Warringtonfire
Holmesfield Road
Warrington
Cheshire
WA1 2DS
United Kingdom
T: +44 (0)1925 655116
W: www.warringtonfire.com

Title:

The Fire Resistance Performance Of A Fire Blanket When Tested Utilising The Heating And Pressure Conditions Of BS EN 1363-1:2012

Date Of Test:

27 July 2024

Issue No. 1

05 November 2024

WF Report No:

545954/R

Prepared for:

Prosol UK Sales and Distribution Ltd

14-16 Gleadless Rd,
Sheffield,
South Yorkshire,
S2 3AB

Indicative Fire Resistance Test Letter Report

We have enclosed the information of the indicative fire test conducted on your behalf on the 27 July 2024.

The information enclosed relates to an investigation which utilised the heating and pressure conditions given in BS EN 1363-1: 2012 however the full requirements of the Standard were not, however, complied with. The information is provided for the test sponsor's information only and should not be used to demonstrate performance against the Standard nor compliance with a regulatory requirement.

The test was not conducted under the requirements of UKAS accreditation.

The purpose of the test was to provide an indication of the performance of a fire blanket under specified fire test conditions.

The specimen was a silicone coated glass cloth reference '6572SR122- FBM1290' and had overall nominal dimensions of 1600 mm wide by 1600 mm high by 0.2 mm thick. The fabric comprised of a 0.2 mm thick woven glass cloth reference '6572LS', with a grey silicone coating referenced 'SR122' on the front and rear face.

The specimen was installed within a 1500 mm by 1500 mm aperture of a concrete lined frame. The fire blanket was fixed using 1.75 mm thick, 25 mm wide and 25 mm deep galvanised steel angle on all four edges, with 50 mm by 6 mm concrete hex screw fixings with 450 mm centres.

The test assembly formed the front vertical face of a 1.5 metre wide by 1.5 metre high by 2 metre deep gas fired furnace chamber, the temperature rise of which was controlled to conform to the relationship given in BS EN 1363-1: 2012. The furnace atmospheric pressure was controlled so that it was 20 Pa at the head of the specimen, following the principles of BS EN 1363-1: 2012. Clause 5.2.

The test was discontinued after a period of 90 minutes. Throughout the test duration there were no occurrences of any flaming or formation of through gaps in excess of 6 mm wide by 150 mm long or 25 mm diameter.

We trust that the information enclosed is useful to you.

The following information relating to the test is enclosed:

- Table 1 - Specified and recorded furnace temperatures.
- Table 2 - Recorded furnace pressure
- Graph 1 - Specified and recorded furnace temperatures.
- Graph 2 - Recorded pressure.
- Observations of the general behaviour of the specimen during the test.
- Test photographs from before, after and during the test.
- Test construction
- Test specimen drawings
- Schedule of components

Quality Management

Issue No: 1	Issue Date: 05 November 2024
Responsible Officer: **S. Collins***	Approved By: **P. White***
	

