

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 Limited

16 King Edward Road
Brentwood
Essex
CM14 4HL

Product: Two Asymmetrical, Single-Acting, Single-Leaf Timber Doorsets incorporating glazing

Report number: 557882/R

Test date: 04 March 2026

Issue: 1

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

Registered Laboratory:

Warringtonfire
Holmesfield Road
Warrington
Cheshire
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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 apertures within a low-density blockwork wall construction.

Doorset A and Doorset B had overall nominal dimensions of 2333 mm high by 1111 mm wide, incorporating single door leaves with nominal dimensions of 2273 mm high by 1045 mm wide by 44 mm thick. Both door leaves, referenced 'Soloman 44', were hung within a European redwood frame on three stainless steel hinges, such that Doorset A opened away from the heating conditions, whereas Doorset B opened towards the heating conditions. The door leaves incorporated a 10 mm thick sapele lipping adhered to all vertical edges of the leaves. Each door leaf also incorporated two vision panels. The glazing panel referenced 'VP1' was glazed with 7 mm thick glass and had an overall unit size of 1059 mm high by 377 mm wide. The glazing panel referenced 'VP2' was 22.8 mm thick, incorporating two sets of glazing, a 6.8 mm glass layer, an 8 mm argon glass spacer and another 8 mm glass layer. The 6.8 mm glass layer was on the exposed face (push side) of Doorset A and the unexposed face (push side) of Doorset B, while the 8 mm glass layer was on the unexposed face (pull side) of Doorset A and the unexposed face (pull side) of Doorset B. The overall unit size of 'VP2' was 1055 mm high by 373 mm wide. The door leaves also incorporated a surface mounted door closer referenced 'TS11205' on the unexposed face of Doorset A and the exposed face of Doorset B. The doorsets included a dead lock referenced 'ERA 263-51 CA SEA' which remained unlatched for the duration of the test, the doorsets also included a sashlock referenced 'ERA 264-51 CA SEA' which remained unlatched for the duration of the test. Both doorsets remained unlocked for the duration of the test.

Structural opening sizes: 2353 mm high by 1141 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	46 minutes	Failure	48 minutes	Failure
Gap gauge	46 minutes	Area extinguished	48 minutes	No failure*
Cotton pad	46 minutes	Ignited	47 minutes	Ignited

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	9 minutes	Exceeded maximum temperature criteria TC20	9 minutes	Exceeded maximum temperature criteria TC38
Discrete area	7 minutes	Exceeded mean temperature criteria Average	8 minutes	Exceeded mean temperature criteria Average

Insulation (I₁) The test specimen shall be evaluated against the maximum temperature rise criterion specified in EN 1363-1: 2020 (180°C).

Specimen	9 minutes	Exceeded maximum temperature criteria TC20	9 minutes	Exceeded maximum temperature criteria TC38
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Radiation BS EN 1363-2: 1999 requires that the time for the measured radiation to exceed 5, 10, 15, 20 and 25 kW/m² is reported.

	5 kW/m ²	10 kW/m ²	15 kW/m ²	20 kW/m ²	25 kW/m ²
Specimen A	48 minutes*	48 minutes*	48 minutes*	48 minutes*	48 minutes*
Specimen B	48 minutes*	48 minutes*	48 minutes*	48 minutes*	48 minutes*

*Test was discontinued after a period of 48 minutes.

Date of test 04 March 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: 04 August 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
No.2 Single Acting Leaf Doorsets with Door Leaf Glazing	02/03/2026	SC26112T
Timber door blanks	07/11/2023	SCT23262B

Installation

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

The doorsets were received on the 03 March 2026 and mounted within apertures in a blockwork wall construction; the leaves were single-acting. Doorset A could open away from the furnace only, while Doorset B could open into the furnace only. Representatives of the **Test Sponsor** conducted the installation on the 03 March 2026.

Specimen Direction

Doorset A and Doorset B were both **asymmetrical**. The **Test Sponsor** defined the direction in which the doorsets were 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 1 day. 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 12.5°C to 23°C and 36.5% to 58% respectively.

Instruction to Test

The test was conducted on the 04 March 2026 at the request of Wood International Agency Limited, the **Test Sponsor**.

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

Pre-Test Conditioning

Prior to testing, the doorsets were 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
Self closing	A.2.2 and A.4 of EN 16034	1 cycle	1 cycle 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 20°C at the start of the test with no variation 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.

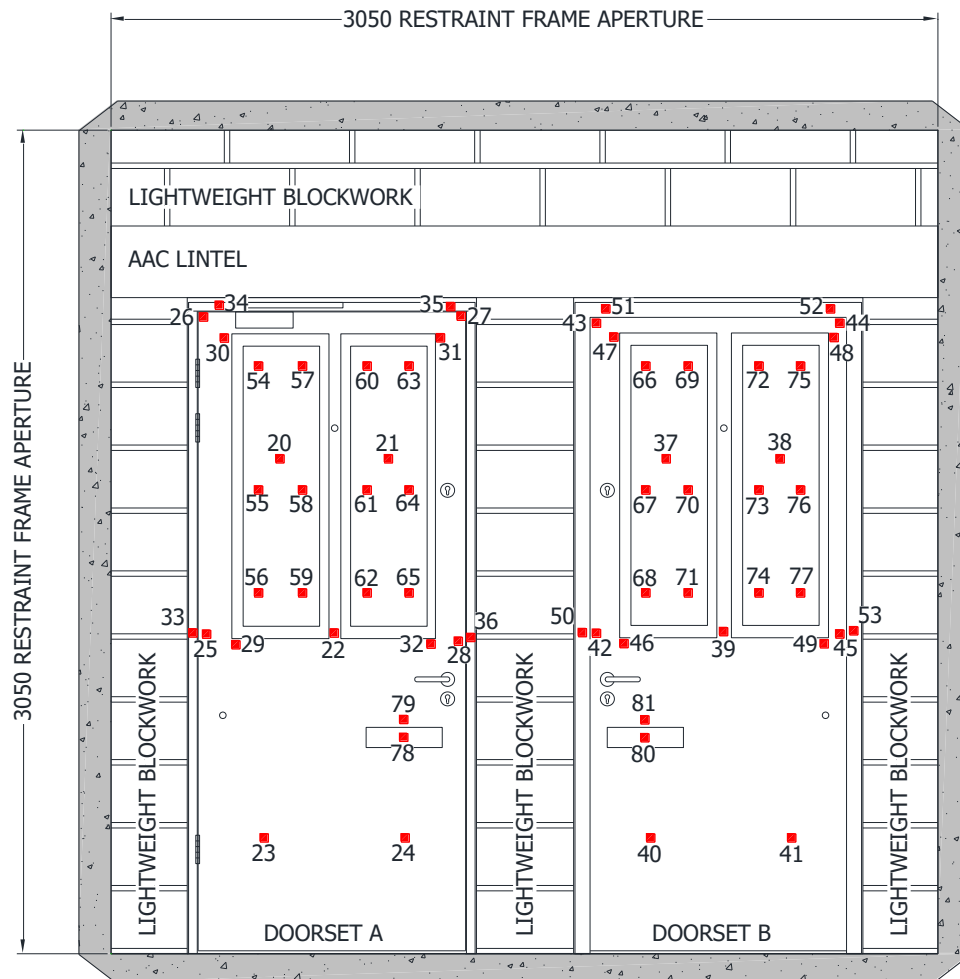
Radiation

Two water-cooled foil heat-flux meters were used to record the heat radiation from both doorsets. The heat flux meters were positioned at a distance of 1 metre from the centre of the doorsets.

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 $15.6 (\pm 5)$ Pa between 5 and 10 minutes and $15.6 (\pm 3)$ Pa thereafter.

