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Title:

The fire resistance performance of a symmetric non-loadbearing, (twin wall) steel stud partition system when tested in accordance with BS EN 1364-1:2015 and BS EN 1363-1: 2020

Date Of Test:

12/04/2022

Issue 1
14/02/2023

WF Report No:

WF514517

Prepared for:

Hadley Industries Holding Ltd
PO Box 92
Smethwick
West Midlands
B66 2PA

Approved Body No. 1314

1762

Test Specimen

Summary of Tested Specimen

The partition system comprised a plasterboard clad steel stud twin wall frame, built directly into a refractory lined steel restraint frame. The right edge of the partition remained unrestrained.

The size of the partition system was 3000mm high x 3000mm wide x 200mm deep overall.

The wall system comprised a Hadley Group 52mm Metal twin Head and Base tracks, separated by a 46mm gap. Hadley Group metal vertical 50mm I studs at 600mm centres plus 50mm C studs at the abutments. The left hand edge remained unrestrained.

A Hadley Group fixing plate was used behind all horizontal joints on both layers on both the unexposed and unexposed faces. Both faces were cladded with 2No layers of British Gypsum 12.5mm thick SoundBloc acoustic board. Both faces were finished with Knauf tape and fill.

Detailed drawings of the test specimen and a comprehensive description of the test construction based on a detailed survey of the specimen 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 **Cotton pad** **Sustained flaming** **Gap gauges**	 72 (Seventy-Two) minutes* 72 (Seventy-Two) minutes* 72 (Seventy-Two) minutes*
Thermal Insulation	72 (Seventy-Two) minutes*
Radiation **(time to 15 kW/m^2)**	72 (Seventy-Two) minutes*

* No failure of this test criteria was observed at termination of the test at 72 minutes

Date of Test 12/04/2022

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Report Prepared by:
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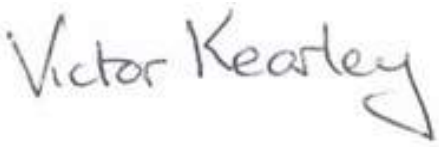

Report Authorised by:
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* For and on behalf of **Warringtonfire.**

Report Issued:

Date: 14/02/2023

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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 1364-1, Fire resistance tests for non-loadbearing elements Part 1: Walls and BS EN 1363-1, Fire resistance tests Part 1: General requirements.

Sampling

Warringtonfire was not involved in factory sampling of the products and materials used for the test specimen described in this report, and as such the results of this test apply to the sample as received.

Installation

The components were received during the month of March 2022. The partition system was constructed and installed directly into a refractory line steel restraint frame by representatives of Warringtonfire to the client's specification.

Conditioning

Warringtonfire stored the specimens in climatic conditions approximate to those expected in normal service, and used the guidelines of Annex F.1 of BS EN 1363 – 1: 2020 to establish a suitable conditioned level where possible.

Ambient Temperature

The ambient air temperature in the vicinity of the test construction was 15ºC at the start of the test with no variation 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 seven plate thermometers, distributed over a plane 100±50mm from the surface of the test construction.

Thermocouples

Thermocouples were provided to monitor the unexposed surface of the specimen. 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.

Radiation

A water-cooled foil heat-flux meter was used to record the heat radiation from the partition. The heat-flux meter was positioned at mid-height at a distance of 1 metre from the centre of the partition.

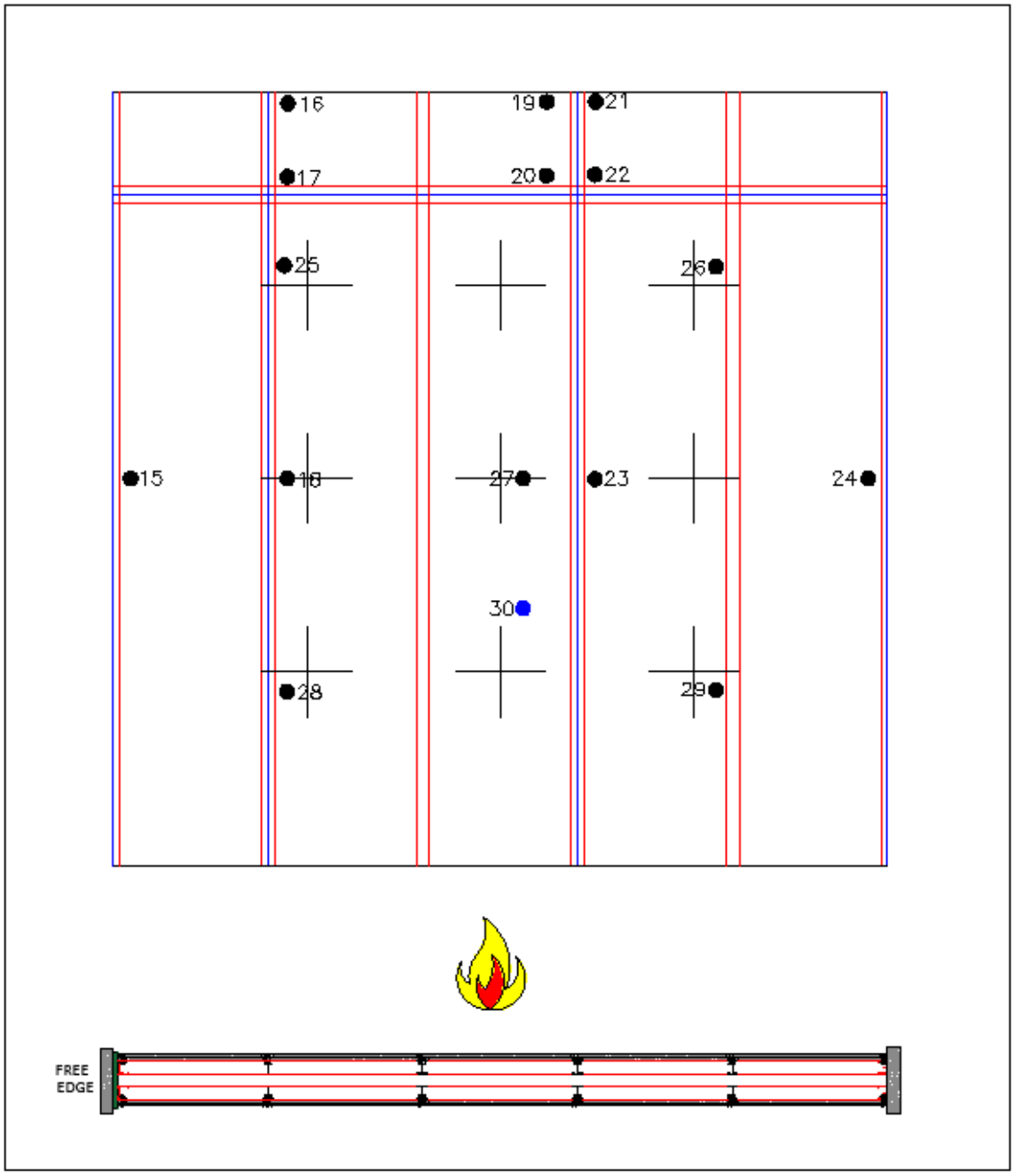
Furnace Pressure

After the first 5 minutes of the test, the furnace pressure was maintained at -1.3 ± 5 Pa and after 10 minutes was maintained at -1.3 ± 3 Pa with respect to atmosphere, at a point 0.5 m from the notional floor level, equating to a pressure of 20 Pa at the head of the wall.

Due to necessary adjustments of the gas and air input to control the furnace, pressures outside the specified tolerances were recorded sporadically at short intervals. As the pressure fluctuations recorded at those intervals did not represent the pressure conditions throughout the test, their effect on the test results can be disregarded.