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

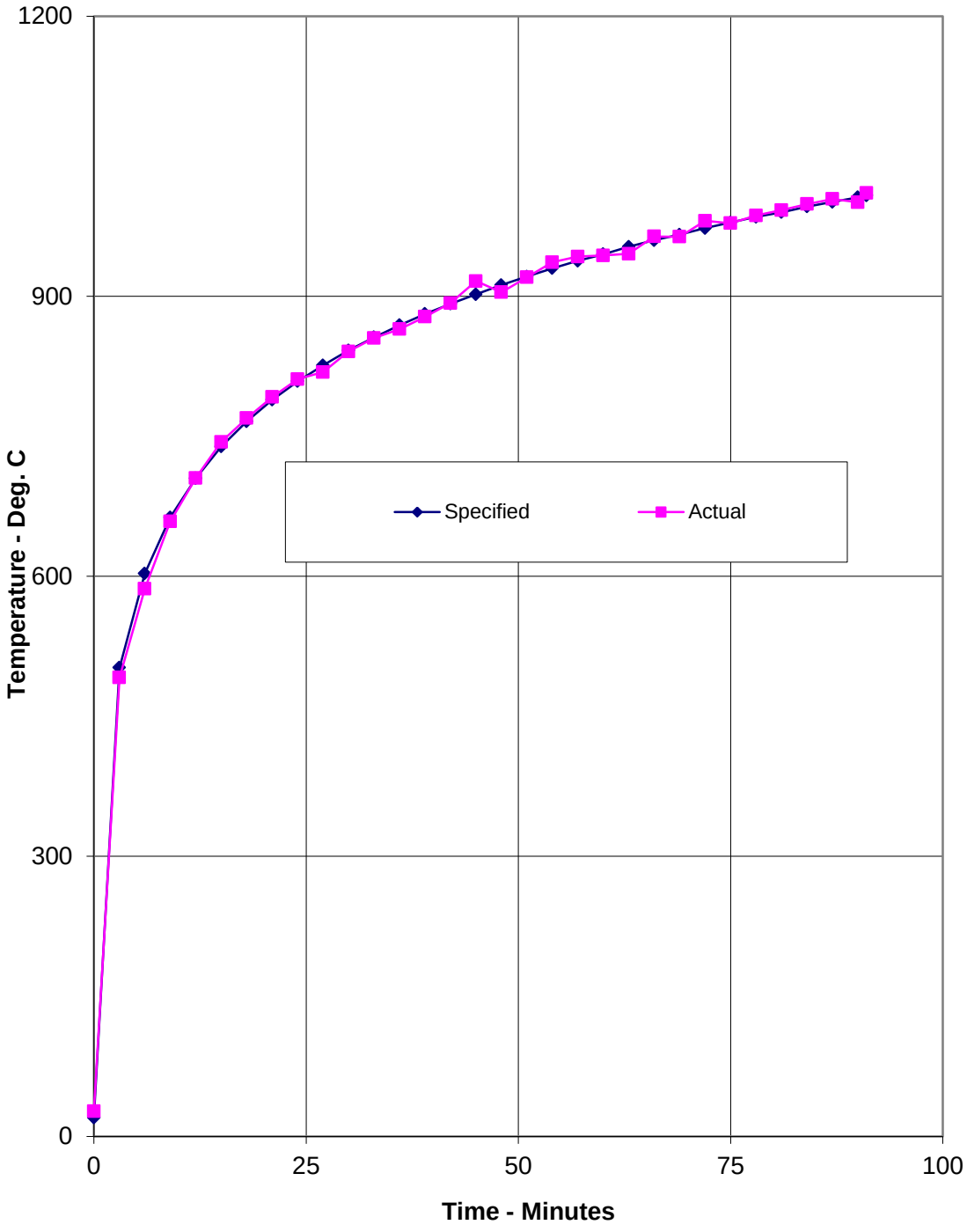
Table 1 – Specified and recorded furnace temperatures

Time Mins	Specified Furnace Temperature Deg. C	Actual Furnace Temperature Deg. C
0	20	27
3	502	492
6	603	587
9	663	659
12	705	705
15	739	744
18	766	770
21	789	792
24	809	811
27	826	819
30	842	841
33	856	855
36	869	865
39	881	878
42	892	893
45	902	916
48	912	904
51	921	920
54	930	937
57	938	943
60	945	944
63	953	946
66	960	964
69	966	964
72	973	981
75	979	978
78	985	987
81	990	992
84	996	999
87	1001	1004
90	1006	1001
91	1008	1011

