

Fire resistance test report

Issuing laboratory: Warringtonfire Testing and Certification Limited

Test standard: BS EN 1634-1:2014 + A1:2018

Test sponsor: Wood International Agency Ltd

16 King Edward Road
Brentwood
Essex
CM14 4HL
United Kingdom

Product: Talisman 54 - Single-Acting, Single-Leaf Timber Doorsets

Report number: 557579/R

Test date: 18 February 2026

Issue: 1

Warringtonfire, accredited for compliance with ISO/IEC 17025:2017 – Testing

Registered Laboratory:
Warringtonfire
Holmesfield Road
Warrington
Cheshire
WA1 2DS
United Kingdom



Approved Body Number 0833



Summary of Tested Specimen

For the purposes of the test the doorsets were referenced as **Doorset A** and **Doorset B**. Both doorsets were installed into two apertures within a rigid low density blockwork supporting construction.

Both **Doorset A** and **Doorset B** had overall nominal dimensions of 2174 mm high by 992 mm wide, incorporating a single door leaf with nominal dimensions of 2135 mm high by 926 mm wide by 54 mm thick. The door leaves were hung within a Framebreak EU 550 frame on three stainless steel hinges, such that the leaves opened into the heating conditions. The door leaves were formed from a pine/spruce/poplar/MGO door blank core element with the door leaves referenced 'Talisman 54'. Both leaves had an 8 mm lipping adhered to all edges. Both doorsets incorporated a stainless steel lockset referenced 'CH7260FR' which remained latched and unlocked throughout the test.

Structural opening size – 2194 mm high by 1022 mm wide

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.

Test Results

Integrity It is required that the specimen retains its separating function, without either causing ignition of a cotton pad when applied or permitting the penetration of a gap gauge as specified in BS EN 1634-1: 2014 + A1:2018 or resulting in sustained flaming on the unexposed surface. **These requirements were satisfied for the periods shown below:**

	Specimen A		Specimen B	
Sustained flaming	75 minutes	Failure	69 minutes	Failure
Gap gauge	75 minutes	No failure*	69 minutes	Area extinguished
Cotton pad	75 minutes	Due to sustained flaming	69 minutes	Due to sustained flaming

Insulation (I₂) The mean temperature rise of the unexposed surface shall not be greater than 140°C and that the maximum temperature rise shall not be greater than 180°C with the exception that the limit for temperature rise for any frame member or transom member adjacent to the leaf/leaves of the doorset or openable window shall be 360°C. Insulation failure also occurs simultaneously with integrity failure as specified in BS EN 1634-1: 2014 + A1:2018. **These requirements were satisfied for the period shown below:**

Specimen	71 minutes	Exceeded maximum temperature criteria TC24	65 minutes	Exceeded maximum temperature criteria TC47
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Insulation (I₁) The test specimen shall be evaluated against the maximum temperature rise criterion specified in EN 1363-1: 2020 (180°C).

Specimen	70 minutes	Exceeded maximum temperature criteria TC27	64 minutes	Exceeded maximum temperature criteria TC43
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*Test was discontinued after a period of 75 minutes.

Date of test 18 February 2026

Location of test Element Materials Technology, 722 Birchwood Park, Warrington WA3 6FW, United Kingdom

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Quality Management

Issue No: 1		Issue Date: 21 July 2026	
Responsible Officer:	P. White Technical Officer	Approved By:	S. Whittle Testing Manager
			

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

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Test Conditions

Standard

In accordance with BS EN 1634-1:2014+A1:2018 Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware - Part 1: Fire resistance test for door and shutter assemblies and openable windows.

Sampling

A representative of **BMTrada** sample selected the following components of the tested specimen:

Component	Sampling date	Sampling report reference
Doorset A Blank	14/01/2026 – 16/01/2026	SC26047B
1 no. Single Acting Single Leaf Doorset (Doorset A)	10/02/2026 – 11/02/2026	SC26087T
Doorset B Blank	07/11/2026	SC23257B
1 no. Single Acting Single Leaf Doorset (Doorset B)	10/02/2026 – 11/02/2026	SC26086T

Copies of sampling reports are included in the Sample Report section.

Installation

The doorsets were received on the 17 February 2026 and mounted within an apertures in a blockwork wall construction; the leaves were single-acting and could open into the furnace only. Representatives of **the Test Sponsor** conducted the installation on the 17th February 2026.

Specimen Direction

Tested specimen **A** was **asymmetrical**. Specimen **B** was **asymmetrical** The **Test Sponsor** defined the direction in which the specimen was tested, and it is shown in the test specimen drawings section of this report.

Conditioning

The specimen's storage, construction, and test preparation took place in the test laboratory over a total, combined time of 5 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 11.5°C to 21.5°C and 30% to 54.5% respectively.

Instruction to Test

The test was conducted on the 18 February 2026 at the request of Wood International Agency Ltd, the **Test Sponsor**.

Neil Harrison a representative of the **Test Sponsor** witnessed the test.

Pre-Test Conditioning

Prior to testing, the doorset was subjected to appropriate mechanical pre-test conditioning in accordance with the below requirements:

Test	Relevant Clause	Description	Comments
Operability	A.2.2 of EN 16034	25 cycles	25 cycles completed
Final setting	10.1.4 of EN 1634-1: 2018	1 cycle	1 cycle completed

Ambient Temperature

The ambient air temperature in the vicinity of the test construction was 15°C at the start of the test with a maximum variation of +1°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 nine plate thermometers, distributed over a plane 100 mm from the surface of the test construction.

Thermocouples

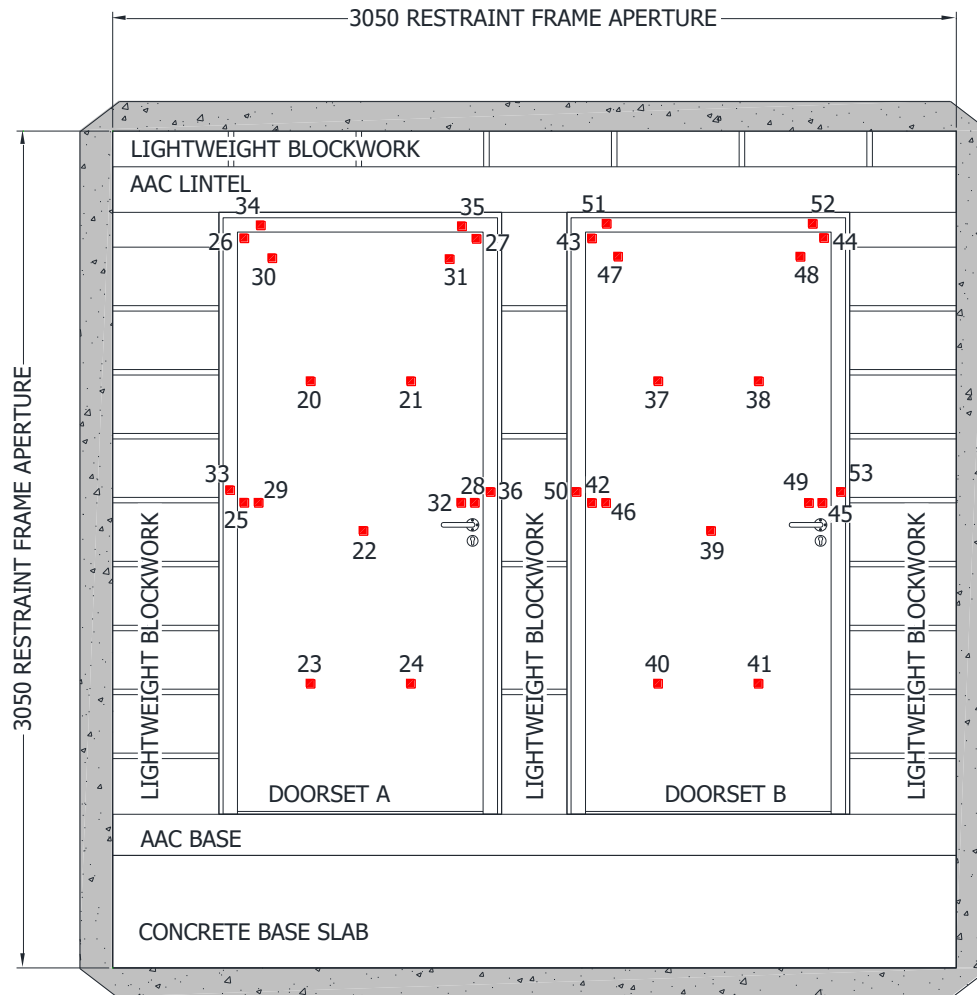
Thermocouples were provided to monitor the unexposed surface of the specimens. The output of all instrumentation was recorded at no less than one minute intervals. The locations and reference numbers of the various unexposed surface thermocouples are shown in Figure 1.

Furnace Pressure

After the first five minutes of testing and for the remainder of the test, the furnace atmospheric pressure was controlled so that it complied with the requirements of BS EN 1363-1: 2020, clause 5.2.1 The calculated pressure differential relative to the laboratory atmosphere at the top of the specimen was 14.2 ($\pm$ 5) Pa between 5 and 10 minutes and 14.2 ($\pm$ 3) Pa thereafter.