Test Specimen Drawings

Figure 1 – General elevation of the test construction and thermocouple locations



: Furnace Thermocouples
: Unexposed Face Thermocouples
: Radiometer

Viewed From Unexposed Face

Figure 2 – Unexposed Face Elevation

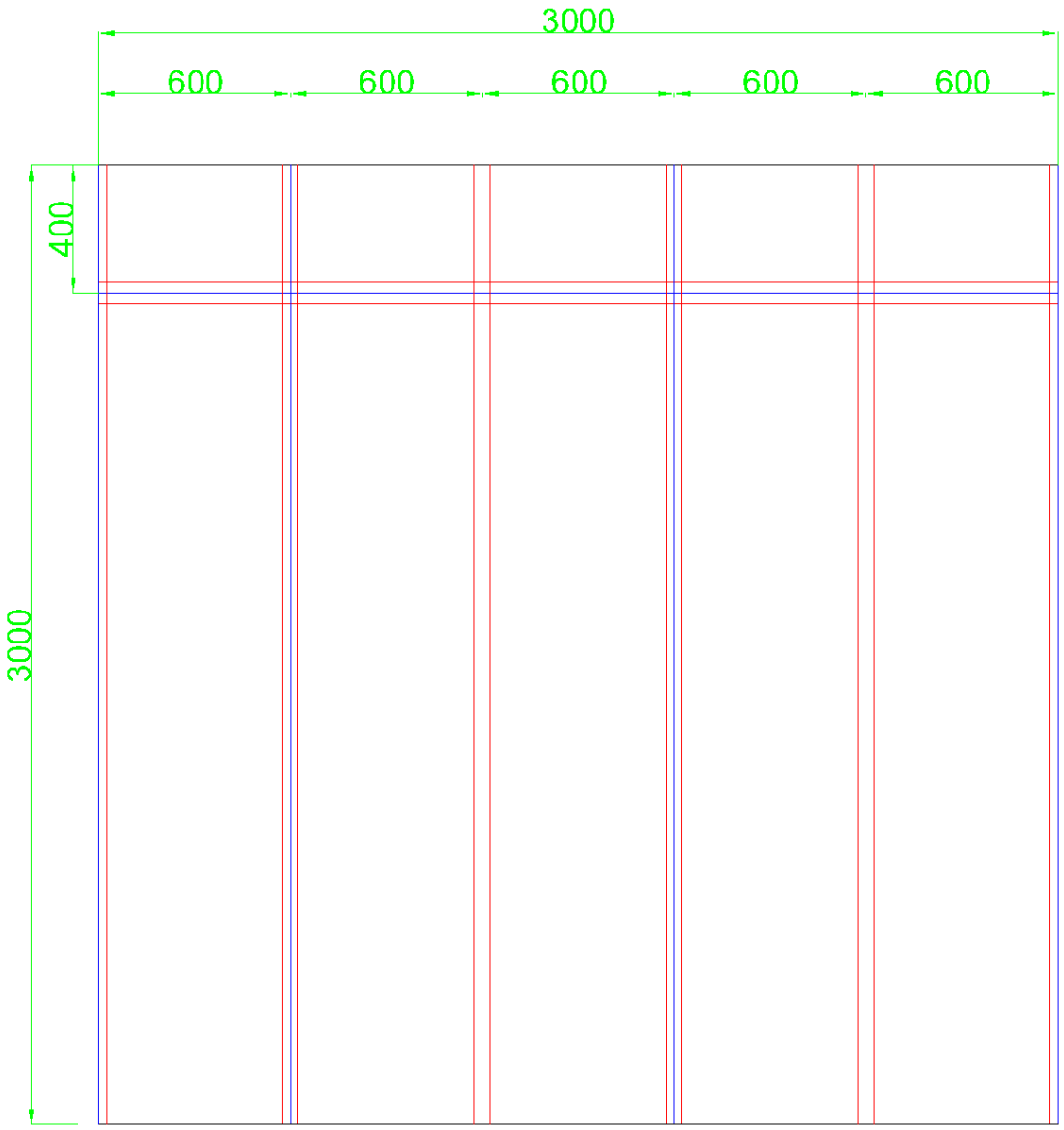


Figure 3 – Exposed Face Elevation

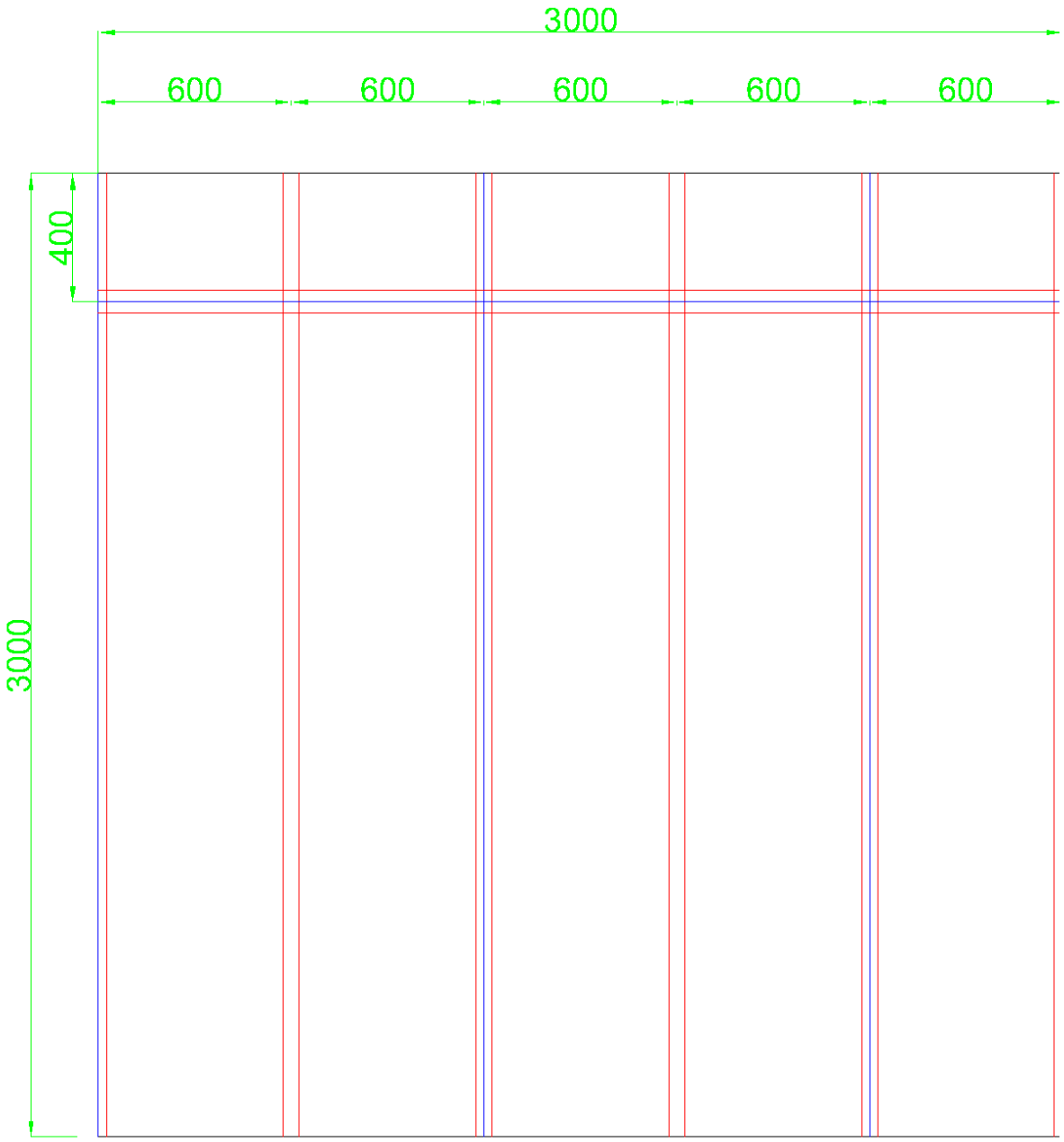


Figure 4 – Vertical Cross Section

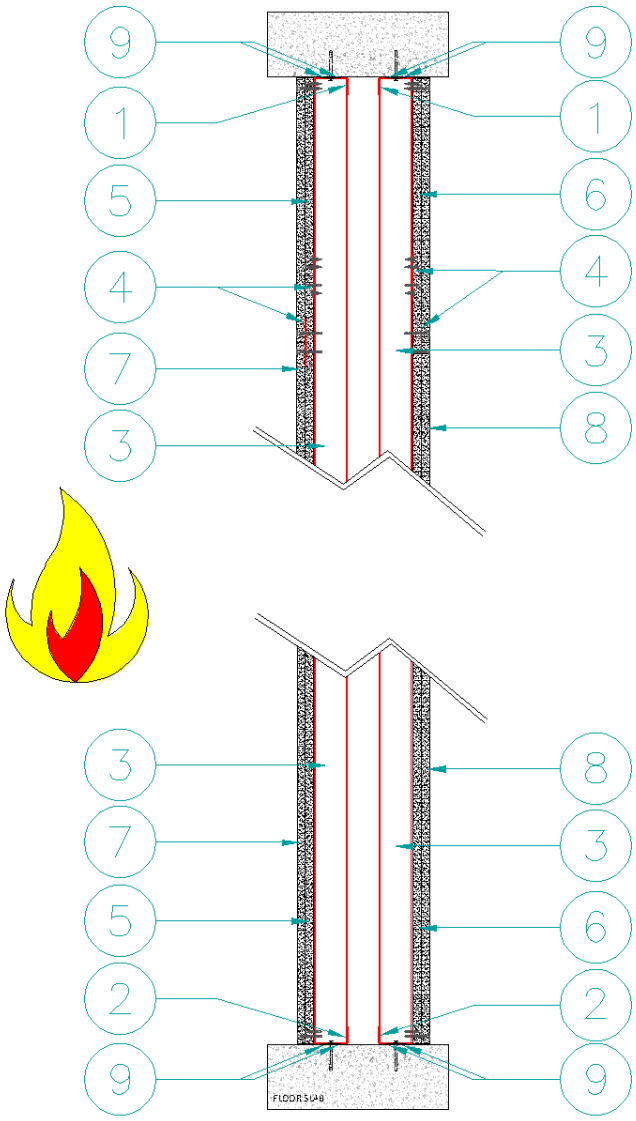
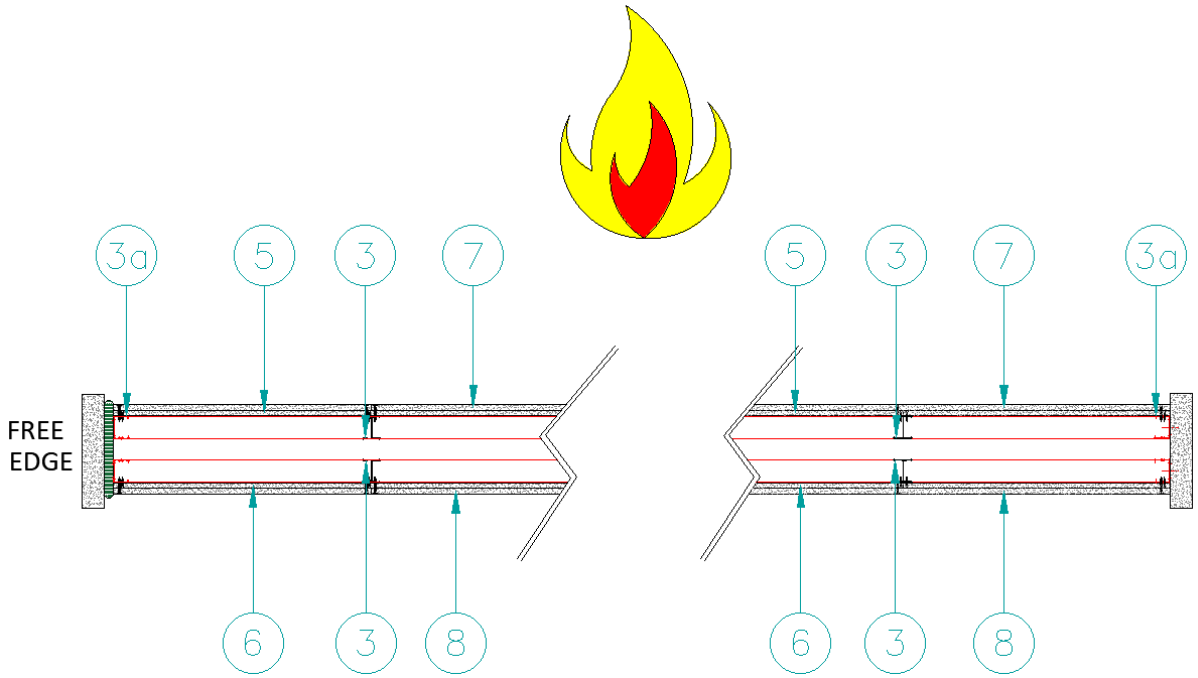


