

Title:

The Fire Resistance Performance Of Three Specimens Of Wall Mounted and Three Specimens Of Floor Mounted Cavity Barrier Systems, When Tested In Accordance With EN 1366-4:2021

Date Of Test:

18 September 2024

Issue 1

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WF Report No:

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Prepared for:

TIMLOC BUILDING PRODUCTS

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0249

Test Specimens

Summary of Tested Specimens

For the purpose of the test the floor specimens were referenced A to C and the wall specimens were referenced D to F.

The section of floor had overall dimensions of 2230 mm long by 1730 mm wide by nominally 600 mm thick and was made up of autoclaved aerated concrete lintels arranged to provide three cavities of varying widths which were all 1180 mm in length.

The section of wall had overall dimensions of 1510 mm high by 1510 mm wide by nominally 600 mm thick and was made up of autoclaved aerated concrete lintels arranged to provide four cavities of varying widths which were all 1180 mm in length.

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

Floor Specimens

Specimen	Substrate	Seal Details
A	Autoclaved aerated concrete to Autoclaved aerated concrete	Sealed with a 1200 mm long by 320 mm (2 no. layers of 160 mm) wide by 250 mm deep stone mineral wool cavity barrier wrapped in a 35-micron polythene sleeve referenced 'PWFRSTOP300'. The barrier was compression fitted at 250 mm from the exposed face with 20 mm compression to the width and 20 mm to the length
B		Sealed with a 1200 mm long by 160 mm wide by 250 mm deep stone mineral wool cavity barrier wrapped in a 35-micron polythene sleeve referenced 'PWFRSTOP150'. The barrier was compression fitted at 250 mm from the exposed face with 10 mm compression to the width and 20 mm to the length
C		Sealed with a 1200 mm long by 65 mm wide by 250 mm deep stone mineral wool cavity barrier wrapped in a 35-micron polythene sleeve referenced 'PWFRSTOP50'. The barrier was friction fitted at 250 mm from the exposed face with 15 mm compression to the width and 20 mm to the length.

Wall Specimens

Specimen	Substrate	Seal Details
D	Autoclaved aerated concrete to Autoclaved aerated concrete	Sealed with a 1200 mm long by 65 mm wide by 250 mm deep stone mineral wool cavity barrier wrapped in a 35-micron polythene sock referenced 'PWFRSTOP50'. The barrier was compression fitted at 250 mm from the exposed face with 15 mm compression to the width and 20 mm to the length
E		Sealed with a 1200 mm long by 160 mm wide by 250 mm deep stone mineral wool cavity barrier wrapped in a 35-micron polythene sock referenced 'PWFRSTOP150'. The barrier was compression fitted at 250 mm from the exposed face with 10 mm compression to the width and 20 mm to the length
F		Sealed with a 1200 mm long by 320 mm (2 no. layers of 160 mm) wide by 250 mm deep stone mineral wool cavity barrier wrapped in a 35-micron polythene sock referenced 'PWFRSTOP300'. The barrier was compression fitted at 250 mm from the exposed face with 20 mm compression to the width and 20 mm to the length

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	<table border="1"> <thead> <tr> <th rowspan="2">Specimen</th> <th colspan="2">Integrity (minutes)</th> <th rowspan="2">Insulation (minutes)</th> </tr> <tr> <th>Cotton Pad</th> <th>Sustained flaming</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>66*</td> <td>66*</td> <td>66*</td> </tr> <tr> <td>B</td> <td>66*</td> <td>66*</td> <td>66*</td> </tr> <tr> <td>C</td> <td>66*</td> <td>66*</td> <td>66*</td> </tr> <tr> <td>D</td> <td>66*</td> <td>66*</td> <td>66*</td> </tr> <tr> <td>E</td> <td>66*</td> <td>66*</td> <td>66*</td> </tr> <tr> <td>F</td> <td>66*</td> <td>66*</td> <td>66*</td> </tr> </tbody> </table> <p style="text-align: center;">*Test was discontinued after a period of 66 minutes.</p>			Specimen	Integrity (minutes)		Insulation (minutes)	Cotton Pad	Sustained flaming	A	66*	66*	66*	B	66*	66*	66*	C	66*	66*	66*	D	66*	66*	66*	E	66*	66*	66*	F	66*	66*	66*
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D	66*	66*	66*																														
E	66*	66*	66*																														
F	66*	66*	66*																														

Date of Test 18 September 2024

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Quality Management

Issue No: 1	Issue Date: 11 February 2025
Responsible Officer: M.A.Rana* Technical Officer	Approved By: G. Edmonds* Senior Technical Officer
	

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

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Test Conditions

Standard	<p>BS EN 1366-4:2021 Fire resistance tests for service installations – Part 4: Linear joint seals.</p> <p>Clause 6.2 of BS EN 1366-4:2021 specifies a typical length to width for a linear joint seal is 10:1. The length to width may be < 10:1 in case the heated length of the linear joint is ≥ 2600 mm. This requirement was not satisfied due to the reduced length of Specimen's A, B, E and F. Therefore, the test was conducted generally in accordance with the standard. Test results obtained are only valid to the Specimens as tested.</p> <p>The test was not conducted under the requirements of Warringtonfire's UKAS scope of accreditation.</p>
Sampling	<p>Warringtonfire was not involved in the sampling or selection of the tested specimen or any of the components.</p> <p>The results obtained during the test only apply to the test samples as received and tested by Warringtonfire.</p>
Installation	<p>Warringtonfire supplied the wall and floor constructions. The gap sealing systems were provided and installed by a representative of the Test Sponsor on 13 September 2024.</p>
Conditioning	<p>The specimen's storage, construction, and test preparation took place in the test laboratory over a total, combined time of ten days. Throughout this period both the temperature and the humidity of the laboratory were measured and recorded as being within a range of from 16.0°C to 29.5°C and 29.5% to 75.0% respectively.</p>
Instruction to Test	<p>The test was conducted on the 18 September 2024 at the request of TIMLOC BUILDING PRODUCTS, the test sponsor.</p> <p>Mr. S. Bishop, a representative of the Test Sponsor witnessed the test.</p>
Ambient Temperature	<p>The ambient air temperature in the vicinity of the test construction was 20°C at the start of the test with a maximum variation of +2°C during the test.</p>
Furnace	<p>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.</p>
Thermocouples	<p>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 the Test Construction section of this report.</p>

