity barrier <i>required</i> FRL	—/45/45	—/60/60
Timber, <i>required</i> minimum thickness	45 mm	60 mm
Mineral wool, <i>required</i> minimum thickness	45 mm	60 mm



Title:

The Fire Resistance
Performance Of Three
Specimens Of Floor
Mounted Linear Gap
Sealing Systems, When
Tested In General
Accordance With
EN 1366-4:2006+A1:2010

Date Of Test:

6th November 2020

Issue 1:

22nd January 2021

WF Report No:

435010/R



Prepared for:

**Siderise Insulations
Limited**
Forge Industrial Estate,
Maesteg,
Bridgend,
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CF34 0AZ

Test Specimen

Summary of Tested Specimen

For the purpose of the test the floor specimens were referenced A to C.

The section of floor had overall dimensions of 2200 mm long by 1750 mm wide by nominally 150 mm thick and was made up of autoclaved aerated concrete lintels, a glulam beam, and a CTL floor section arranged to provide three linear gaps of varying widths which were all 1200 mm in length.

Specific details of each of the seals are given in the tables below:

Floor Specimens

Specimen	Substrate	Seal Details
A	Concrete to GluLam beam	250 mm wide by 1200 mm long by 120 mm thick Sideride XFS120 stone wool cavity barrier seal installed flush with the exposed face with 25 mm compression and a taped butt joint 200 mm from one end. The barrier was retained in place using three steel hangers fixed to the GluLam beam.
B	Concrete to CTL	250 mm wide by 1200 mm long by 120 mm thick Sideride XFS120 stone wool cavity barrier seal installed flush with the exposed face with 25 mm compression and a taped butt joint 200 mm from one end. The barrier was retained in place using three steel hangers fixed to the CTL floor section.
C	Concrete to CTL	250 mm wide by 1200 mm long by 120 mm thick Sideride XFS120 stone wool cavity barrier seal installed flush with the exposed face with 25 mm compression and a taped butt joint 200 mm from one end. It included a 75 mm wide by 1.5 mm thick graphite based intumescent strip which was taped to the unfixed longitudinal edge encapsulated in foil tape. The barrier was retained in place using three steel hangers fixed to the AAC supporting construction.

Detailed drawings of the test specimen(s) and a comprehensive description of the test construction based on a detailed survey of the specimen(s) and information supplied by the sponsor of the test are included in the Test Specimen and Schedule of Components sections of this report.

Performance Criteria and Test Results

Integrity It is required that the specimen retains its separating function, without either causing ignition of a cotton pad when applied as specified in BS EN 1363-1: 2020, or resulting in sustained flaming on the unexposed surface.

Insulation The requirements of the standard are that the maximum temperature rise shall not be greater than 180°C. Insulation failure also occurs simultaneously with integrity failure as specified in BS EN 1363-1: 2020.

Test Results

Specimen	Integrity (minutes)		Insulation (minutes)
	Cotton Pad	Sustained flaming	
A	122	122	124*
B	124*	124*	124*
C	103	105	103

*Test was discontinued after a period of 124 minutes.

Date of Test 6th November 2020

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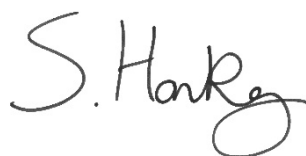
Signatories



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S. Hankey*
Business Unit Head

* For and on behalf of **Warringtonfire**.

Report Issued

Date: 22nd January 2021

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Revision History

Issue No:	Re-issue Date:
Revised By:	Approved By:
Reason for Revision:	

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Test Conditions

Standard

BS EN 1366-4: 2006 +A1:2010 Fire resistance tests for service installations – Part 4: Linear joint seals

Clause 6.2 of BS EN 1366-4: 2006 + A1: 2010 specifies length to width ratio for a linear joint seal to be minimum 10:1. This requirement was not satisfied due to the reduced length of Specimens; therefore the test was conducted generally in accordance with the standard. Test results obtained are only valid to the Specimens as tested.

Sampling

A representative of **Warringtonfire** sample selected the following components of the tested specimen:

Component	Sampling date	Sampling report reference
Cavity Barrier A	17/06/2019	FM414700
Cavity Barrier B	17/06/2019	FM414700
Cavity Barrier C	17/06/2019	FM414700

Copies of sampling reports are included in the Sample Report section.

Installation

Warringtonfire supplied the wall and floor constructions. The gap sealing systems were provided and installed by a representative of the test sponsor on the 6th November 2020.

Conditioning

The specimen's storage, construction, and test preparation took place in the test laboratory over a total, combined time of 1 day. Throughout this period of time both the temperature and the humidity of the laboratory were measured and recorded as being within a range of from 15.5°C to 18.5°C and 51% to 63.5% respectively.

Instruction to Test

The test was conducted on the 6th November 2020 at the request of Siderise Insulations Limited, the test sponsor.

Mr. C. Mort a representative of the test sponsor witnessed the test.

Ambient Temperature

The ambient air temperature in the vicinity of the test construction was 12°C at the start of the test with a maximum variation of +3°C during the test.

Furnace

The furnace was controlled so that its mean temperature complied with the requirements of BS EN 1363-1: 2020 Clause 5.1 using four plate thermometers, distributed over a plane 100 mm from the surface of the vertical test construction and four plate thermometers, distributed over a plane 100 mm from the surface of the horizontal test construction.