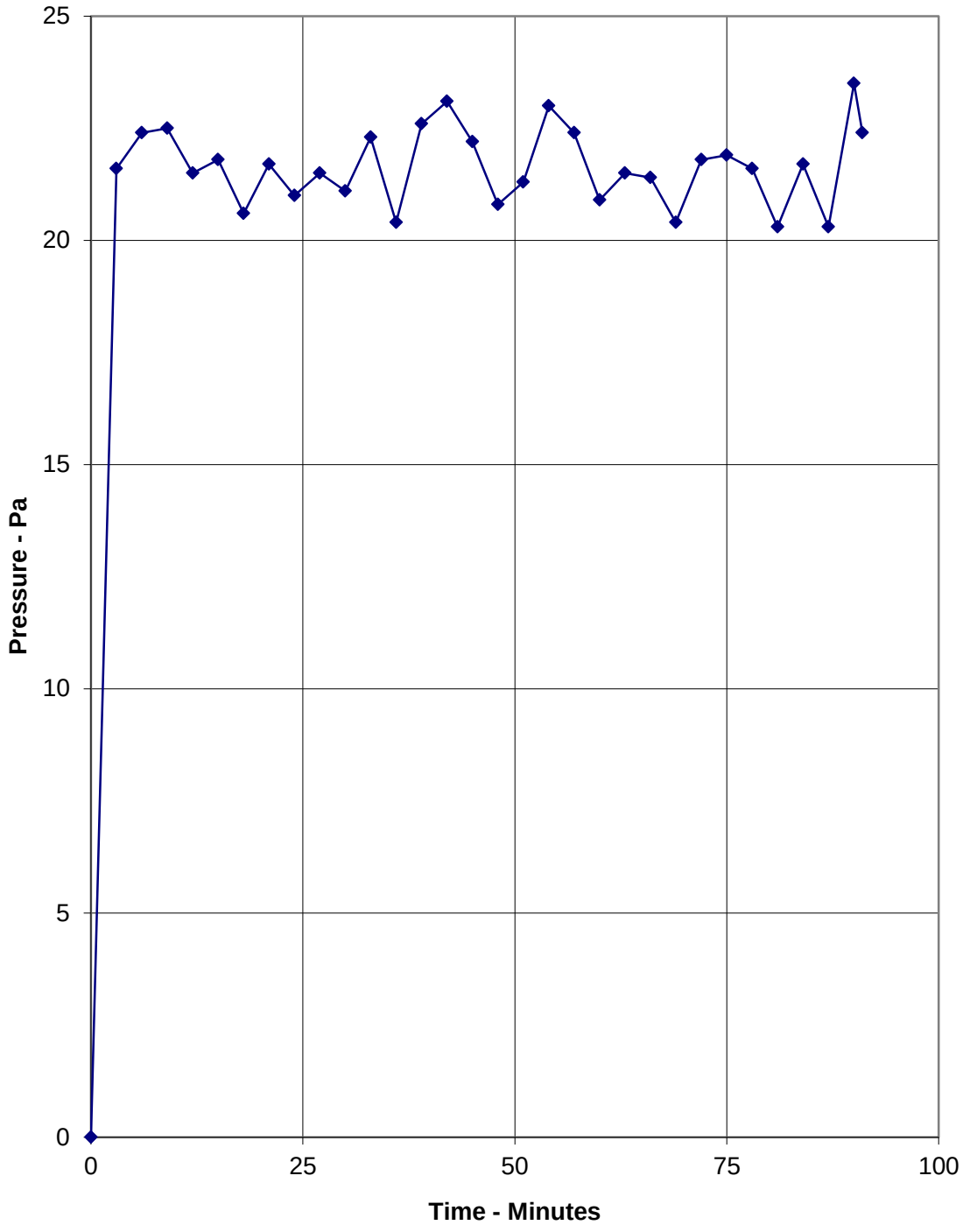
Table 2 – Furnace Pressure

Time Mins	Recorded Pressure Pascals
0	0.00
3	21.60
6	22.40
9	22.50
12	21.50
15	21.80
18	20.60
21	21.70
24	21.00
27	21.50
30	21.10
33	22.30
36	20.40
39	22.60
42	23.10
45	22.20
48	20.80
51	21.30
54	23.00
57	22.40
60	20.90
63	21.50
66	21.40
69	20.40
72	21.80
75	21.90
78	21.60
81	20.30
84	21.70
87	20.30
90	23.50
91	22.40