Test Specimen Drawings



■ POSITIONS OF THERMOCOUPLES

GENERAL ELEVATION OF TEST CONSTRUCTION
UNEXPOSED FACE

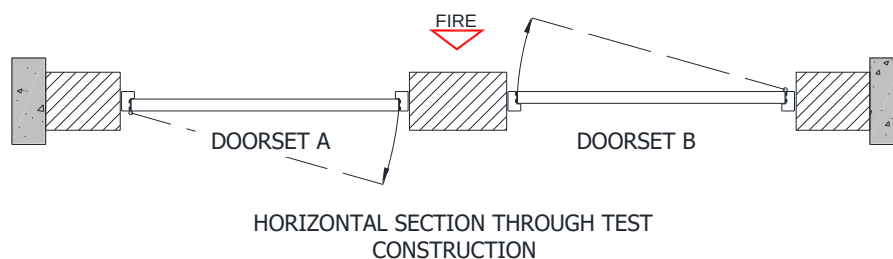


Figure 1. Elevation of Thermocouple Positions – Unexposed Face

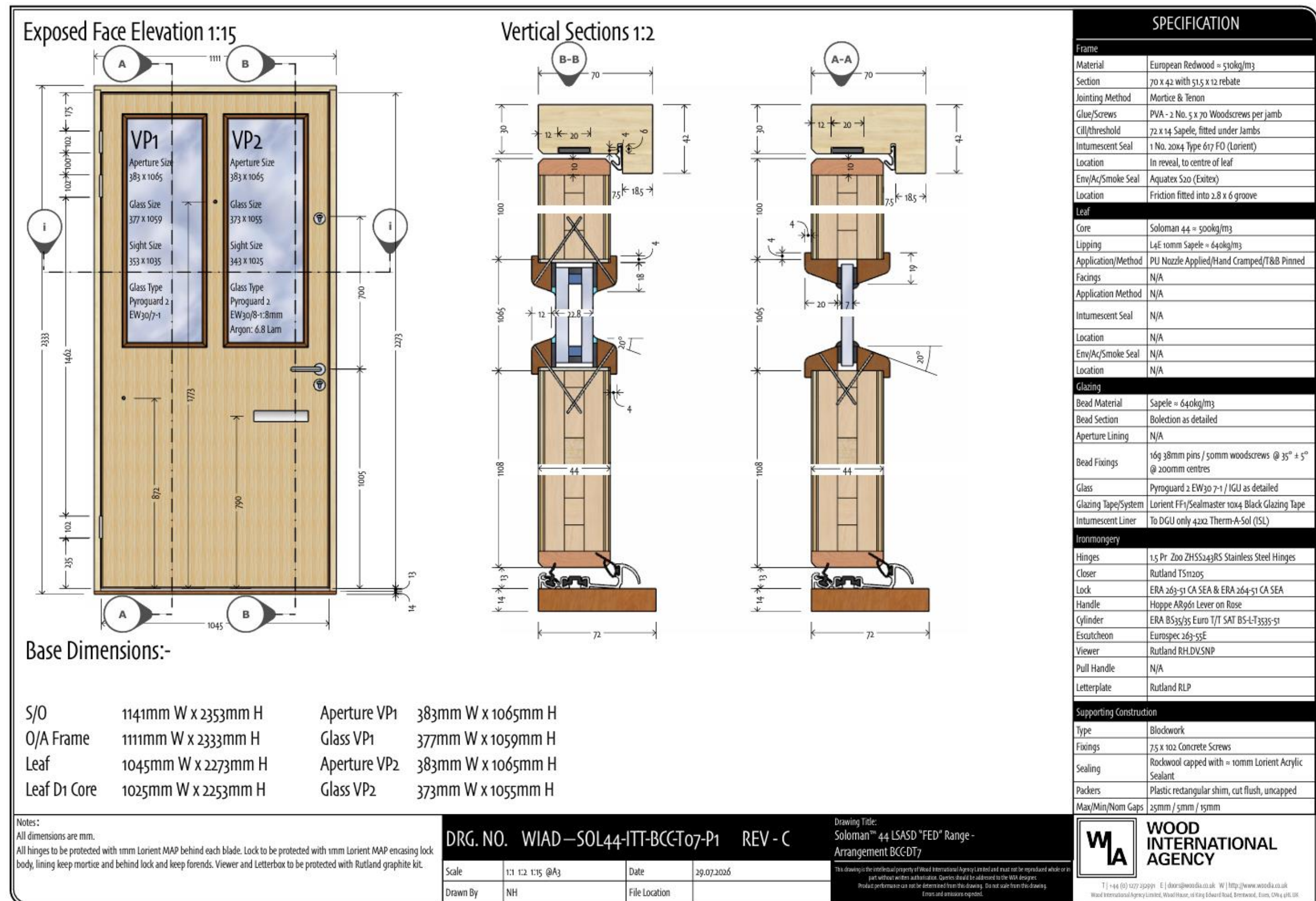


Figure 2. WIAD—SOL44-ITT-BCC-T07 REV C – Page 1



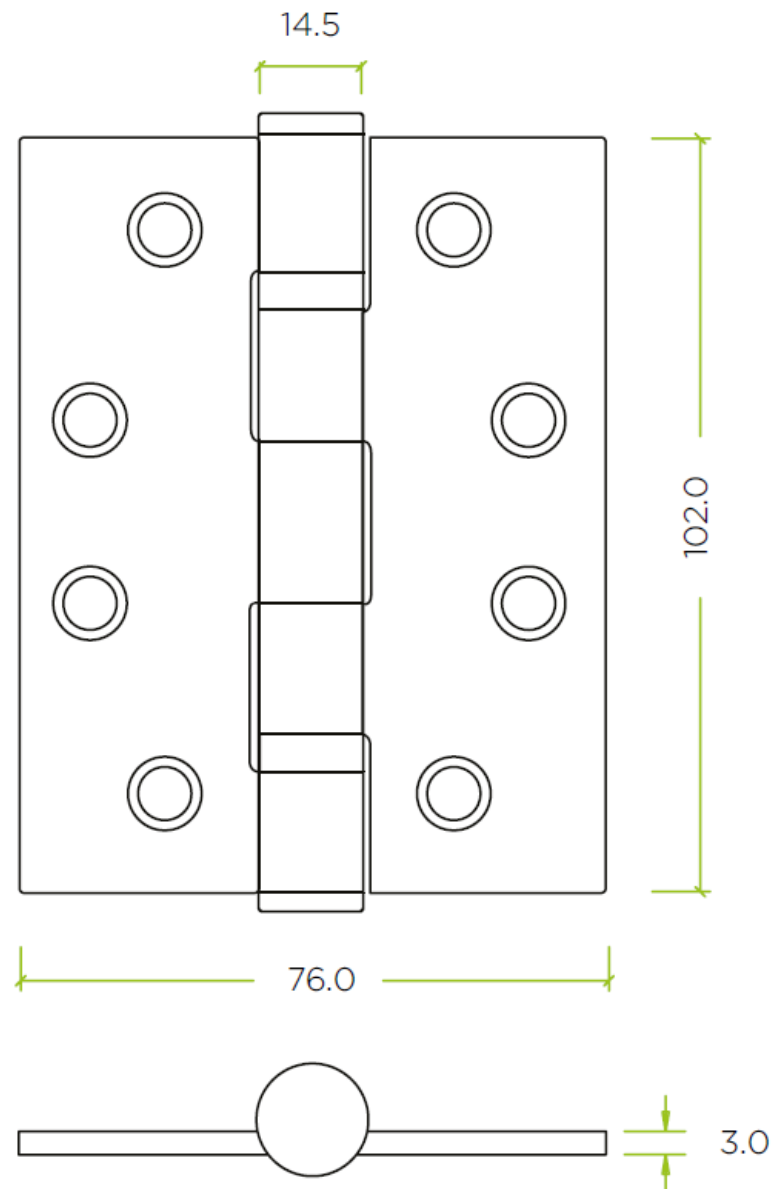
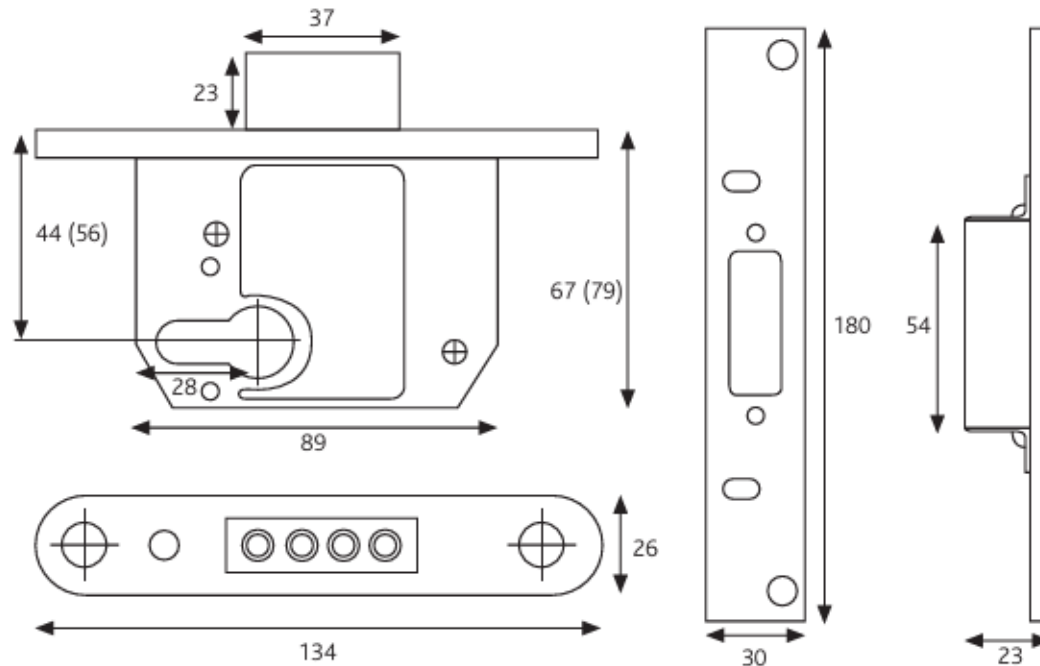