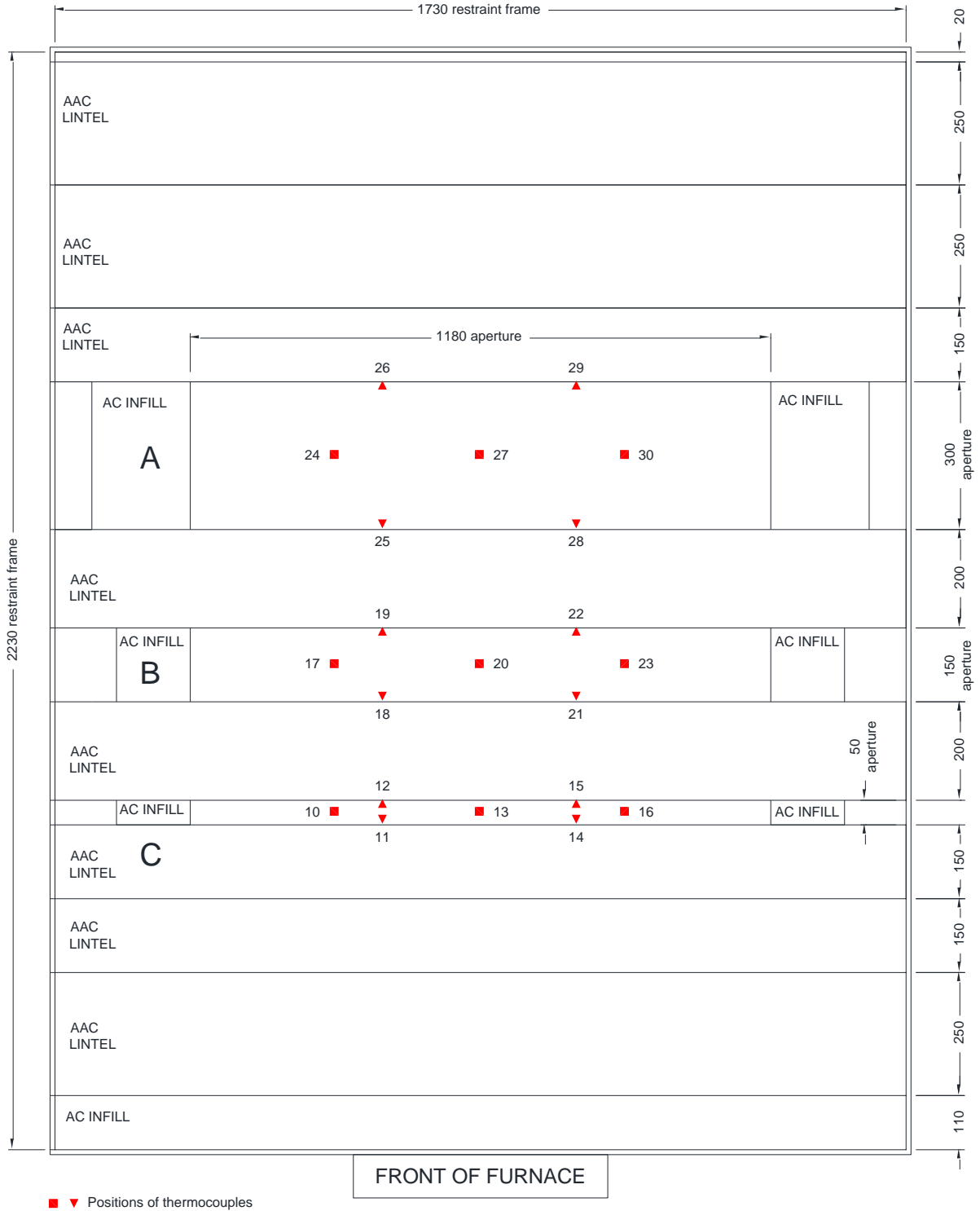
Furnace Pressure

The requirements of BS EN 1363-1:2020, clause 5.2 could not be satisfied due to simultaneous testing of wall and floor specimens. The floor specimens were tested under more onerous conditions, at position 100 mm below the underside of the floor assembly the differential pressure was calculated to be 22 (± 2) Pa between 5 and 10 minutes and 22 (± 3) Pa respectively thereafter. The wall specimens satisfied the requirements of BS EN 1363-1:2020, clause 5.2. The calculated pressure differential relative to the laboratory atmosphere at mid height of the wall mounted specimens was 15 (± 5).

Should the conditions of furnace temperature, furnace pressure or ambient temperature which are achieved during the test represent a more severe exposure to the test specimen, the test is still to be considered valid.

Test Construction

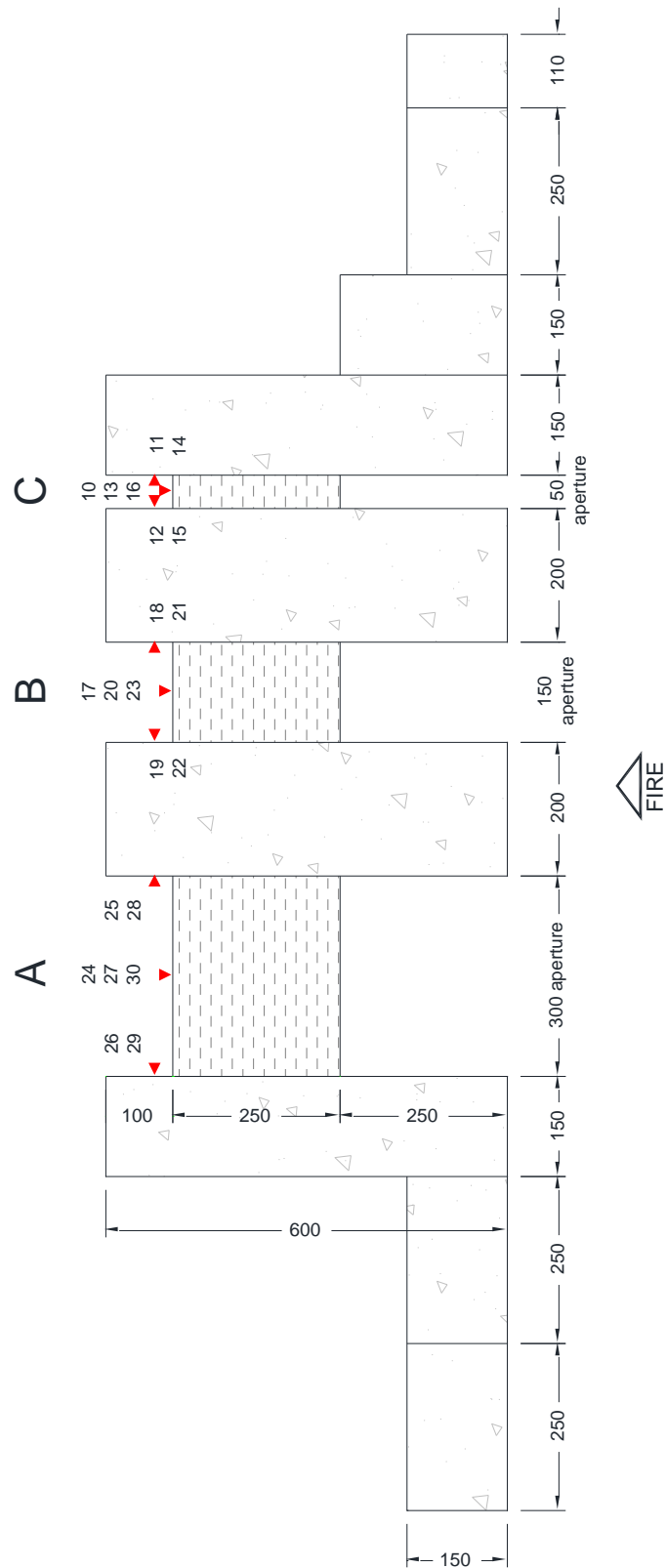
Figure 1. General plan of unexposed face showing thermocouple positions