Thermocouples

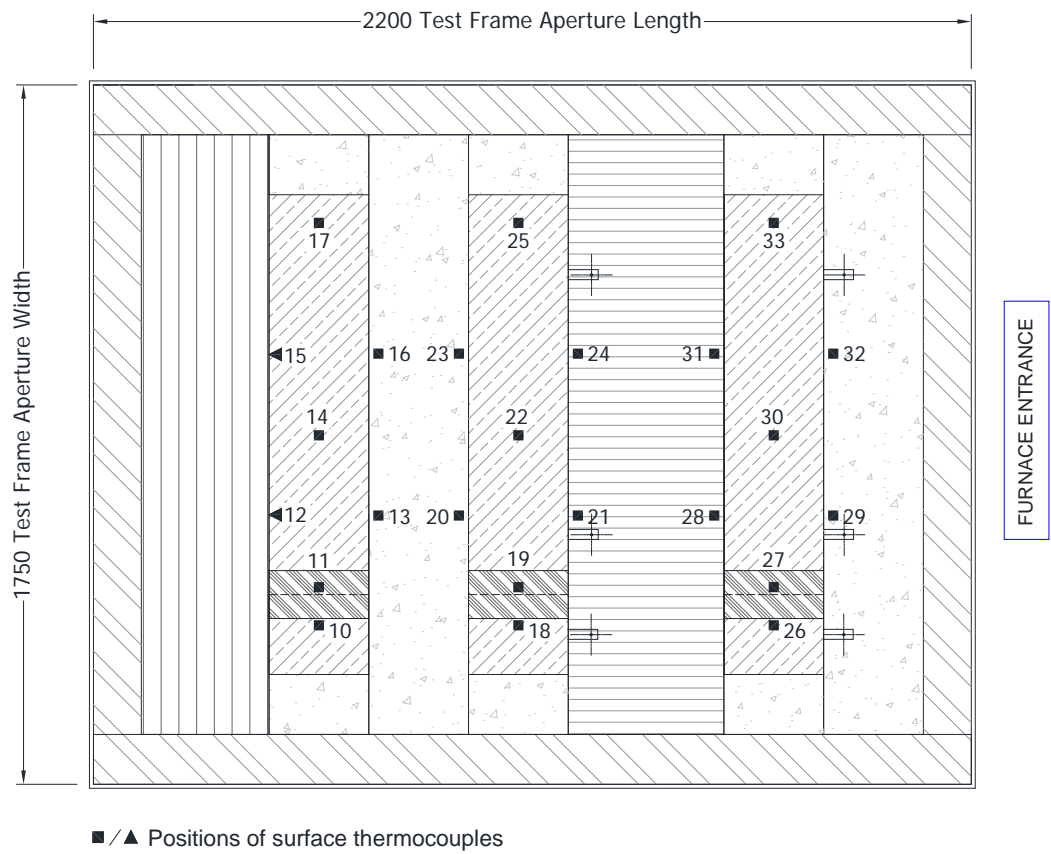
Thermocouples were provided to monitor the unexposed surface of the specimens. The output of all instrumentation was recorded at no less than one minute intervals. The locations and reference numbers of the various unexposed surface thermocouples are shown in Figure 1.

Furnace Pressure

After the first five minutes of testing and for the remainder of the test, the furnace atmospheric pressure was controlled so that it complied with the requirements of BS EN 1363-1: 2020, clause 5.2.1 The calculated pressure differential relative to the laboratory atmosphere at position 100 mm below the underside of the floor assembly the differential pressure was calculated to be 20 (\pm 5) Pa between 5 and 10 minutes and (\pm 3) Pa respectively thereafter.