Figure 4. Item 19 – Zoo Hardware ZHSS243RS Hinge Drawing

Deadlock



Sashlock

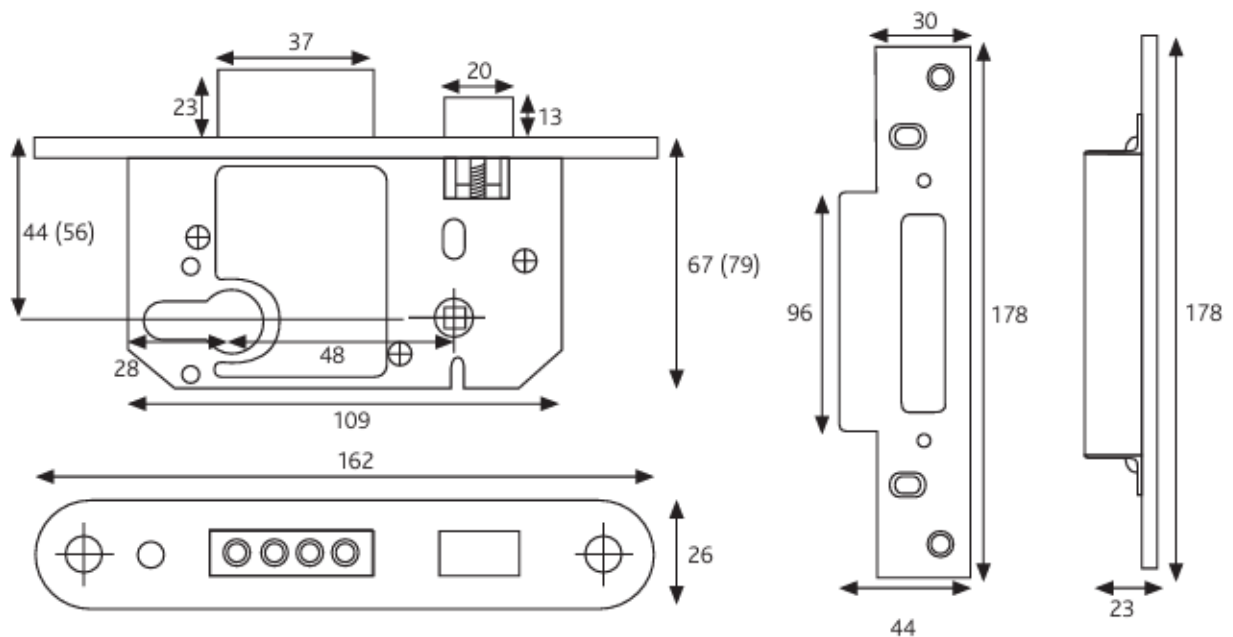


Figure 5. Items 20, 21, 22, 23 – ERA 264-51 & ERA 263-51 Lockset & Keep Drawings

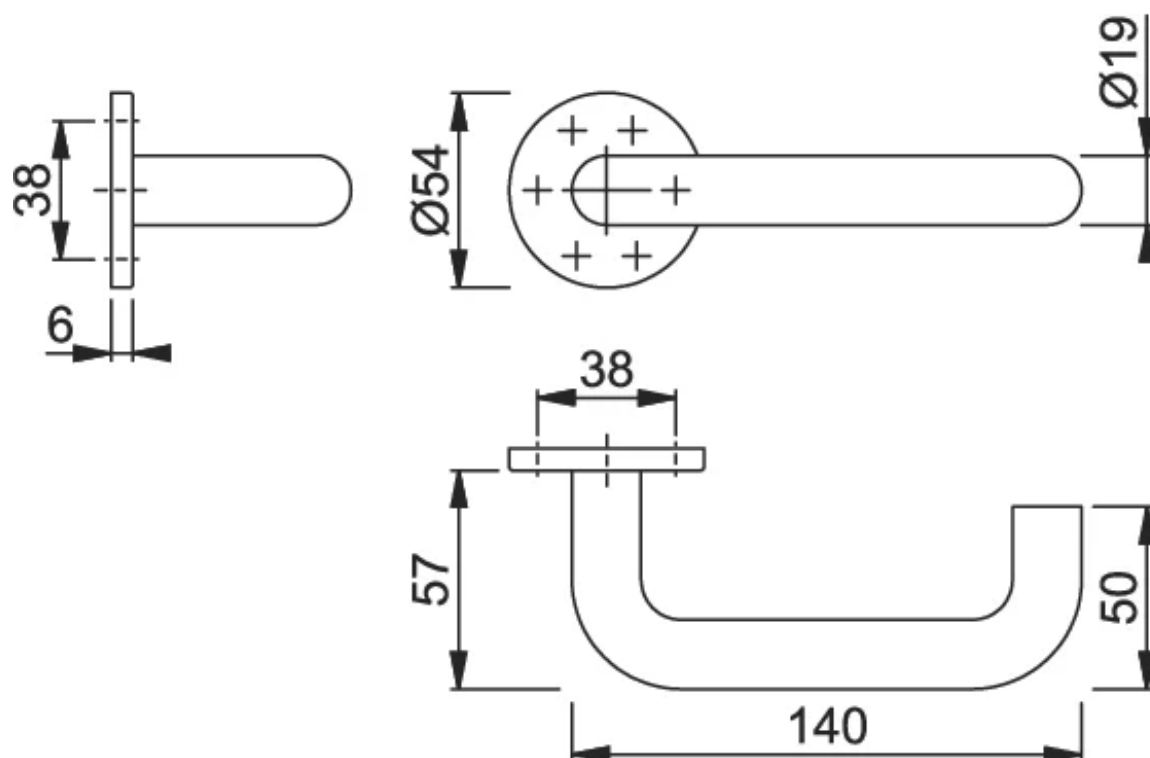


Figure 6. Item 26 – AR961 Lever Handle Drawing

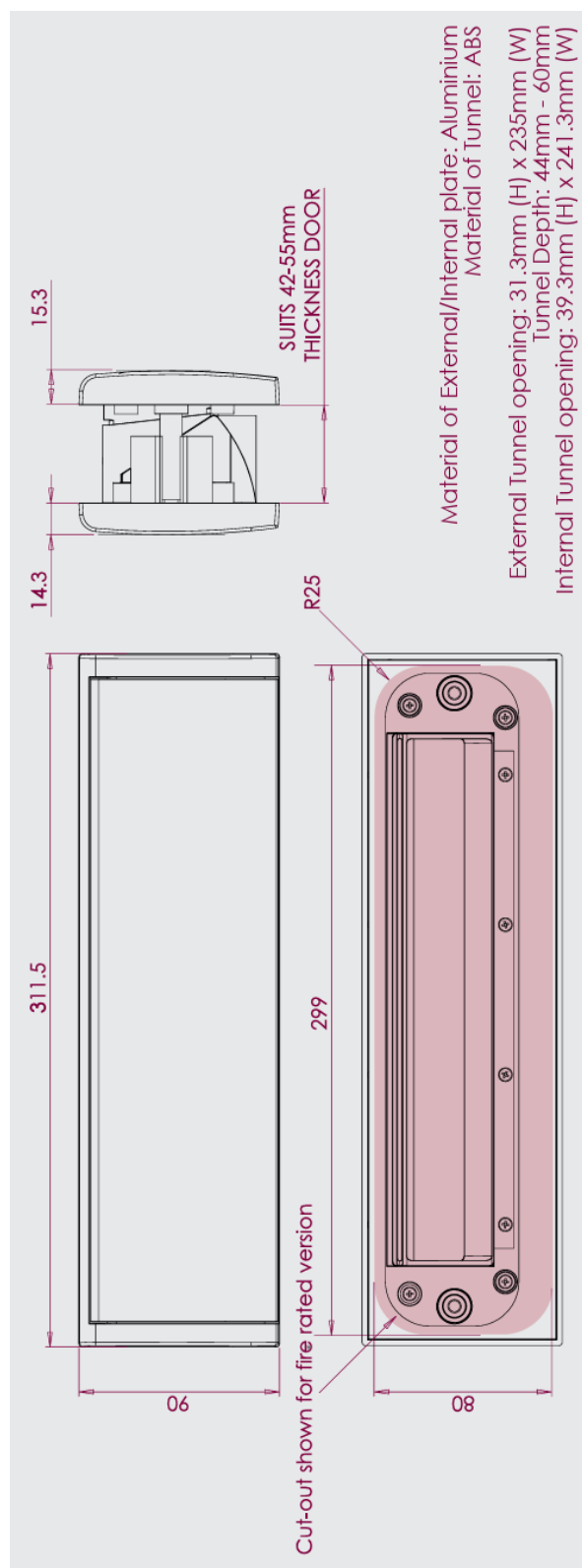


Figure 7. Item 27 – Rutland RLP.SNPSNP Letter Plate Drawing

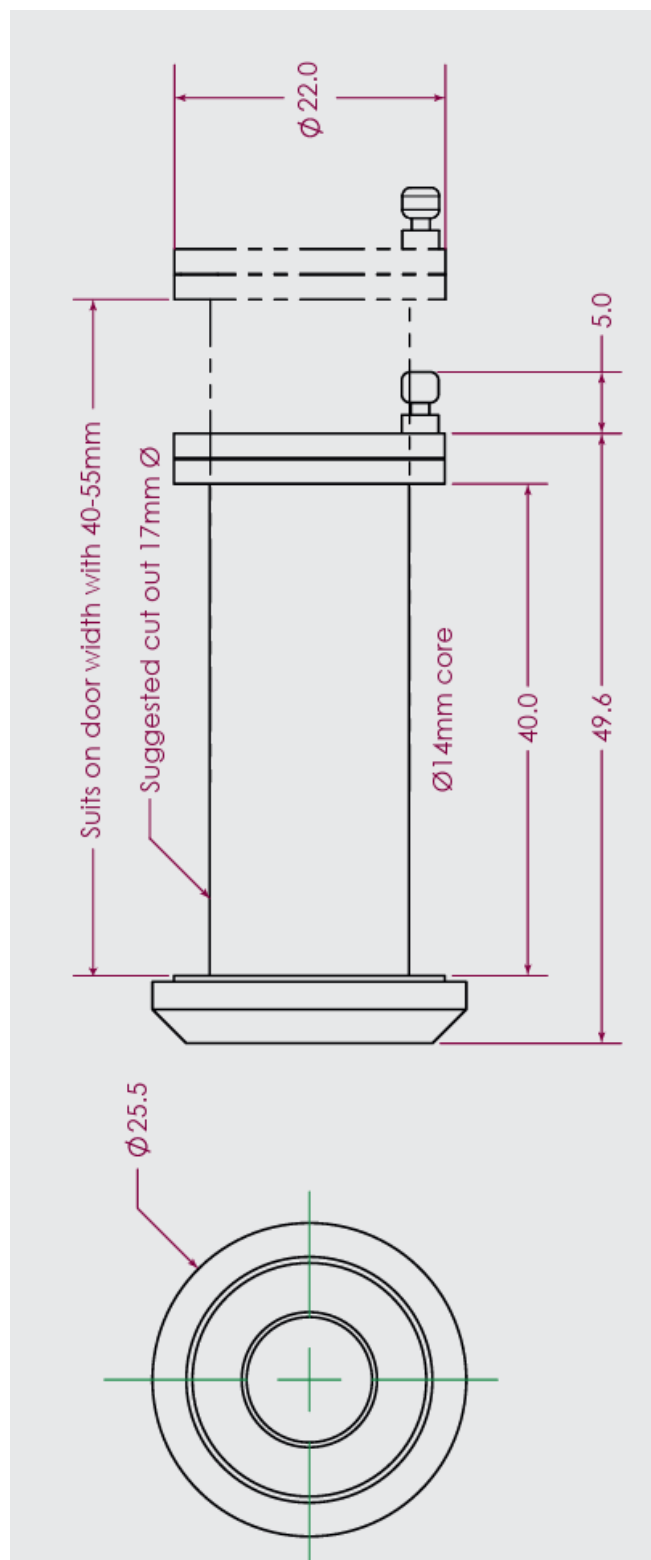


Figure 8. Item 28 – Rutland RH.DV.SNP Door Viewer Drawing



Schedule of Components

Door Frame

1. Door Frame	
Manufacturer	By Dezin Carpentry
Reference	N/A
Material	European Redwood and Jambs
Density recorded at sampling visit	442 – 482 kg/m ³
Density (stated)	510 kg/m ³
Moisture content recorded at sampling visit	14.0%
Moisture content recorded at test lab	
Doorset A	10.2% (measured using a Protimeter at WarringtonFire)
Doorset B	10.1% (measured using a Protimeter at WarringtonFire)
Overall size	1111 mm wide x 2333 mm high
Frame (Head)	70 mm wide x 42 mm thick with 51.5 mm wide x 12 mm rebate
Frame (Jambs)	70 mm wide x 42 mm thick with 51.5 mm wide x 12 mm rebate
Stop	Integral 18.5 mm x 12 mm
Jamb to Head jointing method, fixing detail and location	Mortice & Tenon joint - 2 No. 5 mm x 70 mm Woodscrews
Stop to Frame jointing method, fixing detail and location	Stop is integral in the frame
Presence of Adhesives	No
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, 2191 mm
Does the fixing penetrate intumescent seal within frame reveal	No
Packing Material	Plastic
Packing Material Dimension	100 mm x 28 mm x 1 – 6 mm thickness, stacked as required
Packing Material Location	Between door frame and supporting construction