GENERAL PLAN OF UNEXPOSED FACE SHOWING THERMOCOUPLE POSITIONS

Do not scale. All dimensions are in mm

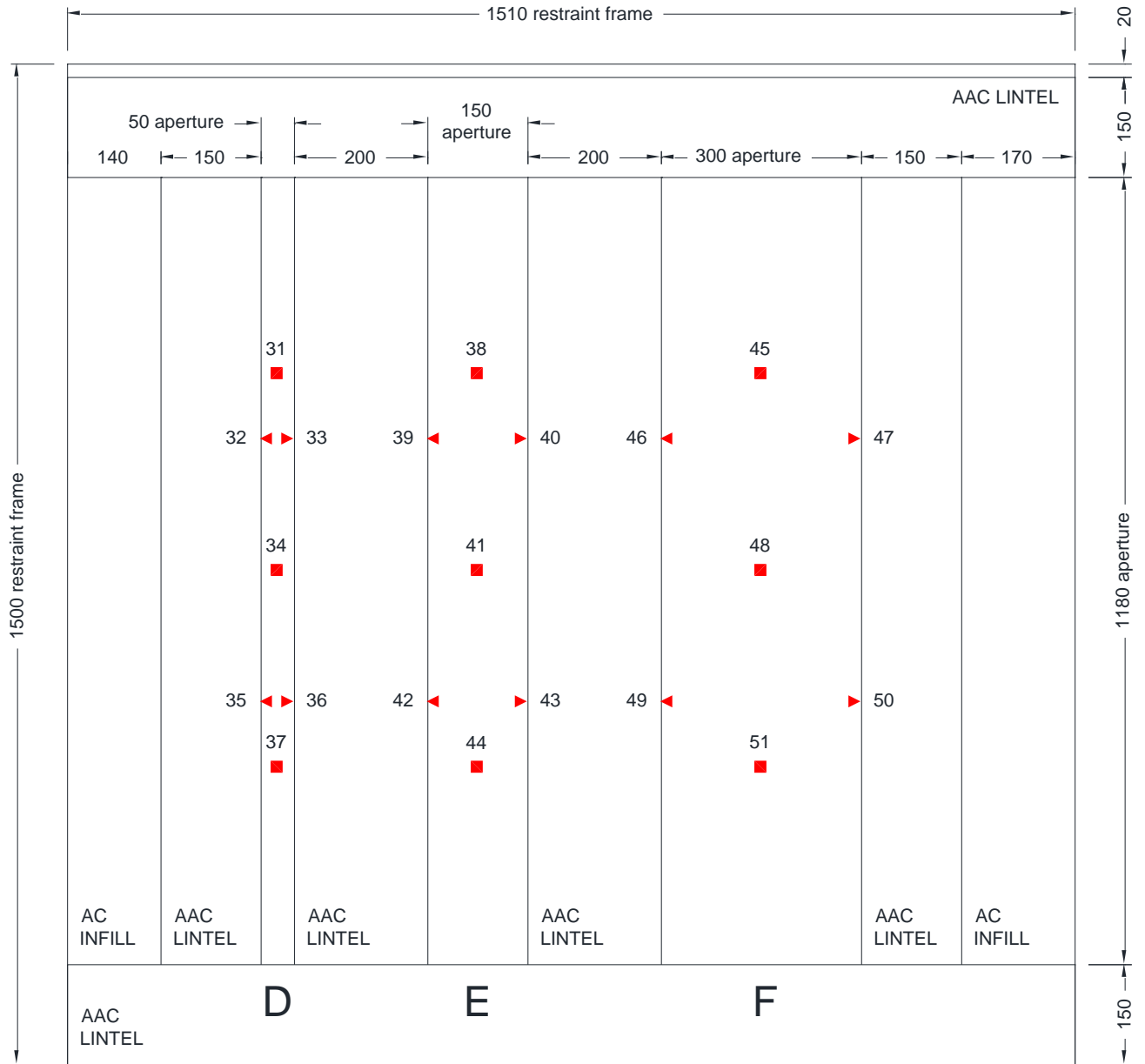
Figure 2. Typical vertical section through test specimen