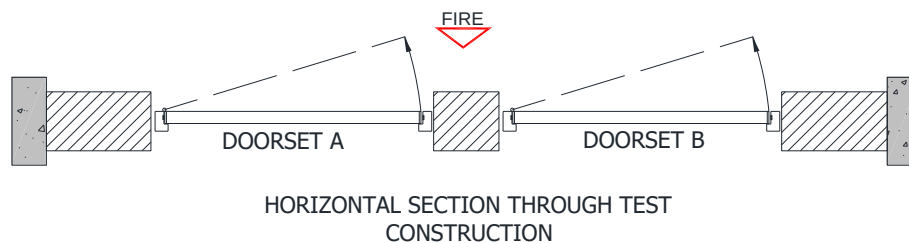
Due to necessary adjustments of the gas and air input to control the furnace, pressures outside the specified tolerances were recorded sporadically at short intervals. As the pressure fluctuations recorded at those intervals did not represent the pressure conditions throughout the test, their effect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

Test Specimen Drawings



■ POSITIONS OF THERMOCOUPLES

GENERAL ELEVATION OF TEST CONSTRUCTION
UNEXPOSED FACE



HORIZONTAL SECTION THROUGH TEST
CONSTRUCTION

Figure 1. Elevation of Thermocouple Positions – Unexposed Face

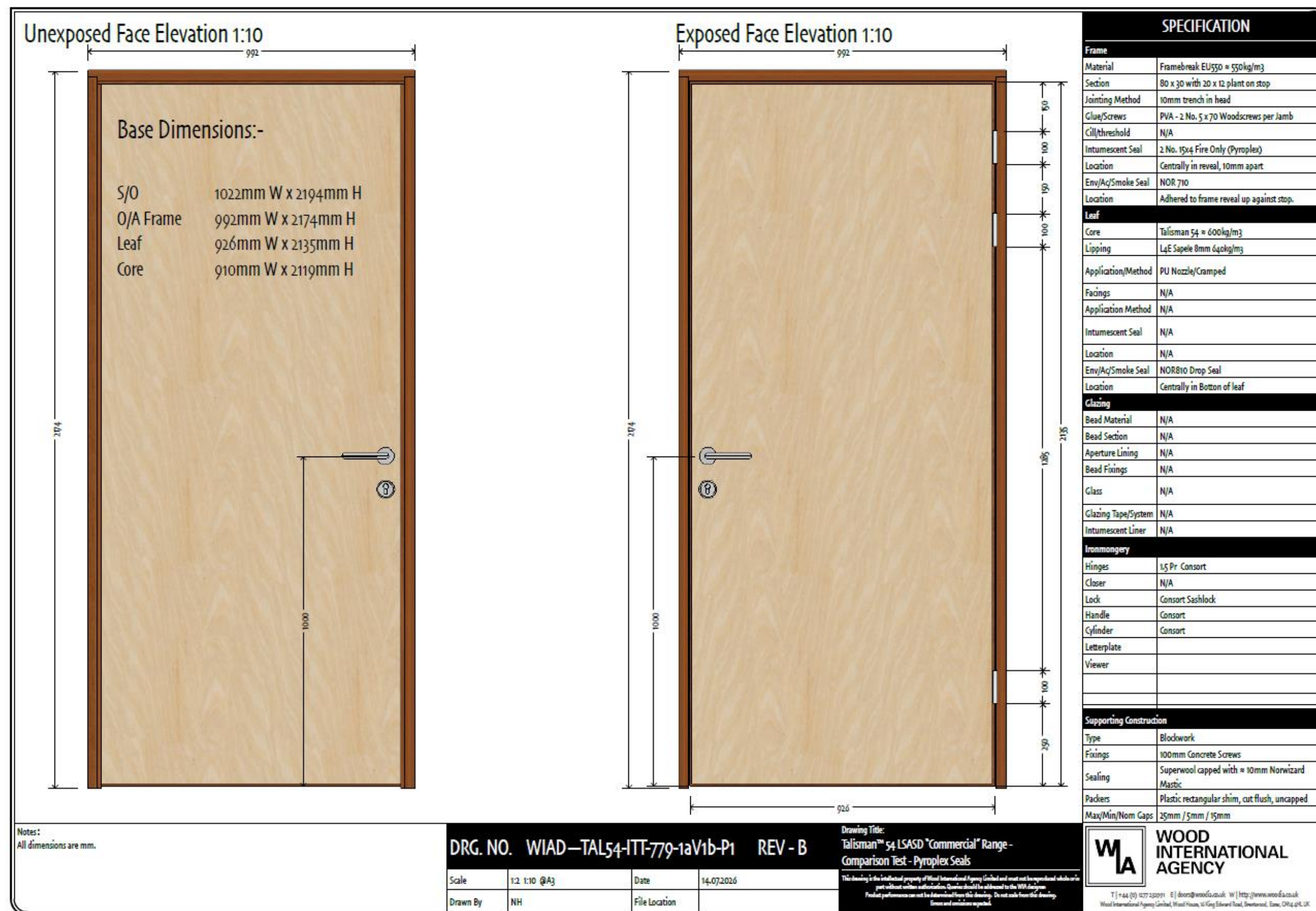


Figure 2. WIAD—TAL54-ITT-779-1aV1b – Page 1

Test date: 18/02/2026

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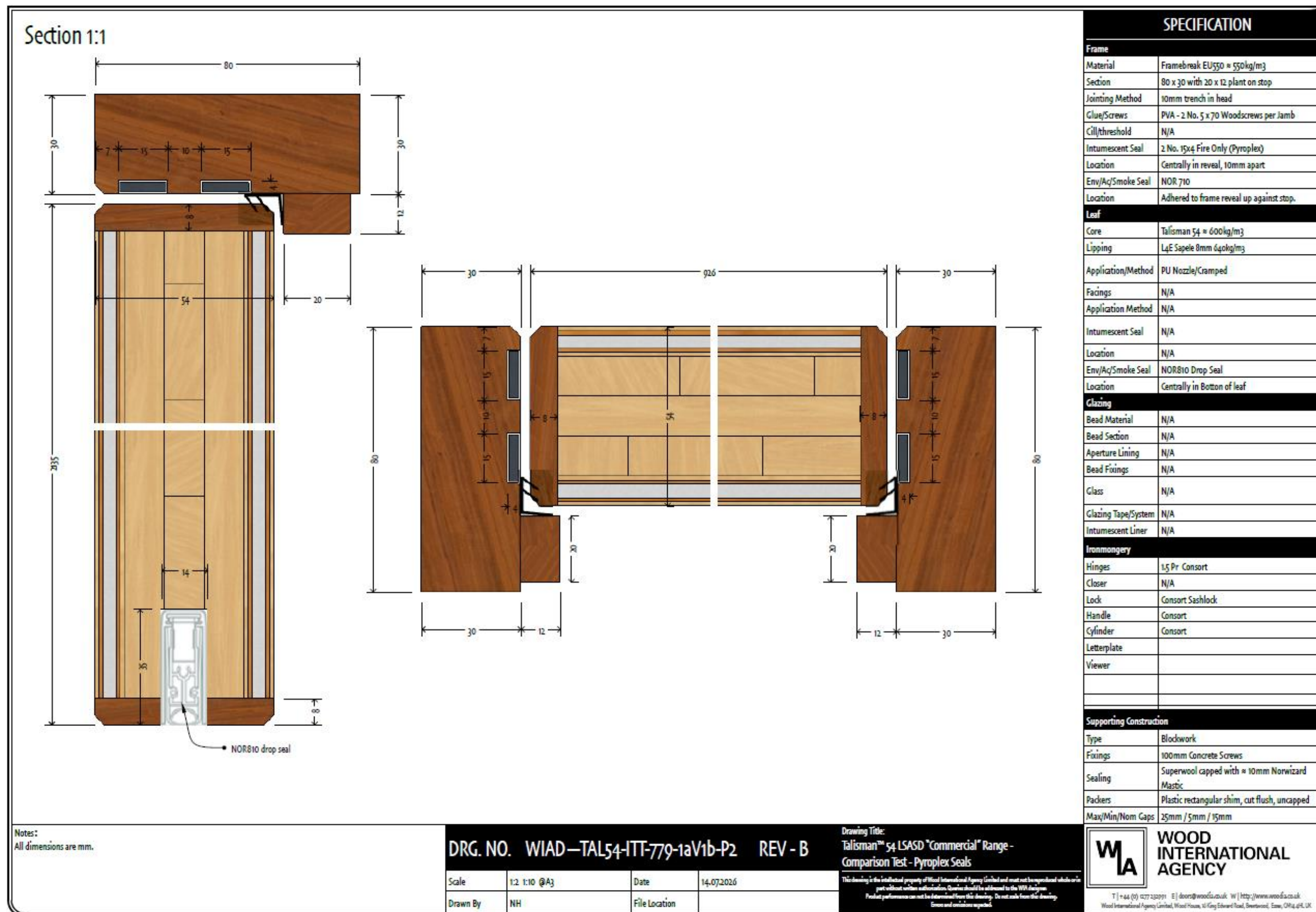