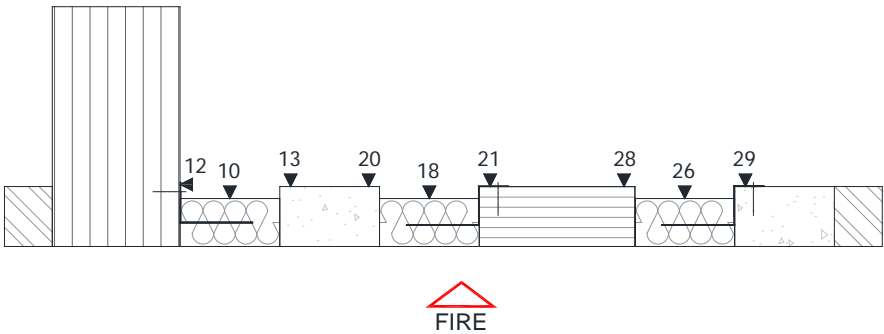
Test Specimen Drawings

Figure 1- General Plan View of Test Construction Showing Thermocouple Locations



■/▲ Positions of surface thermocouples

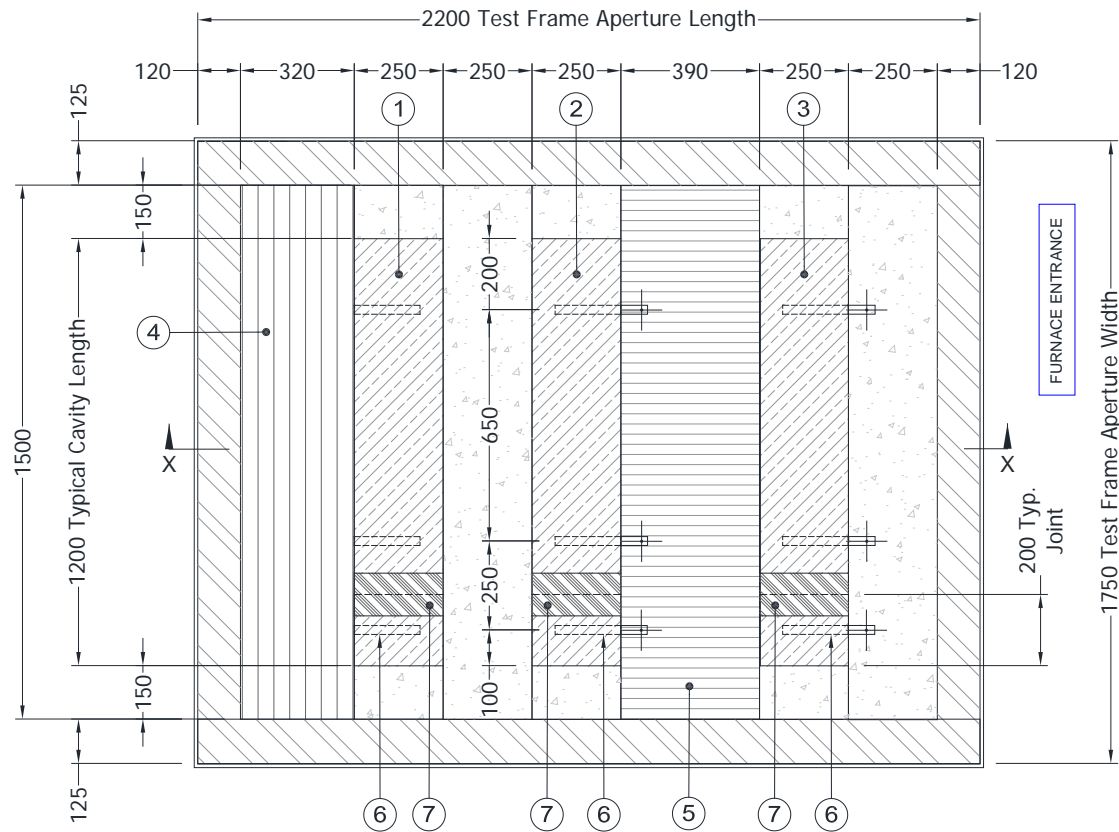
GENERAL PLAN VIEW OF TEST CONSTRUCTION AT UNEXPOSED FACE
SHOWING THERMOCOUPLE LOCATIONS



TYPICAL SECTION THROUGH TEST CONSTRUCTION SHOWING
THERMOCOUPLE LOCATIONS

Do not scale. All dimensions are in mm

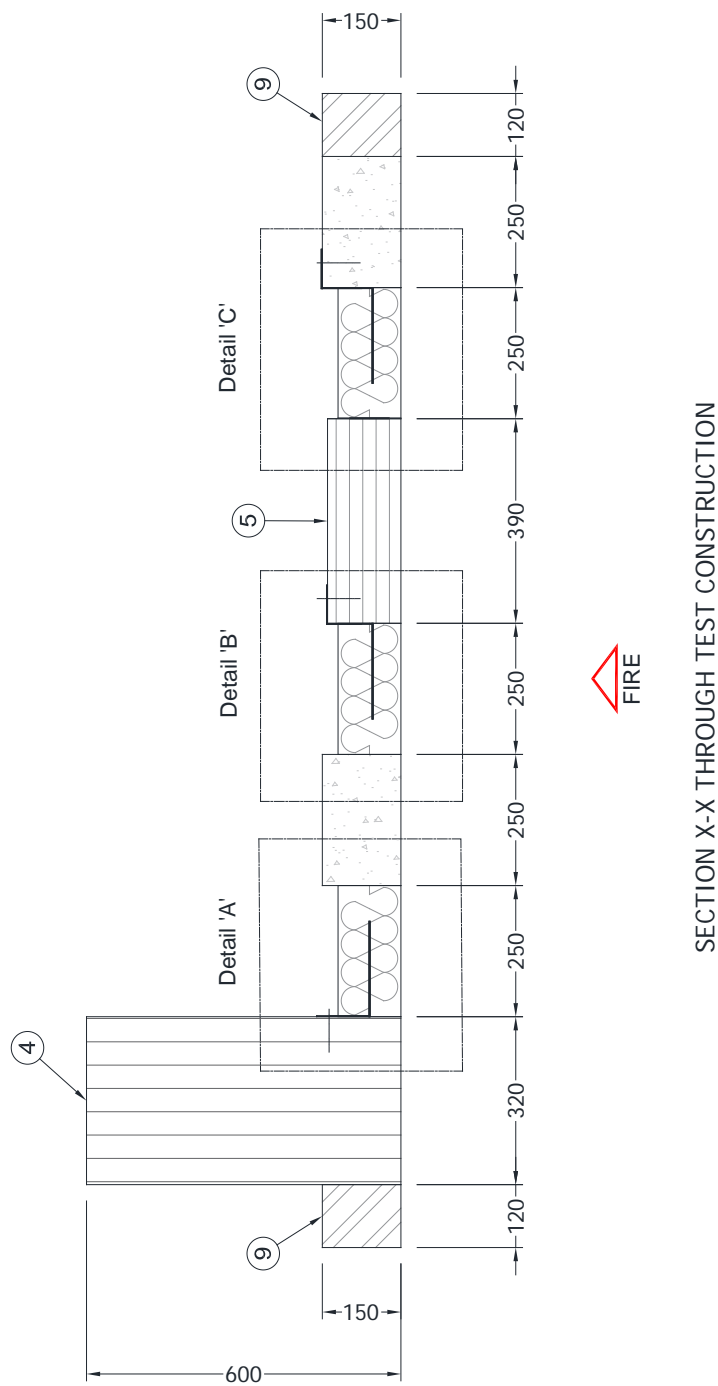
Figure 2 – General Plan View of Test Construction at Unexposed Face