TYPICAL VERTICAL SECTION THROUGH TEST SPECIMEN

Do not scale. All dimensions are in mm

Figure 3. General elevation of unexposed face showing thermocouple positions

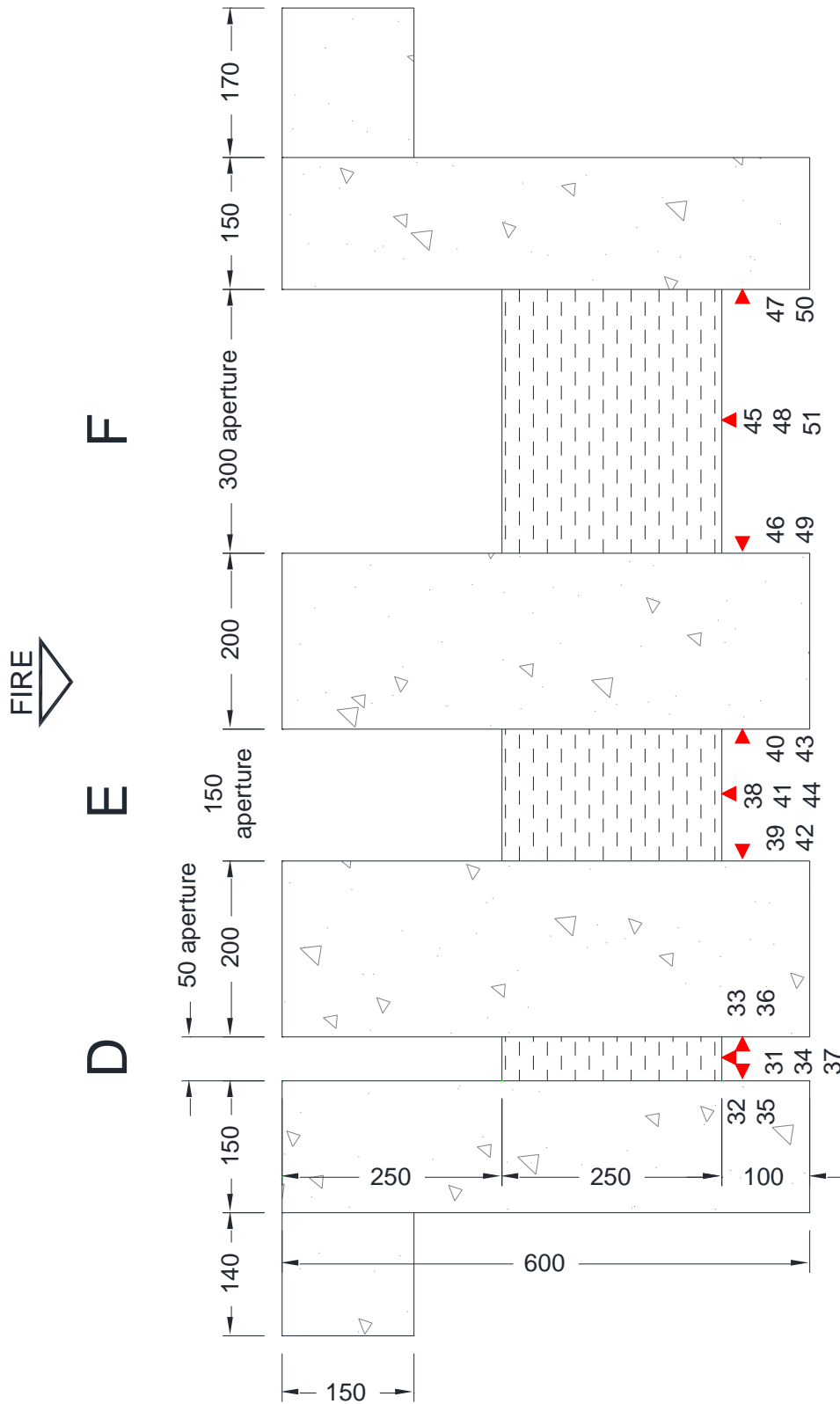


■ ▼ Positions of thermocouples

GENERAL ELEVATION OF UNEXPOSED FACE

Do not scale. All dimensions are in mm

Figure 4. Typical horizontal section through test specimen



TYPICAL HORIZONTAL SECTION THROUGH TEST SPECIMEN

Do not scale. All dimensions are in mm

Schedule of Components

The schedule of components describes the test specimen and lists the components used in the construction of the test specimen. These were provided by the test sponsor and surveyed by Warringtonfire.

All measurements were verified by Warringtonfire unless stated otherwise in the schedule of components. All components marked with an “*” have not been verified by Warringtonfire.

<u>Item</u>	<u>Description</u>
1. Specimen A	
Details of aperture	: 300 mm wide x 1180 mm long
Details of barrier	
Manufacturer	: Timloc
Reference	: PWFRSTOP300
Material	: Stone mineral wool in a 35 µm polythene sleeve
Density	: 40 kg/m ³ (stated)
Overall size	: 1200 mm long x 250 mm deep x 320 mm wide (comprising 2no. layers of 160 mm)
Fixing method	: Compression-fitted into the aperture with 20 mm compression across the width and 20 mm across the length
2. Specimen B	
Details of aperture	: 150 mm wide x 1180 mm long
Details of barrier	
Manufacturer	: Timloc
Reference	: PWFRSTOP150
Material	: Stone mineral wool in a 35 µm polythene sleeve
Density	: 40 kg/m ³ (stated)
Overall size	: 1200 mm long x 250 mm deep x 160 mm wide
Fixing method	: Compression-fitted into the aperture with 10 mm compression across the width and 20 mm across the length
3. Specimen C	
Details of aperture	: 50 mm wide x 1180 mm long
Details of barrier	
Manufacturer	: Timloc
Reference	: PWFRSTOP50
Material	: Stone mineral wool in a 35 µm polythene sleeve
Density	: 40 kg/m ³ (stated), 42 kg/m ³ (measured)
Overall size	: 1200 mm long x 250 mm deep x 65 mm wide
Fixing method	: Compression-fitted into the aperture with 15 mm compression across the width and 20 mm across the length

<u>Item</u>	<u>Description</u>
4. Specimen D	
Details of aperture	: 50 mm wide x 1180 mm long
Details of barrier	
Manufacturer	: Timloc
Reference	: PWFRSTOP50
Material	: Stone mineral wool in a 35 µm polythene sleeve
Density	: 40 kg/m ³ (stated), 46 kg/m ³ (measured)
Overall size	: 1200 mm long x 250 mm deep x 65 mm wide
Fixing method	: Compression-fitted into the aperture with 15 mm compression across the width and 20 mm across the length
5. Specimen E	
Details of aperture	: 150 mm wide x 1180 mm long
Details of barrier	
Manufacturer	: Timloc
Reference	: PWFRSTOP150
Material	: Stone mineral wool in a 35 µm polythene sleeve
Density	: 40 kg/m ³ (stated)
Overall size	: 1200 mm long x 250 mm deep x 160 mm wide
Fixing method	: Compression-fitted into the aperture with 10 mm compression across the width and 20 mm across the length
6. Specimen F	
Details of aperture	: 300 mm wide x 1180 mm long
Details of barrier	
Manufacturer	: Timloc
Reference	: PWFRSTOP300
Material	: Stone mineral wool in a 35 µm polythene sleeve
Density	: 40 kg/m ³ (stated)
Overall size	: 1200 mm long x 250 mm deep x 320 mm wide (comprising 2no. layers of 160 mm)
Fixing method	: Compression-fitted into the aperture with 20 mm compression across the width and 20 mm across the length
Supporting construction (comprising items 7 – 8)	
7. Concrete lintels (supplied by Warringtonfire)	
Material	: Steel reinforced autoclaved aerated concrete
Density	: 550 ~ 650 kg/m ³
Overall size	: 1680 / 1500 mm long x 600 mm deep x 150 mm wide 1680 mm long x 600 mm deep x 200 mm wide 1680 mm long x 150 mm deep x 250 mm wide
8. Masonry infill (supplied by WarringtonFire)	
Manufacturer	: THERMALITE
Reference	: THERMALITE Shield
Material	: Lightweight concrete blocks
Overall size	: 150 mm wide x 215 mm high x 440 mm long
Density	: 884 kg/m ³ (measured)
Fixing method	: Ordinary sand/cement mortar, mix 3:1