Figure 5 – Horizontal Cross Section



Schedule of Components

(Refer to Figures 1 to 5)
(All values are nominal unless stated otherwise)
* Stated by sponsor, not verified by laboratory

Internal Framing

1. Head track		Description
Manufacturer or Supplier	:	Hadley Group*
Reference	:	52mm Track*
Material	:	Mild Steel
Overall size	:	52mm*
a. Depth	:	52mm*
b. Height	:	32mm*
c. Thickness	:	0.55mm*
Fixing Method to restraint frame and centres	:	Fixed at 600mm centres, and one fixing positioned 50mm from each end of the track
Details of fixings to Restraint frame	:	
d. Manufacturer	:	Screwfix
e. Reference	:	Easydrive
f. Type & material	:	Zinc Plated Stainless Steel Concrete Screws
g. Overall size	:	6mm diameter x 100mm long
h. Spacing	:	600mm centres

2. Base track		Description
Manufacturer or Supplier	:	Hadley Group*
Reference	:	52mm Track*
Material	:	Mild Steel
Overall size	:	52mm*
a. Depth	:	52mm*
b. Height	:	32mm*
c. Thickness	:	0.55mm*
Fixing Method to restraint frame and centres	:	Fixed at 600mm centres, and one fixing positioned 50mm from each end of the track
Details of fixings to Restraint frame	:	
d. Manufacturer	:	Screwfix
e. Reference	:	Easydrive
f. Type & material	:	Zinc Plated Stainless Steel Concrete Screws
g. Overall size	:	6mm diameter x 100mm long
h. Spacing	:	600mm

3. Vertical Studs		Description
Manufacturer or Supplier	:	Hadley Group*
Reference	:	50mm I Stud*
Material	:	Mild Steel
Location and Spacing	:	Studs each side at 600mm centres*
Overall size	:	
a. Depth	:	50mm*
b. Width	:	32mm*
c. Height	:	0.7mm*
Fixing Method to restraint frame and centres (If Applicable)	:	Vertical studs are not fixed to the restraint frame
Details of fixings to Head and Base Track (If applicable)	:	Vertical studs are not fixed to the head and base track

3a. Vertical Studs (free & fixed edge)		Description
Manufacturer or Supplier	:	Hadley Group*
Reference	:	50mm C Stud*
Material	:	Mild Steel
Location and Spacing	:	2x 50mm Hadley C studs at abutments, each side
Overall size	:	
a. Depth	:	50mm*
b. Width	:	32mm*
c. Height	:	0.7mm*
Fixing Method to restraint frame (fixed edge only)	:	
d. Manufacturer	:	Screwfix
e. Reference	:	Easydrive
f. Type & material	:	Zinc Plated Stainless Steel Concrete Screws
g. Overall size	:	6mm diameter x 100mm long
h. Spacing	:	600mm

4. Flat Strap		Description
Manufacturer	:	Hadley Group
Reference	:	Hadley Fixing plate
Material	:	Mild Steel
Location	:	Used behind all horizontal board joints, positioned 300mm down before first layer of board is fixed, screwed to vertical stud using 2 No wafer head screws detailed below. Then positioned 400mm down between first and second layer of board, not fixed to vertical studs, but fixed to first layer of board through second layer of board.
Overall size	:	75mm x 2400mm
a. Depth	:	2400mm
b. Height	:	75mm
c. Thickness	:	0.55mm
Fixing Method to vertical studs	:	2 No Wafer Head Screws
Details of fixings to vertical studs	:	Inner layer strap
d. Manufacturer	:	Evolution*
e. Reference	:	Evolution Drywall Wafer Head Screws*
f. Type & material	:	Drywall Screws*
g. Overall size	:	3.9mm diameter x 13mm long*
h. Location	:	Fixed to Studs

Cladding Material

5. First Layer of board applied to the internal framing exposed face		Description
Manufacturer	:	British Gypsum
Reference	:	12.5mm Gyproc SoundBloc
Material	:	Plasterboard
Batch Reference/ Number	:	27266/0*
Individual board dimension	:	12.5mm x 3000mm x 1200mm
Overall dimension	:	3000mm x 3000mm
Moisture Content (%)	:	Unknown
Board Weight (kg/m^2)	:	10.3
Application method	:	Jack-Point Screws
Fixing Method to restraint frame and centres	:	Jack-Point Screws at 300mm centres
Details of fixings to Internal framing	:	
a. Manufacturer	:	Evolution*
b. Reference	:	Evolution drywall screws*
c. Type & material	:	Drywall screws*
d. Overall size	:	3.9mm x 32mm*
e. Spacing	:	300mm centres

6. First Layer of board applied to the internal framing unexposed face		Description
Manufacturer	:	British Gypsum
Reference	:	12.5mm Gyproc SoundBloc
Material	:	Plasterboard
Batch Reference/ Number	:	27266/0*
Individual board dimension	:	12.5mm x 3000mm x 1200mm
Overall dimension	:	3000mm x 3000mm
Moisture Content (%)	:	Unknown
Board Weight (kg/m^2)	:	10.3
Application method	:	Jack-Point Screws
Fixing Method to restraint frame and centres	:	Jack-Point Screws at 300mm centres
Details of fixings to Internal framing	:	
a. Manufacturer	:	Evolution*
b. Reference	:	Evolution drywall screws*
c. Type & material	:	Drywall screws*
d. Overall size	:	3.9mm x 32mm*
e. Spacing	:	300mm centres

7. Second Layer of board applied to the internal framing exposed face		Description
Manufacturer	:	British Gypsum
Reference	:	12.5mm Gyproc SoundBloc
Material	:	Plasterboard
Batch Reference/ Number	:	27266/0*
Individual board dimension	:	12.5mm x 3000mm x 1200mm
Overall dimension	:	3000mm x 3000mm
Moisture Content (%)	:	Unknown
Board Weight (kg/m^2)	:	10.3
Application method	:	Jack-Point Screws
Fixing Method to restraint frame and centres	:	Jack-Point Screws at 300mm centres
Details of fixings to Internal framing	:	
a. Manufacturer	:	Evolution*
b. Reference	:	Evolution drywall screws*
c. Type & material	:	Drywall screws*
d. Overall size	:	3.9mm x 42mm*
e. Spacing	:	300mm centres

8. Second Layer of board applied to the internal framing unexposed face		Description
Manufacturer	:	British Gypsum
Reference	:	12.5mm Gyproc SoundBloc
Material	:	Plasterboard
Batch Reference/ Number	:	27266/0
Individual board dimension	:	12.5mm x 3000mm x 1200mm
Overall dimension	:	3000mm x 3000mm
Moisture Content (%)	:	Unknown
Board Weight (kg/m2)	:	10.3
Application method	:	Jack-Point Screws
Fixing Method to restraint frame and centres	:	Jack-Point Screws at 300mm centres
Details of fixings to Internal framing	:	
a. Manufacturer	:	Evolution*
b. Reference	:	Evolution drywall screws*
c. Type & material	:	Drywall screws*
d. Overall size	:	3.9mm x 42mm*
e. Spacing	:	300mm centres

Sealing Materials

9. Sealant 1		Description
Manufacturer	:	Rockwool
Reference	:	212902*
Material	:	Intumescent Mastic
Location	:	Two continuous beads underneath head and base track, and also fixed edge. There is one continuous bead around the perimeter of the wall between the framework and the first layer of board, then another between the first and second layer of board, then finally a third on the second layer of board where the board meets the restraint frame.
Nominal Application thickness	:	10mm

Tape and Fill

10. Jointing tape		Description
Manufacturer	:	Knauf
Reference	:	Jointing Tape
Material	:	Paper Tape
Location	:	Placed on all board joints on the second layer only, on both faces. No tape is used on the first layer.

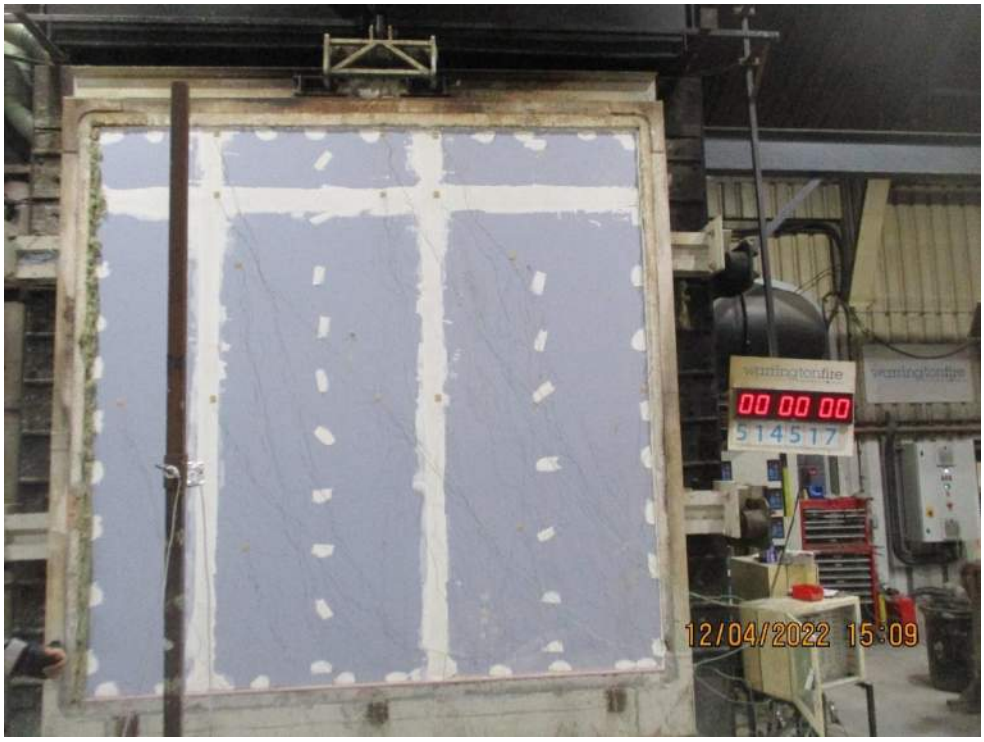
11. Jointing compound		Description
Manufacturer	:	Knauf
Reference	:	Fill & Finish 20kg
Material	:	Mixture of calcium carbonate, perlite, water based polymer emulsion, thickeners and water
Location	:	Used on all board joints on the second layer only on both faces. No jointing compound is used on the first layer. Also applied to screw heads on the second layer of board.
Nominal Application thickness	:	2mm, then tape applied then another 2mm

Test Observations

Time (minutes)	All observations are from the unexposed face unless noted otherwise.
00:00	The test has started.
10:00	No visible change.
15:00	No visible change.
18:20	On the exposed face. The tape and fill is beginning to burn away.
22:04	On the exposed face. A gap has opened up on the joint and is approximately 15mm wide.
30:00	On the exposed face. The gap on the joint has opened up to approximately 25mm.
35:00	On the unexposed face there is no visible change.
45:00	On the unexposed face there is no visible change.
51:50	On the exposed face, the first layer of the centre board has fallen off.
60:00	On the exposed face the whole first layer has fallen off.
60:00	On the unexposed face, no visible change except for a bow in the middle.
66:08	There is smoke issuing at the centre of the fixed edge and the fixing position on the left full board.
72:00	Test terminated.