Figure 3. WIAD-TAL54-ITT-779-1aV1b – Page 2

Test date: 18/02/2026

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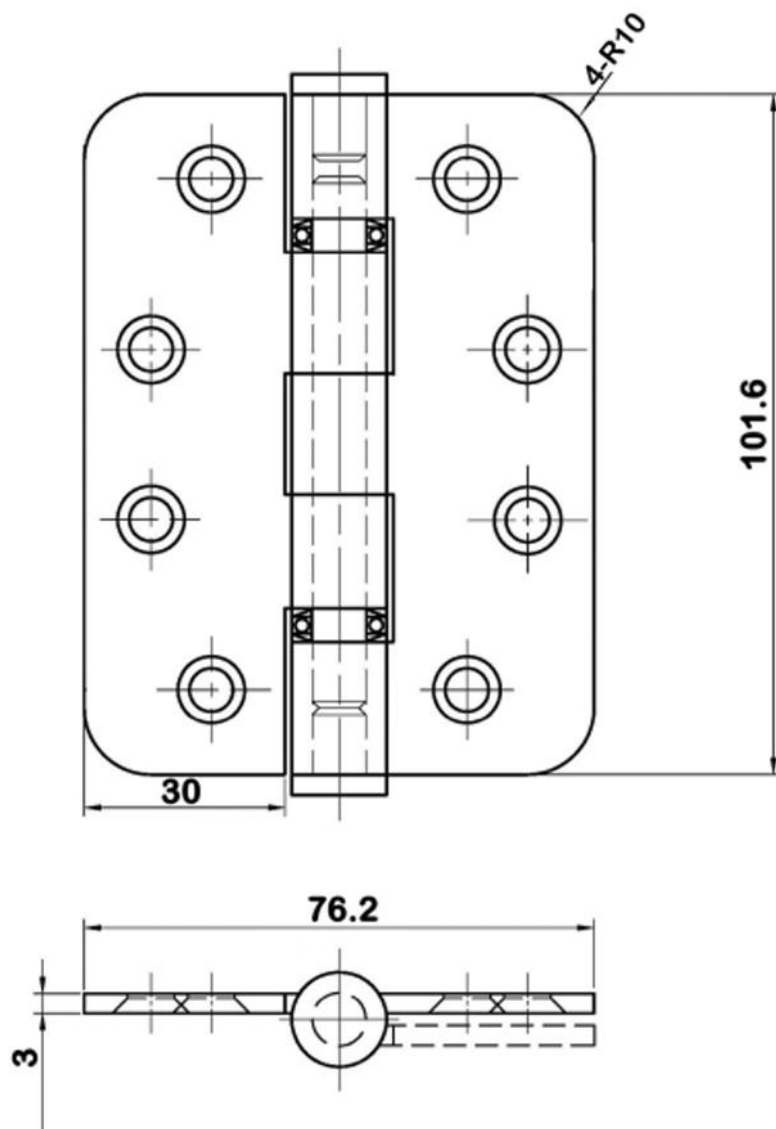


Figure 4. Item 12 – Consort CBH102R.SSS Hinge Drawing

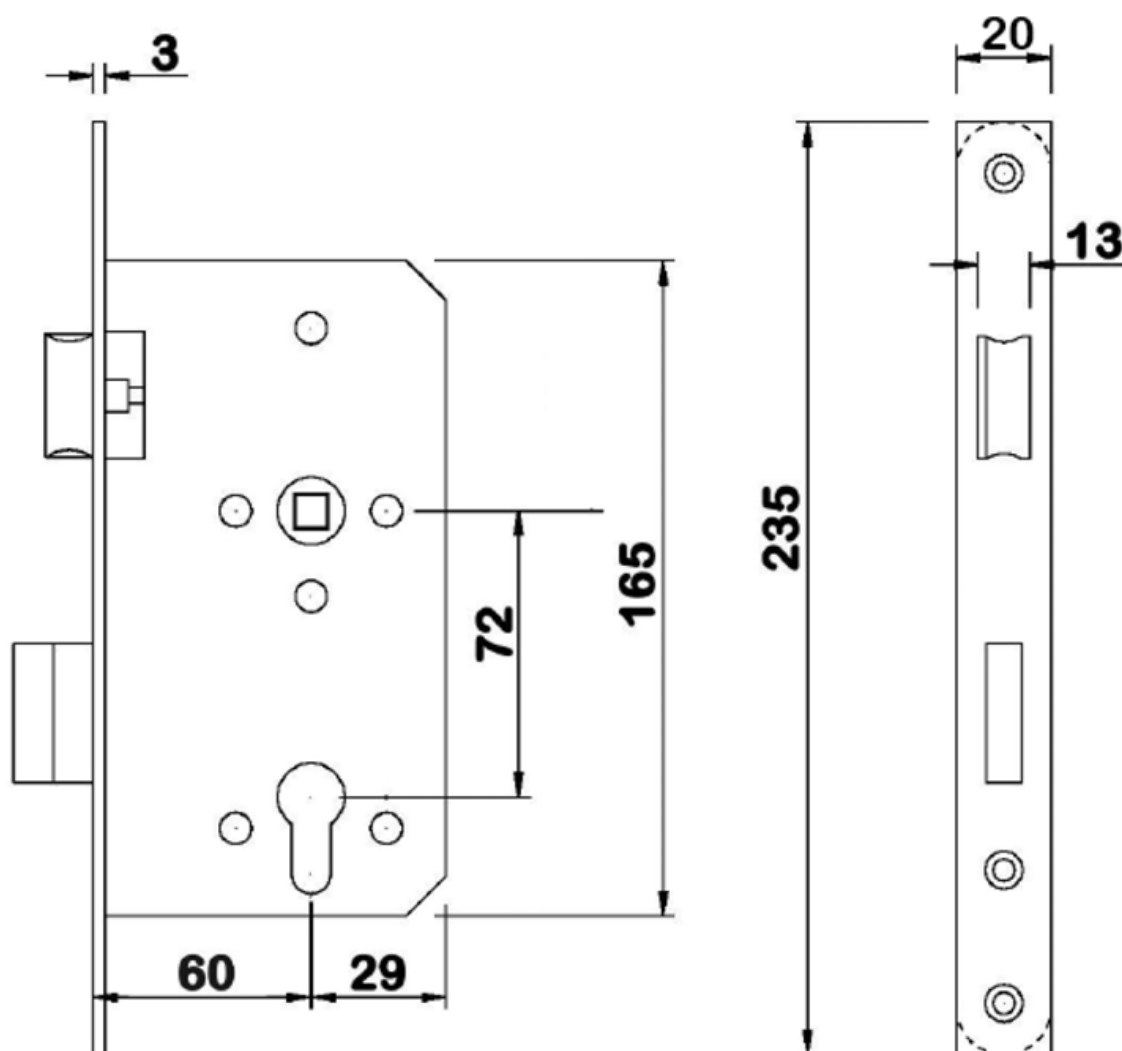


Figure 5. Item 14 – Consort CH7260FR Lockset Drawing

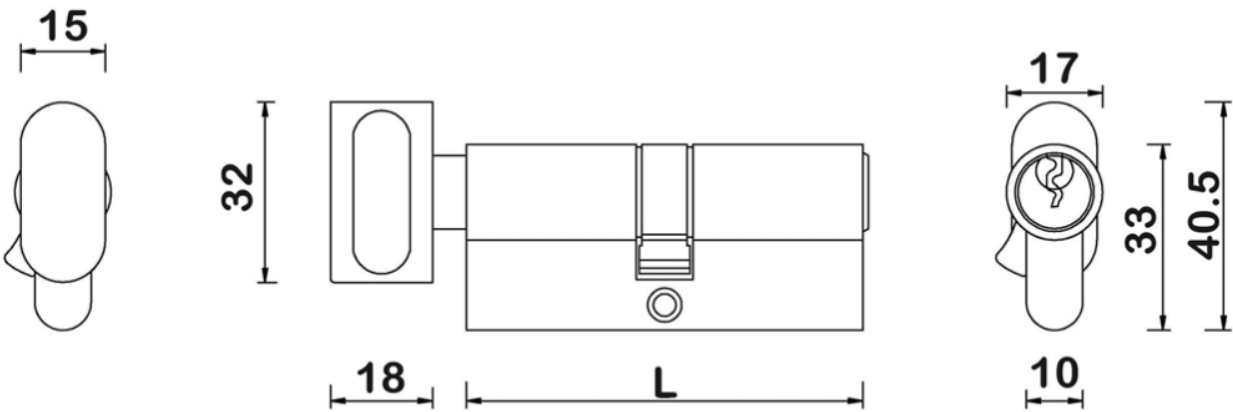


Figure 6. Item 16 – Consort CH 783.2.SNP Cylinder Drawing

Schedule of Components

Schedule of components

Door Frame

1. Door Frame	
Manufacturer	By Deesign Carpentry
Reference	N/A
Material	Framebreak EU 550 Head and Jambs
Density	550 kg/m ³ (stated)
Density recorded at sampling visit	619-638 kg/m ³
Moisture content recorded at sampling visit	16-18%
Moisture content recorded at test lab	
Doorset A	14.9% (measured using a Protimeter at WarringtonFire)
Doorset B	14.1% (measured using a Protimeter at WarringtonFire)
Overall size	992 mm x 2174 mm
Frame (Head)	80 mm wide x 30 mm thick
Frame (Jambs)	80 mm wide x 30 mm thick
Stop	20 mm wide x 12 mm deep
Jamb to Head jointing method, fixing detail and location	2 No. Woodscrews 5 mm x 70 mm though head into end grain of each jamb. Pilot Holes beforehand. Heads trenched by 10 mm
Stop to Frame jointing method, fixing detail and location	To be fitted at lab: Pinned to frame with 30 mm 18g pins
Presence of Adhesives	Yes
Manufacturer	Wurth
Type	PVA on trenched joints in head
Reference	D4 PVA ready mix
Curing method	Evaporation
Application method	By hand
2. Frame Fixing Method to Supporting Construction	
Supplier	Wurth
Reference	0234730102
Type & material	Blue passivated galvanised steel countersunk milling head screw
Overall size	Ø7.5 mm x 102 mm
Spacing	From the bottom: 100 mm, 700 mm, 1300 mm, 1900 mm, 2046 mm