Test Observations

Time		All observations are from the unexposed face unless noted otherwise.
mins	secs	
00	00	The Test Commences.
02	10	Bags on Specimens E and F have billowed out. All thermocouples appear to be still attached.
03	40	The thermocouples on the floor Specimens have detached as the bag has become inflated on all Specimens.
06	10	Steam/smoke release from bags and AAC interface on Specimen C at both ends.
09	10	Bag E has deflated considerably compared to initial inflation. Bag F still inflated.
09	50	Thermocouples have been reattached to the barriers on all three floor Specimens.
16	50	Bag A and Bag B are still considerably inflated.
26	05	Moisture build up behind bag on Specimen E and between mineral wool and thermocouple.
35	10	No significant visible change.
55	00	Roving Thermocouple reading on Specimen D barrier at 18.7 Degrees Celsius.
56	10	Slight shrinkage from the head of Specimen D and at both ends of Specimen C at the head locations.
66	00	The test is discontinued at the sponsor's request.

Test Photographs

The exposed face of the wall assembly prior to testing



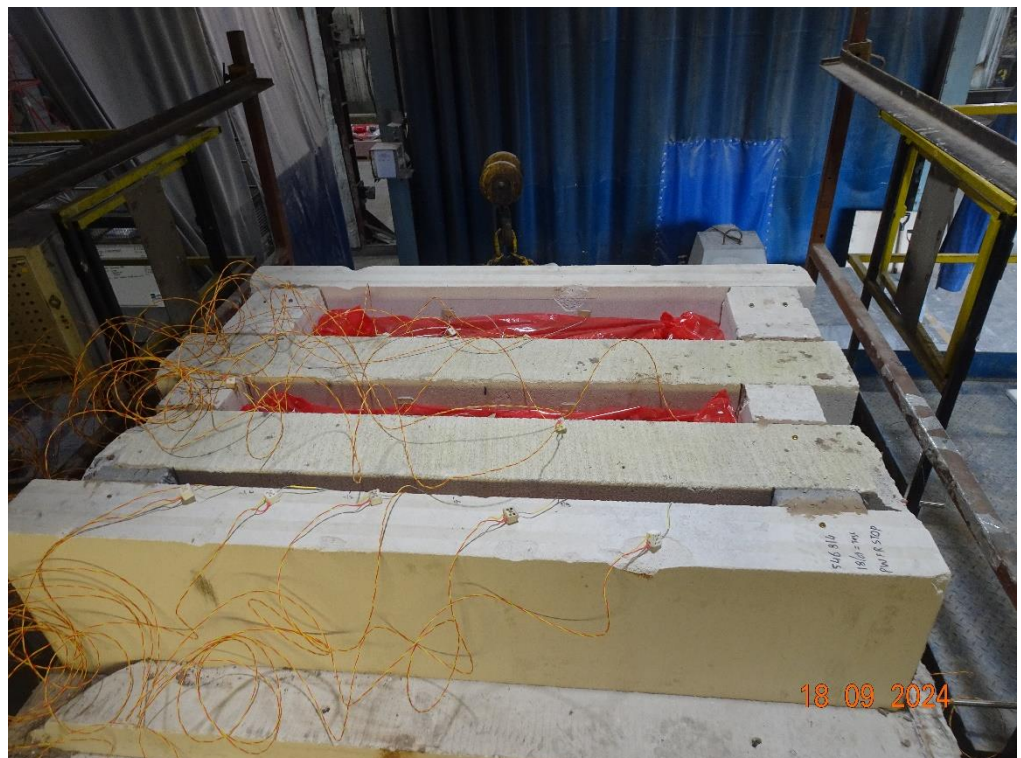
The unexposed face of the wall assembly prior to testing



The exposed face of the floor assembly prior to testing



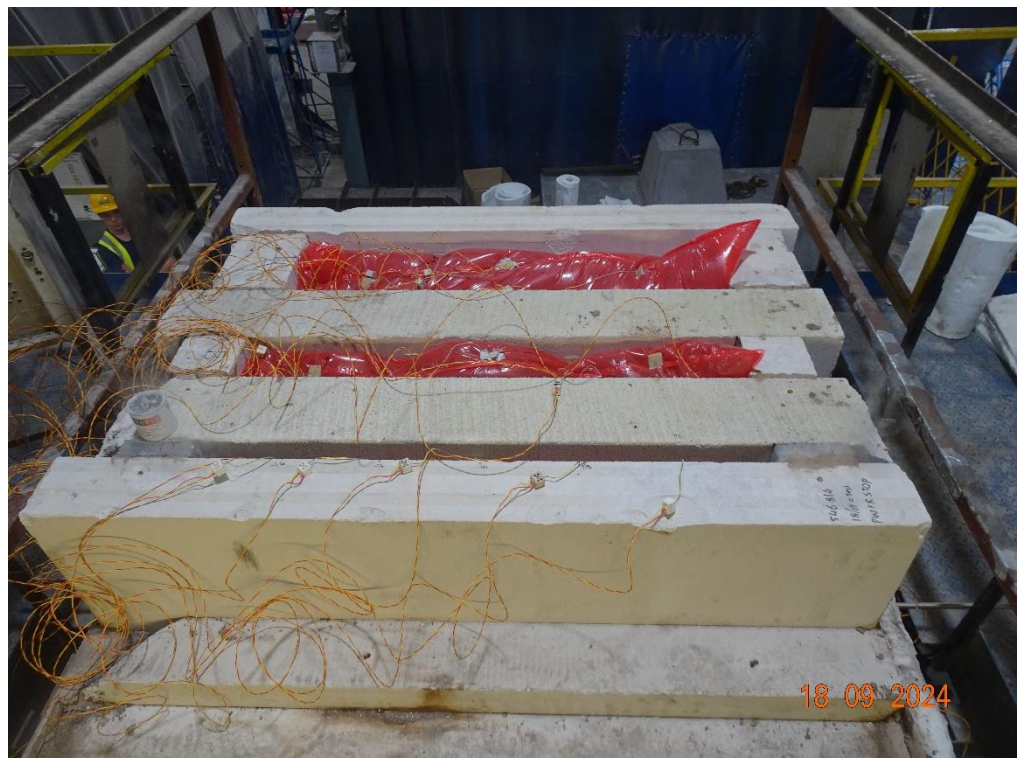
The unexposed face of the floor assembly prior to the start of the test