3. Intumescent to Frame Reveal	
Quantity	1 No.
Manufacturer	Lorient
Reference	LP2004 Type 617
Material	PVC encased sodium silicate
Overall section size	20 mm wide x 4 mm thick
Application method	Friction/Adhesive Tape
Location (relative to the opening face of the door leaf)	12 mm
Presence of Adhesives	Yes
Location	Rear of seal
Type	Adhesive tape
4. Smoke Seal to Frame Reveal	
Manufacturer	Exitex
Reference	Aquatex S20
Material	PU foam core with polyurethane outer sheathing
Overall section size	9 mm x 19.6 mm
Application method	Friction fit
Location	Into groove aligned with stop upstand
Presence of Adhesives	No
5. Threshold	
Manufacturer	Exitex
Reference	MXS/15/2/TB
Material	Aluminium
Overall section size	62 mm x 15 mm
Fixing method	Fitted to cill with 3 No stainless-steel screws of 4 mm x16 mm countersunk head
6. Cill	
Manufacturer	By Deziign Carpentry
Material	Sapele
Density	Nominally 640 kg/m ³ , measured 715 kg/m ³ during sampling
Overall section size	72 mm x 14 mm
Fixing method	Screwed to underside of jambs with 2 No. 4 mm x 50 mm stainless steel screws at either jamb
Presence of sealants	No
Presence of Adhesives	No

Fire Stopping

7. 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
8. Sealant to Fire Stopping Detail	
Manufacturer	Lorient
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

9. Door Leaf	
Manufacturer (blank)	Wood International Agency Limited
Reference	Soloman 44
Quantity of leaves on doorset	1
Density	500 kg/m ³ (stated)
Glazing location relative to the head and closing edge	100 mm from the head of the leaf and 100 mm from the closing edge of the leaf
Overall leaf size prior to trimming	1220 mm wide x 2440 mm high x 44 mm thick
Overall leaf size supplied for testing	1045 mm wide x 2273 mm high x 44 mm thick
Moisture content recorded at test lab	
Doorset A	8.6% (measured using a Protimeter at WarringtonFire)
Doorset B	7.4% (measured using a Protimeter at WarringtonFire)
10. Core Element 1	
Confidential information withheld, on file with Warringtonfire	
11. Facings	
Confidential information withheld, on file with Warringtonfire	
12. Rails	
Confidential information withheld, on file with Warringtonfire	
13. Stiles	
Confidential information withheld, on file with Warringtonfire	

14. Lippings / Edge Banding	
Manufacturer	By Dezign Carpentry
Material	Sapele
Density recorded at sampling visit	715 kg/m ³
Density (stated)	640 kg/m ³
Moisture content at sampling visit	12.0%
Moisture content at test lab	
Doorset A	6.3% (measured using a Protimeter at WarringtonFire)
Doorset B	6.2% (measured using a Protimeter at WarringtonFire)
Overall size	44 mm wide x 10 mm thick
Fixing method	PUR Adhesive, hand cramped. Mechanical fixings (38mm long 16g pins) in 2 rows 50mm from ends, 350mm centres, used for top and bottom lippings only.
Location	All 4 edges
Adhesives	
Manufacturer	Lumberjack
Type	D4
Curing method	Moisture
Application method	Hand spread/cramped
Presence of Mechanical Fixings	38mm long 16g pins in 2 rows 50mm from ends, 350mm centres, used for top and bottom lippings only.

Glazing

15. Double glazed unit / Glass	
Manufacturer / Supplier	Pyroguard UK/Fireglass UK
Reference	VP1 - Pyroguard 2 EW30/7-1 VP2 - Pyroguard 2 EW30/8-1:8mm Technoform Spacer, Argon Filled:6.8mm Clear Lam
Unit overall size	VP1 - 1059 mm high x 377 mm wide x 7 mm thick VP2 - 1055 mm high x 373 mm wide x 22.8 mm thick
VP2 Positioning	
Push side	6.8mm Clear Laminated Glass
Pull side	Pyroguard 2 EW30/8-1
Glass spacer	VP1 - N/A VP2 - 8mm Argon Filled with Technoform Warmedge Spacer Bar
Aperture location relative to the head and closing edge of the leaf	100 mm from the head of the leaf and 99 mm from the closing edge of the leaf
Aperture size (prior to any lining)	1065 mm high x 383 mm wide

Sight size	VP1 - 1035 mm high x 353 mm wide VP2 – 1025 mm high x 347 mm wide
Expansion allowance	VP1 - 3mm all around VP2 - 3mm all around + 2mm intumescent liner
Presence of Timber aperture lining	No
Presence of Adhesives to Aperture lining	No
16. Beading	
Material	Sapele
Density recorded at sampling visit	667 kg/m ³
Density (stated)	640 kg/m ³
Moisture content at sampling visit	Not recorded
Moisture content at test lab	
Doorset A	7.6% (measured using a Protimeter at WarringtonFire)
Doorset B	8.2% (measured using a Protimeter at WarringtonFire)
Overall size	VP1 - 20 mm x 19 mm VP2 - 12 mm x 22 mm
Fixing method, fixing material and sizes	VP1 - 16g x 38 mm pins VP2 - 3.5 mm x 50 mm wood screws
Fixing distances from corners, centres and angle relative to the face of the glass	50 mm from corners, 200 mm centres and at 35 ° to the face of the glass
17. Intumescent Liner	
Manufacturer	VP1 – N/A VP2 – Intumescent Seal Limited
Reference	VP2 – Therm-A-Sol
Material	VP2 – Sodium Silicate
Overall size	42 mm x 2 mm
Fixing method	Adhered to glazing apertures
18. Sealant applied to glass on the internal / external face of the leaf	
Manufacturer	VP1 – Assa Abloy T/A Lorient VP2 – Intumescent Seals Limited
Reference	VP1 – Flexible Figure 1 (FF1) VP2 – Sealmaster Black Glazing Tape
Material	VP1 – Graphite VP2 – Ceramic Tape
Overall size	VP1 – 13.5 mm x 3.5 mm (plus cap) VP2 – 10 mm x 4 mm
Application method	VP1 – Adhered to bead upstand VP2 – Adhered to bead upstand

Hardware

19. Hinges	
Supplier	Zoo Hardware
Reference	ZHSS243RS
Quantity	3 No. per leaf
Primary material	Stainless Steel
Type	Butt Hinge
Sizes (See Figure 4)	
knuckle	Ø14 mm x 105 mm high
blades	102 mm high x 30 mm wide (76 mm overall) x 3 mm thick
security pin	none
Fixings	Ø4.5 mm x 30 mm long
number off per blade	4
Position of each hinge relative to the head of the leaf	175 mm, 377 mm, 1941 mm
Details of intumescent protection	Behind each blade
Intumescent detail	
Manufacturer	Assa Abloy T/A Lorient
Material	Mono ammonium phosphate (MAP)
Thickness	1 mm
Application method	Self-adhesive
Interruptions to Intumescent within the frame reveal	Partially interrupted
20. Lockset / Latch 1	
Manufacturer	ERA
Reference	ERA 264-51 CA SEA
Material	Steel
Overall sizes (See Figure 5)	
Central Lockcase	109 mm high x 67 mm wide x 23 mm thick
Forend / face plate	162 mm high x 26 mm wide x 3 mm thick
Latch bolt	20 mm high x 12 mm wide x 13 mm projection
Lock bolt	37 mm high x 14 mm wide x 23 mm projection
Fixing method	2 No. 4.5 mm x 40 mm wood screws
Operation of latch bolt	Disengaged
Operation of lock bolt	Disengaged

Details of intumescent protection	Fully wrapped in 1 mm Lorient MAP
Location of centre of the spindle relative to the bottom of the leaf	1004 mm
Location of centre of latch bolt relative to the bottom of the leaf	1012 mm
Location of centre of lock bolt relative to the bottom of the leaf	927 mm
21. Keeps 1	
Manufacturer	ERA
Reference	ERA 264-51 CA SEA
Material	Steel
Overall size (See Figure 5)	178 mm high x 44 mm wide x 2 mm thick 96 mm high x 14 mm lip
Fixing method	4 No. 4.5 mm x 40 mm wood screws
Details of intumescent protection	Fully wrapped in 1mm Lorient MAP
22. Lockset / Latch 2	
Manufacturer	ERA
Reference	ERA 263-51 CA SEA
Material	Steel
Overall sizes (See Figure 5)	
Central Lockcase	89 mm high x 67 mm wide x 23 mm thick
Forend / face plate	134 mm high x 26 mm wide x 3 mm thick
Lock bolt	37 mm high x 14 mm wide x 23 mm projection
Fixing method	2 No. 4.5 mm x 40 mm wood screws
Operation of latch bolt	Disengaged
Operation of lock bolt	Disengaged
Latch Forces	
Doorset A	22.8 N
Doorset B	19.9 N
Details of intumescent protection	Fully wrapped in 1 mm Lorient MAP
Location of centre of lock bolt relative to the bottom of the leaf	1720 mm
23. Keeps 2	
Manufacturer	ERA
Reference	ERA 263-51 CA SEA
Material	Steel
Overall size (See Figure 5)	180 mm high x 30 mm wide x 2 mm thick
Fixing method	4 No. 4.5 mm x 40 mm wood screws
Details of intumescent protection	Fully wrapped in 1 mm Lorient MAP

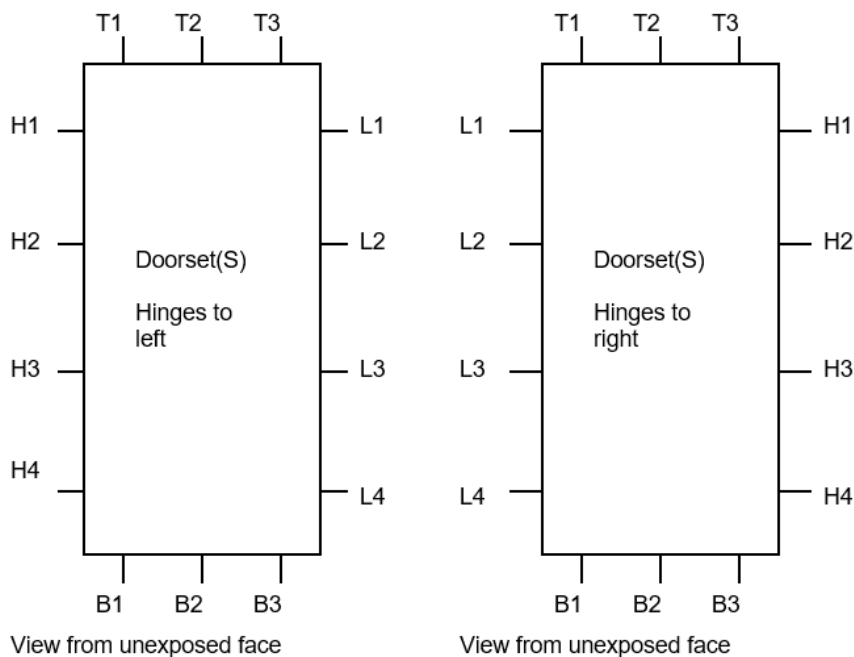
24. Cylinder with Thumbturn	
Manufacturer	ERA
Reference	BS-L-T3535-51
Material	Solid brass
Overall size	70 mm long x 33 mm high x 17 mm wide
25. Escutcheon	
Manufacturer	ERA
Reference	263-55ESC
Material	Brass and steel
Overall size	Ø52 mm x 13 mm thick
Fixing method	2 No. bolt through steel fixings
26. Lever Handle	
Manufacturer	Hoppe UK
Reference	AR961
Material	Stainless steel
Overall size (See Figure 6)	Ø19 mm x 140 mm long x 57 mm projection Ø54 mm x 6 mm thick rose
Fixing method, fixing material, sizes, quantity and location	2 No. M3.5 x 80 mm bolt through fixings
Details of intumescent protection	None
27. Letter Plate	
Manufacturer	Rutland
Reference	RLP
Material	
Tunnel	ABS
Face plates	Aluminium
Overall size (See Figure 7)	311.5 mm wide x 90 mm high x 14.3/15.3 mm projection
Cut out size	299 mm wide x 80 mm high
Fixing method	2 No.
Presence of sealants	Supplied fitted to letterplate
Location	Centre of letter plate measures 790 mm from the bottom of door leaf and 260 mm from the closing stile
Details of intumescent protection	Integral to letter plate
28. Door Viewer	
Quantity	2 No. per doorset
Manufacturer	Rutland
Reference	RH.DV.SNP
Material	Satin nickel
Cut Out Diameter	Ø17 mm