Graph 1 – Furnace Temperature



Graph 2 – Furnace Pressure



Test Observations

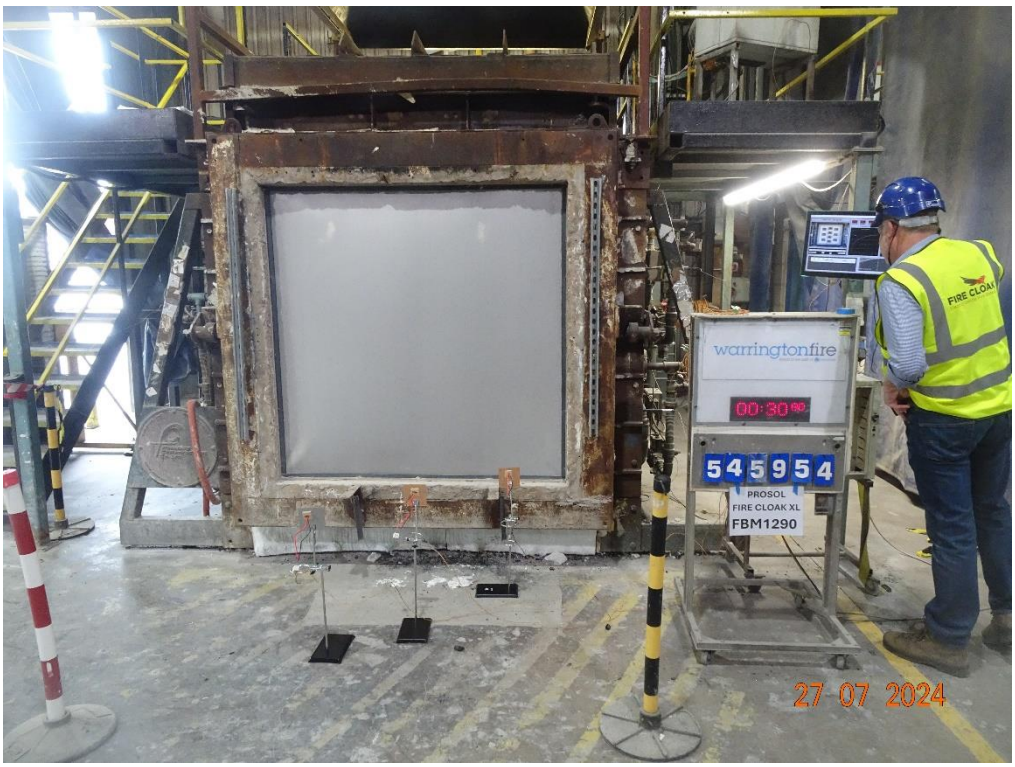
Time		All observations are from the unexposed face unless noted otherwise.
mins	secs	
00	00	**The test commences.**
00	15	The curtain billowed out with pressure at commencement of the test.
02	40	Steam/smoke is being released across specimen.
04	30	The specimen is discolouring a dark grey colour.
07	00	The steam/smoke that was being released has ceased across specimen.
28	00	No significant visible change.
40	00	White lines can be seen vertically from the top to the bottom of the specimen.
47	00	The bottom angle is starting to deflect.
52	00	The specimen is starting to glow red.
67	00	There is glowing on the edges becoming more red in colour.
73	00	A gap is starting to form at the bottom left corner of the specimen near the angle.
77	00	The specimen is now glowing red entirely.
90	00	**Test discontinued at the request of the test sponsor.**

