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Title:

The Fire Resistance
Performance Three
Specimens Of Floor
Mounted Control Joint
Systems, When Tested In
Accordance With
AS 1530.4:2014 Section 10

Date Of Test:

15th February 2021

Issue 1

16th March 2021

WF Report No:

438106/R



Prepared for:

Siderise Insulations Ltd

Forge Industrial Estate Maesteg Bridgend Mid Glamorgan





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 150 mm thick and was made up of autoclaved aerated concrete lintels arranged to provide three control joints 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

Over the control of t				
Specimen	Substrate	Seal Details		
A	Concrete to Concrete	'XFS120' Stone wool insulation with aluminium foil faces, stated density 75kg/m³. The barrier was 1200 mm long x 310 mm wide (with no compression) x 120 mm deep, it was installed with 10 mm compression and with a taped butt joint 200 mm down from one end. Fixed to the supporting construction using 3 steel hangers. Specimen installed flush with the unexposed surface of the supporting construction.		
В	Concrete to Concrete	'XFS90' Stone wool insulation with aluminium foil faces, stated density 75kg/m³. The barrier was 1200 mm long x 310 mm wide (with no compression) x 120 mm deep, it was installed with 10 mm compression and with a taped butt joint 200 mm down from one end. Fixed to the supporting construction using 3 steel hangers. Specimen installed flush with the unexposed surface of the supporting construction.		
С	Timber to Timber	'XFS90' Stone wool insulation with aluminium foil faces, stated density 75kg/m³. The barrier was 1200 mm long x 310 mm wide (with no compression) x 90 mm deep, it was installed with 10 mm compression and with a taped butt joint 200 mm down from one end. Fixed to the supporting construction using 3 steel hangers. Specimen installed flush with the unexposed surface of the 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 specimens retain their separating function, without causing ignition of a cotton pad when applied as specified in AS 1530.4:2014, or resulting in sustained flaming on the unexposed surface.						
Insulation	greater than	It is required that the mean temperature rise of the unexposed surface shall not be greater than 140°C and that the maximum temperature rise shall not be greater than 180°C as specified in AS 1530.4:2014.					
Test Results		Integrity	y (minutes)			Fire	
	Specimen	Cotton Pad	Sustained Flaming	Insu	Insulation (minutes) Resista		
	Α	132*	132*	132*	No Failure	/120/120	
	В	132*	132*	79	TC 35 exceeds maximum temperature rise	/120/60	
	С	76	78 [#]	61	TC 13 exceeds maximum temperature rise	/60/60	
*Test was discontinued after a period of 132 minutes. #Specimen blanked off.							

Date of Test 15th February 2021

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Signatories

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* For and on behalf of Warringtonfire.

Report Issued

Date: 16th March 2021

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Revision History

Issue No :	Re-issue Date:
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Test Conditions

Standard

AS 1530.4:2014 Fire-resistance tests for elements of construction – Section 10 Service Penetrations And Control Joints

Sampling

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

Component	Sampling date	Sampling report reference		
XFS120	14/08/2020	FM432018		
XFS90	14/00/2020	F1V1432010		

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 15th February 2021.

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 18°C to 24.5°C and 38.5% to 40.5% respectively.

Instruction to Test

The test was conducted on the 15th February 2021 at the request of Siderise Insulations Ltd, 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 16°C at the start of the test with a maximum variation of -1°C and +3°C during the test.

Furnace

The furnace was controlled so that its mean temperature complied with the requirements of AS 1530.4:2014 Clause 2.11 using four mineral insulated thermometers, distributed over a plane 100 mm from the surface of the horizontal test construction.

Thermocouples

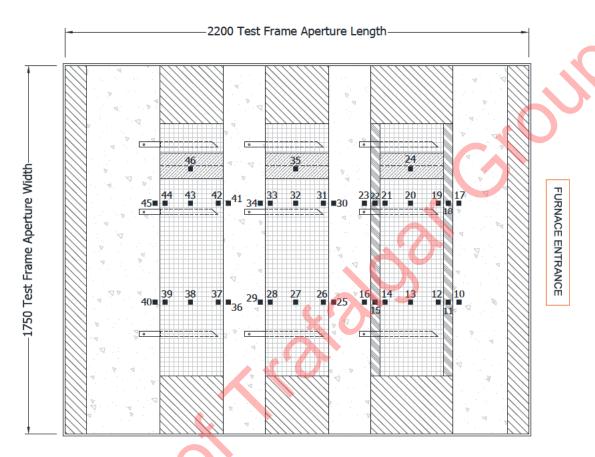
Thermocouples were provided to monitor the unexposed surface of the specimens. The output of all instrumentation was recorded at no less than one minute intervals. The locations and reference numbers of the various unexposed surface thermocouples are shown in Figure 1.