Does the fixing penetrate intumescent seal within frame reveal	No
Packing Material	Plastic
Packing Material Dimension	28 mm x 100 mm x 1-6 mm (stacked as necessary)
Packing Material Location	Between door frame and supporting construction
3. Intumescent to Frame Reveal	
Quantity	2
Manufacturer	Pyroplex
Reference	8700
Material	PVC Encased Graphite
Overall section size	15 mm wide x 4 mm thick
Application method	Friction & self-adhesive back
Location (relative to the opening face of the door leaf)	7 mm and 32 mm (so 10 mm apart) Further details on marked position of intumescent joints on frame jambs: -150 mm distance from top on exposed groove - 150 mm distance from bottom unexposed groove
Presence of Adhesives	Yes
Location	Self-adhesive on back of strips as manufacturer
4. Smoke Seal to Frame Reveal	
Manufacturer	Norseal
Reference	NOR710
Material	PVC
Overall section size	10.75 mm x 10.2 mm
Application method	Self-adhered to frame reveal
Location	Against stop upstand
Presence of Adhesives	Self-adhesive to rear of seal

Fire Stopping

5. Frame to Supporting Construction Fire Stopping Detail	
Manufacturer	Morgan Advanced Materials
Reference	Superwool Plus
Material	High temperature insulation wool
Thickness	25 mm, uncompressed
Density	96 kg/m ³ (stated)
Fixing method	Compressed within the gap between the specimen and the restraint frame
6. Sealant to Fire Stopping Detail	
Manufacturer	Norseal
Reference	Firewizard
Material	Intumescent Acrylic Sealant
Overall dimension	Approximate 10 mm bead
Application method	Cartridge gunned around perimeter of the door frame to both faces

Door Leaf

7. Door Leaf	
Manufacturer	Wood International Agency Limited
Reference	Talisman 54
Density	585-631 kg/m ³
Quantity of leaves on doorset	1
Overall leaf size prior to trimming	910 mm x 2119 mm
Overall leaf size supplied for testing	926 mm wide x 2135 mm high x 54 mm thick
Moisture content recorded at test lab	
Doorset A	7.0% (recorded using a Protimeter at WarringtonFire)
Doorset B	7.0% (recorded using a Protimeter at WarringtonFire)
8. Core Element 1	
Manufacturer	Wood International Agency Limited
Reference	Doorset A – Talisman 54 – Blank sampled against SC26047B Doorset B - Talisman 54 - Blank sampled against SC23257B
Material	Pine/Spruce/Poplar/MGO Blank
Density recorded at sampling visit	

Doorset A	SC23257B: Lamel core 409 kg/m ³ 12%MC Blank with facing 585 kg/m ³ 13% MC
Doorset B	SC26047B: Lamel core 458 kg/m ³ 12%MC Blank with facing 631 kg/m ³ 13% MC
9. Core Element 2	
Confidential information withheld, on file with Warringtonfire	
10. Facings	
Confidential information withheld, on file with Warringtonfire	
11. Lippings / Edge Banding	
Manufacturer	Wood International Agency Limited
Reference	Std Sapele Lipping
Material	Sapele
Density	640 kg/m ³ (nominal)
Density recorded at sampling visit	665-772 kg/m ³
Moisture content at sampling visit	14-15%
Overall size	54 mm wide x 8 mm thick Verticals lipping overrun horizontals
Fixing method	Glued to leaf edges, adhesive manually spread, ambient temperature
Location	All edges
Adhesives	Yes
Manufacturer	Würth
Type	PU "Rapid MCPU adhesive"
Curing method	Moisture
Application method	Hard spread and cramped
Presence of Mechanical Fixings	No

Hardware

12. Hinges	
Supplier	Consort
Reference	CBH102R.SSS
Quantity	3
Primary material	Stainless Steel
Type	Butt hinges
Sizes	
knuckle	Ø14 mm x 107 mm
blades	101.6 mm x 76.2 mm x 3 mm
security pin	None
Fixings	
type	Wooden screws
material	Stainless steel
sizes	30 mm x 4.5 mm
number off per blade	4
Position of each hinge relative to the head of the leaf	Top Hinge: 150 mm from top leaf to top blade Central hinge: 150 mm from bottom of top blade to top of central blade Bottom hinge: 250 mm from bottom of leaf to bottom of bottom blade
Details of intumescent protection	1 mm IPK.CBH102 BASF Interdens pads under each blade
Interruptions to Intumescent within the frame reveal	Exposed side intumescent – Fully interrupted Unexposed side intumescent – Not interrupted
13. Drop Down Seal	
Manufacturer	Norseal
Reference	NOR810
Material	Aluminium
Overall sizes	
Body	14 mm wide x 35 mm high
Length	To suit leaf
Face plate	On both sides of leaf ref Norsound 5125 kw 41/2025
Fixing method, type and locations	2.87 mm x 16.44 mm st steel screws (1 per side) ref Nonsounds 5125 kw 41/2025
Location within leaf	Central on bottom leaf
Maximum operating drop	20 mm

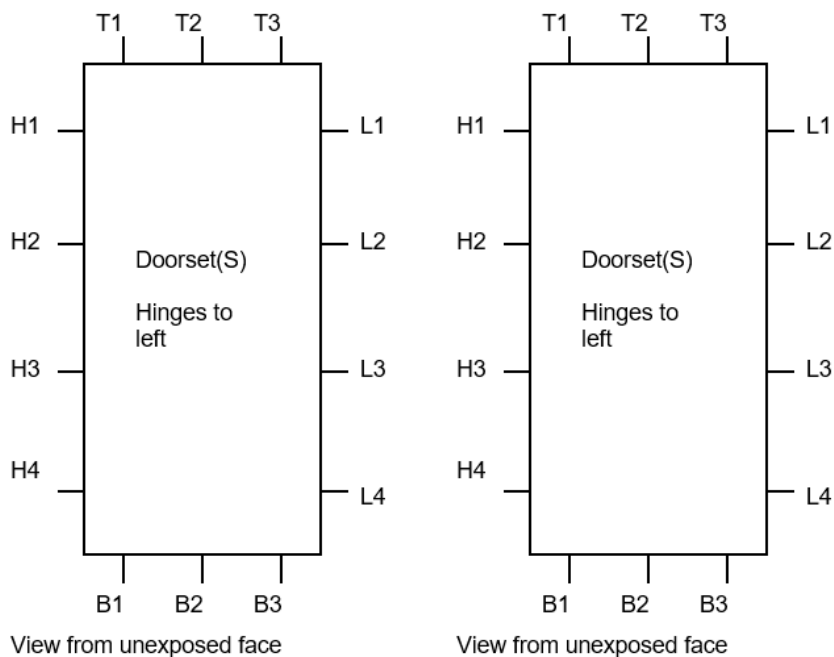
14. Lockset	
Manufacturer	Consort
Reference	CH7260FR
Material	Stainless steel
Overall sizes	
Central Lockcase	165 mm high x 20 mm wide x 89 mm deep
Forend plate	235 mm high x 20 mm wide x 3 mm thick
Latch bolt	30 mm high x 13 mm wide x 10 mm projection
Lock bolt	35 mm high x 9 mm wide x 20 mm projection
Fixing method	Stainless steel screws 30 mm x 4.73 mm provided with CH7260FR.
Operation of latch bolt	Engaged
Operation of lock bolt	Disengaged
Latch Forces	
Doorset A	7.4 N
Doorset B	6.7 N
Details of intumescent protection	
Central lockcase	1.0 mm graphite Consort intumescent kit code IPK/lock/1/SA around lock body,
Forend plate	1.0 mm graphite Consort intumescent kit code IPK/lock/1/SA
Location of centre of the spindle relative to the bottom of the leaf	1000 mm
Location of centre of latch bolt relative to the bottom of the leaf	Centre of the latch bolt measures 1028 mm from the bottom of the leaf
Location of centre of lock bolt relative to the bottom of the leaf	Centre of the latch bolt measures 950 mm from the bottom of the leaf
15. Keeps	
Manufacturer	Consort
Reference	Sashlock Keep part of CH7260FR
Material	Stainless steel
Centre Strike Plate and Keep	Positions and cut apertures: From top of head 1063 mm from head, 1233 mm to bottom of keep 24 mm cut aperture, depth of cut 4.82 mm width of latch mortice 21.12 mm 21.67 mm depth of cut, length of mortice 57.34 mm Mortice locking same width, 26.14 mm depth.
Overall sizes	170 mm high x 25 mm wide (40.1 mm inc. lip/return x 66 mm long) x 1.5 mm thick
Fixing method	3 No. 16.55 mm x 3.42 mm stainless steel screws

