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Title:

Indicative Fire Test

Report No:

189970



Prepared for:

UAP Limited

Bank House,
16-18 Bank Street,
Bury,
Lancashire.
BL8 3AZ.

Date:

11th February 2010

Indicative Fire Test

We have pleasure in enclosing the information obtained from the indicative fire test conducted on your behalf on the 18th January 2010

The information enclosed relates to a test, which utilised the heating and test methodology given in BS 476: Part 20: 1987, 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 fire resistance performance of a letterplate within a section of chipboard cored, timber door leaf, when exposed to the heating conditions specified in BS 476: Part 20: 1987.

The test specimen comprised of a timber door leaf with overall nominal dimensions of 1500 mm high by 1500 mm wide by 54 mm thick, incorporating an aluminium framed Letterplate referenced, 'UAP All Aluminium Firecheck Letterplate'. The letterplate was installed into an aperture nominally 260 mm wide by 47 mm high, cut centrally within the door leaf 600 mm from its base. The letterplate was installed such that the brush seals were on the unexposed face of the door leaf. The assembly was mounted within an aperture in a refractory concrete lined, steel support frame

The assembly formed the front vertical face of a gas fired furnace chamber, with a vertical opening of 1.5 m square by 2 m deep. The temperature rise of the furnace was controlled to conform with the relationship given in BS 476: Part 20: 1987. For the purpose of the test the furnace pressure was controlled such that it was nominally - 6 Pa at mid-height of the letterplate.

The following information relating to the test is enclosed:

- ◆ Table 1 - Specified and actual furnace temperatures.
- ◆ Table 2 - Individual temperatures recorded on the unexposed surface of the outer flap of the letterplate (Thermocouple 11) and on the face of the door leaf 25 mm above the top edge of the letterplate. (Thermocouple 10)
- ◆ Graph 1 - Specified and actual furnace temperatures
- ◆ Observations made during the test.
- ◆ Photographs before during and after the test.

The test was discontinued after a period of 68 minutes.

We trust that the information obtained from the test will be useful to you.

