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Title:

The Fire Resistance Performance Of Two Floor Mounted 'Open-State' Cavity Barrier When Tested Utilising The General Principles Of ASFP Technical Guidance Document -TGD 19: (Nov 2017)

Date Of Test:

24 November 2023

Issue 1

18 April 2024

WF Report No:

538815A/R



Prepared for:

Diamorph UK Ltd

C/O Tenmat Ltd Frank Perkins Way Irlam Greater Manchester M44 5EW



This report Supersedes report referenced 538815A Issued 12 April 2024

Test Specimen

Summary of For the purpose of the test the floor specimens were referenced A to D and the **Tested Specimen** wall specimens were referenced E to G. Specimens B and C are the subject of this report. Specimen A was not subjective to this report. Specimens D to G are subjective to another report. The section of floor had overall dimensions of 2250 mm long by 1750 mm wide by 600 mm thick and was made up of autoclaved aerated concrete lintels arranged to provide four 1100 mm long x 50 mm wide cavities. Specimen B had an overall aperture size of 50 mm wide by 1100 mm long by 600 mm deep. A 145 mm wide by 450 mm high SIP Panel was fixed to the supporting construction along one side of the aperture. The SIP Panel was clad on both sides with 12.5 mm thick OSB board layered with a 0.3 mm thick breather membrane on the aperture side. The SIP Panel cavity was insulated with PU Insulation Foam. 50 mm wide x 25 mm thick timber battens were through fixed to the SIP Panel, 10 mm from the edge of the aperture. A 75 mm wide by 6mm thick intumescent strip, referenced "FF102 / 50" was screw fixed to the OSB board at mid height of the aperture, leaving a 44 mm wide air gap. The strip was split into lengths of 900 mm and 200 mm with a butt joint.

Specimen C had an overall aperture size of 50 mm wide by 1100 mm long by 600 mm deep. A 145 mm wide by 450 mm high SIP Panel was fixed to the supporting construction along one side of the aperture. The SIP Panel was clad on both sides with 12.5 mm thick OSB board layered with a 0.3 mm thick breather membrane on the aperture side The SIP Panel cavity was insulated with PU Insulation Foam. 50 mm wide x 25 mm thick timber battens were through fixed to the SIP Panel, 10 mm from the edge of the aperture. A 75 mm (stated) wide by 6mm thick intumescent open state cavity barrier, referenced "CavGuard Roll 65" was stapled to the OSB board at mid height of the aperture, leaving a 44 mm wide air gap. The strip was split into lengths of 900 mm and 200 mm with a butt joint.

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.

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Performance Criteria and Test Results

Integrity	It is required that the specimen retains its separating function, without:			
	 causing ignition of a cotton pad when applied sustained flaming on the unexposed surface 			
	Except that any failure before 5 minutes shall be disregarded unless any area of any surfaces exhibits sustained flaming above the seal within that period.			
Insulation	Transmission of heat through the test construction shall not raise any one of the thermocouple temperatures of the unexposed surface of the test specimen more than 180 K above its initial temperature. However, any failure before 5 minutes shall be disregarded.			
	Note: the 'suspended' thermocouple effective closure of the 'open-state' also be disregarded.	may exceed 180 K rise in advance of the cavity barrier test specimen. This shall		
Effective Closure	Closure is deemed to have occurred when there is no visible gap and the 'suspended' thermocouple temperature is less than 180 K rise above initial ambient temperature.			
Test Results	Specimen B Specimen C			
Integrity	129 Minutes*	109 Minutes		
Cotton Pad	129 Minutes*	109 Minutes		
Sustained Flaming	129 Minutes* 109 Minutes			
Insulation (Surface T/C's)	129 Minutes* 70 Minutes			
Insulation (Suspended T/C's)	129 Minutes* 70 Minutes			
Closure time	4 Minutes	5 Minutes		
	Due to the nature of ventilated/open state cavity barrier seals, an initial spike in temperature is recorded by the thermocouples positioned in the air gap adjacent to the seal as it is open to the furnace. The temperature is rapidly reduced once the seals react and fill the whole cavity. The 'air gap insulation' figure quoted in the results disregards this initial spike in temperature provided the temperature returns to below 180°C rise within the first five minutes of the test.			
	*Test was discontinued after a period of	129 minutes.		