GENERAL PLAN VIEW OF TEST CONSTRUCTION AT UNEXPOSED FACE

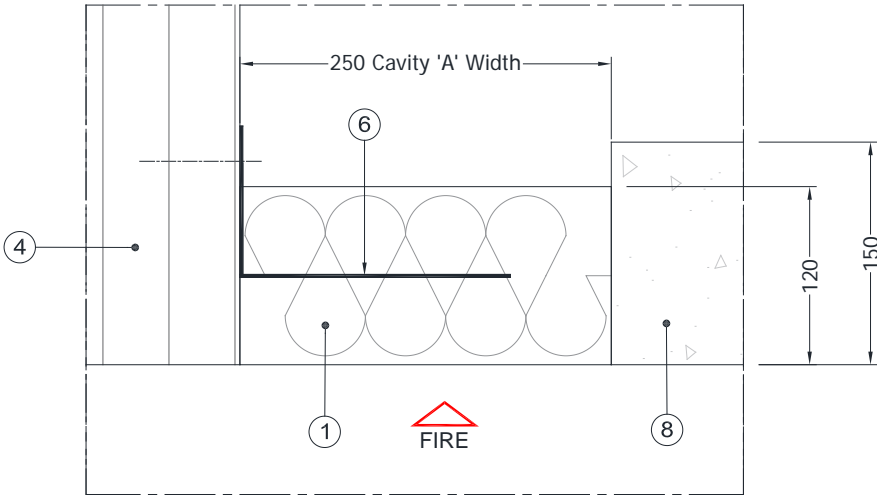
Do not scale. All dimensions are in mm

Figure 3 – Typical Section Through Test Construction

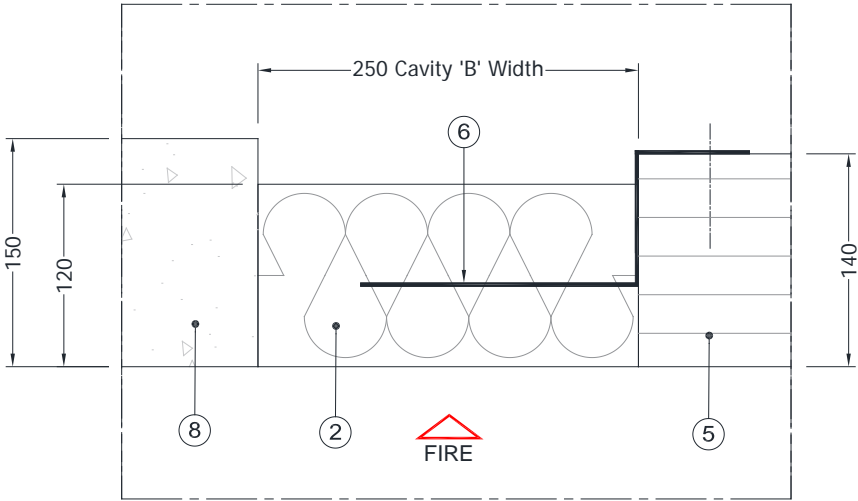


Do not scale. All dimensions are in mm

Figure 4 – Details 'A' & 'B'



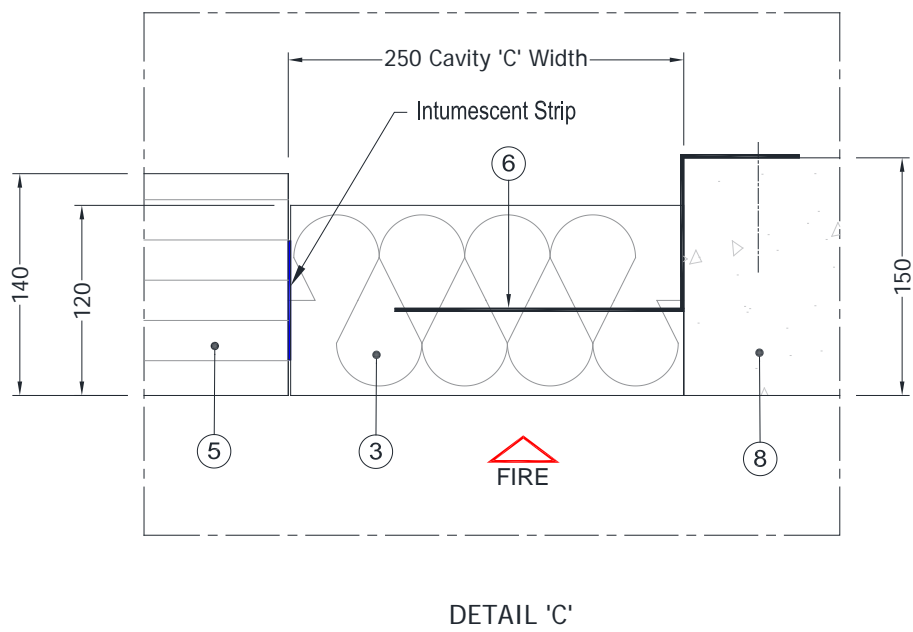
DETAIL 'A'



DETAIL 'B'

Do not scale. All dimensions are in mm

Figure 5 – Detail ‘C’



Do not scale. All dimensions are in mm

Schedule of Components

(Refer to Figures 1 to 5)

(All values are nominal unless stated otherwise)

(All other details are as stated by the sponsor)