Overall sizes (See Figure 8)	
Body diameter	Ø14 mm x 40 mm long
Diameter at Internal Face	Ø 22 mm
Diameter at External Face	Ø 25.5 mm
Fixing method	Threaded through leaf
Location	872 mm from the bottom of the leaf and 100 mm from the closing edge of the leaf to the centre of the aperture 1773 mm from the bottom of the leaf and central horizontally
Details of intumescent protection	Fully wrapped 1 mm Rutland graphite tube
29. Door Closer	
Manufacturer	Rutland
Reference	TS11205
Material	Silver finish
Configuration	Parallel arm
Overall size	68 mm high x 257 mm wide x 43 mm deep
Fixing method	
Body	3 No. 66 mm x 4.5 mm countersunk steel wood screws
Slide rail	2 No. 55 mm x 4.0 mm countersunk steel wood screws
Average closer forces	
Doorset A	
Average opening force	72.7 N
Average closing force	23.0 N
Doorset B	
Average opening force	75.1 N
Average closing force	21.9 N

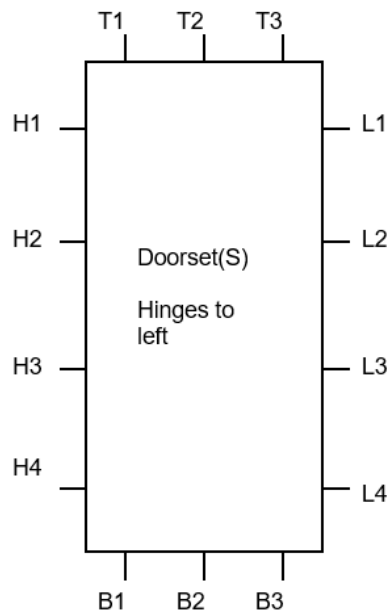
Supporting Construction

30. 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 3000 mm long
31. Lightweight Blockwork	
Manufacturer	THERMALITE
Reference	THERMALITE Shield
Material	Lightweight concrete blocks
Thickness	150 mm wide x 215 mm high x 440 mm long
Density	600 kg/m ³ (measured)
Fixing Method	Ordinary sand/cement mortar, mix 3:1

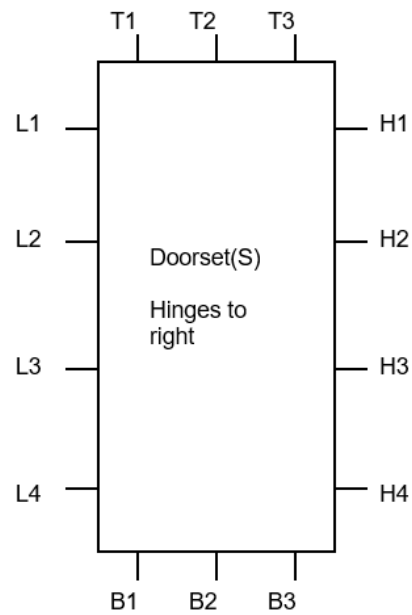
Doorset clearance gaps



Doorset A (mm)					
Hinge Side	Primary	Leaf to Stop	Leading Edge	Primary	Leaf to Stop
H1	3.19	6.63	L1	3.14	6.98
H2	2.65	6.89	L2	3.05	8.22
H3	3.01	7.06	L3	2.51	9.09
H4	2.56	7.22	L4	3.35	9.77
Mean	2.85		Mean	3.01	
Max	3.19		Max	3.35	
Min	2.56		Min	2.51	
Max Permitted	5.02		Max Permitted	5.18	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	3.52	7.03	B1	2.39	
T2	4.37	6.19	B2	2.18	
T3	4.53	8.39	B3	3.26	
Mean	4.14		Mean	2.61	
Max	4.53		Max	3.26	
Min	3.52		Min	2.18	
Max Permitted	6.34		Max Permitted	4.94	



View from unexposed face



View from unexposed face

Doorset B (mm)					
Hinge Side	Primary	Leaf to Stop	Leading Edge	Primary	Leaf to Stop
H1	3.19	6.02	L1	2.82	6.43
H2	2.91	6.87	L2	2.85	6.93
H3	3.18	7.03	L3	3.09	8.16
H4	3.13	7.66	L4	3.36	8.20
Mean	3.10		Mean	3.03	
Max	3.19		Max	3.36	
Min	2.91		Min	2.82	
Max Permitted	5.15		Max Permitted	5.20	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	2.75	7.75	B1	3.39	
T2	4.04	5.97	B2	3.10	
T3	2.82	6.40	B3	3.03	
Mean	3.20		Mean	3.17	
Max	4.04		Max	3.39	
Min	2.75		Min	3.03	
Max Permitted	5.62		Max Permitted	5.28	

Test Observations

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

mins secs

00	00	The Test Commences.
00	52	Smoke release from hinge side of both doorsets.
01	32	All glazing sets have reacted and discoloured milky and opaque
01	52	Audible cracking heard from both doorsets.
02	30	Smoke release from letter plate of both doorsets.
03	23	All glazing is discolouring brown.
04	12	Yellow discolouration below the letter plate on Doorset B.
04	38	Both doorsets are unrestrained.
06	32	Intense smoke release from both doorsets.
09	46	Doorset B letter plate pulling away causing brown discolouration around it.
10	30	All glazing is cracking internally.
13	25	Smoke release from the letter plate on Doorset B.
14	23	Internal bubbling of liquid on VP2 the left glazing panel edges on Doorset B.
17	15	Intumescent is pushing out the of VP1 the right glazing panel edges on Doorset B.
17	52	Intumescent has fallen off the VP1 the right glazing panel edges on Doorset B.
17	57	Intumescent has fallen off VP1 the right glazing panel edges on Doorset A.
18	30	Yellow discolouration above the letter plate Doorset A
21	42	Yellow discolouration above VP1 the right glazing on Door Leaf B.
22	32	Yellow discolouration around cylinder and pull handle of both doorsets.
24	10	Intumescent has pushed out of letter plates on both doorsets.
24	17	The viewing holes have discoloured black on both doorsets.
27	09	Glazing surface reacting and visibly shaking

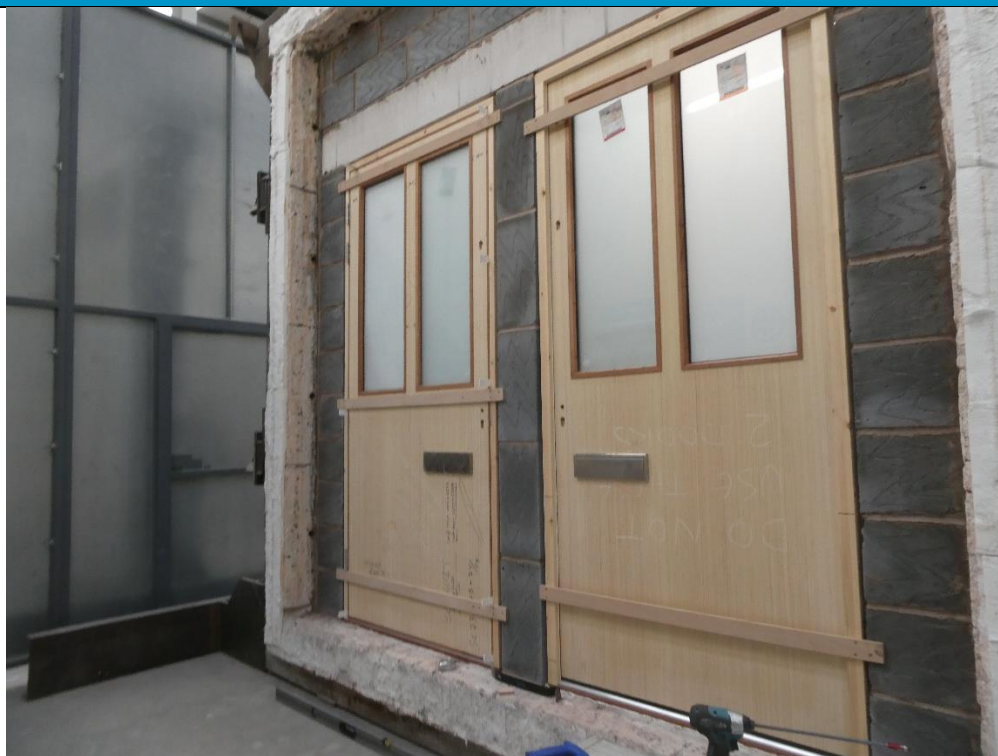
Time All observations are from the unexposed face unless noted otherwise.

mins secs

27	34	Audible cracking heard from both doorsets.
28	58	VP1 the left glazing panel on Doorset A has deflected inwards.
32	02	Smoke releasing intensely from all glazing panels and both letter plates.
34	22	The interior glazing on VP1 the left glazing panel of Doorset A is glowing.
37	32	The interior glazing on VP1 the left glazing panel of Doorset B is glowing.
41	30	The exterior glazing on the VP1 right glazing panel of Doorset B is glowing.
41	45	Cotton pad applied to the top right of VP1 the right glazing panel of Doorset B and did not ignite.
46	00	Cotton pad applied to the bottom of the door closer on Doorset A and ignited. Cotton pad integrity failure is deemed to have occurred.
46	10	Sustained flaming on the door closer of Doorset A. Sustained flaming integrity failure is deemed to have occurred.
46	38	Flaming on the door closer of Doorset A has been extinguished with water. All modes of integrity failure are no longer deemed to be satisfied.
47	25	Cotton pad applied to the lock set of Doorset B and ignited. Cotton pad integrity failure is deemed to have occurred.
48	32	Sustained flaming on VP1 the right glazing panel of Doorset B. Sustained flaming integrity failure is deemed to have occurred
48	37	The test is discontinued at the sponsor's request.