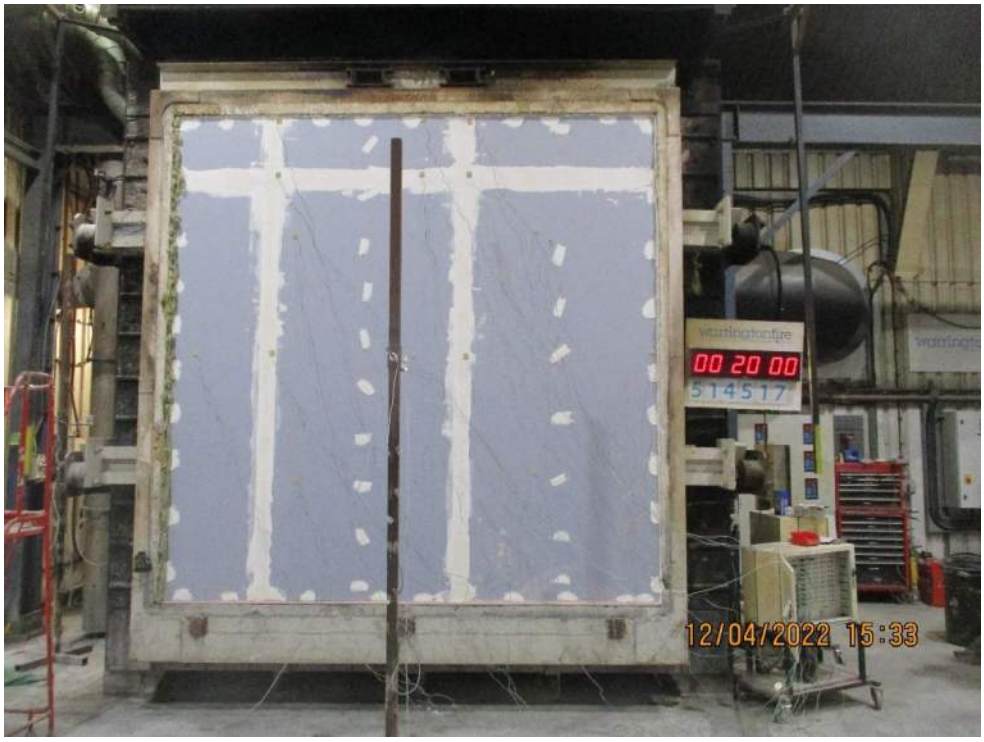
Test Photographs

The unexposed face prior to testing



The unexposed face after a test duration of 10 minutes

The unexposed face after a test duration of 20 minutes



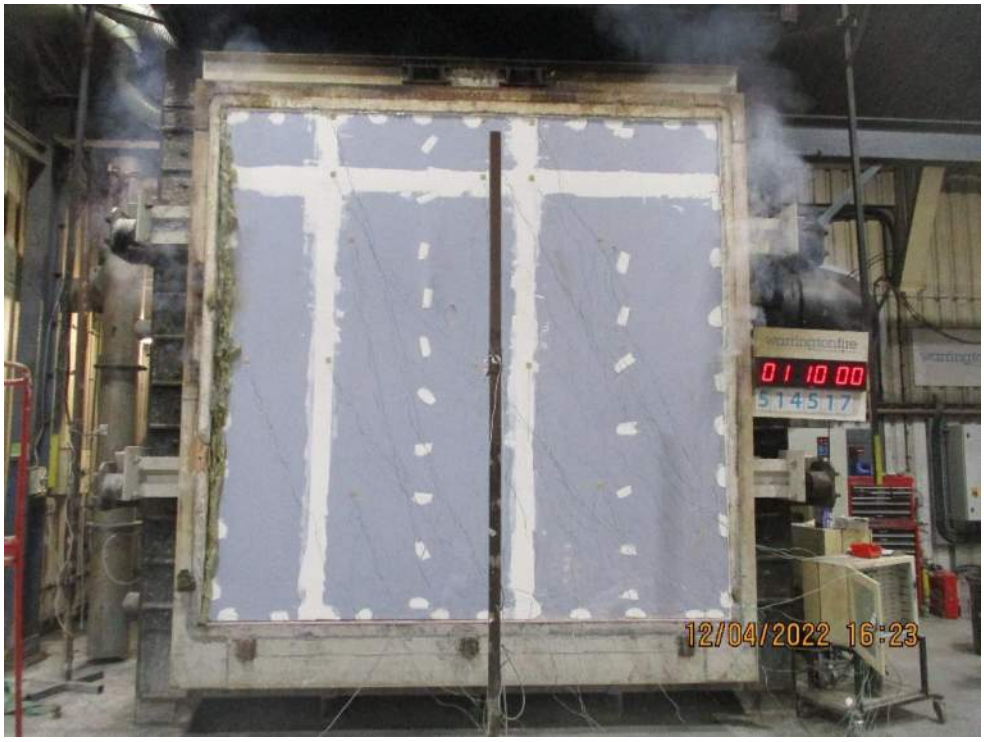
The unexposed face after a test duration of 30 minutes

The unexposed face after a test duration of 40 minutes

The unexposed face after a test duration of 50 minutes

The unexposed face after a test duration of 60 minutes

The unexposed face after a test duration of 70 minutes



Temperature and Deflection Data

Mean Furnace Temperature, Together With The Temperature/Time Relationship Specified In BS EN 1363-1: 2020

Time	Mean Furnace temperature	ISO834
min	°C	°C
0	20	20
1	222	349
2	381	445
3	491	502
4	581	544
5	596	576
6	594	603
7	609	626
8	636	645
9	660	663
10	674	678
11	684	693
12	701	705
13	713	717
14	723	728
15	733	739
16	741	748
17	752	757
18	761	766
19	770	774
20	779	781
21	787	789
22	795	796
23	801	802
24	807	809
25	812	815
26	817	820
27	823	826
28	829	831
29	833	837
30	839	842
31	844	847
32	849	851
33	853	856
34	859	860
35	862	865
36	866	869

Time	Mean Furnace temperature	ISO834
min	°C	°C
37	870	873
38	874	877
39	878	881
40	881	885
41	885	888
42	888	892
43	892	896
44	893	899
45	892	902
46	896	906
47	915	909
48	924	912
49	927	915
50	926	918
51	927	921
52	928	924
53	931	927
54	935	930
55	939	932
56	942	935
57	944	938
58	947	940
59	947	943
60	950	945
61	950	948
62	955	950
63	958	953
64	960	955
65	964	957
66	965	960
67	968	962
68	973	964
69	945	966
70	957	968
71	972	971
72	986	973

Individual And Mean Temperatures Recorded On The Unexposed Face

Time	Chan 25	Chan 26	Chan 27	Chan 28	Chan 29	Mean
min	°C	°C	°C	°C	°C	°C
0	17	17	16	16	16	16
1	17	17	16	16	16	16
2	17	17	16	16	16	16
3	17	17	16	16	16	16
4	17	17	16	16	16	16
5	17	17	16	16	16	16
6	17	17	16	16	16	16
7	17	17	16	16	16	16
8	17	17	16	16	16	16
9	17	17	16	16	16	16
10	17	17	17	16	16	17
11	18	18	17	16	17	17
12	18	19	17	17	17	18
13	19	19	18	17	17	18
14	20	21	19	18	18	19
15	22	22	20	18	19	20
16	23	24	21	19	20	21
17	25	25	22	20	21	23
18	26	27	23	21	22	24
19	28	29	25	22	23	25
20	30	30	26	23	25	27
21	32	32	27	25	26	28
22	33	33	29	26	27	30
23	35	35	30	27	29	31
24	37	37	32	28	30	33
25	39	38	33	30	32	34
26	40	40	35	31	33	36
27	42	41	37	33	35	38
28	43	43	38	34	36	39
29	45	44	40	35	38	40
30	46	46	41	37	39	42
31	48	47	43	38	41	43
32	49	48	45	40	43	45
33	51	50	46	42	44	47
34	52	51	47	43	46	48
35	53	52	49	44	47	49
36	54	53	50	46	49	50
37	55	54	51	47	50	51
38	56	55	52	48	51	52
39	56	56	53	50	52	53
40	57	56	54	51	53	54
41	58	57	55	52	54	55
42	58	57	55	52	55	55
43	58	58	56	53	56	56
44	58	59	56	54	56	57

Time	Chan 25	Chan 26	Chan 27	Chan 28	Chan 29	Mean
min	°C	°C	°C	°C	°C	°C
45	59	60	56	54	56	57
46	59	61	56	54	56	57
47	59	62	57	55	56	58
48	60	63	58	55	57	59
49	62	64	60	56	57	60
50	63	66	61	56	58	61
51	64	67	63	57	60	62
52	65	68	63	58	61	63
53	65	69	64	58	63	64
54	66	71	65	59	64	65
55	67	72	66	60	65	66
56	68	73	67	61	67	67
57	69	74	68	61	68	68
58	69	74	70	62	69	69
59	70	75	71	63	69	70
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61	71	75	72	64	70	70
62	71	75	73	65	70	71
63	71	75	74	66	70	71
64	72	75	74	67	71	72
65	72	75	74	68	71	72
66	72	75	74	69	71	72
67	72	76	74	69	71	72
68	73	78	74	70	71	73
69	74	79	74	70	72	74
70	77	80	73	71	72	75
71	80	81	74	72	72	76
72	82	82	79	73	74	78