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 AS 1530.4:2014 Clause 2.3 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 3) Pa respectively thereafter.

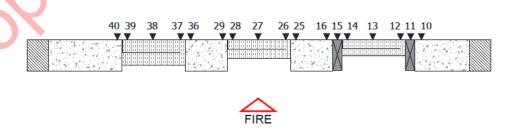
Test Specimen Drawings

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



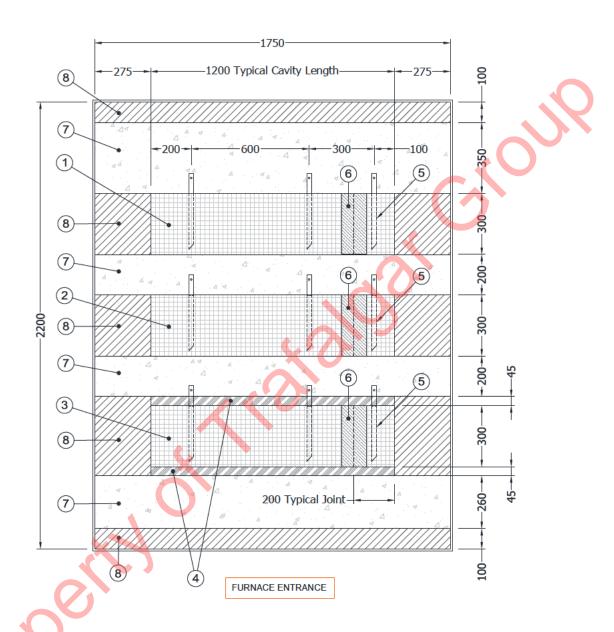
■ / ▲ Positions of surface thermocouples

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



TYPICAL HORIZONTAL SECTION THROUGH TEST CONSTRUCTION SHOWING THERMOCOUPLE LOCATIONS

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



GENERAL PLAN VIEW OF TEST CONSTRUCTION AT UNEXPOSED FACE

Figure 3 – Typical Section Through Test Construction

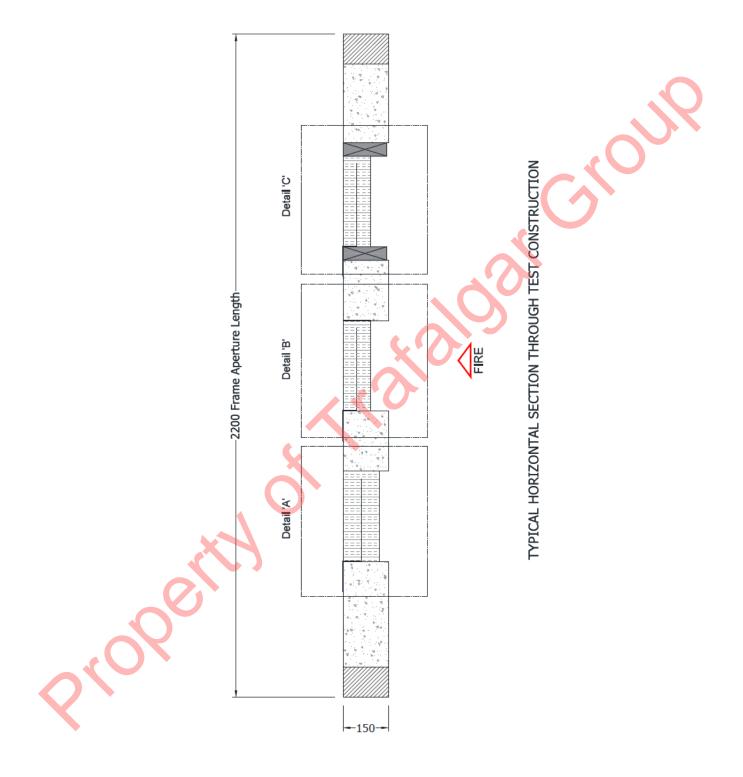


Figure 4 – Details 'A' & 'B'