Date of Test 24 November 2023

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Quality Management

Issue No: 1	Issue Date: 12 April 2024			
Responsible Officer: N.Bradley*	Approved By: D.Whittle*			
Hattabart	HAN			
Issue No: 2	Re-issue Date: 18 April 2024			
Responsible Officer: N.Bradley*	Approved By: D.Whittle*			
Hattabut	TAA			
Reason for Revision: Removed Signatories and Revision history pages, replaced with Quality Management page.				
data table (page 22).				
Changed 'CavGuard 65' to 'CavGuard Roll 65' on pages 2 and 12.				

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Test Conditions

Standard	ASFP Technical Guidance Document – TGD 19: (November 2017). Fire Resistance Test for 'Open-State' Cavity Barriers used in the external envelope or fabric of buildings.			
	This test method is only intended to evaluate the fire resistance performance of the open-state cavity barrier against fire exposure from below, in terms of the time from ignition necessary to effectively seal the cavity, and to maintain that seal. This test assembly does not include a façade system and the results alone do not represent what might happen in a façade system.			
Sampling	A representative of the tested specimen	Warringtonfire sam	ple selected the following com	ponents of
	Component	Sampling date	Sampling report reference	1
	FF102 / 50	25/01/21	13589894	1
	Cayquard 65	15/05/20	FM428958	-
	(FF107)	13/03/20	1 101420930	
	Copies of sampling r	eports are included	in the Sample Report section.	J
Installation	The aerated concret between the 21 Nove	e floor was construc ember 2023 to the 2	cted by representatives of Warr 2 November 2023.	ingtonfire
	The cavity sealing sy test sponsor on the 2	ystems were provide 22 November 2023.	ed and installed by a representa	ative of the
Conditioning	The specimen's storage, construction, and test preparation took place in the test laboratory over a total, combined time of 4 days. Throughout this period of time both the temperature and the humidity of the laboratory were measured and recorded as being within a range of from 15°C to 20°C and 41% to 66% respectively.			
Instruction to Test	The test was conducted on the 24 November 2023 at the request of Diamorph UK Ltd, the test sponsor.			
	Mr. I Hainsworth a representative of the test sponsor witnessed the test.			
Ambient Temperature	The ambient air temperature in the vicinity of the test construction was 17°C at the start of the test with a maximum variation of -2°C 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 four plate thermometers, distributed over a plane 100 mm from the surface of the horizontal test construction.			
Thermocouples	Thermocouples were provided to monitor the unexposed surface of the specimen and 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, and the suspended thermocouples are shown in Figures 1 to 4.			

Furnace Pressure After the first five minutes of testing, the furnace pressure was controlled to maintain a slightly positive pressure relative to the pressure of the laboratory. The furnace atmospheric pressure was measured and controlled such that, at a position 100 mm below the underside of the cavity barriers, the differential pressure was calculated to be 20 (±3) Pa.

Test Construction

Figure 1 – General plan of unexposed face showing thermocouple positions



▼ thermocouple positions

⊕ mineral insulated thermocouples

GENERAL PLAN OF UNEXPOSED FACE SHOWING THERMOCOUPLE POSITIONS

Do not scale. All dimensions are in mm

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Figure 2 – Typical vertical section through specimen B



TYPICAL VERTICAL SECTION THROUGH TEST SPECIMEN

Do not scale. All dimensions are in mm

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TYPICAL VERTICAL SECTION THROUGH TEST SPECIMEN

Do not scale. All dimensions are in mm

Schedule of Components

(Refer to Figures 1 to 3) (All values are nominal unless stated otherwise) (All other details are as stated by the sponsor)