Yours faithfully



S. Gilfedder
Testing Officer
Fire Resistance Department
Exova Warringtonfire

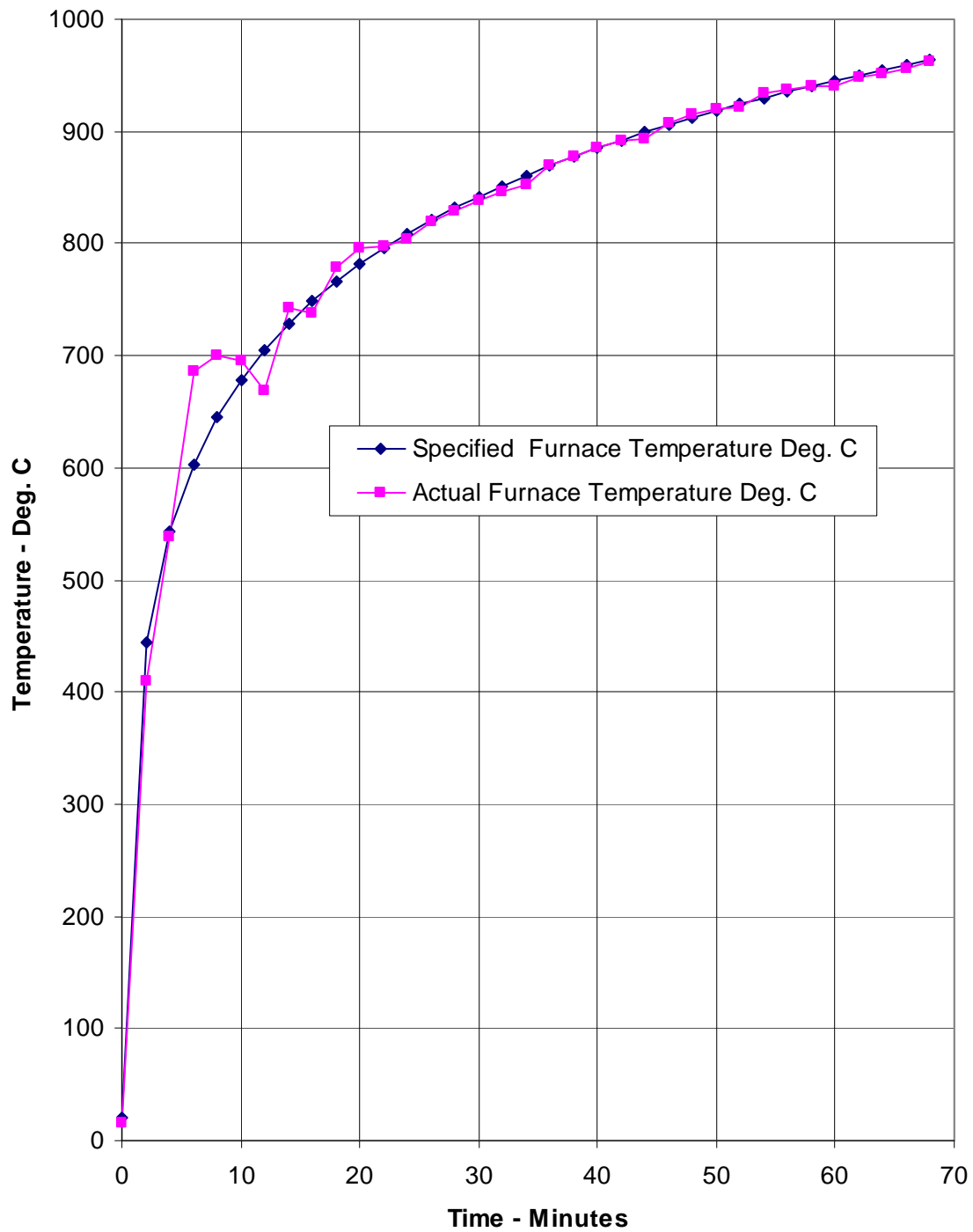
Table 1

Time Mins	Specified Furnace Temperature Deg. C	Actual Furnace Temperature Deg. C
0	20	16
2	445	410
4	544	539
6	603	686
8	645	700
10	678	695
12	705	669
14	728	743
16	748	738
18	766	779
20	781	796
22	796	797
24	809	804
26	820	820
28	832	829
30	842	838
32	851	846
34	860	852
36	869	870
38	877	878
40	885	886
42	892	892
44	899	894
46	906	908
48	912	915
50	918	919
52	924	922
54	930	934
56	935	937
58	940	941
60	945	940
62	950	948
64	955	952
66	960	956
68	964	962

Table 2

Time Mins	T/C Number 10 Deg. C	T/C Number 11 Deg. C
0	15	13
2	14	36
4	15	26
6	15	23
8	15	34
10	18	160
12	23	152
14	27	111
16	27	90
18	28	75
20	30	65
22	33	60
24	35	56
26	37	55
28	40	54
30	42	54
32	44	55
34	46	57
36	48	60
38	50	63
40	52	68
42	54	72
44	56	77
46	58	81
48	60	84
50	62	87
52	64	90
54	66	93
56	68	97
58	70	100
60	71	103
62	73	107
64	75	112
66	77	115
68	79	115

Graph 1



Test Observations

Time		All observations are from the unexposed face unless noted otherwise.
mins	secs	The ambient air temperature in the vicinity of the test construction was 11°C at the start of the test with a maximum variation of 5°C during the test.
00	00	The test commences.
10	38	The exposed face of the door leaf has ignited.
11	34	Smoke release is visible along the bottom edge of the letterplate with some moisture staining visible on the face of the door leaf adjacent to the bottom two corners of the letterplate.
16	00	Flaming can be seen around the exposed letterplate.
21	00	Little or no smoke release is visible around the letterplate.
30	00	No significant visible change to the unexposed face.
34	05	The exposed face of the door leaf is cracked and charred, it is difficult to make out the letterplate due to the flaming around the assembly.
54	16	The letterplate flap is starting to be pushed open slightly along the bottom edge.
61	10	No significant visible change.
64	00	The face of the door leaf starts to vibrate.
67	00	Viewed from the exposed side a white material fills the aperture of the letterplate.
68	09	The letterplate flap falls away, flaming is visible from the letterplate void. The test is discontinued at the sponsor's request.

Test Photographs

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



The unexposed face of the assembly after a test duration of 20 minutes



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



The bottom edge of the letterplate flap starts to get pushed open with the reaction of the intumescent



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



The unexposed face of the assembly after a test duration of 68 minutes



The exposed face
of the assembly
immediately after
the test