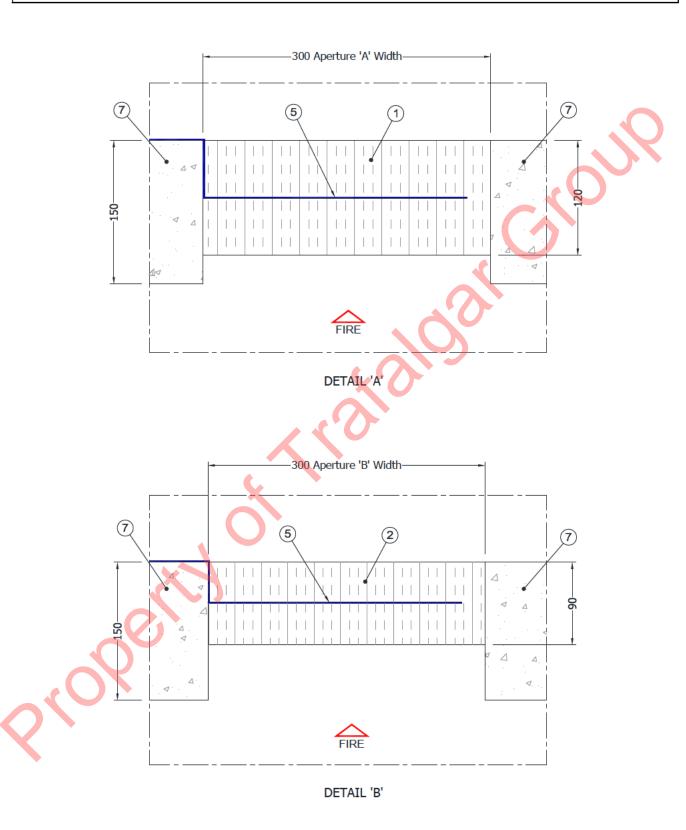
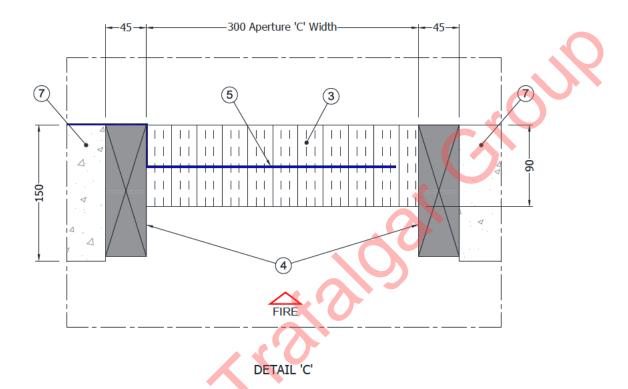


Figure 5 – Detail 'C'



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.

Density : 75 kg/m³

Cavity size : 1200 mm long x 300 mm wide x 150 mm deep.

Specimen size : 1000 mm long x 300 mm wide x 120 mm deep and 200

mm long x 300 mm wide x 120 mm deep.

Specimen size (uncompressed) : 1000 mm long x 310 mm wide x 120 mm deep and 200

mm long x 310 mm wide x 120 mm deep.

Fixing method : Fixed to the supporting structure using 3 No. steel

hangers (item 5). Splice Jointed and taped with

aluminium foil joint tape (item 6)

Compression : 10 mm

2. Cavity Barrier Specimen 'B'

Manufacturer : Siderise Insulation Limited.

Reference : XFS90

Material Stone wool insulation with aluminium foil faces.

Density : 75 kg/m³

Cavity size : 1200 mm long x 300 mm wide x 150 mm deep.

Specimen size (compressed) : 1000 mm long x 300 mm wide x 90 mm deep and 200

mm long x 300 mm wide x 90 mm deep.

Specimen size (uncompressed) 1000 mm long x 310 mm wide x 90 mm deep and 200

mm long x 310 mm wide x 90 mm deep.

Fixing method : Fixed to the supporting structure using 3 No. steel

hangers (item 5). Splice Jointed and taped with

aluminium foil joint tape (item 6)

Compression : 10 mm

3. Cavity Barrier Specimen 'C'

Manufacturer : Siderise Insulation Limited.

Reference : XFS90

Material : Stone wool insulation with aluminium foil faces.

Density : 75 kg/m³

Cavity size : 1200 mm long x 300 mm wide x 150 mm deep.

Specimen size (compressed) : 1000 mm long x 300 mm wide x 90 mm deep and 200

mm long x 300 mm wide x 90 mm deep.

Specimen size (uncompressed) : 1000 mm long x 310 mm wide x 90 mm deep and 200

mm long x 310 mm wide x 90 mm deep.

Fixing method : Fixed to the supporting structure using 3 No. steel

hangers (item 5). Splice Jointed and taped with

aluminium foil joint tape (item 6)

Compression : 10 mm

<u>Item</u> <u>Description</u>

4. Timber Section

Material : Spruce C16 – EN14081

Density : 370 kg/m³

Section size : 145 mm wide x 45 mm deep

Length : 1200 mm

Quantity : 2

Fixing method : Fixed to the supporting structure, using 3 No. Ø 7.5 mm

x 100 mm long concrete screws @ 400 mm centres

5. Steel Hanger

Manufacturer : Siderise Insulation Limited.