<u>Item</u>

Description

1. SIP panel		
Manufacturer	:	SIPCo Ltd
Reference	:	Structural Insulated Panel (SIP)
Material		
a. timber framework	:	Softwood (Grade C24)
b. foam insulation	:	Polyurethane (PU) foam insulation
c. OSB facings	:	OSB
Overall size		
a. timber framework	:	120 mm wide x 45 mm deep
b. foam insulation	:	120 mm thick
c. OSB facings	:	1100 mm long x 450 / 700 mm wide x 12.5 mm thick
Fixing method	:	Timber framework fixed together with 2no. nails per joint. OSB facings through fixed to timber framework with nails. PU Foam Insulation was pre-injected and cured into the framework, filling the void between the OSB facings, forming an exothermally formed connection between the foam and the timber components. Through fixed to the supporting construction with 1no. screw per side.
Fixings (framework)		
i. type	:	Steel ring shank nails
	:	100 mm long x 4.5 mm diameter
		N I - 11 -
I. type	:	Nalls
II. SIZE	:	50 mm long x 5 mm diameter
III. Centres	-	250 mm
Fixings (supporting construction)		Valley, persidents of stand service
I. type	:	Yellow-passivated steel screws
II. SIZE	:	200 mm long x 6 mm diameter
2. Sheathing board		
Manufacturer	:	Knauf
Reference	:	Windliner Board
Material	:	Gypsum based external-grade sheathing board
Density	:	800 kg/m ³ (stated)
Thickness	:	12.5 mm
Fixing method	:	Through fixed to the timber battens with screws
Fixings		5
i. type	:	Black-phosphate coated steel screws
ii. size	:	38 mm long x 3.5 mm diameter
iii. centres	:	500 mm
2 Breether membrane		
S. Dieauler memoralle Monufacturer		Protect
Poforonco	:	TE200 Broathar Mambrana
Matarial	:	Nonwoven snuphond water resistant membrane
Thickness	:	A 3 mm
Fiving method	:	Through fixed to OSB facing 8 mm Arrow T50 stool
	•	staples at 300 mm centres

<u>ltem</u>

Description

4. Timber battens		
Material	:	Softwood (grade C16)
Section size	:	25 mm thick x 50 mm wide
Density	:	370 kg/m ³ (typical)
Fixing method	:	Through fixed to SIP panel via breather membrane with
3		2no. screws per batten
Fixinas		
i. type	:	Yellow-passivated steel screws
ii size		70 mm long x 5 mm diameter
	•	
5 Intumescent strin (cavity B)		
Details of aperture		50 mm wide x 1100 mm long
Manufacturer	:	Tenmat
Reference	:	FE102 / 50
Matorial	:	Graphite based intumescent material (feil wrapped)
Naterial Sample number	:	$\pi (25/01/21)$
Sample humber	:	05282
Batch number		Q5282
Section size	:	1100 mm long (butt-jointed at 900 mm) x 75 mm wide x
		6 mm thick
Fixing method	:	I nrough fixed to the SIP panel with screws
Fixings		
i. type	:	Zinc-coated steel screws
ii. size	:	40 mm long x 6.5 mm diameter
iii. centres	:	250 mm
6 Intumocoopt strip (opvity C)		
o. Intumescent strip (cavity C)		
Details of aperture	:	50 mm wide x 1100 mm long
Details of aperture Manufacturer	:	50 mm wide x 1100 mm long Tenmat
Details of aperture Manufacturer Reference	:	50 mm wide x 1100 mm long Tenmat CavGuard Roll 65
Details of aperture Manufacturer Reference Material	:	50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene
Details of aperture Manufacturer Reference Material	:	50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve
Details of aperture Manufacturer Reference Material Sample number	: : :	50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20)
Details of aperture Manufacturer Reference Material Sample number Batch number	: : : : : : : : : : : : : : : : : : : :	50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20) N/A
Details of aperture Manufacturer Reference Material Sample number Batch number Section size		50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20) N/A 1100 mm long (butt-jointed at 900 mm) x 75 mm wide
Details of aperture Manufacturer Reference Material Sample number Batch number Section size	: : : : : : : : : : : : : : : : : : : :	50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20) N/A 1100 mm long (butt-jointed at 900 mm) x 75 mm wide (nominal), 77 mm wide (measured), x 6 mm thick
Details of aperture Manufacturer Reference Material Sample number Batch number Section size Fixing method	: : : : : : : : : : : : : : : : : : : :	50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20) N/A 1100 mm long (butt-jointed at 900 mm) x 75 mm wide (nominal), 77 mm wide (measured), x 6 mm thick Through fixed to the SIP panel with 12 mm steel staples
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Details of aperture Manufacturer Reference Material Sample number Batch number Section size Fixing method Supporting construction (comprising		50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20) N/A 1100 mm long (butt-jointed at 900 mm) x 75 mm wide (nominal), 77 mm wide (measured), x 6 mm thick Through fixed to the SIP panel with 12 mm steel staples at 250 mm centres
Details of aperture Manufacturer Reference Material Sample number Batch number Section size Fixing method Supporting construction (comprising items 7 – 8)		50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20) N/A 1100 mm long (butt-jointed at 900 mm) x 75 mm wide (nominal), 77 mm wide (measured), x 6 mm thick Through fixed to the SIP panel with 12 mm steel staples at 250 mm centres
Details of aperture Manufacturer Reference Material Sample number Batch number Section size Fixing method Supporting construction (comprising items 7 – 8) 7. Concrete lintels (supplied by		50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20) N/A 1100 mm long (butt-jointed at 900 mm) x 75 mm wide (nominal), 77 mm wide (measured), x 6 mm thick Through fixed to the SIP panel with 12 mm steel staples at 250 mm centres
 Details of aperture Manufacturer Reference Material Sample number Batch number Section size Fixing method Supporting construction (comprising items 7 – 8) 7. Concrete lintels (supplied by Warringtonfire) 		50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20) N/A 1100 mm long (butt-jointed at 900 mm) x 75 mm wide (nominal), 77 mm wide (measured), x 6 mm thick Through fixed to the SIP panel with 12 mm steel staples at 250 mm centres
 Details of aperture Manufacturer Reference Material Sample number Batch number Section size Fixing method Supporting construction (comprising items 7 – 8) 7. Concrete lintels (supplied by Warringtonfire) Material		50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20) N/A 1100 mm long (butt-jointed at 900 mm) x 75 mm wide (nominal), 77 mm wide (measured), x 6 mm thick Through fixed to the SIP panel with 12 mm steel staples at 250 mm centres
 b. Intumescent strip (cavity c) Details of aperture Manufacturer Reference Material Sample number Batch number Bection size Fixing method Supporting construction (comprising items 7 – 8) 7. Concrete lintels (supplied by Warringtonfire) Material Details of aperture Details of aperture Material Details of aperture Material Details of aperture Material Details of aperture Details of aperture Material Details of aperture Details of aperture Material Details of aperture Details of aperture Reference Material Details of aperture Material Details of aperture Details of aperture Material Details of aperture Details of aperture Material Details of aperture Material Details of aperture		50 mm wide x 1100 mm long Tenmat CavGuard Roll 65 Graphite-based intumescent material in polythene sleeve FM428958 (15/05/20) N/A 1100 mm long (butt-jointed at 900 mm) x 75 mm wide (nominal), 77 mm wide (measured), x 6 mm thick Through fixed to the SIP panel with 12 mm steel staples at 250 mm centres
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Test Observations