Test Photographs

The exposed face of the doorsets prior to testing (timber supports and hardware added prior to testing)



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



The unexposed face of the doorsets after a test duration of 5 minutes



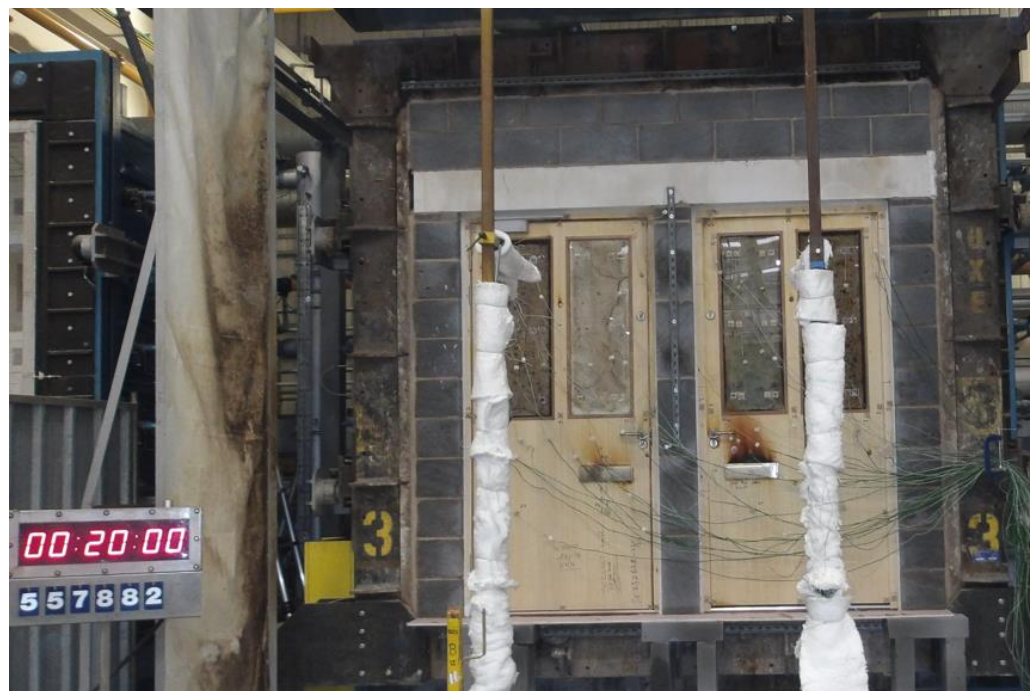
The unexposed face of the doorsets after a test duration of 10 minutes



The unexposed face of the doorsets after a test duration of 15 minutes



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



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



The unexposed face of the doorsets after a test duration of 35 minutes



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



The unexposed face of the doorsets after a test duration of 46 minutes showing sustained flaming on Doorset A



The exposed face
of the doorsets
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
2	445	542
4	544	602
6	603	601
8	645	659
10	678	715
12	705	732
14	728	743
16	748	717
18	766	745
20	781	778
22	796	791
24	809	799
26	820	805
28	831	850
30	842	842
32	851	841
34	860	845
36	869	857
38	877	872
40	885	883
42	892	894
44	899	901
46	906	906
48	912	909

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	21	20	19	19	19	20
2	100	22	19	19	19	36
4	113	31	19	19	19	40
6	127	63	21	19	19	50
8	161	99	21	19	19	64
9	184	109	22	19	20	71
10	207	112	22	20	20	76
12	255	133	24	20	21	91
14	296	161	27	22	22	106
16	322	194	30	24	25	119
18	334	226	34	27	28	130
20	350	261	38	30	30	142
22	368	291	41	33	33	153
24	379	314	44	37	36	162
26	390	330	48	43	39	170
28	406	343	50	52	42	179
30	424	361	53	63	46	189
32	434	373	57	74	49	197
34	446	378	61	81	53	204
36	459	377	66	84	56	208
38	475	378	72	88	61	215
40	491	382	80	91	66	222
42	505	387	85	92	71	228
44	513	391	87	90	78	232
46	512	394	89	89	86	234
48	526	394	90	89	91	238

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	**	20	20	19
2	19	23	20	19
4	20	27	21	19
6	22	35	26	20
8	26	48	30	22
10	30	54	32	23
12	33	61	35	25
14	38	74	38	27
16	44	71	41	30
18	50	69	44	33
20	54	69	47	36
22	58	71	50	40
24	61	74	54	44
26	63	77	60	49
28	65	81	64	56
30	67	86	70	64
32	69	92	72	73
34	71	96	78	79
36	73	99	84	83
38	76	102	91	86
40	78	106	97	87
42	81	111	100	88
44	84	118	101	87
46	88	135	102	86
48	90	*	102	88

***Doorset extinguished using water**

****Indicates thermocouple malfunction**

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	19	17	19	19
2	19	19	21	19
4	20	20	25	20
6	19	22	30	20
8	19	24	34	22
10	20	26	37	25
12	21	32	42	36
14	23	35	47	46
16	25	38	50	49
18	27	42	51	50
20	30	45	52	52
22	33	48	54	54
24	36	53	57	58
26	39	57	61	60
28	42	62	64	63
30	45	68	68	66
32	48	73	72	68
34	51	77	75	71
36	54	78	79	75
38	57	81	82	77
40	61	84	87	80
42	65	87	91	83
44	70	92	95	86
46	75	106	99	90
48	77	*	103	94

***Doorset extinguished using water**

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	18	22	19	18
2	18	19	24	18
4	18	17	32	18
6	18	16	41	19
8	18	14	42	20
10	21	28	46	23
12	25	33	42	28
14	25	37	41	34
16	25	41	40	39
18	27	43	40	36
20	28	45	41	34
22	31	48	46	34
24	34	53	47	35
26	37	55	47	38
28	40	58	48	42
30	43	61	50	45
32	46	65	52	50
34	49	67	53	55
36	51	69	55	60
38	53	72	57	64
40	55	76	57	67
42	56	80	59	69
44	57	85	61	71
46	59	113	63	73
48	*	*	64	75

***Doorset extinguished using water**

Individual and mean temperatures recorded on glazing panel VP1 of Doorset A

Time Mins	T/C Number 54 Deg. C	T/C Number 55 Deg. C	T/C Number 56 Deg. C	T/C Number 57 Deg. C	T/C Number 58 Deg. C	T/C Number 59 Deg. C	Mean Temp Deg. C
0	21	22	22	22	22	20	22
2	104	99	97	98	98	97	99
4	112	107	118	109	107	107	110
6	141	126	154	145	127	142	139
7	165	140	176	167	140	167	159
8	189	160	200	188	158	190	181
10	239	209	255	235	203	242	231
12	286	258	301	278	248	287	276
14	322	299	338	312	287	324	314
16	345	327	365	333	313	349	339
18	360	341	382	342	327	365	353
20	379	360	402	356	343	389	372
22	395	381	413	372	361	403	388
24	403	393	422	383	377	407	398
26	405	391	428	387	381	412	401
28	408	386	435	391	382	417	403
30	418	389	449	402	391	428	413
32	422	395	454	406	393	429	417
34	421	400	453	407	395	428	417
36	420	409	450	407	397	427	418
38	423	423	450	410	405	433	424
40	428	445	458	419	419	440	435
42	434	469	469	426	437	447	447
44	440	492	492	432	457	455	461
46	446	512	515	438	476	485	479
48	*	519	531	*	490	516	*

***Doorset extinguished using water**

Individual and mean temperatures recorded on the glazing panel VP2 of Doorset A

Time Mins	T/C Number 60 Deg. C	T/C Number 61 Deg. C	T/C Number 62 Deg. C	T/C Number 63 Deg. C	T/C Number 64 Deg. C	T/C Number 65 Deg. C	Mean Temp Deg. C
0	**	22	22	23	23	23	23
2	**	24	24	25	25	25	25
4	**	31	31	35	36	32	33
6	**	53	49	70	69	51	58
8	**	88	82	105	105	84	93
10	112	102	105	116	112	101	108
12	133	110	115	146	134	111	125
14	165	128	122	196	166	129	151
15	185	142	131	472	184	140	209
16	202	156	142	238	198	149	181
18	236	181	165	264	229	174	208
20	268	212	194	293	262	202	239
22	295	248	223	326	291	232	269
24	315	278	253	340	314	263	294
26	329	301	277	356	328	287	313
28	339	318	297	**	339	308	320
30	355	336	316	385	355	329	346
32	371	348	328	**	365	342	351
34	387	358	336	386	370	351	365
36	403	362	344	382	376	358	371
38	420	366	352	383	389	365	379
40	436	370	360	387	408	373	389
42	451	375	368	394	429	380	400
44	464	379	374	401	448	385	409
46	475	382	378	408	464	388	416
48	485	383	380	418	480	389	423

****Indicates Thermocouple Malfunction**

Individual temperatures recorded on the letter plate of Doorset A

Time Mins	T/C Number 78 Deg. C	T/C Number 79 Deg. C
0	22	22
2	36	22
4	49	22
6	83	28
8	96	32
10	100	37
12	98	37
14	100	37
16	104	38
18	103	40
20	102	42
22	102	45
24	104	47
26	106	51
28	108	54
30	112	58
32	115	61
34	120	65
36	124	70
38	130	75
40	135	81
42	141	87
44	146	92
46	152	95
48	158	100

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	21	23	19	19	19	20
2	22	102	20	19	19	36
4	25	112	20	19	19	39
6	28	133	20	19	19	44
8	33	174	20	20	19	53
9	37	200	21	20	19	59
10	43	226	21	20	19	66
12	60	277	23	21	20	80
14	80	318	26	22	21	93
16	95	339	29	24	23	102
18	113	349	32	27	25	109
20	126	366	36	29	27	117
22	146	391	39	32	30	128
24	163	402	42	35	33	135
26	181	404	45	38	36	141
28	185	408	48	41	40	144
30	186	419	52	47	44	150
32	199	425	56	54	49	157
34	215	426	61	59	53	163
36	232	425	67	64	59	169
38	247	427	75	69	65	177
40	262	430	83	74	71	184
42	280	436	89	78	77	192
44	294	440	93	81	82	198
46	307	444	97	85	87	204
48	323	445	100	90	92	210