The unexposed face of the wall assembly after a test duration of 30 minutes



The unexposed face of the floor assembly after a test duration of 30 minutes



The unexposed face of the wall assembly after a test duration of 66 minutes



The unexposed face of the floor assembly after a test duration of 66 minutes



The exposed face
of the wall
assembly
immediately after
the test duration



The exposed face
of the floor
assembly
immediately after
the test duration



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	20
2	445	324
4	544	502
6	603	585
8	645	645
10	678	680
12	705	695
14	728	737
16	748	743
18	766	765
20	781	778
22	796	797
24	809	803
26	820	821
28	831	831
30	842	834
32	851	852
34	860	855
36	869	867
38	877	877
40	885	886
42	892	896
44	899	902
46	906	906
48	912	910
50	918	914
52	924	921
54	930	929
56	935	937
58	940	944
60	945	946
62	950	951
64	955	955
66	960	961

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

Time Minutes	T/C Number 24 Deg. C	T/C Number 25 Deg. C	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
0	21	17	19	22	17	19	21
2	22	18	19	22	17	20	22
4	22	18	19	22	17	20	22
6	22	18	19	22	17	20	22
8	21	18	19	22	18	20	22
10	21	18	19	22	18	20	22
12	21	18	19	21	18	20	22
14	21	18	19	22	18	20	22
16	21	18	19	21	18	20	22
18	21	18	19	21	18	20	22
20	22	18	20	21	18	20	23
22	22	18	20	22	18	21	24
24	23	18	20	22	18	21	25
26	24	18	21	23	18	21	26
28	25	19	21	24	19	22	28
30	26	19	21	23	19	22	28
32	27	19	22	24	19	23	29
34	28	19	22	26	19	23	29
36	29	19	23	27	19	24	31
38	30	20	23	28	20	24	32
40	31	20	24	30	20	25	33
42	33	20	25	31	20	26	35
44	35	21	26	33	20	27	37
46	37	21	27	35	21	28	39
48	39	22	28	38	21	29	41
50	40	22	29	40	22	30	42
52	42	23	30	42	22	31	44
54	44	24	31	44	23	33	46
56	46	25	33	46	23	34	48
58	47	25	34	48	24	36	49
60	49	26	35	49	24	37	50
62	50	27	36	51	25	38	52
64	51	27	37	52	25	39	53
66	53	28	38	54	26	41	54

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

Time Minutes	T/C Number 17 Deg. C	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
0	20	17	17	20	17	17	21
2	20	17	18	21	17	17	21
4	20	17	18	21	17	17	21
6	20	17	18	21	17	17	21
8	20	17	18	21	17	17	21
10	20	18	18	20	17	17	21
12	20	17	18	20	17	17	21
14	20	18	18	20	17	17	21
16	20	18	18	20	18	17	21
18	21	18	18	20	18	17	21
20	20	18	18	20	18	17	21
22	20	18	18	20	18	17	21
24	20	18	18	20	18	17	21
26	21	18	18	20	18	17	22
28	21	18	18	20	18	17	22
30	21	18	18	20	18	17	22
32	21	18	18	20	18	18	22
34	21	18	19	20	18	18	22
36	21	18	19	20	18	18	22
38	21	18	19	20	18	18	22
40	22	18	19	21	18	18	23
42	22	19	19	21	18	18	23
44	22	19	19	21	19	18	23
46	23	19	19	21	19	18	23
48	23	19	19	22	19	18	24
50	23	19	20	22	19	18	24
52	24	19	20	22	19	18	24
54	24	20	20	23	19	19	25
56	24	20	20	23	20	19	25
58	25	20	20	23	20	19	26
60	25	20	21	24	20	19	26
62	25	20	21	24	20	19	26
64	26	21	21	25	20	20	27
66	26	21	21	25	20	20	27

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

Time Minutes	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
0	16	16	16	17	16	16	17
2	17	17	16	17	16	16	17
4	17	17	16	17	16	16	17
6	18	17	16	17	16	16	17
8	18	17	16	17	16	17	17
10	18	17	17	17	16	17	17
12	18	17	17	17	16	17	17
14	19	17	17	17	16	17	17
16	19	17	17	18	17	17	17
18	20	17	17	17	17	17	17
20	20	17	17	18	17	17	17
22	19	17	17	18	16	17	17
24	18	17	17	18	17	17	17
26	18	17	17	18	17	17	18
28	18	17	17	18	17	17	18
30	18	17	17	18	17	17	18
32	18	17	17	20	17	17	18
34	19	18	17	21	17	17	19
36	21	18	17	21	17	17	19
38	22	18	18	23	18	18	19
40	23	19	18	24	18	18	20
42	24	19	18	25	18	18	20
44	25	20	19	26	19	18	20
46	28	21	19	28	19	19	21
48	30	21	20	30	20	19	22
50	33	22	21	33	20	20	23
52	35	23	22	36	21	21	24
54	37	25	23	38	22	22	24
56	39	26	24	41	23	23	25
58	41	27	24	43	24	23	26
60	43	28	25	45	25	24	27
62	46	29	26	47	26	25	28
64	47	30	27	49	27	26	28
66	49	31	27	51	28	27	29