Time		All observations are from the unexposed face unless noted otherwise.
mins	secs	
00	00	Test Commences.
03	36	Specimen B visually sealed.
04	45	Specimen C visually sealed.
80	30	TC's attached to the membrane have started to melt off.
15	10	MI's moved approx. 25 mm higher from rising intumescent on Specimens B and C.
25	10	All TC's reattached.
38	36	Smoke and steam release from Specimens B and C.
101	38	Increased smoke and steam release from Specimens B and C.
109	45	Non-aperture side of the stud wall has started to burn, integrity failure deemed to occur.
116	30	Blanked off the non-aperture side of Specimen C on the OSB board.
129	00	Test Discontinued at the request of the test sponsor.

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Test Photographs

The exposed face of the floor assembly prior to testing



The unexposed face of the floor assembly after a test duration of 10 minutes



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



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



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The unexposed face of the floor assembly after a test duration of 90 minutes



The unexposed face of the floor assembly after a test duration of 120 minutes



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



Temperature and Pressure Data

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

Time	Specified	Actual	
	Furnace	Furnace	
Mins	Temperature	Temperature	
	Deg. C	Deg. C	
0	20	45	
4	544	584	
8	645	605	
12	705	708	
16	748	749	
20	781	786	
24	809	822	
28	832	839	
32	851	858	
36	869	875	
40	885	891	
44	899	906	
48	912	917	
52	924	929	
56	935	940	
60	945	951	
64	955	960	
68	964	971	
72	973	981	
76	981	989	
80	988	992	
84	996	991	
88	1003	1000	
92	1009	1004	
96	1016	1009	
100	1022	1022	
104	1028	1028	
108	1033	1035	
112	1039	1041	
116	1044	1047	
120	1049	1045	
124	1054	1047	
128	1059	1056	
129	1060	1058	

