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**Title:**

Indicative Fire Test

**Report No:**

189969



**Prepared for:**

**UAP Limited**

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

**Date:**

11<sup>th</sup> February 2010

## **Indicative Fire Test**

We have pleasure in enclosing the information obtained from the indicative fire test conducted on your behalf on the 18<sup>th</sup> 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 82 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**

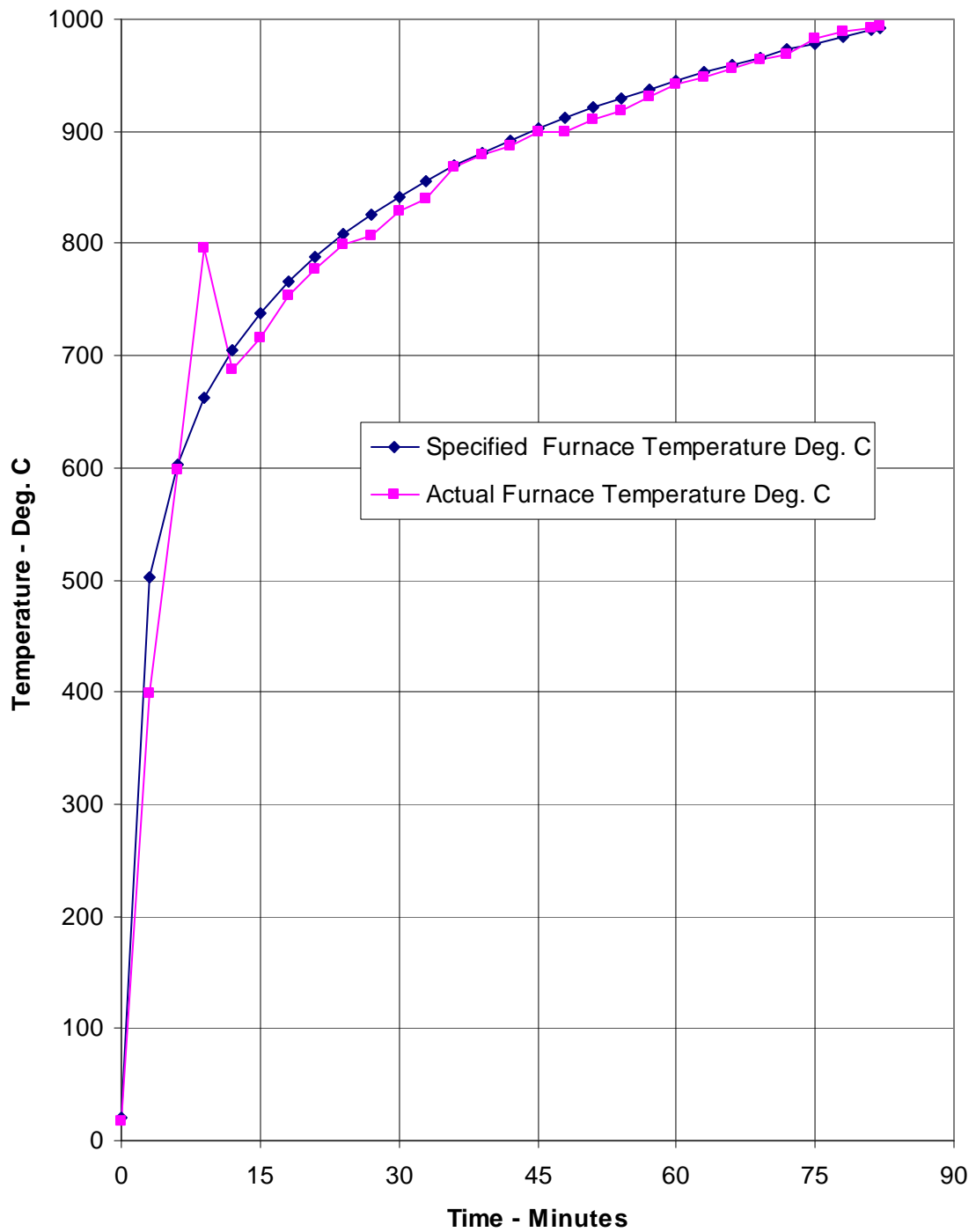
**Table 1**

Time Mins	Specified Furnace Temperature Deg. C	Actual Furnace Temperature Deg. C
0	20	17
3	502	400
6	603	598
9	663	796
12	705	688
15	739	717
18	766	754
21	789	777
24	809	799
27	826	807
30	842	828
33	856	841
36	869	868
39	881	879
42	892	887
45	902	900
48	912	900
51	921	910
54	930	919
57	938	931
60	945	942
63	953	948
66	960	956
69	966	965
72	973	968
75	979	983
78	985	989
81	990	993
82	992	994

**Table 2**

Time Mins	T/C Number 10 Deg. C	T/C Number 11 Deg. C
0	17	14
3	18	50
6	22	69
9	24	117
12	35	134
15	43	116
18	43	105
21	44	98
24	44	94
27	47	96
30	49	96
33	53	96
36	55	96
39	57	94
42	60	93
45	63	93
48	65	92
51	66	92
54	68	92
57	70	92
60	72	92
63	74	94
66	76	96
69	78	99
72	80	103
75	83	110
78	86	116
81	88	123
82	93	122

**Graph 1**



## Test Observations

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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 13°C at the start of the test with a maximum variation of 3°C during the test.
00	00	<b>The test commences.</b>
03	40	Faint smoke/steam release is now visible around the letterplate.
04	48	Moisture staining can be seen on the face of the door leaf at the bottom two corners of the letter plate.
06	56	Smoke release increase around the letterplate.
07	30	The exposed face of the door leaf has ignited.
12	51	Smoke release continues around the letterplate, moisture staining is now visible on the face of the door leaf adjacent to the top edge of the letterplate.
15	00	The exposed face of the door leaf is blackened.
22	30	Smoke release reduces around the letter plate.
30	00	No significant visible change.
34	00	The exposed face of the door leaf has an even cracked / crazed appearance, the exposed face glows orange.
41	24	Only faint smoke release is now visible from the top edge of the letterplate. The letter plate remains flush to the door leaf
46	00	The door leaf starts to vibrate slightly.
58	07	Very little smoke release is now visible from the letterplate. A black/brown residue is visible across the top hinge/pivot on the unexposed face of the letterplate.
66	35	Viewed from the exposed side, a white material fills the aperture of the letterplate.
77	04	Smoke release now visible fro the bottom edge of the letter plate.
81	21	The left hand edge of the letterplate flap starts to slump down.
82	01	The letterplate flap falls away a through gap and flaming is now visible
82	20	<b>The test is discontinued at the sponsor's request.</b>

## Test Photographs

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



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



The unexposed face of the assembly after a test duration of 81 minutes



The exposed face  
of the assembly  
immediately after  
the test