<u>Item</u>	<u>Description</u>
1. Cavity Barrier Specimen A	
Manufacturer	: Siderise Insulation Limited.
Reference	: XFS120
Material	: Stone wool insulation with aluminium foil faces.
Stated density	: 75 kg/m ³
Aperture size	: 1200 mm long x 250 mm wide x 150 mm deep.
Specimen size (uncompressed)	: 1000 mm long x 275 mm wide x 120 mm deep and 200 mm long x 275 mm wide x 120 mm deep.
Fixing method	: Fixed to the Glulam Beam (item 4) using 3 No. steel hangers (item 6), at locations shown in Figure 2. Splice Jointed and taped with aluminium foil joint tape (item 7)
Compression	: 25 mm
2. Cavity Barrier Specimen B	
Manufacturer	: Siderise Insulation Limited.
Reference	: XFS120
Material	: Stone wool insulation with aluminium foil faces.
Stated density	: 75 kg/m ³
Aperture size	: 1200 mm long x 250 mm wide x 150 mm deep.
Specimen size	: 1000 mm long x 275 mm wide x 120 mm deep and 200 mm long x 275 mm wide x 120 mm deep.
Fixing method	: Fixed to the CTL Floor Section (item 5) using 3 No. steel hangers (item 6). Splice Jointed and taped with aluminium foil joint tape (item 7)
Compression	: 25 mm
3. Cavity Barrier Specimen C	
Manufacturer	: Siderise Insulation Limited.
Reference	: XFS120
Material	: Stone wool insulation with aluminium foil faces.
Sample report number	: FM414700
Stated density	: 75 kg/m ³
Aperture size	: 1200 mm long x 250 mm wide x 150 mm deep.
Specimen size	: 1000 mm long x 275 mm wide x 120 mm deep and 200 mm long x 275 mm wide x 120 mm deep.
Fixing method	: Fixed to the concrete slab (item 8) using 3 No. steel hangers (item 6). Splice Jointed and taped with aluminium foil joint tape (item 7)
Compression	: 25 mm
Details of intumescent strip	
Manufacturer	: Confidentially communicated to the laboratory
Reference	: Flexpress
Material	: Graphite based
Overall section size	: 75 mm wide x 1.5 mm thick
Overall length	: 1200 mm (1000 mm length & 200 mm length)
Fixing method	: Self-adhesive fixed along a single edge of the cavity barrier, between barrier and CTL floor section. The strip was encapsulated in RFT120 foil tape.

<u>Item</u>	<u>Description</u>
4. GluLam Beam	
Manufacturer	: Derix
Reference	: GluLam
Material	: Glue Laminated Wood
Density	: 400 - 450 kg/m ³ (Stated)
Overall section size	: 320 mm wide x 600 mm high
Overall length	: 1500 mm
5. CTL Floor Section	
Manufacturer	: Binderholz
Reference	: Sample
Material	: Cross Laminated Timber (Spruce)
Density	: 480 kg/m ³ (Stated)
Overall section size	: 390 mm wide x 140 mm high
Overall length	: 1500 mm
6. Steel Hanger	
Manufacturer	: Siderise Insulation Limited.
Reference	: RS450
Material	: Galvanised steel.
Thickness	: 1.5 mm.
Width	: 25 mm.
Overall length	: 450 mm long
Fixing method	: Each hanger was fixed using 1 No. Ø6 mm x 100 mm long concrete screw. Hanger was cut to length and inserted into the Insulation slab.
Centres	: 2 hangers spaced approximately 650 mm apart, along the length of the cavity aperture and 1 No. hanger at mid-point of the splice jointed slab. See Figure 2.
7. Joint Tape	
Manufacturer	: Siderise Insulation Limited.
Reference	: RFT120
Material	: Self-adhesive backed Aluminium Foil
Thickness	: 0.1 mm
Width	: 120 mm
Fixing method	: Self-adhered across each of the joints in the cavity barriers at the unexposed face.
8. Concrete Lintel - Supplied by Warringtonfire	
Material	: Autoclaved aerated concrete slabs
Density	: 670 kg/m ³
Size	: 250 mm wide x 150 mm thick
Overall sizes	: See Figure 2
9. AAC Blockwork - Supplied by Warringtonfire	
Material	: Autoclaved aerated concrete blocks
Density	: 760 kg/m ³
Thickness	: 150 mm
Fixing method	: Ordinary sand/cement mortar mix

Test Observations

Time		All observations are from the unexposed face unless noted otherwise.
mins	secs	
00	00	The Test Commences.
04	20	Exposed face; timber burning; embers within chamber.
10	00	Support structure; minor smoke release.
20	00	Exposed face; char present on timber. Unexposed face; no significant visible change.
30	00	Timber support structure; smoke release.
32	00	Specimen B; gentle smoke release at fixing near TC21.
34	00	Specimens A, B and C; smoke release at corners.
50	00	No significant visible change.
53	27	Specimen C; Smoke release at fixing near TC28
54	00	Specimen C; fixing to timber; slight char.
60	00	Specimen B; fixing to timber; dark in areas.
61	00	Specimen C; parts starting to detach.
67	00	Specimen A; dark in colour around fixings.
70	00	Specimen C; corners are dark in colour and moisture present. Smoke release and parts beginning to char.
71	00	Smoke release from fixings to timber.
80	00	Increased smoke release.
82	00	Specimen C; moisture at fixings.
90	00	Timber starting to fall into furnace.
91	00	Char at fixings.
100	00	Specimen C; glowing at mid span.
103	00	Cotton pad applied to Specimen C, Pad ignites, integrity failure deemed to have occurred.

Time

mins secs

105	30	Specimen C; sustained flaming observed.
122	00	Specimen A; timber side fixings glowing; sustained flaming observed, integrity failure deemed to have occurred.
124	00	The Test is Discontinued at the sponsors request.