Details of intumescent protection	1.0 mm graphite Consort intumescent kit code IPK/lock/1/SA on back
Centre Strike Plate and Keep	1.0 mm graphite Consort intumescent kit code IPK/lock/1/SA applied in lined aperture for receiving the 2 plastic cases for the keeps in frame section.
Interruptions to Intumescent within the frame reveal	Exposed side intumescent – Fully interrupted Unexposed side intumescent – Partially interrupted
16. Cylinder	
Manufacturer	Consort
Reference	CH 783.2.SNP
Material	Stainless steel
Overall size	70 mm x 33 mm x 17/10 mm 38.46 mm x 20.5 mm aperture in leaf
17. Lever Handle	
Manufacturer	Consort
Reference	CH100.SSS
Material	Stainless steel
Overall size	Ø19 mm x 140 mm on rose 52 mm x 6 mm Projection 65 mm Aperture in blank Ø16.67 mm
Fixing method, fixing material, sizes, quantity and location	Spindle 1000 mm to bottom of leaf Bolt through fixings (3.9 mm diameter stainless steel)
Details of intumescent protection	None
18. Escutcheon	
Manufacturer	Consort
Reference	CH311.6.SSS
Material	Stainless steel
Overall size	52 mm x 6 mm
19. Q-Mark	
Quantity	2 Off
Type	Plugs
Hole size	Ø9 mm
Location	Centrally on door leaf 292 mm & 310 mm from the top of leaf to centre of plugs

Supporting Construction

20. AAC Lintel	
Type	Steel reinforced concrete lintel
Material	Steel reinforced autoclaved aerated concrete
Density	550 ~ 650 kg/m ³
Overall size	150 mm wide x 250 mm high x 1525 mm long
21. AAC Base	
Type	Steel reinforced concrete base
Material	Steel reinforced autoclaved aerated concrete
Density	550 ~ 650 kg/m ³
Overall size	150 mm wide x 600 mm high x 3000 mm long
22. Lightweight Blockwork	
Manufacturer	THERMALITE
Reference	THERMALITE Shield
Material	Lightweight concrete blocks
Thickness	150 mm wide x 215 mm high x 440 mm long
Density	884 kg/m ³ (measured)
Fixing Method	Ordinary sand/cement mortar, mix 3:1
23. Concrete Base Slab	
Type	Steel reinforced concrete lintel
Material	Steel reinforced concrete
Density	1652 kg/m ³ (measured)
Overall size	355 mm wide x 400 mm high x 3000 mm long

Doorset clearance gaps



Doorset A (mm)					
Hinge Side	Primary	Leaf to Stop	Leading Edge	Primary	Leaf to Stop
H1	3.3	2.6	L1	1.9	2.2
H2	2.9	2.0	L2	2.7	1.3
H3	2.5	1.4	L3	3.1	1.9
H4	3.4	1.0	L4	3.2	2.6
Mean	3.0		Mean	2.8	
Max	3.4		Max	3.2	
Min	2.5		Min	1.9	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	3.1	0.9	B1	6.6	
T2	3.6	0.9	B2	5.7	
T3	4.1	1.2	B3	5.5	
Mean	3.6		Mean	5.9	
Max	4.1		Max	6.6	
Min	3.1		Min	5.5	
Doorset B (mm)					
Hinge Side	Primary	Leaf to Stop	Leading Edge	Primary	Leaf to Stop
H1	2.9	0.8	L1	2.8	1.1
H2	3.2	0.8	L2	1.5	0.8
H3	3.2	1.8	L3	1.7	1.3
H4	3.3	2.3	L4	1.1	1.4
Mean	3.1		Mean	1.8	
Max	3.3		Max	2.8	
Min	2.9		Min	1.1	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	3.4	0.8	B1	6.4	
T2	3.7	0.8	B2	6.9	
T3	3.8	0.8	B3	6.2	
Mean	3.6		Mean	6.5	
Max	3.8		Max	6.9	
Min	3.4		Min	6.2	

Test Observations

Time All observations are from the unexposed face unless noted otherwise.

mins secs

00	00	The Test Commences.
00	47	Audible crackling noises heard from specimen.
02	29	Smoke release emitted from threshold both doorsets.
03	00	Smoke release from the thumb turn on Doorset B.
05	23	Smoke release from upper leading edge Doorset A and continues from threshold of both Doorsets.
13	23	Yellow discolouration around door handle and cylinder on both door leaves.
15	16	Crackling noises continue from the specimens.
17	20	Smoke release from the thumb turn on Doorset A.
19	20	Slight brown discolouration at the head of Door Leaf B.
25	23	Slight yellow discolouration at the head of Door Leaf A.
29	38	Moisture visible at the top leading edge of both Doorset.
31	53	Slight brown discolouration on the upper middle hinge side of Doorset B.
34	52	Slight glowing behind Doorset A hinge side at the threshold.
35	53	Brown/black discolouration from the bottom hinge side of Doorset A and a slight black discolouration at the head of the doorset.
36	20	Brown discolouration around handles and cylinder at both doorsets with fluid seeping out from the cylinder.
32	20	Audible popping noise heard from specimens
40	32	Black discolouration around keyhole of Doorset B.
41	28	Fluid dropping out from the head of doorsets.
42	28	Black discolouration around thumb turn of Doorset A with fluid coming out.
46	15	Brown discolouration at the leading edge of Doorset A.
49	10	Brown discolouration on the frame heads of both doorsets.

Time

mins secs

54	30	Smoke release continues from both cylinders.
61	40	White intumescent seal has pulled away from the middle hinge side of Doorset B.
63	30	Burn through forming on the leaf of Doorset B at the centre.
64	42	Smoke release from the top left hinge of Doorset B.
69	10	Sustained flaming on the top left hinge side corner of Doorset B. Sustained flaming integrity failure is deemed to have occurred. Cotton pad integrity failure is also deemed to have occurred.
69	37	Sustained flaming on Doorset B has been extinguished with water. All modes of integrity criteria are no longer satisfied.
70	00	Burnthrough forming on the leaf of Doorset A to the left of the pull handle.
75	10	Sustained flaming on the burn through located on the leaf of Doorset A to the left of the pull handle. Sustained flaming integrity failure is deemed to have occurred. Cotton pad integrity failure is also deemed to have occurred.
75	32	The test is discontinued due to health & safety reasons.

Test Photographs

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



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



The unexposed
face of the
specimens after a
test duration of 10
minutes



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



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



The unexposed face of the specimens after a test duration of 40 minutes



The unexposed face of the specimens after a test duration of 50 minutes



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



The unexposed face of the specimens after a test duration of 69 minutes, showing sustained flaming of Doorset B in the top left-hand corner.



The exposed face of the specimens immediately after the test



Test Data

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

Time Mins	Specified Furnace Temperature Deg. C	Actual Furnace Temperature Deg. C
0	20	20
3	502	480
6	603	563
9	663	622
12	705	679
15	739	713
18	766	767
21	789	814
24	809	825
27	826	826
30	842	837
33	856	879
36	869	863
39	881	877
42	892	888
45	902	904
48	912	918
51	921	925
54	930	935
57	938	944
60	945	950
63	953	953
66	960	949
69	966	969
72	973	969
75	979	977

Individual and mean temperatures recorded on the unexposed surface of the Doorset A

Time Mins	T/C Number 20 Deg. C	T/C Number 21 Deg. C	T/C Number 22 Deg. C	T/C Number 23 Deg. C	T/C Number 24 Deg. C	Mean Temp Deg. C
0	15	15	15	15	15	15
3	15	15	15	15	15	15
6	15	15	15	15	15	15
9	15	15	15	15	15	15
12	16	15	15	15	15	15
15	16	15	16	16	15	16
18	16	16	16	16	16	16
21	17	17	17	17	16	17
24	18	18	18	18	17	18
27	19	19	20	20	19	19
30	21	21	22	22	21	21
33	24	24	24	25	23	24
36	28	27	27	27	26	27
39	31	31	30	31	30	31
42	37	35	34	35	34	35
45	42	39	38	39	38	39
48	46	45	42	45	44	44
51	50	52	47	53	53	51
54	55	62	55	63	66	60
57	61	74	66	75	78	71
60	67	79	75	82	85	78
63	75	89	77	89	96	85
66	77	95	78	94	111	91
69	83	88	90	95	149	101
71	96	87	97	98	194	114
72	98	88	100	100	220	121
75	107	98	130	108	281	145

Individual temperatures recorded on the door leaf 100 mm away from the edges on Doorset A

Time Mins	T/C Number 29 Deg. C	T/C Number 30 Deg. C	T/C Number 31 Deg. C	T/C Number 32 Deg. C
0	15	15	15	15
3	15	15	15	15
6	15	15	15	16
9	15	15	15	16
12	15	15	15	17
15	15	15	16	18
18	16	16	16	21
21	16	17	17	23
24	18	18	18	26
27	19	20	20	29
30	22	22	22	32
33	24	25	25	35
36	28	27	28	38
39	31	30	31	42
42	35	34	34	45
45	39	38	38	50
48	43	42	42	56
51	49	47	49	61
54	57	54	57	66
57	66	63	64	73
60	77	72	74	78
63	83	81	82	85
66	87	86	92	90
69	91	95	97	94
72	100	100	100	98
75	102	100	106	99

Individual temperatures recorded on the door leaf 25 mm away from the edges on Doorset A