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Individual temperatures recorded by the suspended thermocouples above the cavity of Specimen B

Time	T/C	T/C	T/C
	Number	Number	Number
Mins	19	20	21
	Deg. C	Deg. C	Deg. C
0	17	17	17
1	515	418	190
2	335	309	151
3	525	486	268
4	173	167	150
5	106	108	101
8	78	113	97
12	84	119	101
16	90	81	95
20	65	48	68
24	56	49	41
28	46	42	36
32	51	39	36
36	44	40	37
40	36	36	35
44	43	36	39
48	41	35	34
52	42	35	38
56	42	33	35
60	44	34	37
64	45	33	37
68	39	33	39
72	41	34	38
76	37	34	42
80	36	34	41
84	46	33	41
88	47	36	43
92	43	37	47
96	40	37	48
100	41	36	47
104	41	38	51
108	57	38	46
112	43	38	53
116	46	39	52
120	41	37	49
124	47	41	61
128	48	43	57
129	51	44	53

* Thermocouple Malfunction

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

Time	T/C	T/C	T/C
	Number		Number
Mins	16	17	18
	Deg. C	Deg. C	Deg. C
0	17	17	17
1	113	160	99
2	189	308	281
3	256	442	453
4	208	271	227
5	149	171	122
8	90	133	125
12	80	98	51
16	86	88	57
20	80	32	64
24	84	62	69
28	83	62	69
32	85	60	66
36	82	58	64
40	78	57	62
44	81	57	60
48	81	55	58
52	63	55	57
56	65	55	57
60	68	55	57
64	67	55	56
68	69	57	57
72	72	57	58
76	72	59	58
80	72	61	59
84	74	62	60
88	78	63	61
92	82	66	63
96	82	67	64
100	83	68	65
104	85	70	66
108	86	70	67
112	88	72	68
116	91	74	71
120	93	76	72
124	94	78	73
128	94	79	75
129	94	79	76

Individual temperatures recorded by the suspended thermocouples above the cavity of Specimen C

Time	T/C	T/C	T/C
	Number	Number	Number
Mins	22	23	24
	Deg. C		Deg. C
0	17	17	17
1	308	311	410
2	281	320	373
3	314	404	444
4	262	294	174
5	176	187	94
8	135	118	63
12	92	100	47
16	75	89	47
20	66	82	57
24	58	53	66
28	80	54	58
32	70	56	59
36	61	51	63
40	54	48	66
44	52	43	90
48	54	47	109
52	60	41	127
56	67	42	139
60	67	42	148
64	41	28	49
68	39	26	49
72	40	26	50
76	42	25	51
80	42	29	53
84	41	35	56
88	44	31	59
92	46	29	64
96	52	32	71
100	58	31	70
104	73	29	70
108	83	42	75
112	76	32	83
116	83	34	98
120	79	36	114
124	70	38	118
128	69	41	133
129	68	48	134

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	•	•	
Time	T/C	T/C	T/C
	Number	Number	Number
Mins	25	26	27
	Deg. C	Deg. C	Deg. C
0	17	16	17
1	314	53	114
2	372	181	314
3	418	264	443
4	318	410	310
5	209	*	180
8	159	*	99
12	35	*	35
16	30	*	30
20	30	56	30
24	29	72	28
28	37	87	28
32	37	94	27
36	36	111	26
40	36	127	25
44	36	137	27
48	38	142	26
52	37	156	38
56	40	165	40
60	40	173	42
64	*	181	47
68	*	191	46
70	*	196	50
71	*	200	51
72	*	203	49
76	*	216	48
80	*	227	50
84	*	232	55
88	*	250	59
92	*	268	68
96	*	287	86
100	*	312	101
104	*	344	109
108	*	379	131
112	*	413	157
116	*	447	181
120	*	467	206
124	*	475	233
128	*	484	288
129	*	487	306

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

* Thermocouple Malfunction

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





Table Showing Recorded Furnace Pressure 450mm Below The Floor Construction

On-going Implications

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The results relate only to the behaviour of the specimen 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.

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.