Individual Temperatures Recorded On The Maximum Thermocouples

Time	Chan 15	Chan 17	Chan 18	Chan 19	Chan 20	Chan 21	Chan 22	Chan 23	Chan 24
min	°C	°C	°C	°C	°C	°C	°C	°C	°C
0	15	14	15	16	15	14	15	14	16
1	15	14	15	16	15	14	15	14	16
2	15	14	15	16	15	14	15	14	16
3	15	14	15	16	15	14	15	14	16
4	15	15	15	16	15	15	15	14	16
5	15	15	15	16	15	15	15	14	16
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11	16	15	16	17	16	16	17	15	17
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13	17	17	17	19	17	18	19	16	18
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15	19	19	19	23	20	22	22	18	20
16	20	21	20	24	21	24	24	19	21
17	22	22	21	26	23	26	25	20	23
18	23	24	23	28	24	27	27	22	25
19	24	25	24	29	26	29	29	23	27
20	26	27	25	31	27	30	30	24	30
21	27	28	27	32	29	32	32	25	32
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23	30	31	29	35	31	34	34	28	37
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25	33	34	32	38	34	37	37	31	42
26	35	35	33	39	35	38	38	32	44
27	36	36	34	40	36	38	39	33	46
28	38	37	35	41	37	39	40	34	48
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37	50	45	45	50	46	47	47	44	57
38	51	46	46	51	46	47	48	44	57
39	52	46	47	52	47	48	48	45	57
40	53	47	48	52	48	48	48	46	56
41	54	47	49	53	48	49	49	47	55
42	54	48	49	53	49	49	49	47	55
43	55	48	50	54	49	50	49	48	54
44	55	48	50	54	50	50	50	48	54
45	55	48	50	54	50	51	50	49	54

Time	Chan 15	Chan 17	Chan 18	Chan 19	Chan 20	Chan 21	Chan 22	Chan 23	Chan 24
min	°C	°C	°C	°C	°C	°C	°C	°C	°C
46	55	49	51	55	51	51	51	49	53
47	55	49	51	56	53	52	51	49	53
48	55	50	52	57	55	53	53	50	53
49	55	51	52	59	58	54	55	51	53
50	55	53	53	61	60	56	57	52	54
51	56	54	55	63	62	58	59	54	55
52	57	56	56	65	64	59	60	57	57
53	58	57	57	66	65	61	62	61	59
54	59	59	58	68	66	62	63	63	60
55	60	60	59	69	67	64	64	64	61
56	60	62	60	70	68	65	65	65	62
57	61	62	61	71	69	66	66	66	63
58	62	63	62	72	69	67	67	67	64
59	63	64	63	73	69	68	68	68	65
60	63	64	64	73	69	69	69	69	66
61	64	65	66	74	70	70	70	70	66
62	65	66	67	74	70	70	70	71	67
63	66	66	68	74	69	71	71	71	68
64	67	67	69	74	69	71	72	72	68
65	68	68	70	75	69	72	73	73	69
66	69	69	71	75	70	72	75	74	69
67	70	70	72	75	71	72	77	74	69
68	70	71	72	75	73	73	80	75	71
69	71	72	73	75	76	73	82	74	72
70	71	74	73	76	78	73	84	74	72
71	74	77	74	76	79	75	87	73	73
72	82	80	75	78	80	77	89	72	74

Note: Channel 16 has been removed due to malfunction.

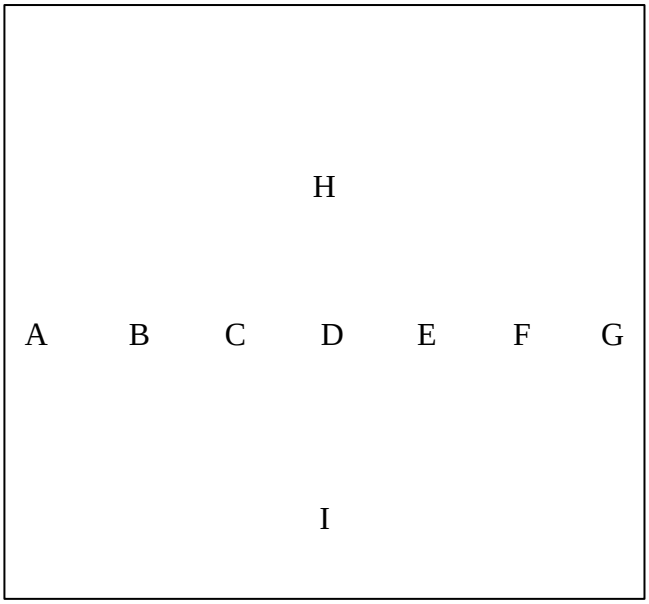
Recorded Radiation Intensity From The Partition Specimen

Time	Chan 30
min	kW/m²
0	0.2
1	0.2
2	0.2
3	0.2
4	0.2
5	0.2
6	0.2
7	0.2
8	0.2
9	0.2
10	0.2
11	0.2
12	0.2
13	0.2
14	0.2
15	0.2
16	0.3
17	0.3
18	0.3
19	0.3
20	0.3
21	0.3
22	0.3
23	0.3
24	0.3
25	0.3
26	0.3
27	0.3
28	0.3
29	0.3
30	0.3
31	0.4
32	0.4
33	0.4
34	0.4
35	0.4
36	0.4

Time	Chan 30
min	kW/m²
37	0.4
38	0.4
39	0.4
40	0.4
41	0.4
42	0.4
43	0.4
44	0.4
45	0.4
46	0.4
47	0.4
48	0.4
49	0.4
50	0.5
51	0.5
52	0.5
53	0.5
54	0.5
55	0.5
56	0.5
57	0.5
58	0.5
59	0.5
60	0.5
61	0.5
62	0.5
63	0.5
64	0.5
65	0.5
66	0.6
67	0.5
68	0.6
69	0.5
70	0.6
71	0.6
72	0.6

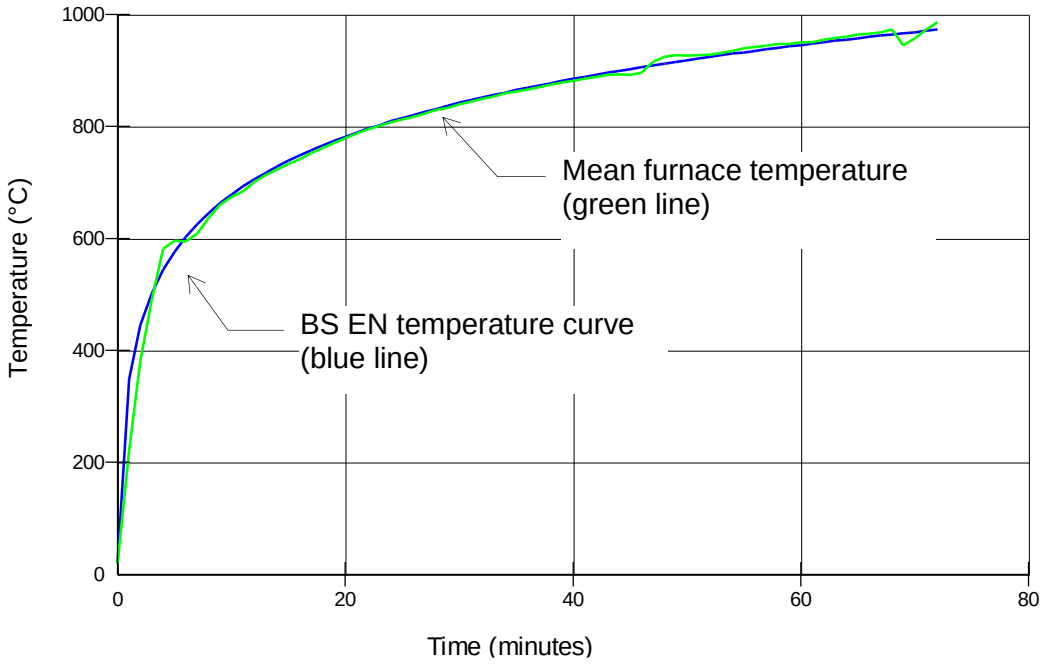
Horizontal Deflections Of The Partition Specimen

The deflection of the specimen partition was measured from the centre point, and at mid height on each stud. The readings have been tabulated and are shown graphically below. A positive reading represents deflection in towards the furnace. A negative reading represents deflection away from the furnace.

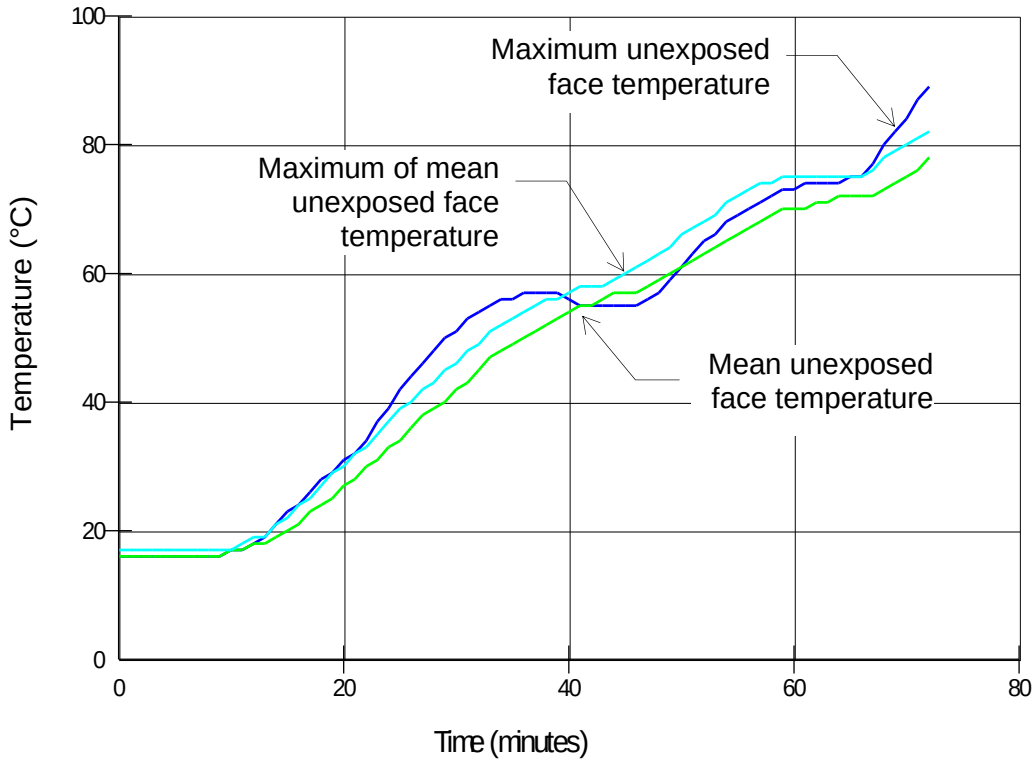


TIME mins	A	B	C	D	E	F	G	H	I
10	-6	-5	-6	-6	-5	-4	1	4	-1
20	-4	-7	-8	-8	-8	-4	3	2	-3
30	-5	-10	-10	-12	-12	-9	3	1	-5
40	-4	-9	-8	-8	-9	-4	4	1	-4
50	13	18	26	29	32	29	4	36	17
60	39	47	62	63	64	66	4	55	40
70	105	99	91	81	73	49	-1	56	59