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

Time Minutes	T/C Number 31 Deg. C	T/C Number 32 Deg. C	T/C Number 33 Deg. C	T/C Number 34 Deg. C	T/C Number 35 Deg. C	T/C Number 36 Deg. C	T/C Number 37 Deg. C
0	16	15	15	16	14	15	15
2	17	15	15	16	15	15	15
4	17	16	15	16	15	15	16
6	17	16	15	16	15	15	16
8	17	16	15	16	15	15	16
10	17	16	15	17	15	15	16
12	17	16	15	16	15	15	16
14	17	16	15	16	15	15	16
16	18	16	15	16	15	15	16
18	18	16	15	17	15	15	16
20	18	16	16	17	15	16	16
22	18	16	16	17	15	16	16
24	18	16	15	17	15	16	16
26	18	16	16	17	15	16	16
28	18	16	16	17	15	16	16
30	18	16	16	17	15	16	16
32	18	16	16	17	15	16	16
34	18	16	16	17	15	16	16
36	18	16	16	17	15	16	16
38	18	16	16	17	15	16	16
40	18	16	16	17	15	16	16
42	19	16	16	17	15	16	16
44	19	16	16	17	16	16	16
46	19	16	16	17	16	16	17
48	19	16	16	17	16	16	17
50	19	16	16	17	16	16	17
52	19	16	16	17	16	16	17
54	19	16	16	18	16	16	17
56	19	17	16	18	16	16	17
58	19	17	16	18	16	16	17
60	20	17	16	18	16	16	17
62	20	17	16	18	16	16	17
64	20	17	16	18	16	16	18
66	20	17	17	18	16	17	18

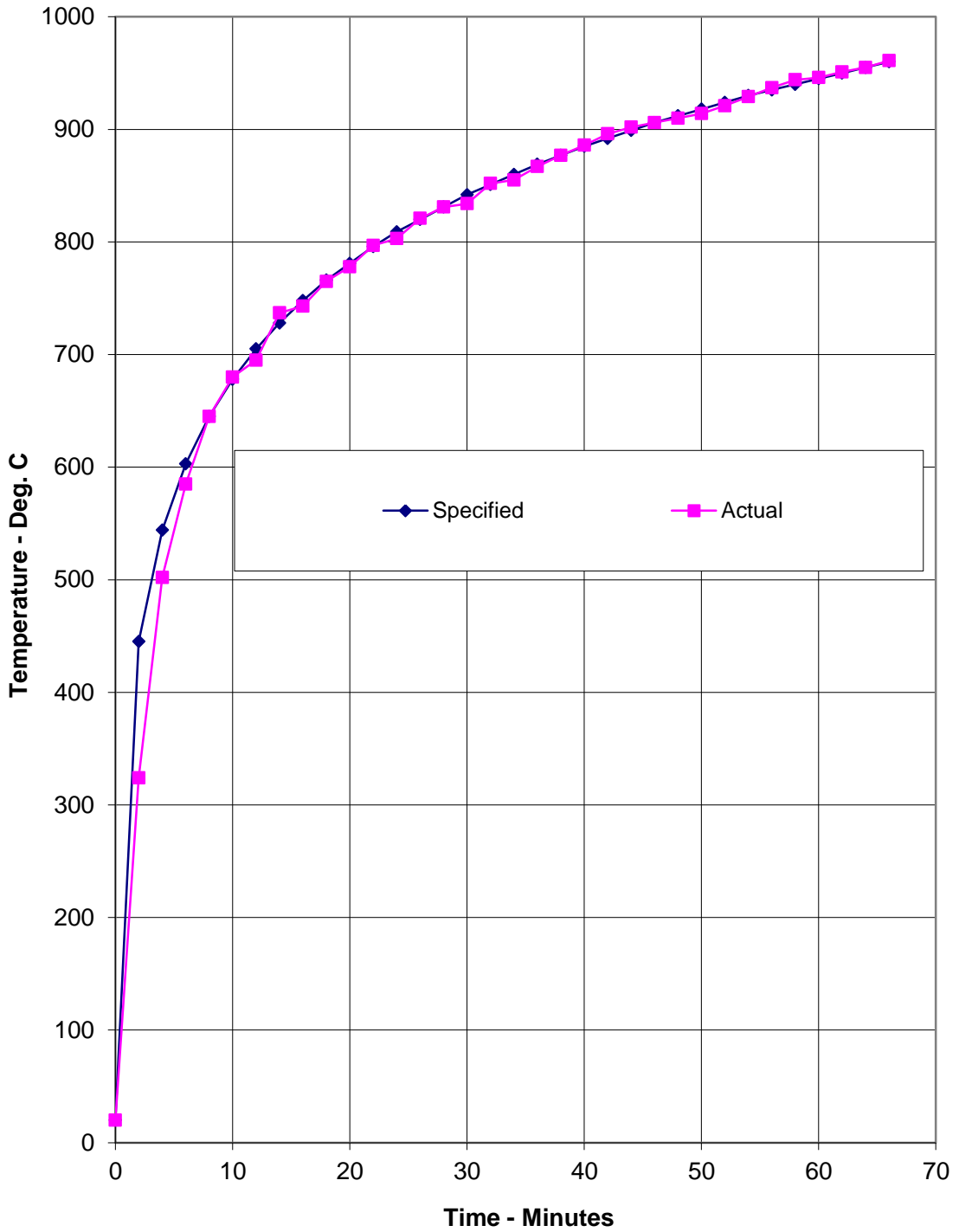
Individual temperatures recorded on the unexposed surface of Specimen E and adjacent to Specimen E

Time Minutes	T/C Number 38 Deg. C	T/C Number 39 Deg. C	T/C Number 40 Deg. C	T/C Number 41 Deg. C	T/C Number 42 Deg. C	T/C Number 43 Deg. C	T/C Number 44 Deg. C
0	19	16	16	19	16	16	18
2	19	17	16	19	17	16	19
4	20	17	16	20	17	17	19
6	26	17	17	21	17	17	20
8	32	18	18	25	18	17	22
10	35	18	19	27	18	18	24
12	37	19	19	28	19	18	26
14	39	19	20	30	19	18	27
16	40	20	21	32	20	19	28
18	41	20	21	32	20	19	28
20	42	20	21	33	20	20	29
22	44	20	22	35	21	20	31
24	43	21	22	35	21	20	31
26	46	21	23	38	22	21	32
28	47	22	24	40	22	21	33
30	47	22	24	39	23	22	32
32	50	23	25	42	23	22	35
34	51	23	25	43	24	22	36
36	53	24	26	44	24	23	37
38	54	24	27	45	25	23	37
40	56	25	28	46	26	24	39
42	57	26	28	47	26	24	39
44	58	26	29	49	27	25	40
46	59	27	30	52	27	26	42
48	59	27	30	52	28	26	43
50	60	28	31	54	29	27	44
52	61	29	32	55	29	27	44
54	62	30	32	57	30	28	46
56	62	30	33	57	30	28	46
58	63	31	34	58	31	29	47
60	63	32	34	60	32	29	48
62	64	32	35	60	32	30	48
64	63	32	35	60	32	31	48
66	64	33	36	61	33	31	49