Reference : RS450

Material : Galvanised steel.

Thickness : 1.5 mm.
Width : 25 mm.
Supplied length : 450 mm long

Overall shaped dimensions

i. Cavity barrier 'A' : 375 mm long x 60 mm high x 25 mm wide

(trimmed and bent)

ii. Cavity barrier 'B' : 375 mm long x 45 mm high x 25 mm wide

(trimmed and bent)

iii. Cavity barrier 'C' : 375 mm long x 45 mm high x 25 mm wide

(trimmed and bent)

Fixing method : The hanger was cut to the required length and inserted

225 mm into the Insulation slab. Each hanger was fixed to the supporting structure using 1 No. Ø7.5 mm x

50mm long concrete screw, per hanger.

Centres : 2 hangers spaced approximately 600 mm apart, along

the length of the cavity aperture and 1 No. hanger at mid-point of the splice jointed slab. See Figure 2.

6. 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.

7. Concrete Lintel - Supplied by Warringtonfire

Material : Autoclaved aerated concrete slabs

Density : 670 kg/m3
Thickness : 150 mm
Overall sizes : See Figure 2

8. Masonry Blocks - supplied by Warringtonfire

Material : Autoclaved aerated concrete blocks

Density : 760 kg/m³

Fixing method : Ordinary sand/cement mortar.

Test Observations

Time		All observations are from the unexposed face unless noted otherwise.
mins	secs	
00	00	The Test Commences.
06	07	Steam/smoke release can be seen from one end of Specimen C and the supporting construction.
07	20	Steam/smoke release can be seen from one end of Specimens A and B.
19	20	Steam/smoke release continues from all barriers.
26	00	Steam/smoke release can be seen from timber substrate of Specimen C at mid-span.
37	10	Discolouring to timber adjacent the bracket closest to thermocouple number 15.
44	00	Foil face of B and C have delaminated.
59	50	Discolouring to timber increased.
71	00	Discolouring to both timber substrates.
71	30	Glowing observed to the end of timber substrate, closest to thermocouple number 18.
76	30	Cotton pad applied to glowing on Specimen C, cotton pad ignites. Integrity failure deemed to occur.
78	20	Mastic applied to glowing area on Specimen C to allow the test to continue.
100	00	No significant visible change.
109	00	Sustained flaming multiple places across C, mastic applied to allow the test to continue.
120	00	No significant visible change on A or B.
124	00	Specimen C is extinguished.
264	00	Test is discontinued at the sponsors request.

Test Photographs

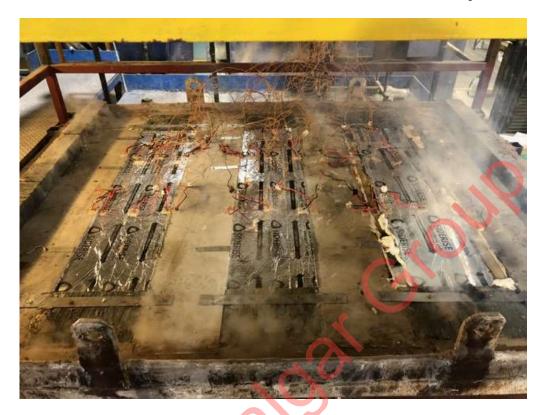
The exposed face of the floor assembly prior to testing



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



The unexposed face of the floor assembly after a test duration of 132 minutes



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 AS 1530.4:2014

Time Specified		Actual	
	Furnace	Furnace	
Mins	Temperature	Temperature	
	Deg. C	Deg. C	
0	20	15	
4	544	598	
8	645	525	
12	705	736	
16	748	738	
20	781	792	
24	809	815	
28	832	837	
32	851	855	
36	869	874	
40	885	889	
44	899	896	
48	912	908	
52	924	919	
56	935	930	
60	945	941	
64	955	953	
68	964	960	
72	973	969	
76	981	979	
80	988	989	
84	996	999	
88	1003	1006	
92	1009	1016	
96	1016	1018	
100	1022	1020	
104	1028	1021	
108	1033	1026	
112	1039	1029	
116	1044	1047	
120	1049	1055	
124	1054	1062	
128	1059	1064	
132	1063	1065	