As no movement was induced into the specimen during the test there can be no evaluation of the performance of the seal where movement is induced in a building under actual fire conditions

This report Supersedes report referenced 538815A Issued 12 April 2024

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

General	The results of the fire test are directly applicable to similar constructions where one or more of the changes listed below are made:
	A) Increase in the length of the cavity barrier provided that a minimum of 900 mm is tested.
	B) Decrease in distances of fixing centres.
	C) Void size can be interpolated between minimum and maximum voids tested.D) If a single void size is tested, the result is only applicable to that void size.
	E) A decrease in the gap between the seal and any external cladding subject to any minimum requirements for ventilation purposes e.g. CWCT requirement for not less than 25 mm, NHBC requirements etc. Note: applying this rule shall not result in the surface of any combustible insulation being closer to the edge of the seal (air gap) than tested.
Substrates	Testing using a combustible substrate covers a non-combustible substrate.
Insulation	 Test on insulation running behind the cavity will cover interrupted insulation For continuous insulation the following insulation hierarchy is used: Best – stone wool, phenolic, PIR, glass wool, PUR, EPS – Worst For interrupted insulation the following insulation hierarchy is used:
	Best – stone wool, glass wool, phenolic, PIR, , PUR, EPS – Worst

Sample Report

warringtonfire

Sample Report

This report provides a record of the information relating to samples taken by Warringtonfire Testing and Certification Limited trading, or its agent, for certification of the products detailed below.

Job No.	FM428958	
Manufacturer	Tenmat Ltd	
Manufacturing site	Ashburton Road West, Trafford Park, Manchester M17 1TD	
Place of sampling	As above - remote sample from stock. Via MS Teams	
Traceability information	Date/time of production: Week 48 -2019 – 27.11.2019 Production unit/line: Millboard line Batch number: Task 4807 Shift: - 0600hrs – 1400hrs	
Product Number/ Description	FF107 (Firefly Intumescent Millboard) 2150 x 1150 x 6 mm Sheet	
Marking of the product by the manufacturer e.g. label, batch number and date of manufacture	No marking	
Marking of the samples by Warringtonfire Testing and Certification Limited	Job No: WF 428958 – 426869 - Sheet 1 to 10 Date: 15.5.2020 Signature or initials: Ian Hainsworth	
Stock/batch quantity from which samples selected and sample quantity	31 Sheets 10 sheets selected and numbered.	
Results of tests and/or inspections during manufacture	See attached supporting evidence.	
Essential Characteristics to be tested ie. Test reference	Specific Ad hoc tests	
Samples to be dispatched by manufacturer to *** within *** weeks/month(s)	To Warringtonfire – for June 2020	
Date of sampling	15.5.2020 (remote - live via MS Teams)	
Warringtonfire Testing and Certification Limited notified body number	1121	

Warringtonfire Testing and Certification Limited Registered Office: 10 Lower Grosvenor Place, London, United Kingdom, SW1W 0EN. Company Registration No.11371436

Doc. Ref. EWC-QU-FT-90 (Issue 3 - 29/11/2018)

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7	warringtonfire Proud to be part of @ element
Signed: IHainsworth	Signed:
(for and on behalf of Manufacturer)	(for and on behalf of Warringtonfire Testing and Certification Limited)
Print: Ian Hainsworth	Print: Stephen.Holles
Date: 15.5.2020	Date:

Warringtonfire Testing and Certification Limited Registered Office: 10 Lower Grosvenor Place, London, United Kingdom, SW1W 0EN. Company Registration No.11371436

Doc. Ref. EWC-QU-FT-90 (Issue 3 - 29/11/2018)

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This report provides a record of the information relating to samples taken by UL INTERNATIONAL (UK) LTD, or its agent, for attestation of conformity of the products noted below.

Project Number	13589894
Manufacturer	TENMAT LTD
Manufacturing plant	BOWDON HOUSE ASHBURTON RD W TRAFFORD PARK M17 1RE UNITED KINGDOM
Place of sampling	At manufacturing plant
Date of sampling	25 th January 2021
Stock/batch quantity from which samples selected	Sheet batch 0409 Manufacturing shop order Q5282
Number/quantity of samples	6 Requested (10 Shipped)
Identification of the product in accordance with the technical specification	FF102/50
Manufacturer's marks including batch no. and date of manufacture	FF102/50 Batch number Q5282
Sampler's marks	π on label & initials TC on foil
Properties to be tested	T.B.C
UL notified body number	NB 0843

Signed, bus pm for and on behalf of UL INTERNATIONAL (UK) LTD

Signed

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