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	19	23	21	22
2	20	23	22	22
4	22	23	23	22
6	25	25	24	25
8	29	28	28	26
10	29	31	31	29
12	31	33	34	31
14	34	37	40	34
16	36	42	41	36
18	37	50	43	41
20	40	53	46	45
22	43	59	50	51
24	47	63	54	57
26	51	64	58	61
28	55	68	61	66
30	58	70	65	70
32	62	72	68	74
34	67	75	72	77
36	72	78	75	79
38	78	81	79	81
40	83	84	83	84
42	88	89	88	87
44	93	102	95	90
46	94	107	99	94
48	**	108	102	97

****Indicates Thermocouple Malfunction**

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	19	19	18	19
2	19	19	18	19
4	20	20	19	19
6	23	25	20	20
8	30	41	23	20
10	35	45	27	21
12	40	51	32	23
14	43	52	36	25
16	45	53	40	27
18	47	54	42	30
20	50	57	46	33
22	52	59	51	36
24	54	62	55	40
26	58	64	60	44
28	65	67	63	48
30	70	70	65	53
32	76	74	68	59
34	85	78	73	65
36	96	83	76	71
38	99	89	81	76
40	100	96	88	79
42	102	103	97	82
44	108	108	108	83
46	117	116	114	85
48	125	132	119	87

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	21	18	17	17
2	21	18	17	17
4	21	19	19	17
6	22	20	20	17
8	23	23	22	17
10	22	26	24	18
12	23	28	26	18
14	24	29	29	19
16	25	30	31	20
18	26	32	34	22
20	27	34	37	25
22	30	36	40	27
24	32	38	45	30
26	35	40	49	33
28	37	42	52	36
30	40	44	55	39
32	43	46	58	41
34	45	48	60	43
36	47	51	62	46
38	49	53	65	48
40	51	57	68	50
42	53	60	73	51
44	55	64	77	53
46	57	72	83	55
48	59	85	89	56

Individual and mean temperatures recorded on glazing panel VP2 of Doorset B

Time Mins	T/C Number 66 Deg. C	T/C Number 67 Deg. C	T/C Number 68 Deg. C	T/C Number 69 Deg. C	T/C Number 70 Deg. C	T/C Number 71 Deg. C	Mean Temp Deg. C
0	23	23	24	24	22	24	23
2	24	24	25	25	23	25	24
4	27	26	30	28	26	28	28
6	34	30	38	33	29	32	33
8	47	36	46	43	35	42	42
10	65	48	57	59	45	53	55
12	79	62	68	76	60	64	68
14	93	80	82	89	80	81	84
16	108	92	94	101	90	94	97
18	121	107	108	115	103	108	110
20	138	121	125	133	117	124	126
22	156	144	147	152	140	144	147
23	165	155	158	161	153	153	158
24	175	164	167	169	165	163	167
26	191	182	185	184	184	179	184
28	188	185	182	184	191	183	186
30	196	187	188	190	191	186	190
32	212	199	201	205	203	197	203
34	230	216	215	225	220	212	220
36	251	234	229	245	239	226	237
38	282	250	242	277	256	238	258
40	306	263	260	299	270	255	276
42	325	280	270	314	286	266	290
44	340	298	278	327	301	277	304
46	356	310	289	342	313	290	317
48	374	324	302	361	324	306	332

Individual and mean temperatures recorded on glazing panel VP1 of Doorset B

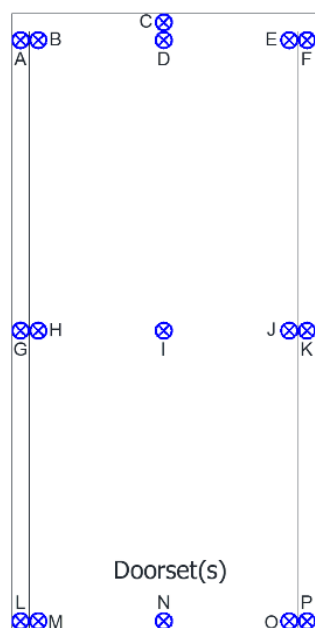
Time Mins	T/C Number 72 Deg. C	T/C Number 73 Deg. C	T/C Number 74 Deg. C	T/C Number 75 Deg. C	T/C Number 76 Deg. C	T/C Number 77 Deg. C	Mean Temp Deg. C
0	24	23	22	21	25	20	23
2	100	21	**	**	21	**	47
4	116	22	**	**	21	**	53
6	143	26	**	**	143	**	104
8	190	31	200	**	193	191	161
9	216	30	228	**	220	218	182
10	243	32	257	**	248	246	205
12	293	**	310	**	301	296	300
14	330	**	352	**	338	334	339
16	351	**	386	**	361	360	365
18	**	**	405	**	371	379	385
20	**	**	417	**	386	400	401
22	**	**	426	**	402	410	413
24	**	**	434	**	410	416	420
26	**	**	443	**	414	422	426
28	**	**	457	**	420	432	436
30	**	**	473	**	432	445	450
32	**	**	482	**	438	450	457
34	**	**	488	**	439	453	460
36	**	**	494	**	439	459	464
38	**	**	506	**	441	471	473
40	**	**	519	**	445	481	482
42	**	**	532	**	449	494	492
44	**	**	546	**	453	505	501
46	**	**	562	**	458	517	512
48	**	**	579	**	460	529	523

****Indicates Thermocouple Malfunction**

Individual temperatures recorded on the letter plate of Doorset B

Time Mins	T/C Number 80 Deg. C	T/C Number 81 Deg. C
0	22	22
2	40	22
4	54	23
6	83	35
8	115	42
10	105	50
12	102	55
14	101	59
16	96	60
18	94	62
20	94	64
22	95	64
24	97	67
26	99	71
28	102	77
30	106	77
32	111	81
34	115	87
36	120	90
38	125	94
40	130	98
42	135	99
44	140	104
46	146	112
48	151	125

Horizontal deflections of the Doorset A



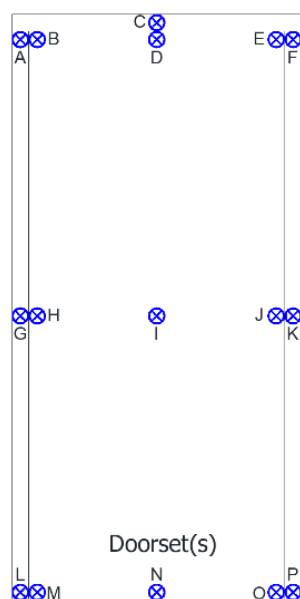
Deflections - mm																
TIME mins	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	-2	-5	0	-1	-2	-6	-7	-8	0	*	-2	-4	-1	-1	-2	-2
10	-5	0	1	3	12	-1	-8	-10	-2	-4	-11	-4	*	3	2	-2
15	-5	0	0	0	-6	**	-1	-1	-5	0	-16	-2	3	3	3	-6
20	0	-1	-3	3	**	-7	-5	-2	-7	-4	-9	-1	1	1	4	-1
25	-4	-8	-2	1	1	-6	-5	-6	-6	-2	-5	-3	1	0	5	-1
30	-4	-14	-6	3	7	-4	-11	-8	-12	-3	-2	-1	3	-2	7	-2
35	-2	-12	-5	4	6	2	-6	-8	-16	-5	-3	-3	1	-3	7	-1
40	-14	-8	-4	5	20	-1	-13	-6	-20	-2	-1	-3	1	-4	11	-2

****Smoke release obscuring deflection measurement**

***Deflection device malfunction**

Positive values indicate movement towards the furnace

Horizontal deflections of the Doorset B



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
5	-1	**	-2	-1	-3	-3	-2	-3	-4	-3	0	-2	-3	0	-1	-3
10	-7	2	-2	3	-1	-3	-1	-1	-3	-6	0	-2	-1	4	1	-2
15	-3	-6	1	2	-2	2	1	0	-4	-4	0	-2	1	1	1	-3
20	-4	4	-4	1	-4	-4	3	1	-5	-2	0	-2	1	-2	-2	-1
25	-5	6	-1	-2	-1	-2	-1	3	-6	-2	0	-2	1	-2	-2	-3
30	-3	6	*	-3	-3	1	0	6	-5	-1	1	-2	3	-2	1	-2
35	-3	4	-8	-2	-6	-5	0	-1	-5	0	-1	-3	3	-2	2	0
40	**	**	-4	-8	-7	-2	-1	0	-11	2	-3	1	2	-3	*	-2
45	-5	**	-10	-11	**	-4	-3	5	-18	3	0	-2	5	-2	9	-1