Individual and mean temperatures recorded on the unexposed surface of Specimen A

Mins Number 37 Number 38 Number 39 Number 42 Number 43 Number 44 A4 A4 <th< th=""><th>Mean Mean Mean Mean Mean Mean Mean Mean</th></th<>	Mean Mean Mean Mean Mean Mean Mean Mean
Mins 37 38 39 42 43 44 44 Deg. C	16 Temp g. C Deg. C 14 14 13 14 13 14
Deg. C Deg. C<	g. C Deg. C 4 14 3 14 3 14
0 14 12 13 14 19 14 1 4 14 11 13 13 19 13 1 8 15 12 13 12 20 14 1 12 20 15 17 18 27 22 2 16 27 23 25 27 38 32 3 20 35 30 30 34 45 36 4 24 41 36 34 39 48 38 4 28 49 42 39 42 55 41 4 32 59 54 49 48 65 50 5 36 68 66 58 57 75 58 6 40 72 72 64 64 81 65 7 44 75 77 68	14 14 13 14 13 14
4 14 11 13 13 19 13 1 8 15 12 13 12 20 14 1 12 20 15 17 18 27 22 2 16 27 23 25 27 38 32 3 20 35 30 30 34 45 36 4 24 41 36 34 39 48 38 4 28 49 42 39 42 55 41 4 32 59 54 49 48 65 50 5 36 68 66 58 57 75 58 6 40 72 72 64 64 81 65 7 44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 74 <td< td=""><td>13 14 13 14</td></td<>	13 14 13 14
8 15 12 13 12 20 14 1 12 20 15 17 18 27 22 2 16 27 23 25 27 38 32 3 20 35 30 30 34 45 36 4 24 41 36 34 39 48 38 4 28 49 42 39 42 55 41 4 32 59 54 49 48 65 50 5 36 68 66 58 57 75 58 6 40 72 72 64 64 81 65 7 44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 15 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 1	13 14
12 20 15 17 18 27 22 2 16 27 23 25 27 38 32 3 20 35 30 30 34 45 36 4 24 41 36 34 39 48 38 4 28 49 42 39 42 55 41 4 32 59 54 49 48 65 50 5 36 68 66 58 57 75 58 6 40 72 72 64 64 81 65 7 44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 15 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 135 80 80 153 76 15	l l
16 27 23 25 27 38 32 3 20 35 30 30 34 45 36 4 24 41 36 34 39 48 38 4 28 49 42 39 42 55 41 4 32 59 54 49 48 65 50 5 36 68 66 58 57 75 58 6 40 72 72 64 64 81 65 7 44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 11 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 135 80 80 153 76 15	′/ /U
20 35 30 30 34 45 36 4 24 41 36 34 39 48 38 4 28 49 42 39 42 55 41 4 32 59 54 49 48 65 50 5 36 68 66 58 57 75 58 6 40 72 72 64 64 81 65 7 44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 1 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 135 80 80 153 76 15	39 30
24 41 36 34 39 48 38 4 28 49 42 39 42 55 41 4 32 59 54 49 48 65 50 5 36 68 66 58 57 75 58 6 40 72 72 64 64 81 65 7 44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 15 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 135 80 80 153 76 15	15 36
28 49 42 39 42 55 41 44 32 59 54 49 48 65 50 5 36 68 66 58 57 75 58 6 40 72 72 64 64 81 65 7 44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 1 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 135 80 80 153 76 15	17 40
32 59 54 49 48 65 50 5 36 68 66 58 57 75 58 6 40 72 72 64 64 81 65 7 44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 1 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 135 80 80 153 76 15	19 45
36 68 66 58 57 75 58 66 40 72 72 64 64 81 65 7 44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 15 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 135 80 80 153 76 15	59 55
40 72 72 64 64 81 65 7 44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 1 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 135 80 80 153 76 15	67 64
44 75 77 68 70 90 69 8 48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 1 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 18 64 92 135 80 80 153 76 18	74 70
48 77 97 70 73 111 72 10 52 79 97 72 76 125 75 12 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 19 64 92 135 80 80 153 76 19	30 76
52 79 97 72 76 125 75 15 56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 135 80 80 153 76 15	02 86
56 81 97 74 78 144 73 14 60 87 112 78 78 149 76 15 64 92 135 80 80 153 76 15	15 91
60 87 112 78 78 149 76 19 64 92 135 80 80 153 76 19	42 98
64 92 135 80 80 153 76 19	52 105
	55 110
	54 113
72 98 143 85 84 155 79 19	54 114
76 100 141 87 88 156 83 15	55 116
80 101 140 90 91 154 85 19	56 117
84 102 140 91 93 156 89 19	58 118
88 104 142 93 94 156 90 19	59 120
92 108 144 95 96 156 89 10	60 121
96 111 148 97 97 158 92 10	62 124
100 113 149 99 98 160 95 10	64 125
104 114 151 100 99 161 97 10	67 127
108 115 151 101 100 161 96 10	66 127
112 117 153 101 100 164 99 10	68 129
116 118 153 103 101 164 98 10	69 129
	70 131
124 122 157 108 103 167 100 1°	72 133
	73 134
132 125 162 116 107 172 101 1	76 137