Time Mins	T/C Number 25 Deg. C	T/C Number 26 Deg. C	T/C Number 27 Deg. C	T/C Number 28 Deg. C
0	15	15	15	15
3	15	16	15	15
6	15	18	15	16
9	15	21	21	20
12	16	24	24	26
15	17	26	27	32
18	18	29	31	37
21	21	32	32	39
24	23	40	36	43
27	27	46	40	47
30	30	50	43	50
33	33	56	47	56
36	37	58	52	64
39	41	58	57	72
42	45	64	62	80
45	49	68	68	87
48	53	72	75	91
51	60	80	84	93
54	68	88	94	96
57	76	98	100	98
60	83	103	103	102
63	87	108	108	108
66	96	115	124	120
69	96	143	160	139
70	98	159	179	147
71	101	177	199	156
72	106	198	230	165
75	122	253	321	193

Individual temperatures recorded on the door frame A

Time Mins	T/C Number 33 Deg. C	T/C Number 34 Deg. C	T/C Number 35 Deg. C	T/C Number 36 Deg. C
0	14	13	14	14
3	14	13	14	14
6	14	13	14	14
9	14	14	16	15
12	14	14	19	15
15	14	15	20	16
18	14	17	21	17
21	13	19	22	18
24	13	22	23	19
27	12	25	25	21
30	19	31	24	23
33	20	35	26	26
36	21	37	27	30
39	23	41	29	33
42	25	41	32	36
45	27	43	35	40
48	28	43	39	43
51	29	45	43	46
54	30	46	46	48
57	31	50	50	51
60	31	52	53	53
63	31	54	56	55
66	32	58	60	57
69	32	66	66	58
72	33	78	72	60
75	32	86	83	62

Individual and mean temperatures recorded on the unexposed surface of the Doorset B

Time Mins	T/C Number 37 Deg. C	T/C Number 38 Deg. C	T/C Number 39 Deg. C	T/C Number 40 Deg. C	T/C Number 41 Deg. C	Mean Temp Deg. C
0	15	15	15	15	15	15
3	15	15	15	15	15	15
6	15	15	15	15	15	15
9	15	15	15	15	15	15
12	15	15	16	15	15	15
15	16	16	16	15	15	16
18	16	16	16	16	16	16
21	17	18	17	17	16	17
24	18	19	18	18	17	18
27	20	21	20	19	19	20
30	22	23	21	21	20	21
33	24	26	24	24	23	24
36	27	30	27	26	25	27
39	31	36	31	28	28	31
42	36	41	36	31	31	35
45	42	47	41	35	34	40
48	49	53	47	39	38	45
51	57	60	56	44	41	52
54	67	70	68	52	46	61
57	70	79	75	62	52	68
60	76	87	80	71	59	75
63	87	84	82	79	66	80
65	92	83	87	82	70	83
66	92	83	91	84	71	84
69	96	84	100	92	78	90
72	96	91	109	100	84	96
75	109	106	122	107	99	109

Individual temperatures recorded on the door leaf 100 mm away from the edges on Doorset B

Time Mins	T/C Number 46 Deg. C	T/C Number 47 Deg. C	T/C Number 48 Deg. C	T/C Number 49 Deg. C
0	15	15	15	15
3	15	15	15	15
6	15	15	15	15
9	15	15	15	16
12	16	16	15	16
15	16	16	16	17
18	16	16	16	19
21	17	17	17	20
24	18	19	19	23
27	19	21	20	26
30	21	23	22	27
33	24	27	25	30
36	27	32	28	33
39	31	39	32	37
42	35	48	38	41
45	40	56	43	47
48	47	66	49	53
51	59	76	60	60
54	71	81	69	66
57	76	81	83	71
60	81	87	98	77
63	89	111	105	81
65	97	166	115	82
66	101	219	122	82
69	99	477	162	83
72	126	*	213	83
75	*	*	216	84

***Area extinguished**

Individual temperatures recorded on the door leaf 25 mm away from the edges on Doorset B

Time Mins	T/C Number 42 Deg. C	T/C Number 43 Deg. C	T/C Number 44 Deg. C	T/C Number 45 Deg. C
0	15	15	15	15
3	15	15	15	15
6	15	16	15	15
9	16	17	16	17
12	16	19	17	22
15	18	22	20	29
18	20	25	23	36
21	22	29	27	38
24	25	33	32	42
27	28	38	41	45
30	32	42	48	47
33	36	48	52	50
36	40	53	56	55
39	45	57	59	61
42	51	62	67	73
45	60	69	73	82
48	68	77	74	87
51	76	85	76	93
54	83	90	79	97
57	88	91	84	100
60	94	102	86	102
63	100	155	94	104
64	101	193	95	106
65	102	256	98	107
66	104	348	100	108
69	102	*	105	113
72	112	*	126	121
75	*	*	217	133

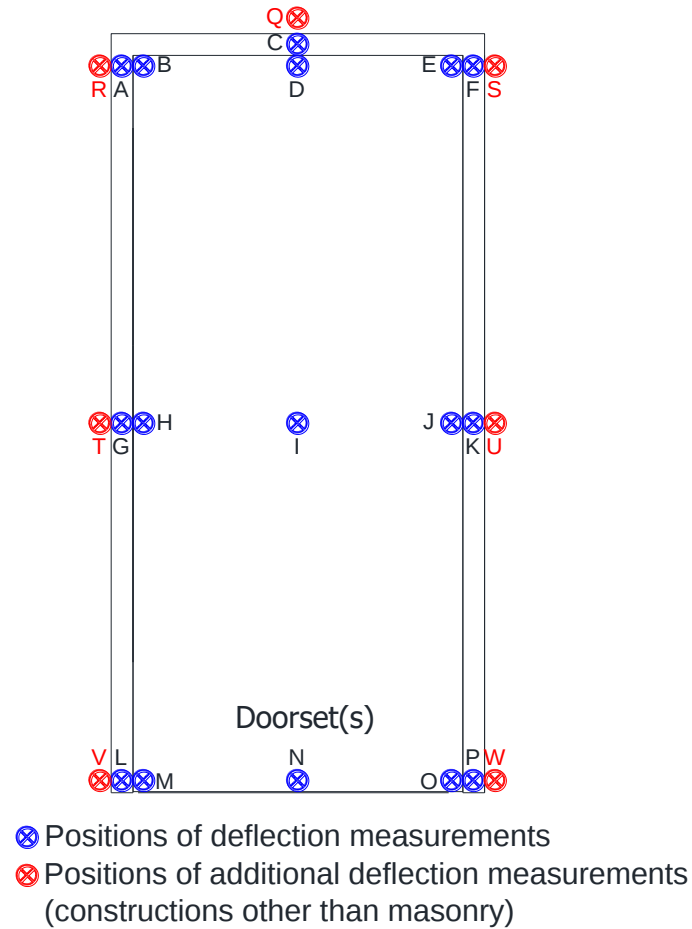
***Area extinguished**

Individual temperatures recorded on the door frame B

Time Mins	T/C Number 50 Deg. C	T/C Number 51 Deg. C	T/C Number 52 Deg. C	T/C Number 53 Deg. C
0	14	13	13	13
3	14	13	13	13
6	14	13	13	13
9	14	13	13	14
12	14	14	14	15
15	14	14	14	15
18	15	15	15	16
21	16	16	16	16
24	18	19	19	17
27	20	22	21	18
30	23	25	24	19
33	26	30	27	21
36	29	35	31	24
39	33	37	34	27
42	36	40	39	31
45	40	42	41	34
48	42	45	44	37
51	45	48	46	40
54	48	51	49	43
57	50	55	52	46
60	53	57	56	48
63	55	61	59	51
65	56	69	61	53
66	57	77	62	53
69	58	110	67	56
72	*	*	75	58
75	*	*	87	61

***Area Extinguished**

Horizontal deflections of the Doorset A

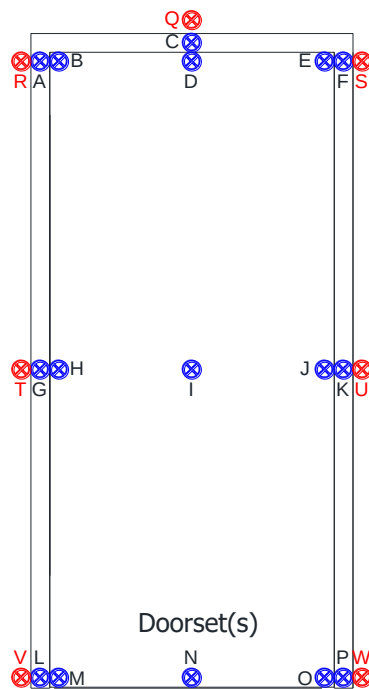


Deflections - mm																
TIME mins	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	-1	1	-2	2	6	0	1	-1	1	-3	-1	1	3	3	2	0
30	-3	4	-2	3	4	-2	0	-5	-10	-2	-4	1	7	7	7	1
40	-1	-3	-4	-3	-10	-2	0	-5	-4	1	0	-1	4	1	5	0
50	-3	0	-4	-2	-12	-6	-1	0	-17	-2	0	1	7	6	8	0
60	-3	5	-4	2	-10	3	0	-6	-24	0	0	1	9	6	10	1
70	-6	-22	-4	-2	-18	-23	-2	-8	-25	-7	-2	1	8	-14	8	2