Test Photographs

The exposed face of the test assembly before the start of the test

The unexposed face of the test assembly before the start of the test

The unexposed face of the test assembly after 30 minutes of testing



The unexposed face of the test assembly after 60 minutes of testing

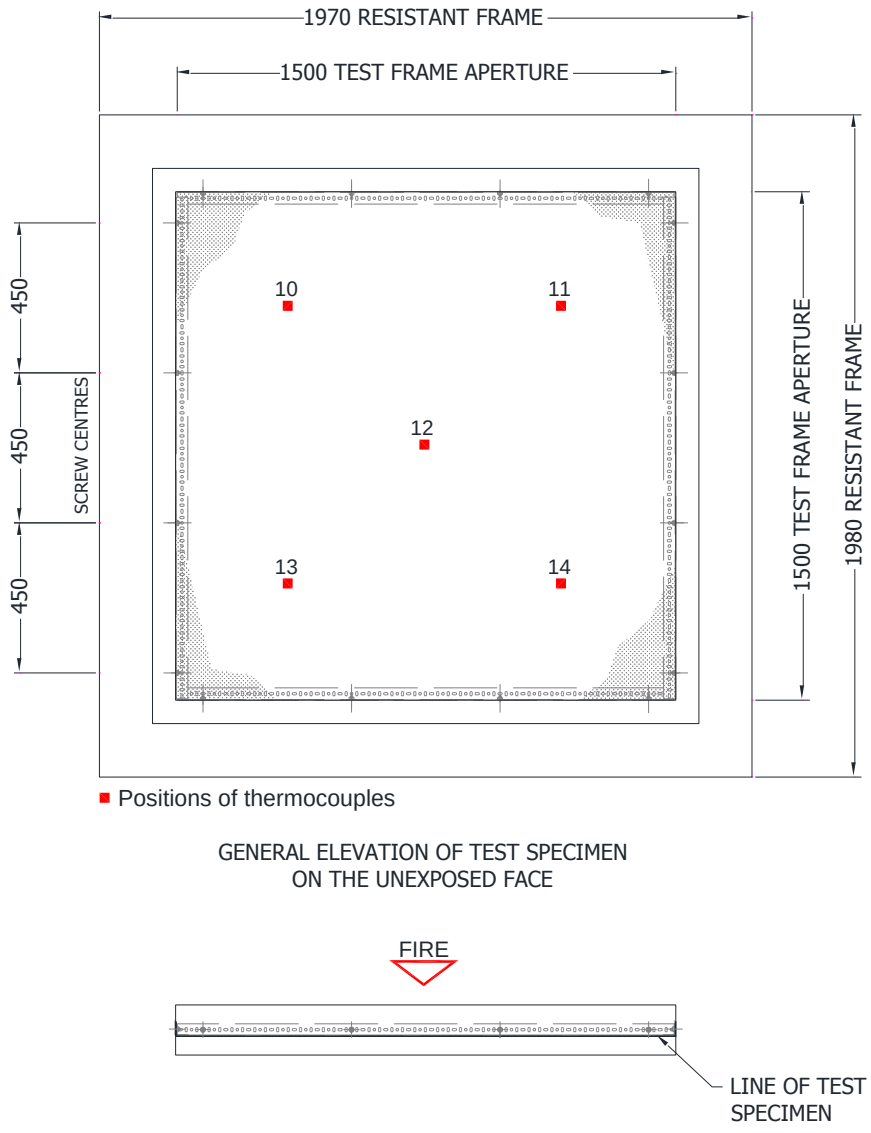
The unexposed face of the test assembly after 80 minutes of testing