Test Photographs

The exposed face of the floor assembly prior to testing



The unexposed face of the floor assembly after a test duration of 60 minutes



The unexposed face of the floor assembly after a test duration of 122 minutes, showing sustained flaming on Specimen A



The exposed face of the floor assembly immediately after the test



Temperature and Pressure Data

Mean furnace temperature, together with the temperature/time relationship specified in BS EN 1363-1: 2020

Time Mins	Specified Furnace Temperature Deg. C	Actual Furnace Temperature Deg. C
0	20	28
4	544	681
8	645	671
12	705	691
16	748	740
20	781	769
24	809	803
28	832	820
32	851	852
36	869	869
40	885	882
44	899	894
48	912	905
52	924	918
56	935	928
60	945	943
64	955	950
68	964	964
72	973	979
76	981	989
80	988	994
84	996	1002
88	1003	1011
92	1009	1012
96	1016	1017
100	1022	1018
104	1028	1021
108	1033	1026
112	1039	1033
116	1044	1035
120	1049	1055
124	1054	1056

**Individual temperatures recorded on the unexposed surface of Specimen A
and adjacent to Specimen A**

Time Mins	T/C Number 10 Deg. C	T/C Number 11 Deg. C	T/C Number 12 Deg. C	T/C Number 13 Deg. C	T/C Number 14 Deg. C	T/C Number 15 Deg. C	T/C Number 16 Deg. C	T/C Number 17 Deg. C
0	15	13	15	13	14	14	13	14
4	15	13	14	13	14	14	13	14
8	16	15	14	13	15	14	13	15
12	24	23	15	13	24	14	13	20
16	35	35	17	14	34	15	14	29
20	42	42	19	15	40	15	15	37
24	48	47	22	16	47	16	16	43
28	57	58	25	18	58	18	18	51
32	67	67	28	21	68	20	20	61
36	73	74	31	25	74	22	23	69
40	77	78	35	28	78	25	27	75
44	79	103	37	32	80	26	30	78
48	81	111	39	35	103	28	33	81
52	97	120	41	38	109	30	36	98
56	102	127	42	41	114	31	37	105
60	102	133	44	43	121	33	39	111
64	104	137	45	44	127	34	42	117
68	109	140	47	46	131	36	43	123
72	113	143	49	47	136	37	45	127
76	115	146	50	49	138	38	46	131
80	120	150	52	50	140	38	47	131
84	123	152	54	51	142	40	48	135
88	124	155	57	52	144	42	49	139
92	128	157	59	53	146	43	50	139
96	133	160	62	54	148	45	51	142
100	134	163	66	55	148	47	52	142
104	135	164	71	56	150	51	52	146
106	135	165	73	57	151	53	53	146
108	134	*	76	57	153	55	54	149
112	138	169	80	58	156	58	56	149
116	138	170	85	58	157	61	57	151
120	137	171	89	59	159	66	57	151
124	144	177	93	60	160	72	58	151

*Thermocouple malfunction

**Individual temperatures recorded on the unexposed surface of Specimen B
and adjacent to Specimen B**

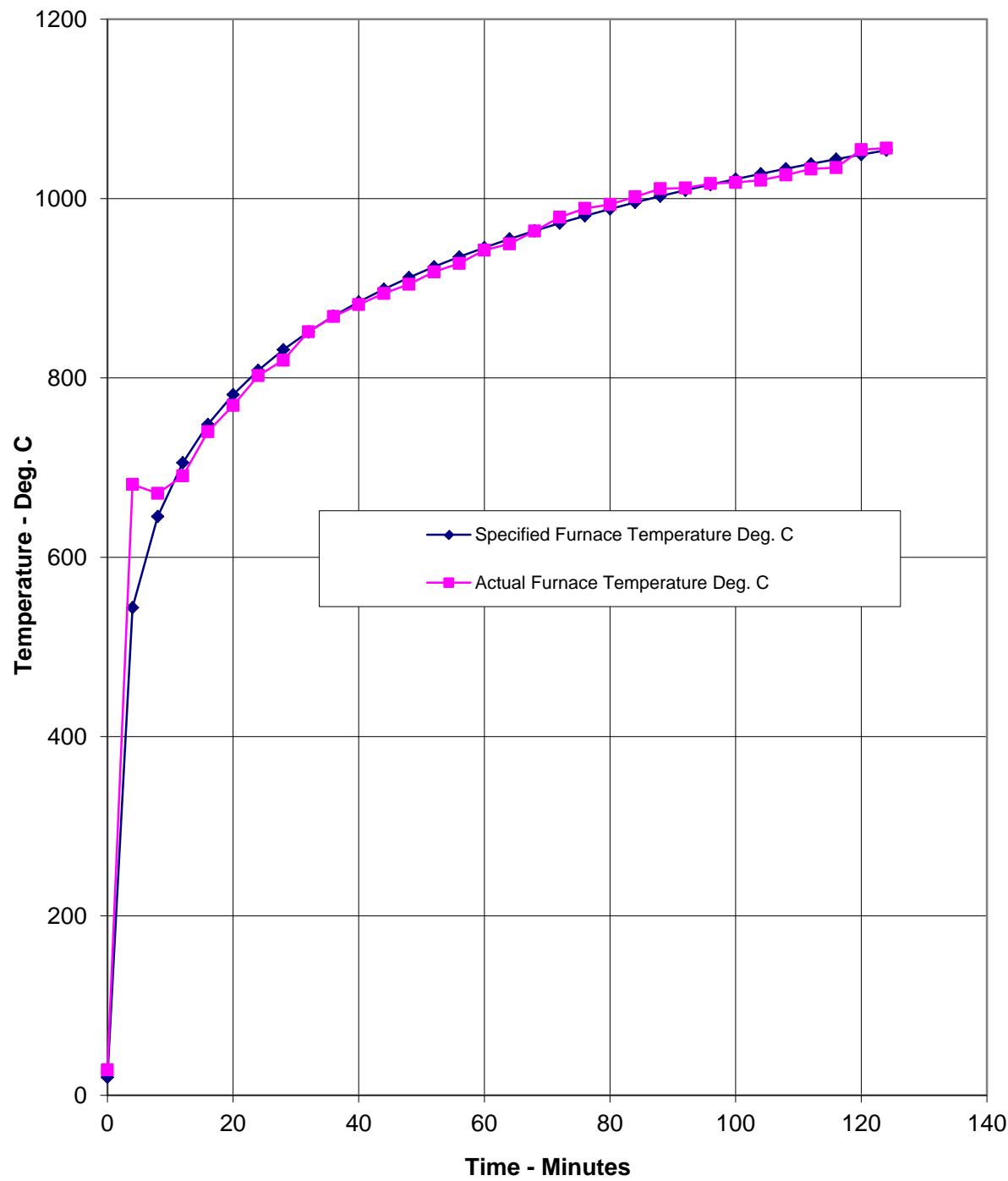
Time Mins	T/C Number 18 Deg. C	T/C Number 19 Deg. C	T/C Number 20 Deg. C	T/C Number 21 Deg. C	T/C Number 22 Deg. C	T/C Number 23 Deg. C	T/C Number 24 Deg. C	T/C Number 25 Deg. C
0	14	14	13	15	14	13	15	14
4	14	14	12	14	14	13	14	14
8	14	15	13	15	16	13	15	15
12	19	24	13	14	25	13	14	23
16	31	37	13	15	36	13	16	35
20	38	44	14	16	42	14	17	40
24	43	50	16	17	50	15	18	46
28	47	58	17	18	60	16	20	53
32	55	67	19	20	69	18	22	63
36	64	73	22	22	75	19	23	71
40	71	77	24	24	78	22	25	76
44	75	83	28	26	85	25	26	79
48	77	103	31	28	105	28	28	81
52	78	106	35	29	108	31	29	96
56	79	116	38	31	116	33	30	103
60	87	124	41	33	125	36	32	104
64	99	131	44	33	130	39	33	109
68	102	137	46	35	135	41	34	117
72	101	141	48	37	138	43	35	123
76	100	145	50	39	142	45	36	128
80	102	148	51	41	143	46	36	130
84	106	152	53	44	145	48	37	133
88	111	154	54	47	149	49	39	137
92	115	155	55	50	150	50	40	140
96	119	158	56	54	151	52	42	141
100	122	161	58	59	154	53	45	143
104	124	163	59	64	158	54	48	147
108	125	162	60	69	165	56	53	148
112	126	164	61	73	164	57	56	151
116	130	167	61	77	166	58	61	153
120	127	164	61	95	169	58	71	155
124	129	165	61	98	171	59	73	157