*Deflection Transducer Device Malfunction

Positive values indicate movement towards the furnace

Horizontal deflections of the Doorset B



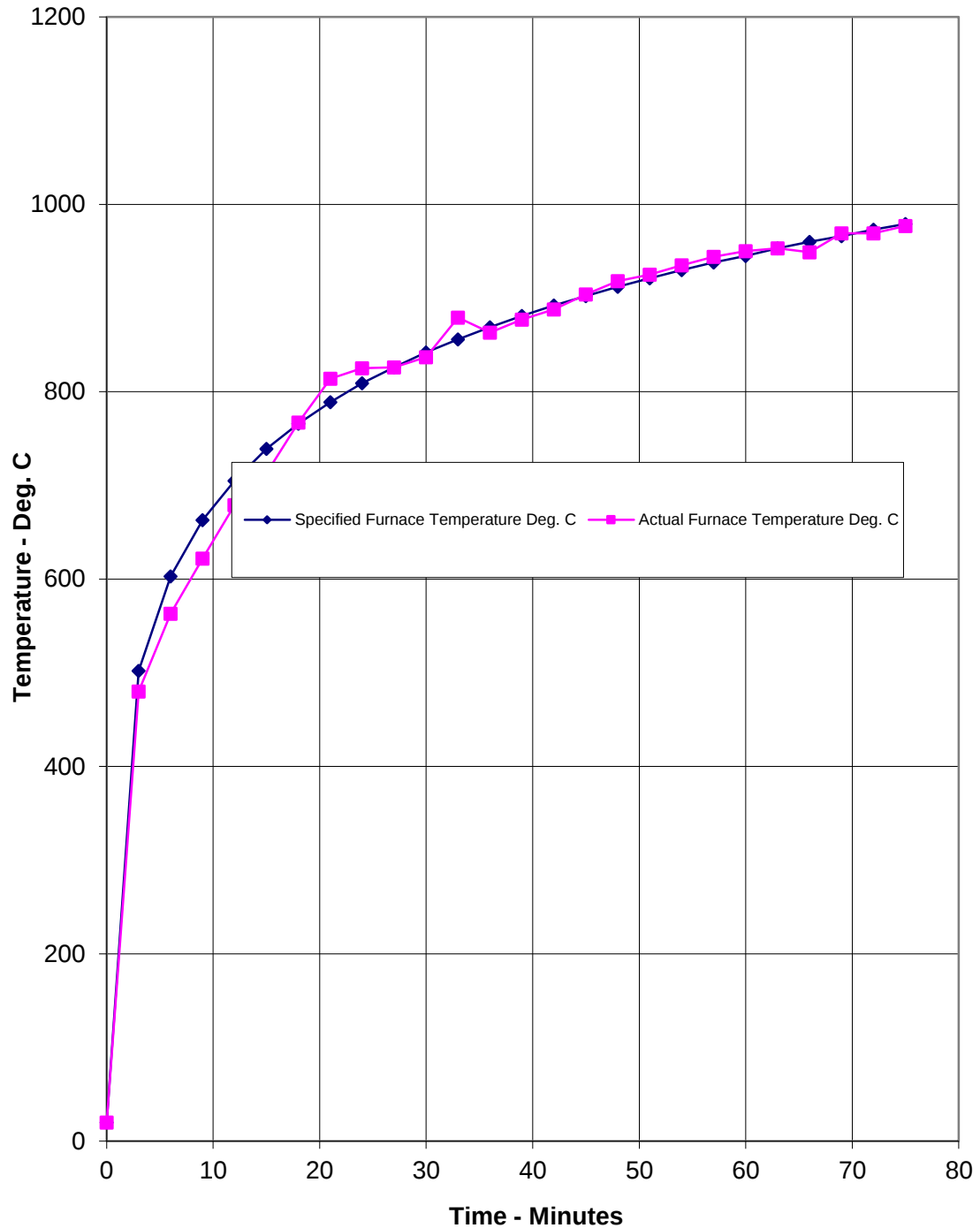
- ⊗ Positions of deflection measurements
- ⊗ Positions of additional deflection measurements (constructions other than masonry)

Deflections - mm																
TIME mins	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20	-2	-2	-3	1	-2	0	-2	0	0	5	-1	-1	0	4	3	-1
30	-2	1	-2	-1	0	-1	-2	2	4	7	-1	-1	0	4	5	1
40	-1	11	-3	-2	-6	-3	-2	3	1	9	0	-1	0	1	3	1
50	1	8	-2	0	-12	-2	-8	0	-4	7	-2	-1	0	1	2	-1
60	0	11	-3	1	-1	-3	-4	-2	-7	4	0	0	3	2	5	-1
70	-8	8	-8	-4	-13	-2	-2	-1	-17	4	1	9	4	1	7	-1

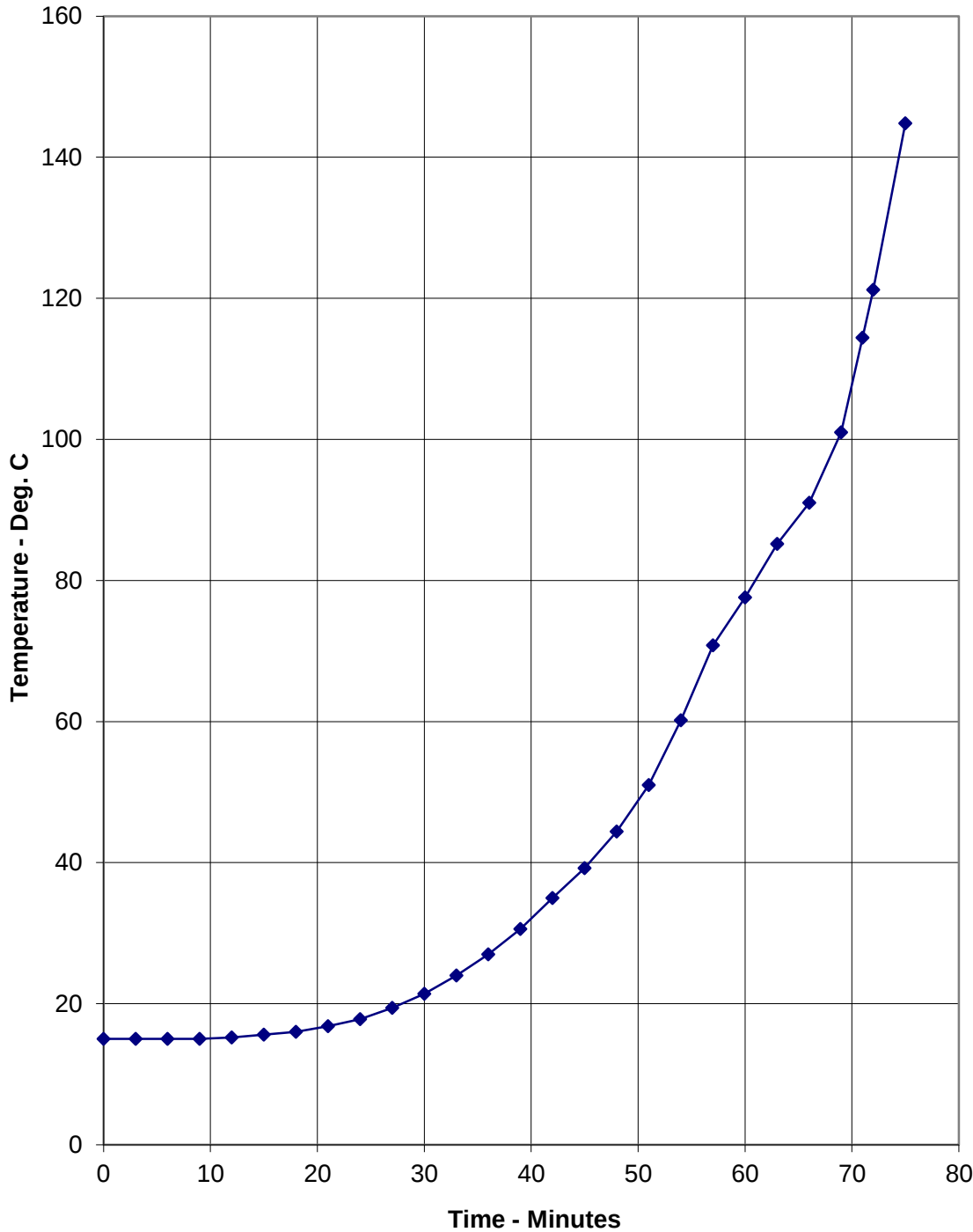
*Deflection Transducer Device Malfunction