The unexposed face of the test assembly after 90 minutes of testing

The exposed face of the test assembly after the end of the test

Test Construction

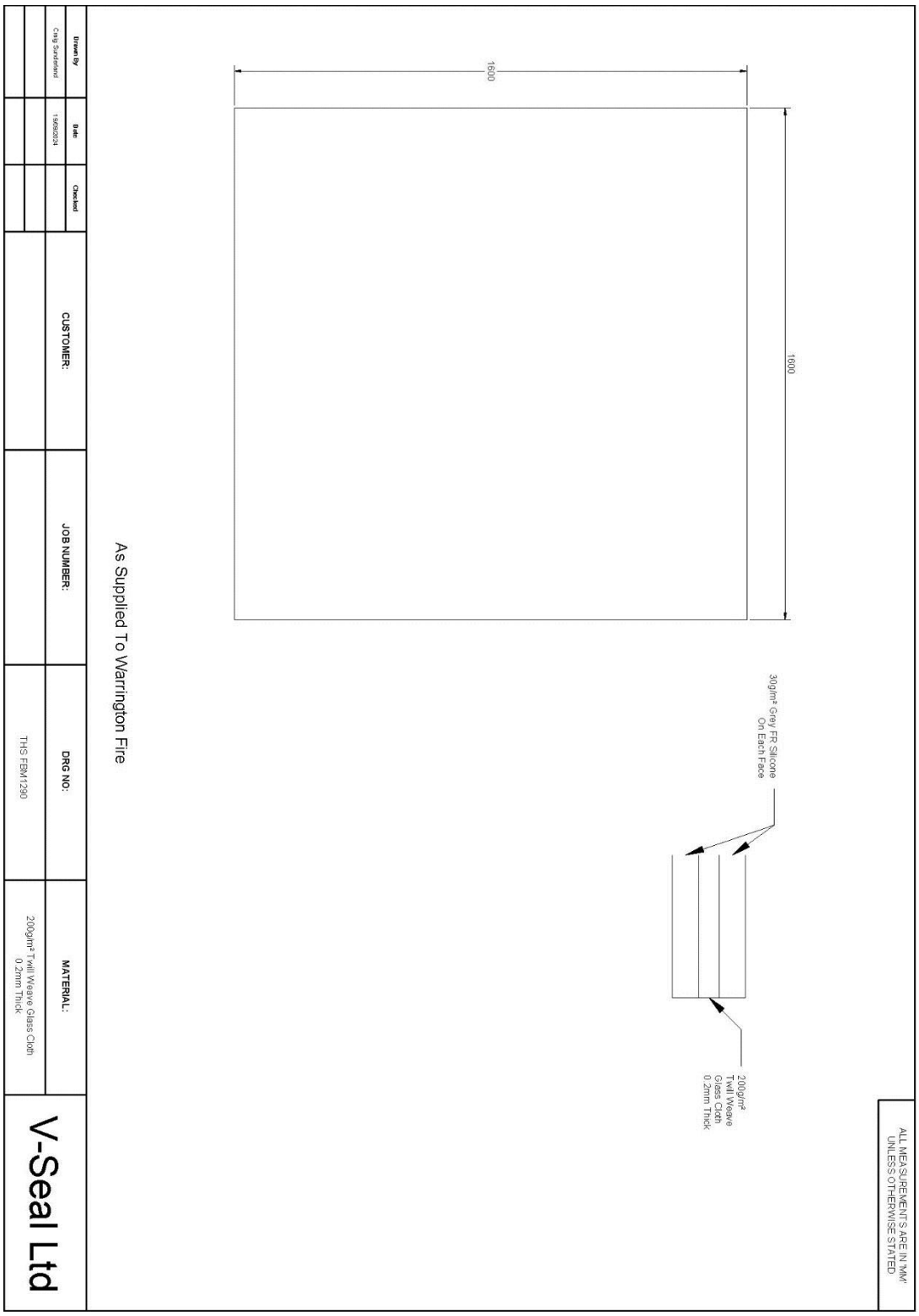
Figure 1. General arrangement of test construction - Unexposed face



Do not scale. All dimensions are in mm

Test Specimen Drawings

Figure 2. Client drawing – THS FBM1290



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.

Figure 2 supplied by the test sponsor.

Item		Description
1. Fire barrier curtain [SB2]		
Manufacturer	:	*Confidentiality retained by Warringtonfire*
Product reference	:	6572SR122- FBM1290
General description	:	Silicone coated glass cloth
Installed Size	:	1600 mm x 1600 mm
Thickness	:	0.2 mm
Density / weight per unit area of overall composite	:	270g/m^2 (stated)
Construction details	:	Single layer of curtain fabric, comprising following details
Material details		
Coating (front and rear face)		
Generic type	:	Silicone coating
Product reference	:	SR122
Colour reference	:	Grey
Number of coats	:	1
Weight per unit area	:	30g/m^2
Density / specific gravity	:	Approx 1.30g/cm^3 (stated)
Glass Cloth		
Generic type	:	Woven glass cloth
Product reference	:	6572LS
Weight per unit area	:	200g/m^2
Thickness	:	0.2 mm
Fixing method	:	The curtain barrier was fixed to the concrete restraint frame using steel angles (item 2) to the unexposed face
2. Steel Angle		
Supplier	:	John Chorley & Co. Ltd
General description	:	Metal angle
Material	:	Galvanised steel
Overall size	:	25 mm wide x 25 mm deep
Thickness	:	1.75 mm thick
Fixing method	:	Through fixed to the concrete restraint frame
Fixings		
i. type	:	Concrete hex screws
ii. size	:	50 mm long x 6.0 mm diameter
ii. centre	:	450 mm