Individual temperatures recorded on the unexposed surface adjacent to Specimen A

Time	T/C	T/C	T/C	T/C
	Number	Number	Number	Number
Mins	36	40	41	45
	Deg. C	Deg. C	Deg. C	Deg. C
0	16	13	13	12
4	15	13	12	11
8	15	14	12	12
12	16	13	14	10
16	17	13	14	12
20	18	13	15	13
24	20	15	16	14
28	23	15	17	14
32	27	16	19	15
36	32	18	21	16
40	37	21	24	18
44	43	24	27	21
48	47	27	31	23
52	51	28	33	27
56	55	35	39	28
60	57	36	40	32
64	59	39	43	34
68	61	41	46	36
72	63	42	48	38
76	65	44	50	40
80	66	46	52	41
84	67	47	53	43
88	68	49	55	44
92	70	50	56	45
96	71	51	57	47
100	72	52	58	48
104	73	53	59	49
108	73	54	60	50
112	74	55	61	51
116	74	56	61	52
120	75	56	62	53
124	75	57	62	54
128	75	58	63	54
132	76	59	63	55

Individual and mean temperatures recorded on the unexposed surface of Specimen B

Time	T/C	Mean						
	Number							
Mins	26	27	28	31	32	33	35	Temp
	Deg. C							
0	15	16	15	15	16	15	16	15
4	15	16	15	15	16	15	16	15
8	17	23	17	18	21	17	22	19
12	26	32	24	39	40	33	44	34
16	39	42	33	47	47	39	50	42
20	46	55	38	54	62	44	61	51
24	60	75	49	67	77	55	74	65
28	72	104	61	75	104	65	100	83
32	76	119	69	78	130	71	131	96
36	80	153	74	79	161	73	163	112
40	82	164	77	92	167	76	171	118
44	89	169	84	99	170	81	175	124
48	100	168	89	104	170	85	173	127
52	102	167	93	110	172	88	175	130
56	103	167	95	111	176	90	174	131
60	104	169	97	113	179	93	178	133
64	105	171	98	113	181	92	179	134
68	106	174	101	120	185	93	183	137
72	108	176	104	124	188	96	187	140
76	111	180	105	126	191	97	192	143
79	113	183	107	126	196	100	196	146
80	113	185	108	123	196	102	198	146
84	115	187	109	127	202	104	201	149
88	117	190	112	130	203	103	203	151
92	119	195	115	130	208	106	207	154
93	119	195	116	131	208	106	208	155
94	119	196	117	133	210	106	210	156
96	121	198	118	133	212	108	213	158
100	122	199	119	136	214	109	214	159
104	123	200	120	137	214	110	215	160
108	123	199	120	137	215	110	214	160
112	125	202	121	137	216	112	217	161
116	127	204	122	138	217	112	218	163
120	129	208	124	140	221	114	220	165
124	130	213	126	143	224	114	224	168
128	132	219	128	141	228	117	226	170
132	134	222	130	146	229	116	230	172

Individual temperatures recorded on the unexposed surface adjacent to Specimen B

Time	T/C	T/C	T/C	T/C
	Number	Number	Number	Number
Mins	25	29	30	34
	Deg. C	Deg. C	Deg. C	Deg. C
0	14	15	14	15
4	14	15	14	14
8	14	15	14	14
12	15	15	17	15
16	16	16	21	15
20	18	17	24	17
24	21	18	30	18
28	24	21	37	21
32	29	25	43	25
36	34	29	46	29
40	38	34	51	32
44	42	38	53	36
48	44	41	55	38
52	46	44	57	40
56	48	46	58	43
60	50	48	59	45
64	52	50	60	46
68	53	52	61	47
72	55	53	63	49
76	56	54	65	50
79	57	55	64	52
80	57	56	64	52
84	59	57	65	53
88	60	58	66	54
92	61	60	66	56
93	61	60	67	56
94	61	60	67	56
96	62	60	67	57
100	63	62	68	58
104	64	62	69	59
108	65	63	69	60
112	65	64	69	61
116	66	65	70	61
120	67	66	70	62
124	68	66	71	63
128	69	67	71	64
132	69	68	72	64