**Individual temperatures recorded on the unexposed surface of Specimen C
and adjacent to Specimen C**

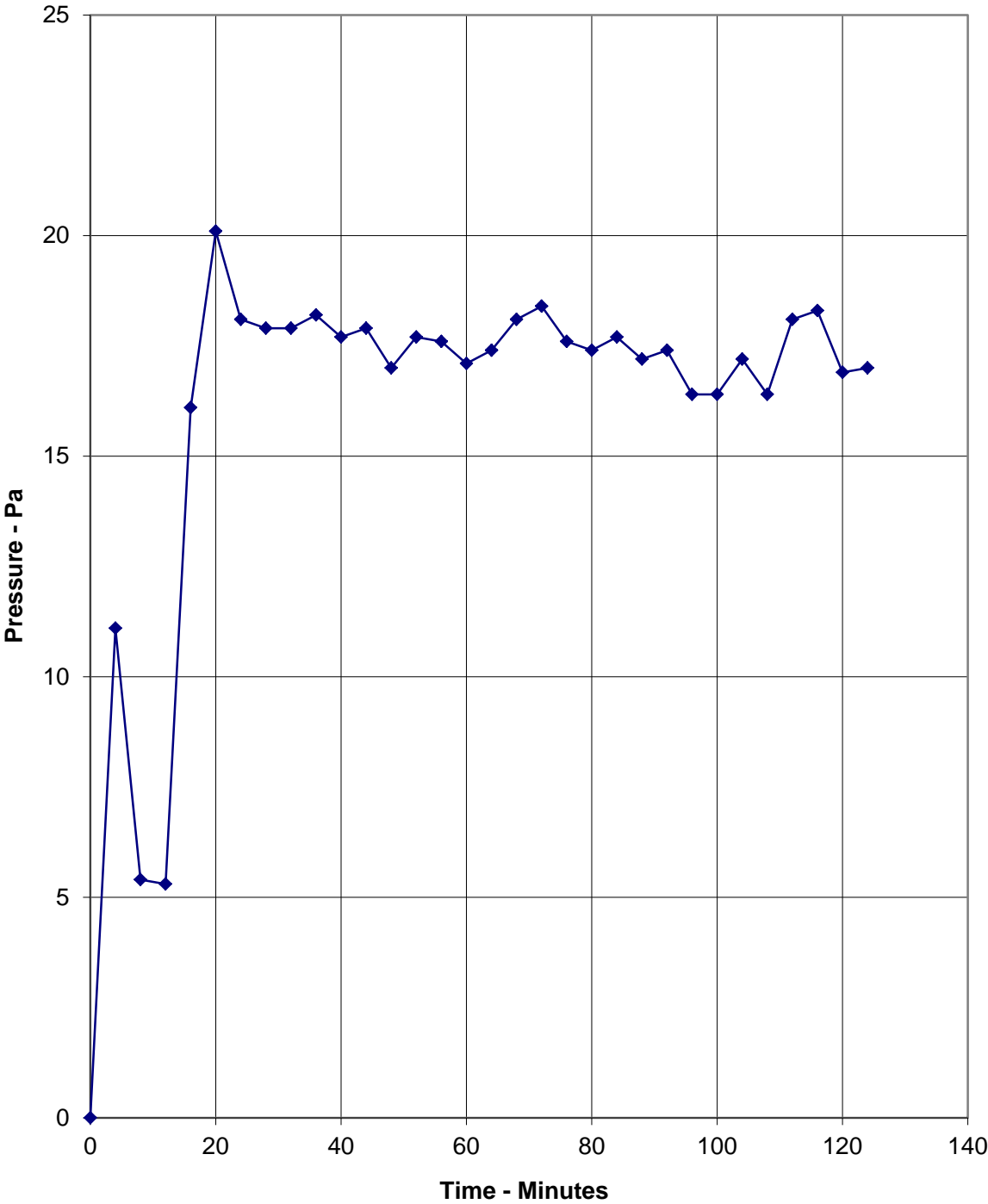
Time Mins	T/C Number 26 Deg. C	T/C Number 27 Deg. C	T/C Number 28 Deg. C	T/C Number 29 Deg. C	T/C Number 30 Deg. C	T/C Number 31 Deg. C	T/C Number 32 Deg. C	T/C Number 33 Deg. C
0	14	14	16	14	14	16	14	15
4	14	13	15	13	14	15	14	14
8	14	15	16	14	15	16	14	15
12	17	22	17	14	20	17	14	22
16	27	34	19	14	27	19	14	31
20	35	45	21	15	34	21	15	37
24	40	49	23	17	38	23	16	41
28	44	53	25	18	42	26	17	46
32	47	60	28	20	50	29	19	54
36	53	66	30	21	59	33	21	62
40	59	72	32	23	66	37	23	68
44	64	76	34	26	72	39	27	73
48	68	85	36	28	76	41	31	76
52	72	98	39	32	78	43	34	77
56	75	105	41	35	86	42	38	79
60	77	112	43	38	103	44	40	79
64	78	121	45	41	108	45	43	79
68	79	131	47	44	113	48	45	81
72	80	138	50	46	117	50	47	93
76	81	143	52	48	120	52	48	101
80	85	147	55	50	126	54	50	105
84	103	151	59	51	127	59	51	107
88	107	156	61	53	131	65	53	110
92	112	159	65	54	133	71	54	114
96	120	163	71	55	136	75	55	118
100	124	166	84	56	138	85	56	120
104	128	168	103	57	142	110	57	121
106	137	173	192	58	154	147	59	123
107	180	212	194	71	259	229	63	135
108	211	261	227	84	350	301	67	159
112	377	444	449	95	552	499	79	273
116	606	702	673	159	766	608	97	440
120	1029	931	909	527	*	1454	254	1024
124	*	940	956	648	*	*	493	*