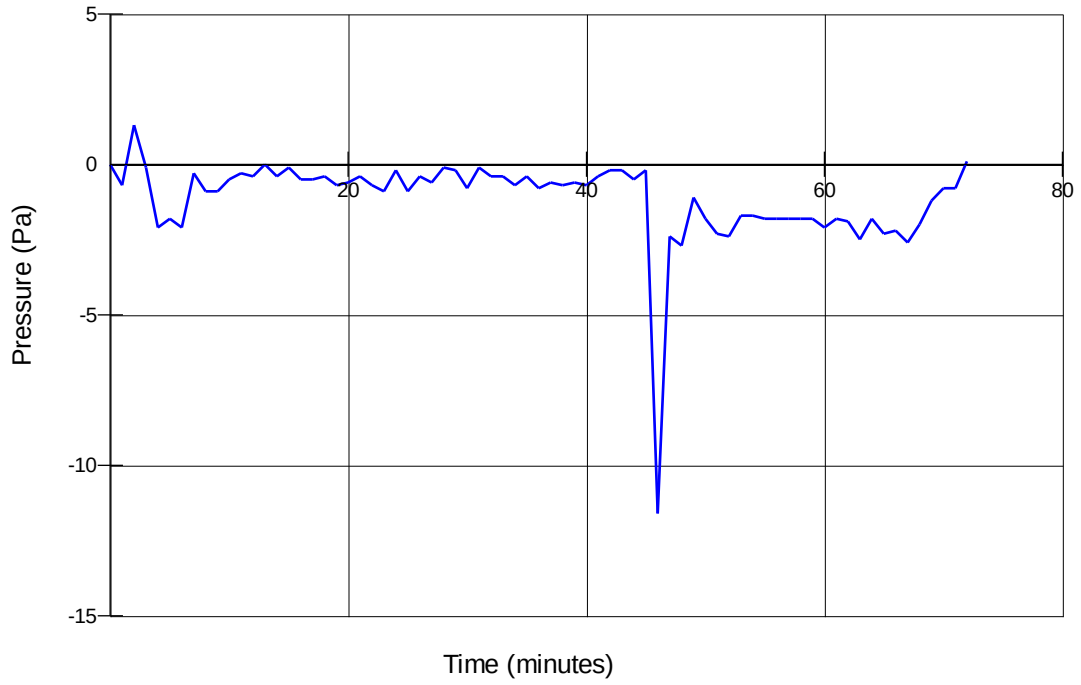
Graph Showing Mean Furnace Temperature, Together With The Temperature/Time Relationship Specified In BS EN 1363-1: 2020



Graph Showing Mean and Maximum Temperatures Recorded On The Unexposed Surface



Graph Showing Recorded Furnace Pressure At 0.5 m From The Notional Floor Level



On-going Implications

Limitations

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 BS EN 1364-1, BS EN 1363-1, and where appropriate BS EN 1363-2. Any significant deviation with respect to size, construction details, loads, stresses and 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 only relate to the behaviour 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 specification and interpretation of fire test methods are the subject of ongoing development and refinement. Changes in associated legislation may also occur. For these reasons it is recommended that the relevance of test reports over 5 years old should be considered by the user. **Warringtonfire** will be able to offer, on behalf of the test sponsor, a review of the procedures adopted for a particular test to ensure that they are consistent with current practices, and if required may endorse the test 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.

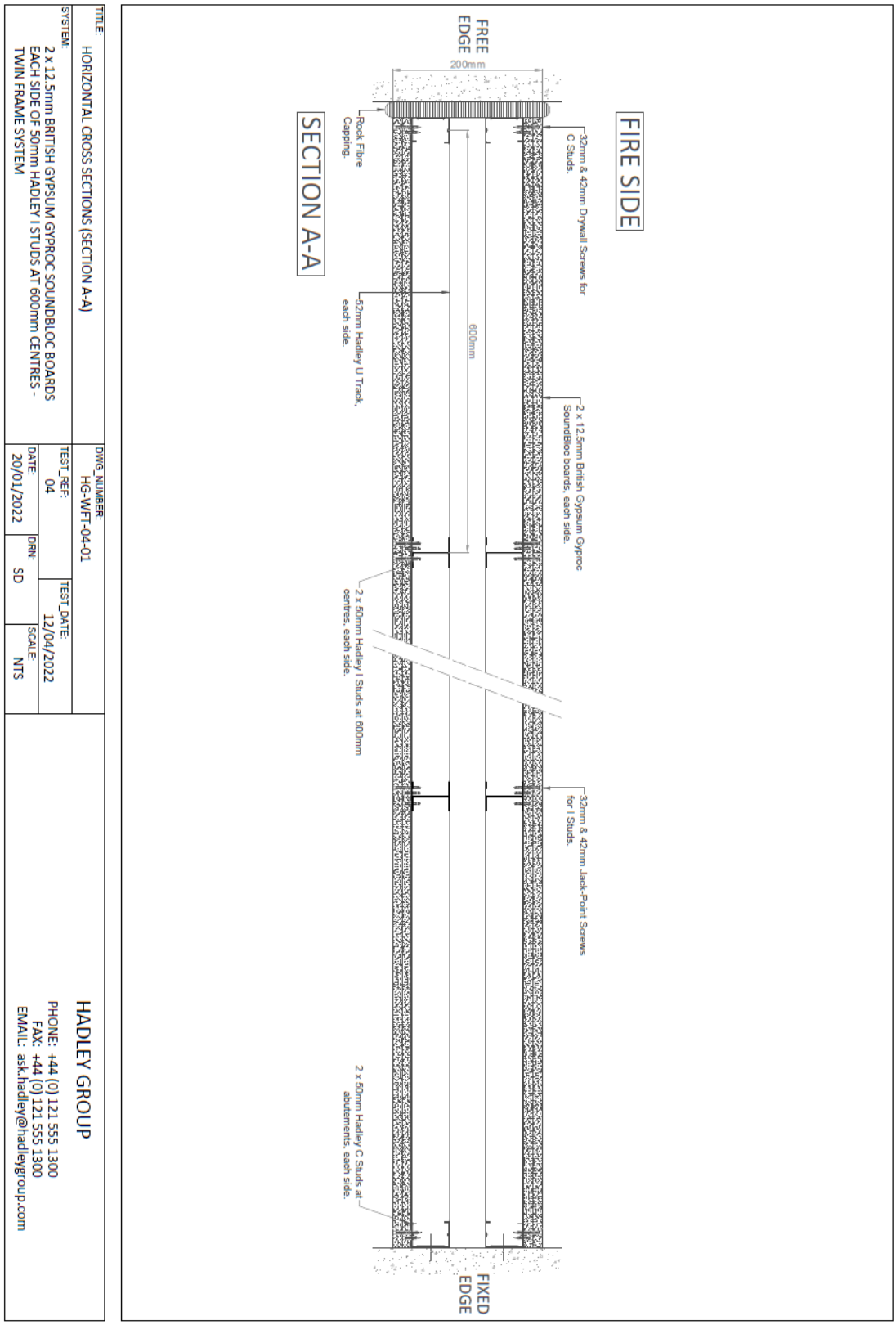
EGOLF

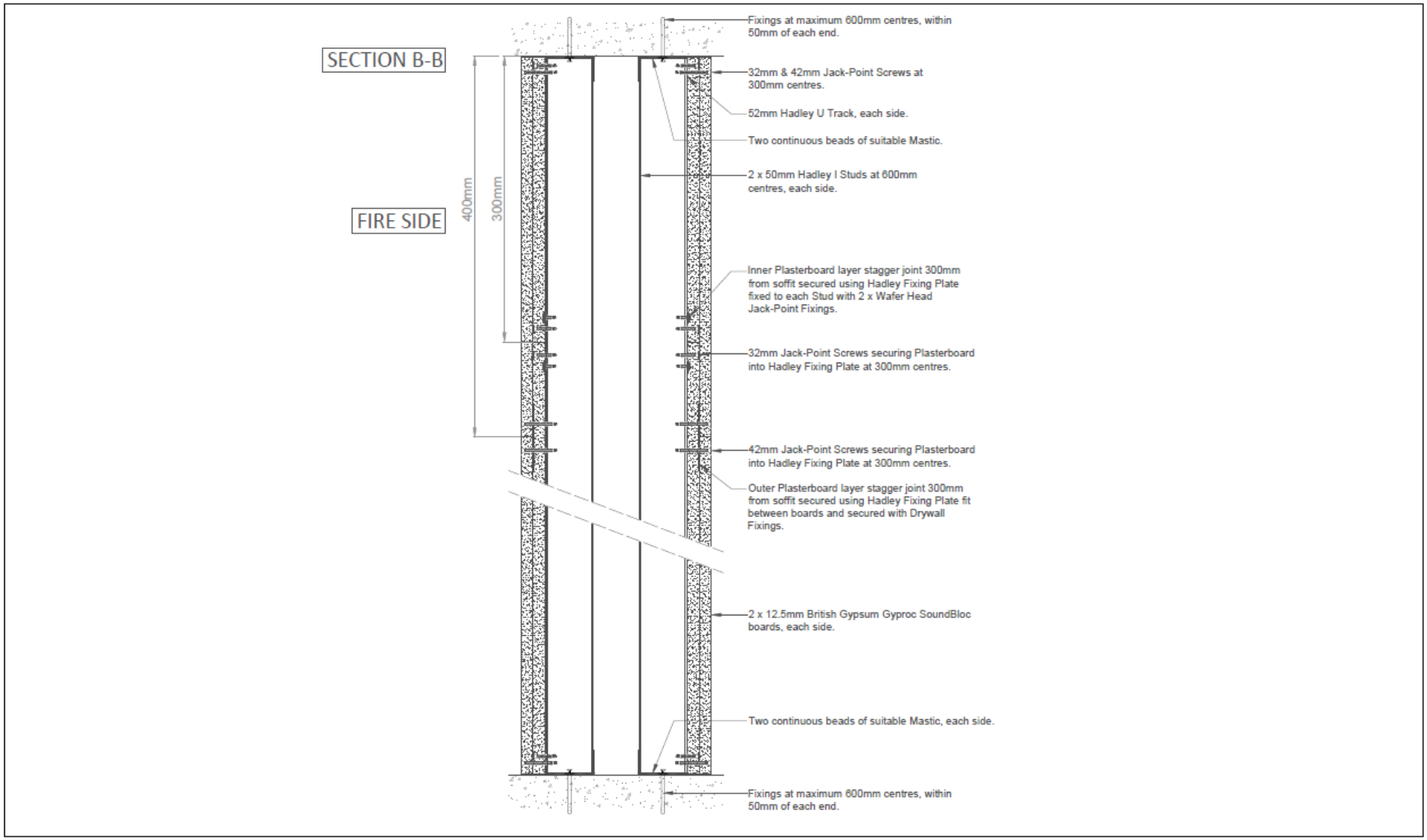
Certain aspects of some fire test specifications are open to different interpretations. EGOLF have identified a number of such areas and have agreed Resolutions which define common agreement of interpretations between fire test laboratories which are members of the Groups. Where such Resolutions are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