Individual and mean temperatures recorded on the unexposed surface of Specimen C

Time	T/C	Mean						
	Number							
Mins	12	13	14	19	20	21	24	Temp
	Deg. C							
0	16	16	15	17	16	16	16	16
4	15	16	15	17	16	16	16	16
8	18	23	17	19	21	19	26	20
12	27	33	28	30	36	36	45	34
16	34	43	37	39	44	46	54	42
20	41	53	41	46	57	54	67	51
24	52	70	51	56	69	65	83	64
28	62	82	62	64	77	72	111	76
32	68	111	69	69	102	75	147	92
36	72	140	72	72	119	77	166	103
40	75	151	74	75	147	80	177	111
44	78	166	76	77	153	94	183	118
48	86	175	83	79	161	101	184	124
52	94	175	89	83	168	104	186	128
56	105	185	96	91	175	109	187	135
60	117	194	107	99	184	114	190	144
61	120	195	111	101	184	116	192	146
62	122	199	114	103	188	117	194	148
64	127	200	119	106	190	121	195	151
66	132	205	124	110	192	123	199	155
67	133	206	128	113	193	125	199	157
68	136	209	130	116	195	127	201	159
72	144	215	139	125	201	134	206	166
76	150	219	146	138	204	139	210	172
80	155	226	153	147	210	144	211	178
84	158	229	158	153	212	147	215	182
88	166	232	162	160	217	151	218	187
92	171	235	167	165	222	156	221	191
96	177	242	175	170	226	160	224	196
100	182	242	180	176	230	163	226	200
104	188	246	189	185	233	167	233	206
108	196	244	198	195	231	169	235	210
112	207	247	205	201	232	172	231	214
116	219	248	215	213	235	177	233	220
120	205	249	225	225	238	180	236	223
124	219	249	234	238	235	186	242	229
128	152	241	248	*	229	189	235	196
132	106	228	251	*	231	193	234	189