Positive values indicate movement towards the furnace

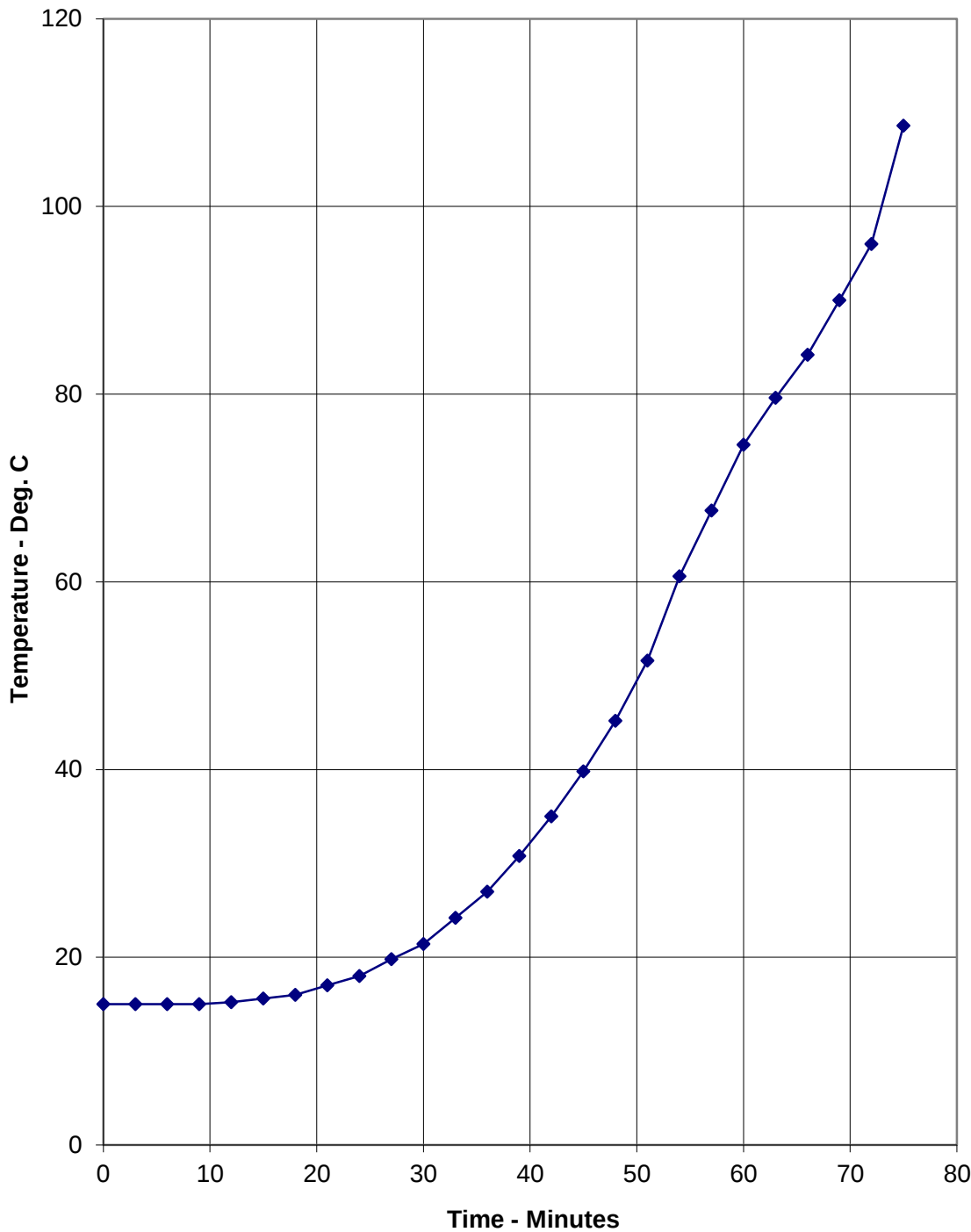
Graph showing mean furnace temperature, together with the temperature/time relationship specified in BS EN 1363-1: 2020



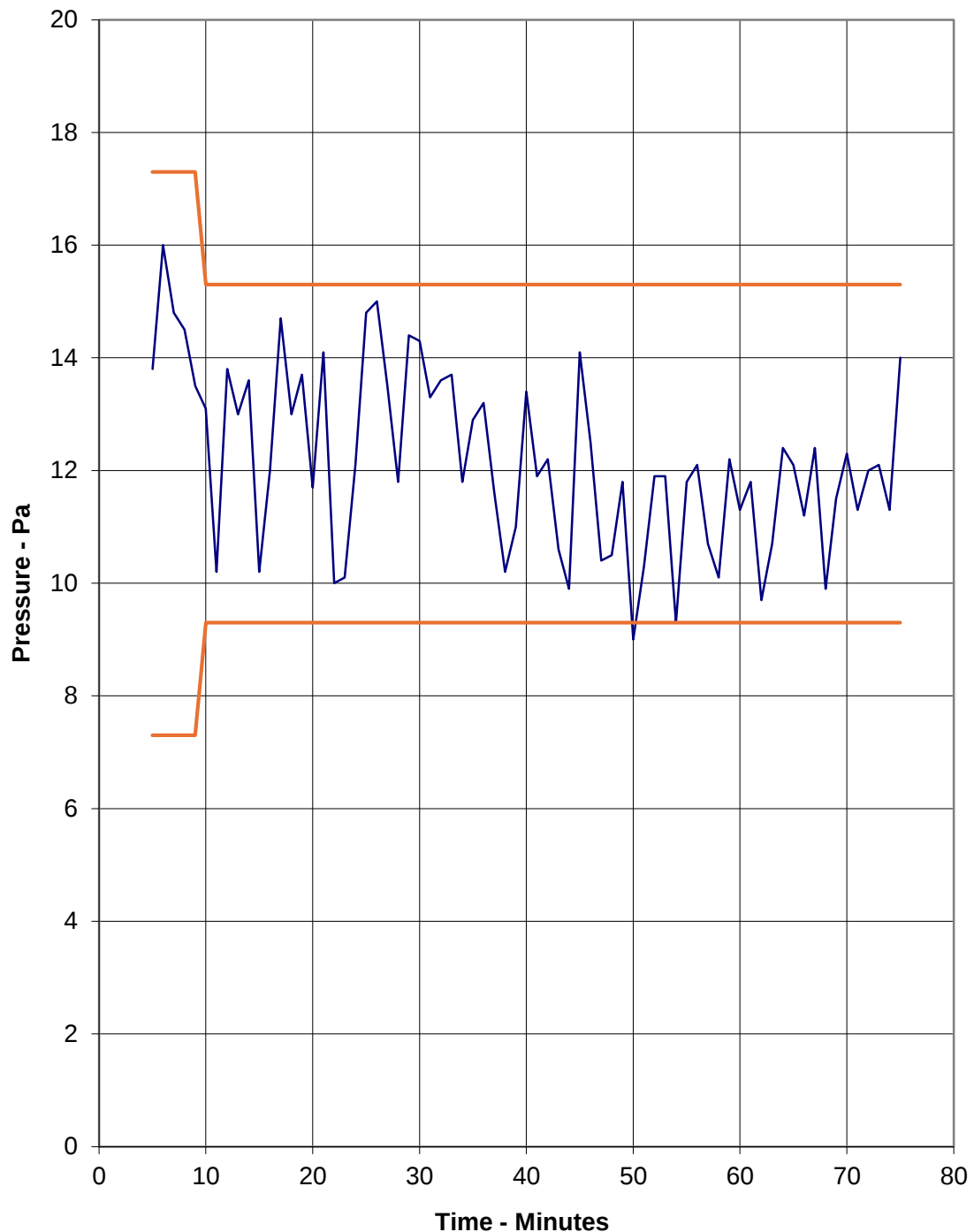
Graph showing mean temperature recorded on the unexposed surface of the Doorset A



Graph showing mean temperature recorded on the unexposed surface of the Doorset B



Graph showing recorded furnace pressure 1950 mm above the head of the doorset



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.

On-going Implications

Validity

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The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criteria for assessing the potential fire hazard of the product in use, nor can the results be extrapolated and applied to other products.

Reports are statements of fact(s) prepared in accordance with the referenced version of the standard(s). Reports are based upon the information provided to Warringtonfire. Warringtonfire takes no responsibility for the accuracy or completeness of such information.

The results stated in this report apply to the test specimens as received. The results relate only to the behaviour of the specimens 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.

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 1634-1:2014+A1:2018, BS EN 1363-1:2020, and where appropriate BS EN 1363-2:1999.

Any significant deviation with respect to size, constructional details, loads, stresses, 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.

Any differences in relation to the aforementioned characteristics may significantly affect the performance and will therefore invalidate the application of the test results to the variant product. It is recommended that any proposed variation to the tested configuration or product should be referred to the test sponsor. The test sponsor should then obtain appropriate documentary evidence of compliance from Warringtonfire or another accredited testing authority. The supplier of the product is responsible for ensuring that the product which is supplied for use is identical to the test specimens that were tested.

The specification and the interpretation of fire test methods are both the subject of ongoing development and refinement. Changes in the applicability of the results of tests in relation to associated legislation may also occur. For these reasons the currency and the relevance of test reports should be considered by the user.

The test report also relates only to the sample(s) of the product submitted to the test. The laboratory accepts no responsibility for the representativeness of the test specimens unless so stated in the test report.

Confidence that the product that is supplied to the market will have the performance indicated in the test report can be supported by use of third-party certification schemes.

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Uncertainty of measurements

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:

017-2018 - Position of thermocouples on door frame

019-2018 - Use of the average temperature thermocouples for determining maximum temperature criterion

021-2018 - Positioning of thermocouples on hotspots in door leaves

032-2018 - Definition of gaps and measurement of size of gaps

034-2018 - Opening/closing of doors before test

062-2022 V2 - Reporting test results

Revision history

N/a

Note: The field of direct application may only be defined following the identification of classification(s). The field of direct and, where applicable, extended application will be included in the classification report.



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