Field of Direct Application

BS EN 1363-1:2020, Fire resistance tests - Part 1: General requirements, states within Section 12.1, Clause v) that “The field of direct application of the results for the specimen being evaluated, either in the form of the full text from the appropriate standard, or only those clauses which are relevant for the specimen tested” shall be included within the test report. The full text of the field of direct application for the results of the specimen being evaluated herein, can be found within the appropriate test standard, which is referenced on the front cover of this report.

Client Drawings

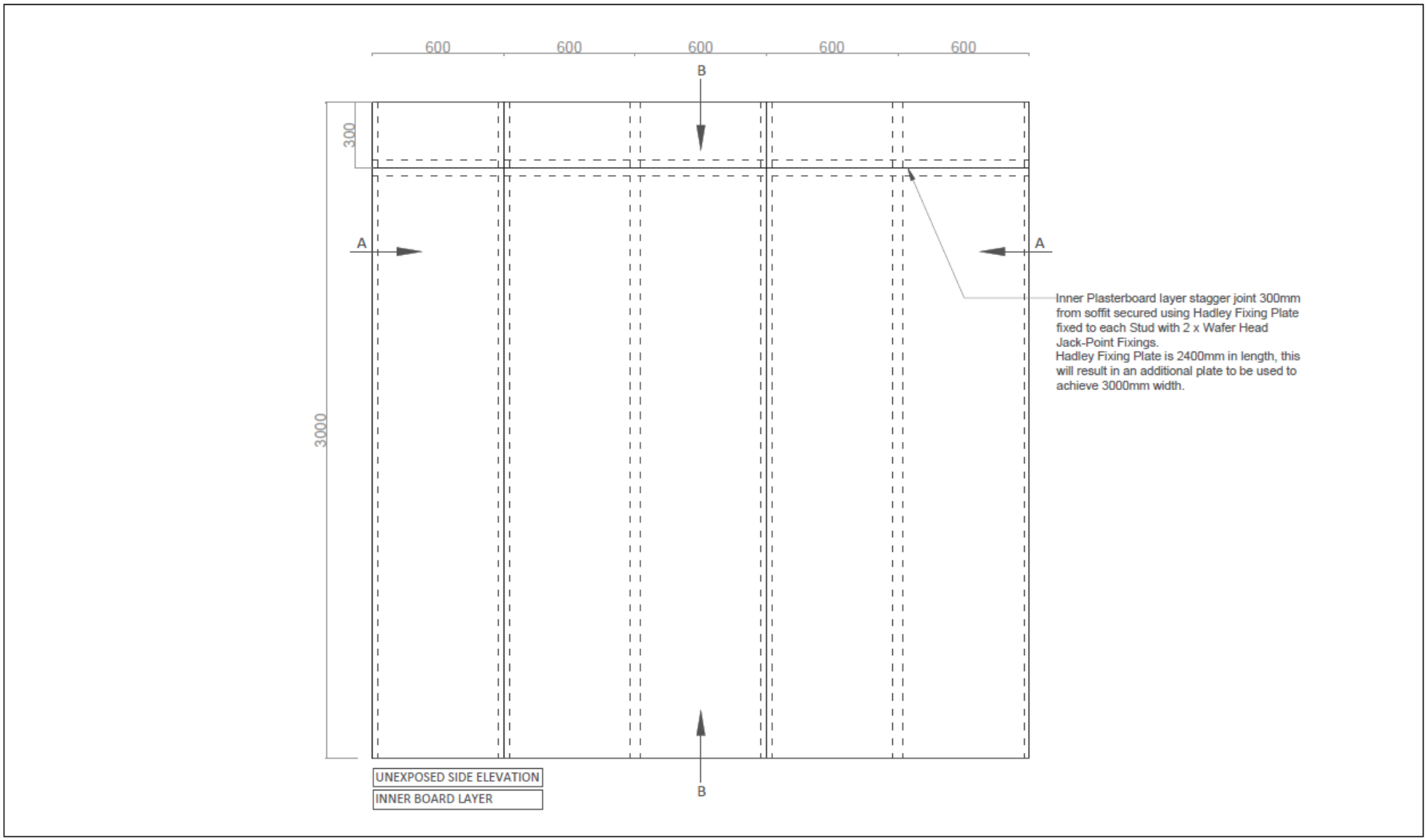




TITLE: VERTICAL CROSS SECTIONS (SECTION B-B)	DWG_NUMBER: HG-WFT-04-02		
SYSTEM: 2 x 12.5mm BRITISH GYPSUM GYPROC SOUNDBLOC BOARDS EACH SIDE OF 50mm HADLEY I STUDS AT 600mm CENTRES - TWIN FRAME SYSTEM	TEST_REF: 04	TEST_DATE: 12/04/2022	
	DATE: 20/01/2022	DRN: SD	SCALE: NTS

HADLEY GROUP
PHONE: +44 (0) 121 555 1300
FAX: +44 (0) 121 555 1300
EMAIL: ask.hadley@hadleygroup.com

59 x 8.26 in



TITLE: UNEXPOSED SIDE ELEVATION - INNER BOARD LAYER	DWG_NUMBER: HG-WFT-04-03		
SYSTEM: 2 x 12.5mm BRITISH GYPSUM GYPROC SOUNDBLOC BOARDS EACH SIDE OF 50mm HADLEY I STUDS AT 600mm CENTRES - TWIN FRAME SYSTEM	TEST_REF: 04	TEST_DATE: 12/04/2022	
	DATE: 20/01/2022	DRN: SD	SCALE: NTS

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PHONE: +44 (0) 121 555 1300
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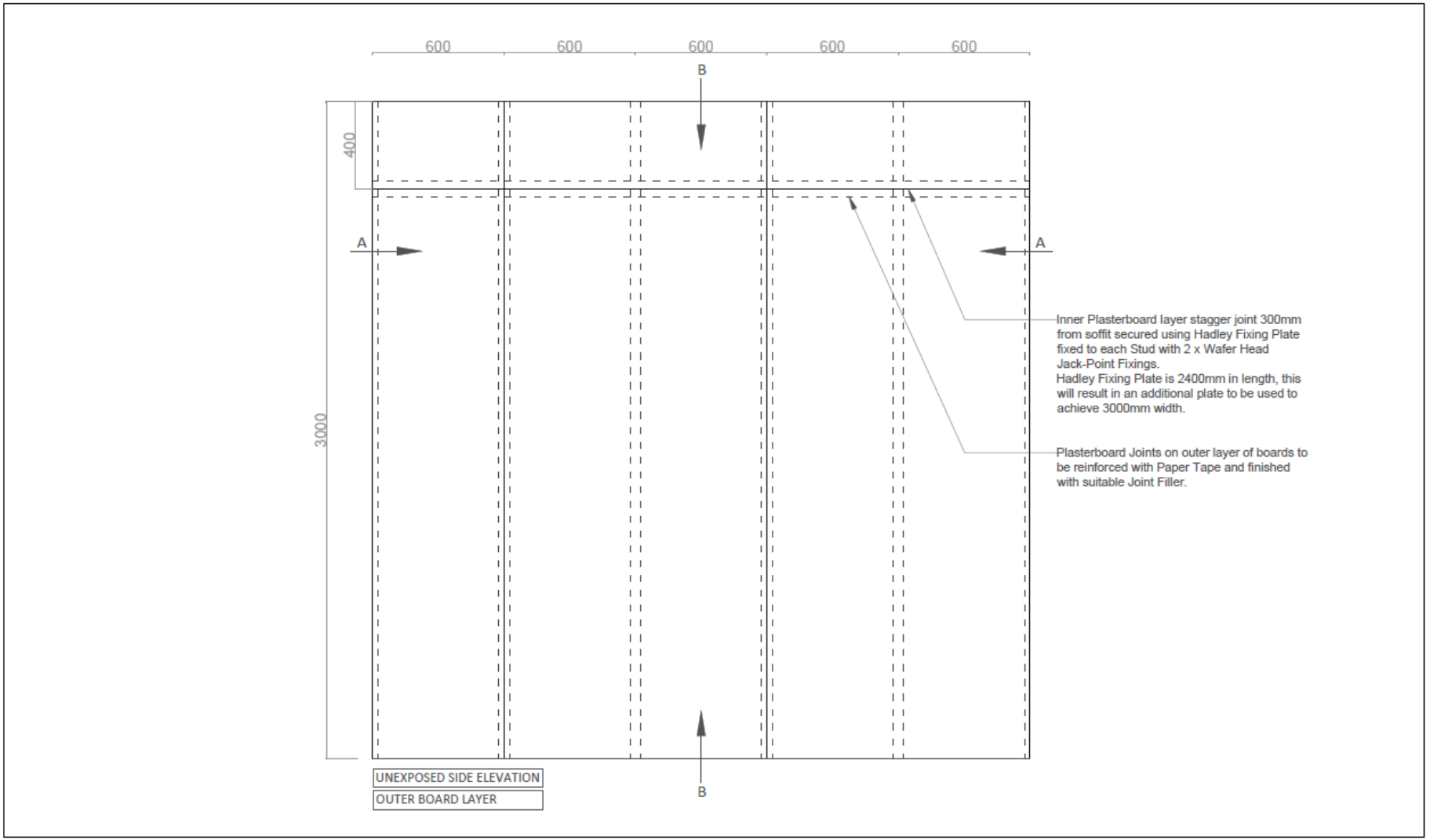
69 x 8.26 in