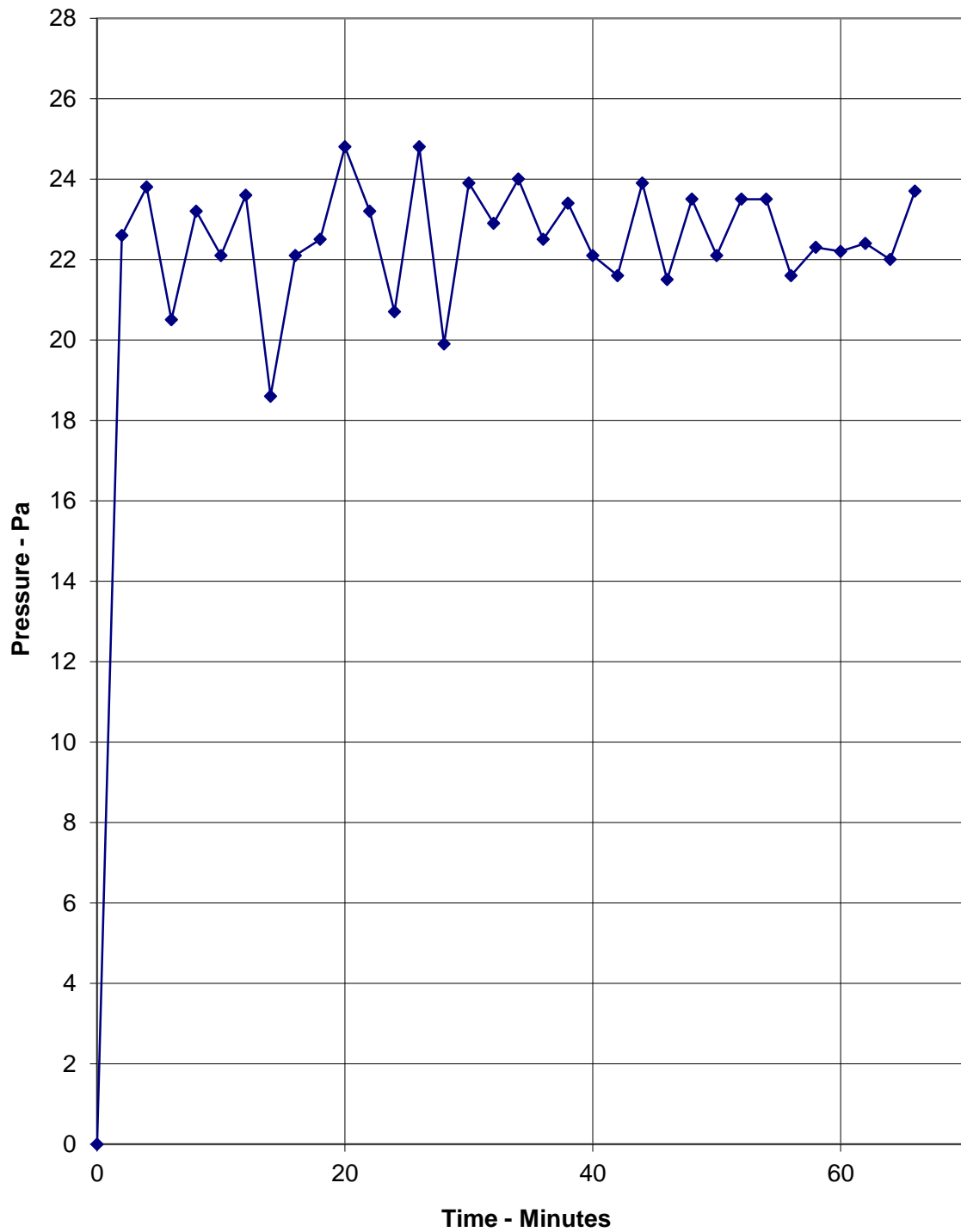
Individual temperatures recorded on the unexposed surface of Specimen F and adjacent to Specimen F

Time Minutes	T/C Number 45 Deg. C	T/C Number 46 Deg. C	T/C Number 47 Deg. C	T/C Number 48 Deg. C	T/C Number 49 Deg. C	T/C Number 50 Deg. C	T/C Number 51 Deg. C
0	20	16	16	20	16	16	19
2	20	17	16	20	17	17	19
4	20	17	17	21	17	17	19
6	20	17	17	21	17	17	20
8	20	17	17	21	17	17	20
10	21	17	17	21	18	17	21
12	21	17	17	21	18	17	21
14	24	18	17	22	18	17	23
16	28	18	18	24	19	18	26
18	29	18	18	23	19	18	24
20	31	19	18	23	19	18	22
22	32	19	18	25	18	18	22
24	33	19	19	25	18	18	22
26	35	20	19	28	19	19	25
28	36	20	20	29	20	19	27
30	37	21	20	30	20	19	27
32	37	21	21	31	20	20	27
34	38	22	21	32	21	20	29
36	38	22	21	32	21	20	26
38	38	22	22	33	21	20	27
40	40	23	22	34	21	21	29
42	41	24	23	35	22	21	29
44	43	24	24	37	22	22	29
46	44	25	24	39	22	22	28
48	46	25	24	41	22	22	28
50	48	26	25	45	23	23	29
52	51	27	26	48	24	23	31
54	52	28	27	50	25	24	33
56	53	29	28	51	25	25	33
58	55	30	29	53	26	26	36
60	57	31	30	55	27	27	38
62	58	32	30	56	28	27	39
64	58	32	31	56	28	28	40
66	60	33	32	58	29	28	43

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



Graph showing recorded furnace pressure 460 mm above the head of the wall specimens



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.

This report details the method of construction, the test conditions and the results obtained when the specific element of construction described herein was tested following the procedure outlined in EN 1363-1, and where appropriate EN 1363-2. Any significant deviation 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.

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

Note: The field of direct application may only be defined following the identification of classification(s). The field of direct and, where applicable, extended application will be included in the classification report.