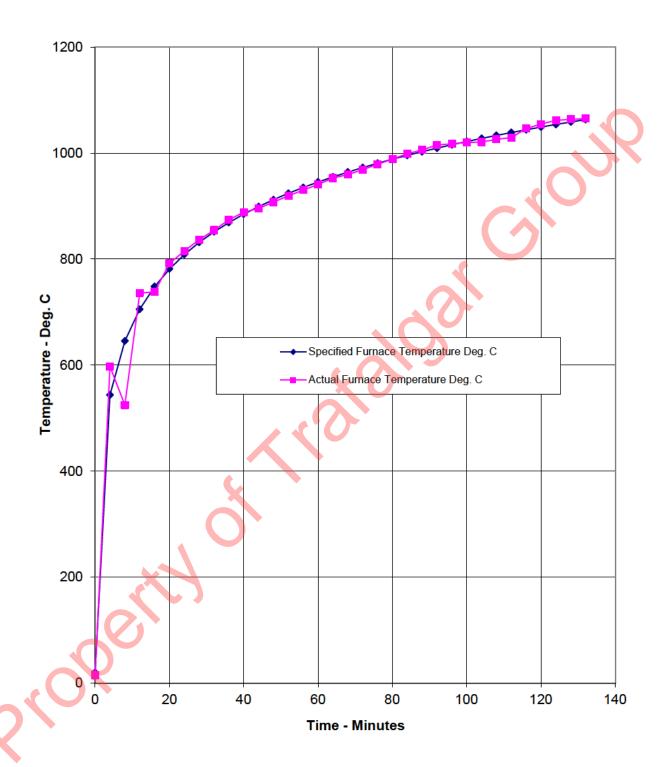
^{*}Thermocouple malfunction

Individual temperatures recorded on the unexposed surface adjacent to Specimen C

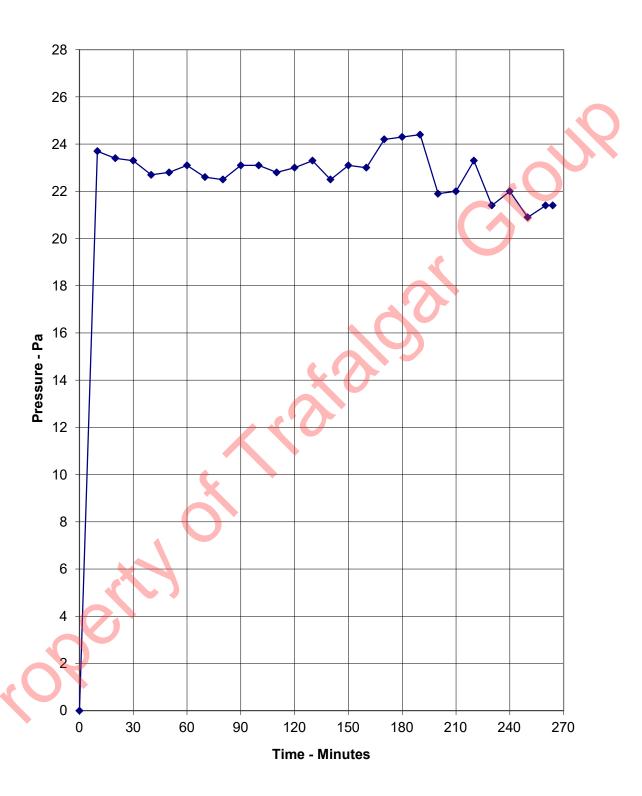
Time	T/C							
	Number							
Mins	10	11	15	16	17	18	22	23
	Deg. C							
0	16	16	16	14	21	17	15	15
4	15	16	15	14	21	16	15	14
8	16	16	15	14	21	17	15	14
12	16	17	14	14	20	17	16	15
16	16	17	12	14	20	19	17	15
20	17	20	13	14	19	20	18	15
24	17	21	11	15	19	21	20	15
28	17	24	10	15	18	22	22	15
32	17	26	7	15	18	24	25	16
36	18	29	6	17	18	25	27	16
40	18	32	5	19	17	27	29	16
44	18	33	32	25	18	28	30	17
48	19	35	34	31	18	28	32	18
52	20	35	36	35	17	30	32	18
56	21	37	36	39	17	31	34	18
60	23	39	37	42	*	33	36	19
61	24	39	37	43	*	33	37	19
62	24	39	37	44		34	38	19
64	25	40	37	44	*	34	39	20
66	27	42	38	46	15	35	40	20
67	28	42	38	46	15	35	40	21
68	29	43	38	47	*	35	41	21
72	33	46	40	49	*	37	44	22
76	38	49	42	50	*	39	46	24
80	42	52	44	50	*	43	50	25
84	46	55	46	52	*	46	52	27
88	50	59	47	56	*	51	55	30
92	54	62	46	59	*	54	59	32
96	57	66	46	61	*	59	62	35
100	59	69	45	61	*	63	65	37
104	60	72	46	62	48	66	67	39
108	64	76	47	62	52	69	68	41
112	66	81	48	63	61	74	70	43
116	69	87	50	62	67	78	71	45
120	69	87	52	62	71	84	71	47
124	69	90	54	62	73	86	72	49
128	62	57	63	63	62	52	73	51
132	62	57	71	62	58	61	74	54

^{*}Thermocouple malfunction

Graph showing mean furnace temperature, together with the temperature/time relationship specified in AS 1530.4:2014



Graph showing recorded furnace pressure 450 mm below the floor construction



On-going Implications

Limitations

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

This report details the method of construction, the test conditions and the results obtained when the specific elements 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 those allowed under the field of direct application in the relevant test method is not covered by this report.

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

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

Permissible Variations To The Tested Specimen

Control Joints

The following variations are permitted:

(a) Results obtained from single test on a butt joints may be applied to contoured joints,

provided the joints have—

- (i) equal width and equal or greater depth of sealant; and
- (ii) equal or greater thickness of fire-separating element.

NOTE: Examples of butt and contoured control joints are shown in Figure 10.12.6.

(b) Facings may be applied to the surface of the fire-stopping system.

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 432018		
Manufacturer	Siderise Insulations Ltd		
Manufacturing site	Forge Industrial Estate, Maesteg, Bridgend, CF34 0AY		
Place of sampling	As above		
Traceability information	Date/time of production: 14 th August 2020. Production unit/line: HSL Batch number: Manufactured from		
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. 1 x Pallet – W/O No.53686		
Marking of the samples by Warringtonfire Testing and Certification Limited	Job No: WF FM432018 Date: 14th August 2020 NB 1121 O/N Signature or initials: D.Thomas		

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

warringtonfire

Stock/batch quantity from which samples selected and sample quantity	Manufactured during the presence of the auditor. Photographs taken of product type.			
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	Fire test to be carried – date and location yet to be decided.			
Samples to be dispatched by manufacturer to *** within *** weeks/month(s)	Date is yet to be arranged.			
Date of sampling	14th August 2020			
Warringtonfire Testing and Certification Limited notified body number	1121			

signed: EA Gilbale .	Signed:			
(for and on behalf of Manufacturer)	(for and on behalf of Warringtonfire Testing and Certification Limited)			
Print: Carol Gilbert	Print: David Thomas			
Date: 14 th August 2020	Date: 14th August 2020			

Reviewed S. Holles

17.9.2020

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

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