TITLE: UNEXPOSED SIDE ELEVATION - OUTER BOARD LAYER	DWG_NUMBER: HG-WFT-04-04		
SYSTEM: 2 x 12.5mm BRITISH GYPSUM GYPROC SOUNDBLOC BOARDS EACH SIDE OF 50mm HADLEY I STUDS AT 600mm CENTRES - TWIN FRAME SYSTEM	TEST_REF: 04	TEST_DATE: 12/04/2022	
	DATE: 20/01/2022	DRN: SD	SCALE: NTS

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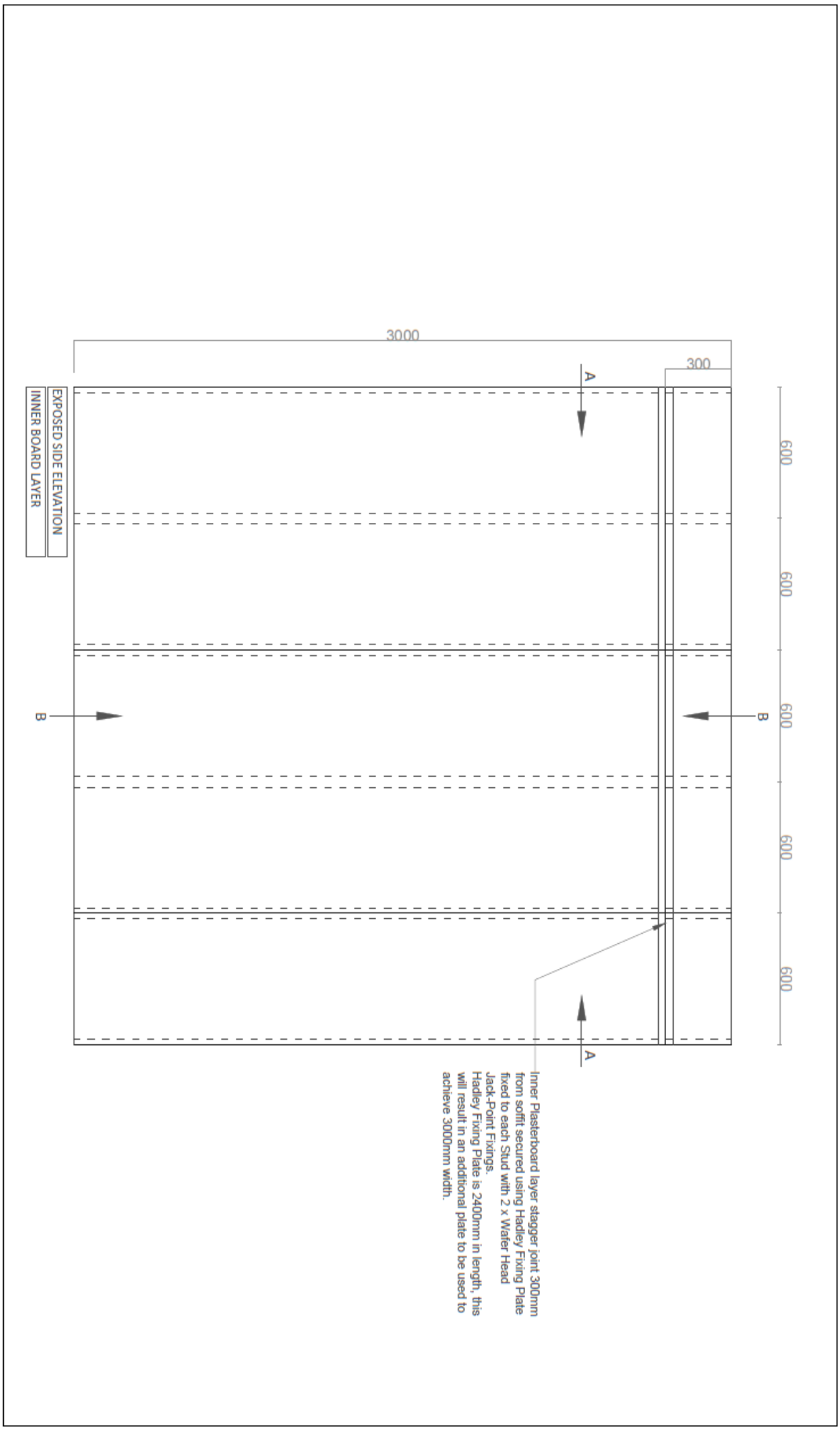
69 x 8.26 in



TITLE: EXPOSED SIDE ELEVATION - INNER BOARD LAYER

DWG_NUMBER: HG-WFT-04-05

SYSTEM: 2 x 12.5mm BRITISH GYPSUM GYPROC SOUNDBLOC BOARDS EACH SIDE OF 50mm HADLEY I STUDS AT 600mm CENTRES - TWIN FRAME SYSTEM

TEST_REF: 04

TEST_DATE: 12/04/2022

DATE: 20/01/2022

DRN: SD

SCALE: NTS

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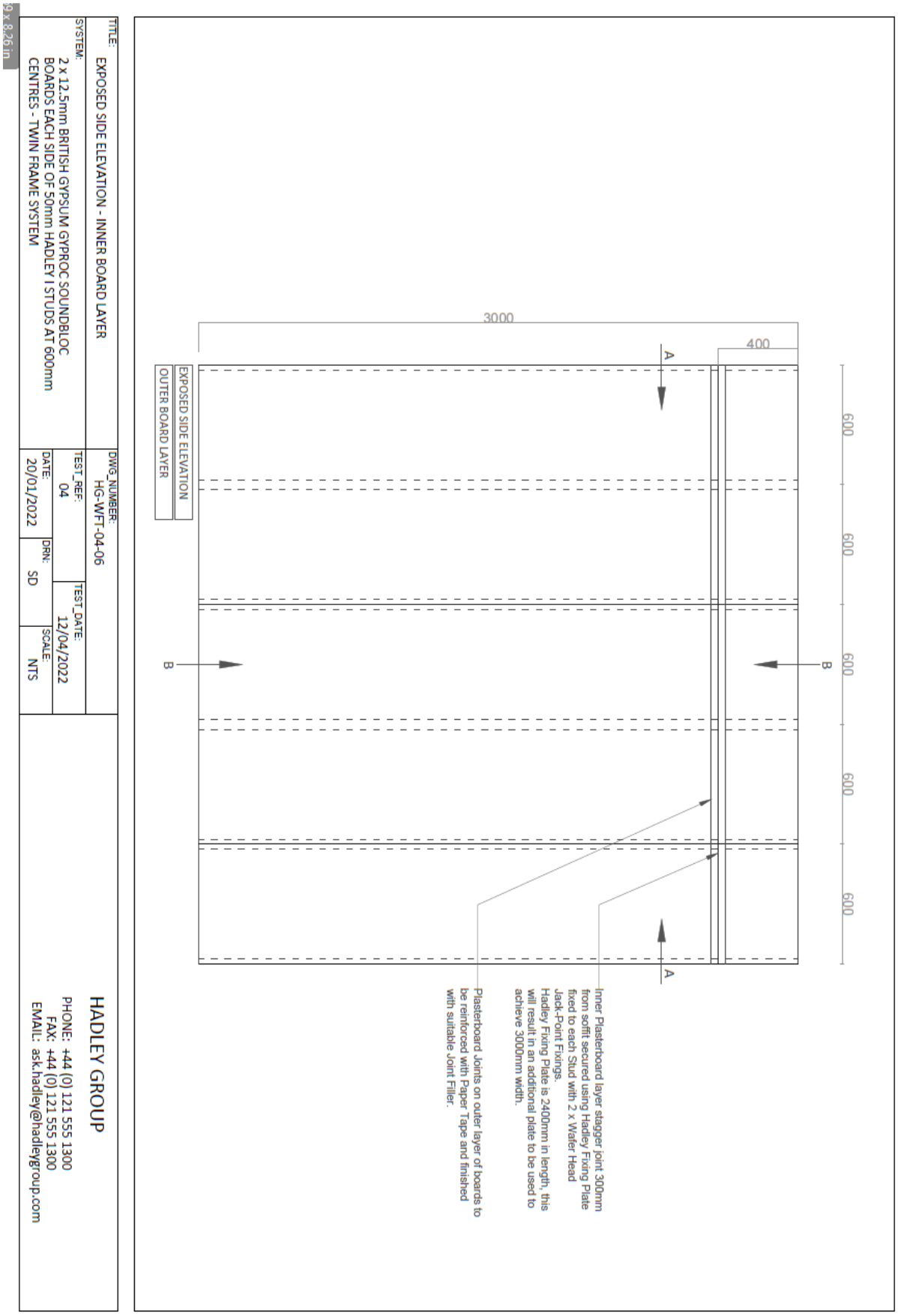
9 x 8.26 in



TITLE: EXPOSED SIDE ELEVATION - INNER BOARD LAYER		DWG_NUMBER: HG-WFT-04-06	
SYSTEM: 2 x 12.5mm BRITISH GYPSUM GYPROC SOUNDBLOC BOARDS EACH SIDE OF 50mm HADLEY I STUDS AT 600mm CENTRES - TWIN FRAME SYSTEM	TEST_REF: 04	TEST_DATE: 12/04/2022	
	DATE: 20/01/2022	DRN: SD	SCALE: NTS

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9 x 8.26 in