*Thermocouple malfunction

Graph showing mean furnace temperature, together with the temperature/time relationship specified in BS EN 1363-1: 2020



Graph showing recorded furnace pressure 450 mm below the floor construction



On-going Implications

Limitations

The results relate only to the behaviour of the specimens of the element of construction under the particular conditions of test. They are not intended to be the sole criteria for assessing the potential fire performance of the element in use, nor do they reflect the actual behaviour in fires.

The results may not be applicable to situations where the joint widths, sealant depths, orientations, supporting construction and backing material vary from those tested.

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 of the result.

EGOLF

Certain aspects of some fire test specifications are open to different interpretations. EGOLF has identified a number of such areas and have agreed Resolutions which define common agreement of interpretations between fire test laboratories which are members of the Groups. Where such Resolutions are applicable to this test they have been followed

Sample Report



Sample Report

This report provides a record of the information relating to samples taken by Warringtonfire Testing and Certification Limited trading, or its agent, for certification of the products detailed below.

Job No.	FM 414700
Manufacturer	Siderise Insulations Ltd
Manufacturing site	Forge Industrial Estate, Maesteg, Bridgend, CF34 0AY
Place of sampling	As above
Traceability information	Date/time of production: 7 th June 2019. Production unit/line: HSL Batch number: XFS 75 (WO52620), XFS 90 (WO52619), XFS 120 (WO52618). Shift: Days
Product Number/ Description	75mm Thick Non Rebated Fire Slab XFS/075/1.2-1.2/NR 90mm Thick Non Rebated Fire Slab XFS/090/1.2-1.2/NR 120mm Thick Non Rebated Fire Slab XFS/090/1.2-1.2/NR
Marking of the product by the manufacturer e.g. label, batch number and date of manufacture	Product name, Company name, Company contact details. Label with date, NB1121& signature by the auditor on the day of manufacture. 2 x Pallets – W/O No.52620 – 52 slabs – 75mm x 1200mm x 1200mm – XFS/075/1.2-1.2/NR 2 x Pallets – W/O No.52619 – 44 slabs – 90mm x 1200mm x 1200mm – XFS/090/1.2-1.2/NR 2 x Pallets – W/O No.52618 – 32 slabs – 120mm x 1200mm x 1200mm – XFS/120/1.2-1.2/NR
Marking of the samples by Warringtonfire Testing and Certification Limited	Job No: WF FM414700 Date: 7 th June 2019 NB 1121 O/N Signature or initials: D.Thomas
Stock/batch quantity from which samples selected and sample quantity	Manufactured during the presence of the auditor. Photographs taken of each sample.
Results of tests and/or inspections during manufacture	Confirmed dimensions and type during sampling visit. Checked BOM for final product make-up.
Essential Characteristics to be tested ie. Test reference	Tests to be carried out at Fire Labs.

Warringtonfire Testing and Certification Limited
Registered Office: 10 Lower Grosvenor Place, London, United Kingdom. SW1W 0EN.
Company Registration No.11371436

Doc. Ref. EWC-QU-FT-90 (Issue 3 – 29/11/2018)



Samples to be dispatched by manufacturer to *** within *** weeks/month(s)	Date is yet to be arranged.
Date of sampling	7 th June 2019
Warringtonfire Testing and Certification Limited notified body number	1121

<p>Signed: </p> <p>(for and on behalf of Manufacturer)</p>	<p>Signed: </p> <p>(for and on behalf of Warringtonfire Testing and Certification Limited)</p>
<p>Print: Thomas James</p>	<p>Print: David Thomas</p>
<p>Date: 7th June 2019</p>	<p>Date: 7th June 2019</p>