****Smoke release obscuring deflection measurement**

***Deflection device malfunction**

Positive values indicate movement towards the furnace

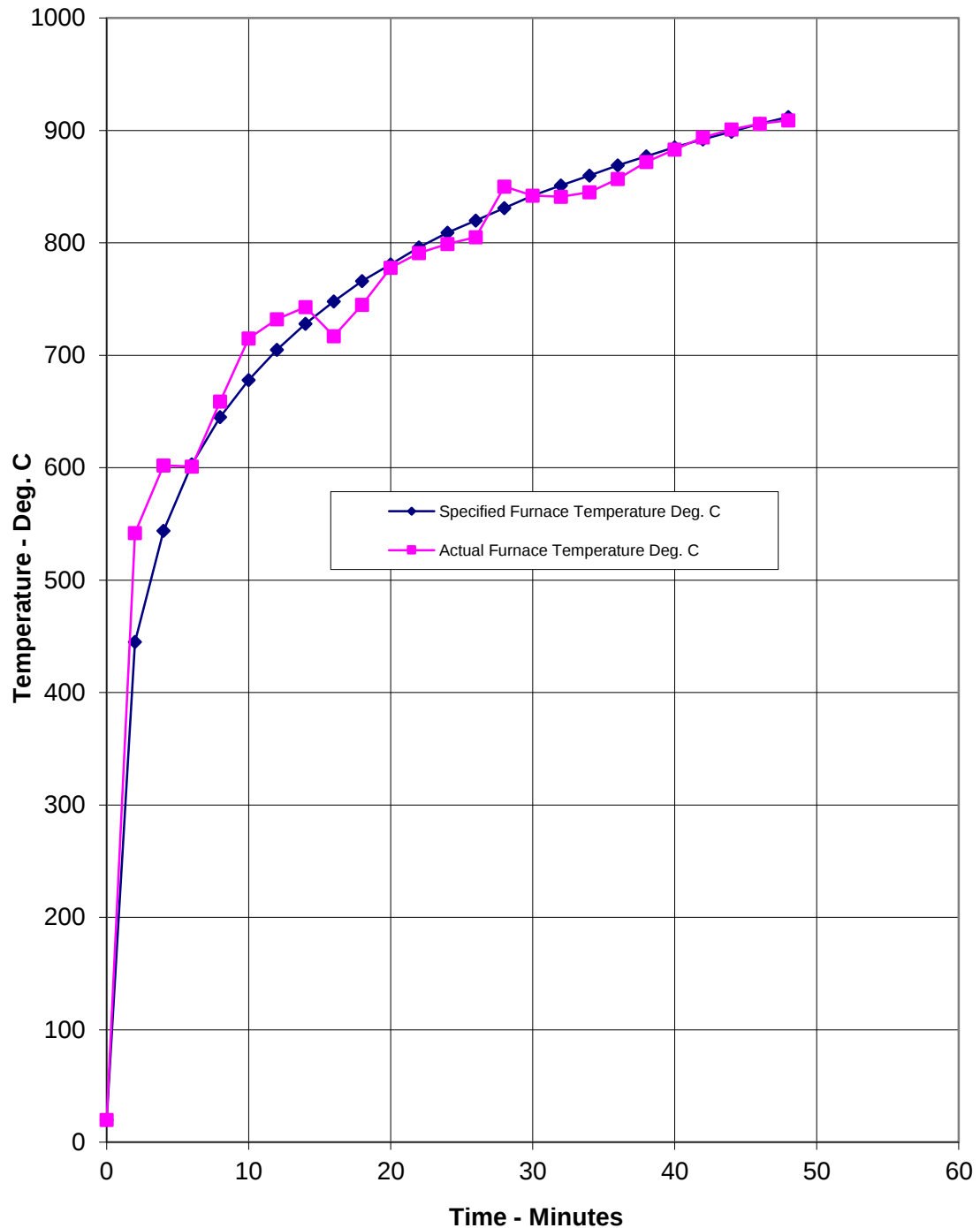
Recorded heat radiation intensity from Doorset A

Time Mins	Radiati on Intensit y kW/m ²
0	0.000
2	0.123
4	0.151
6	0.193
8	0.323
10	0.431
12	0.564
14	0.686
16	0.777
18	0.898
20	0.995
22	1.095
24	1.209
26	1.371
28	1.410
30	1.561
32	1.640
34	1.793
36	1.784
38	1.933
40	1.985
42	2.160
44	2.447
46	2.944
48	2.753

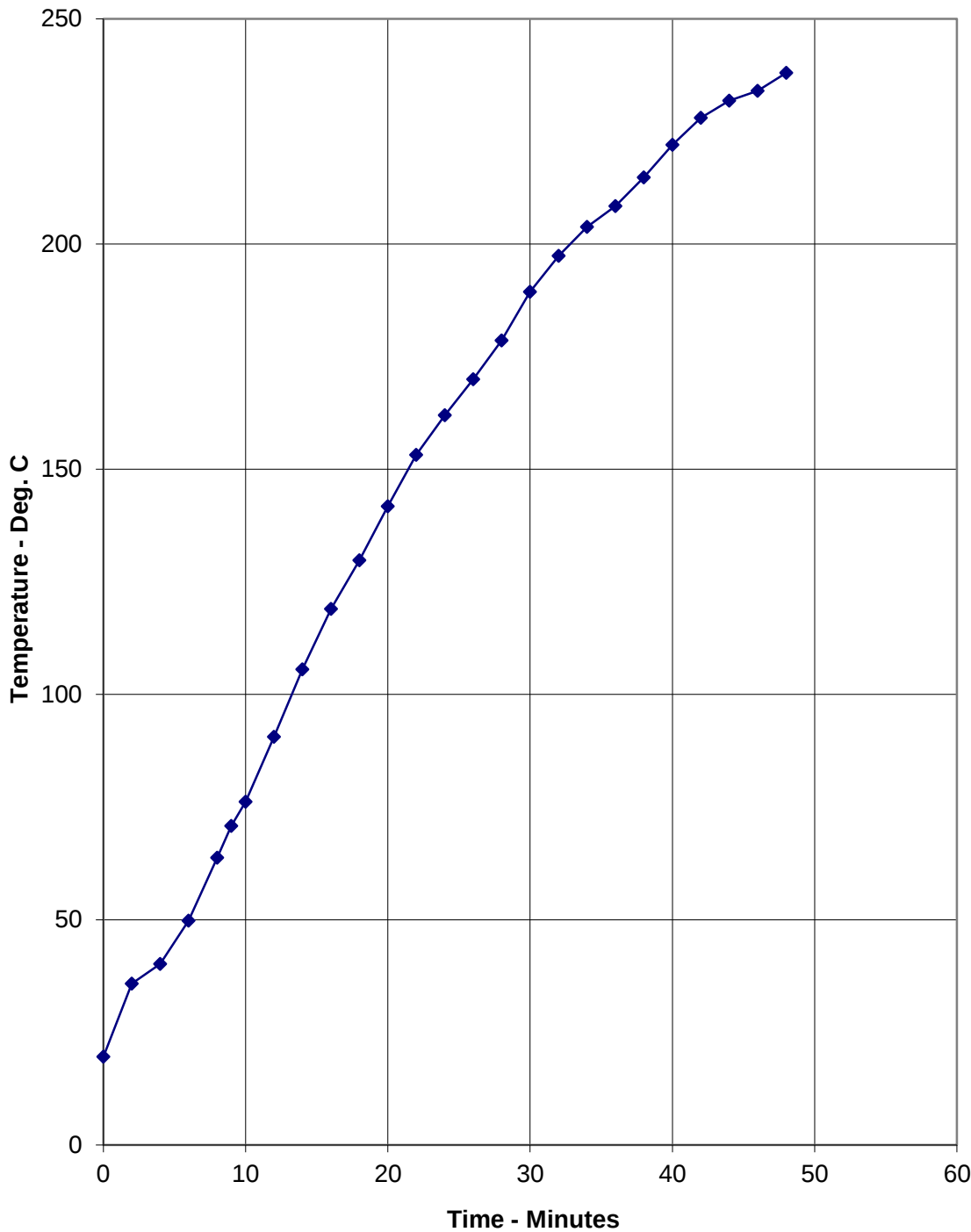
Recorded heat radiation intensity from the Doorset B

Time Mins	Radiation Intensity kW/m ²
0	0.000
2	0.066
4	0.078
6	0.151
8	0.228
10	0.342
12	0.463
14	0.566
16	0.619
18	0.659
20	0.760
22	0.847
24	0.965
26	1.013
28	1.075
30	1.175
32	1.232
34	1.303
36	1.379
38	1.487
40	1.586
42	1.733
44	1.841
46	2.023
48	2.165

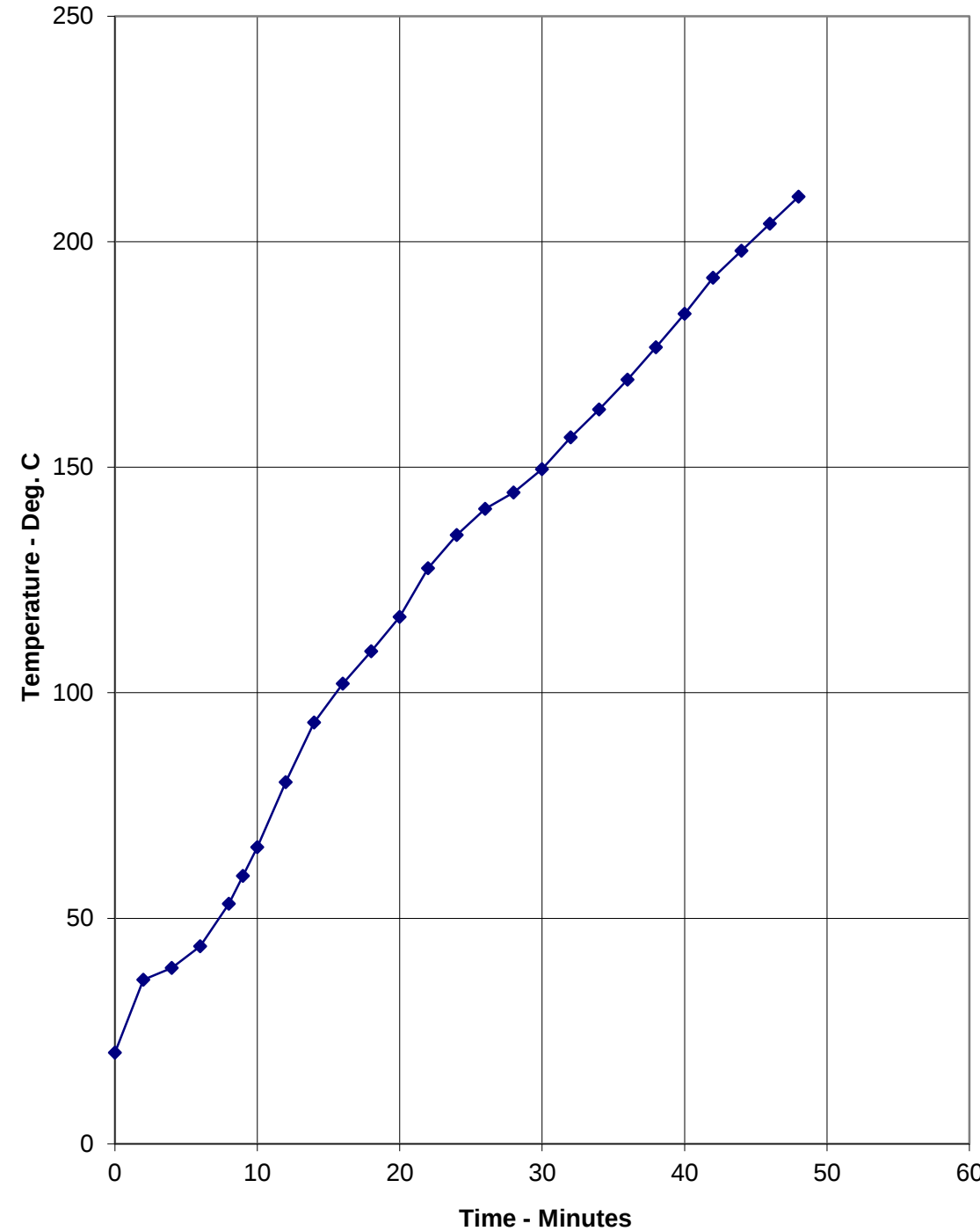
Graph showing mean furnace temperature, together with the temperature/time relationship specified in BS EN 1363-1: 2020



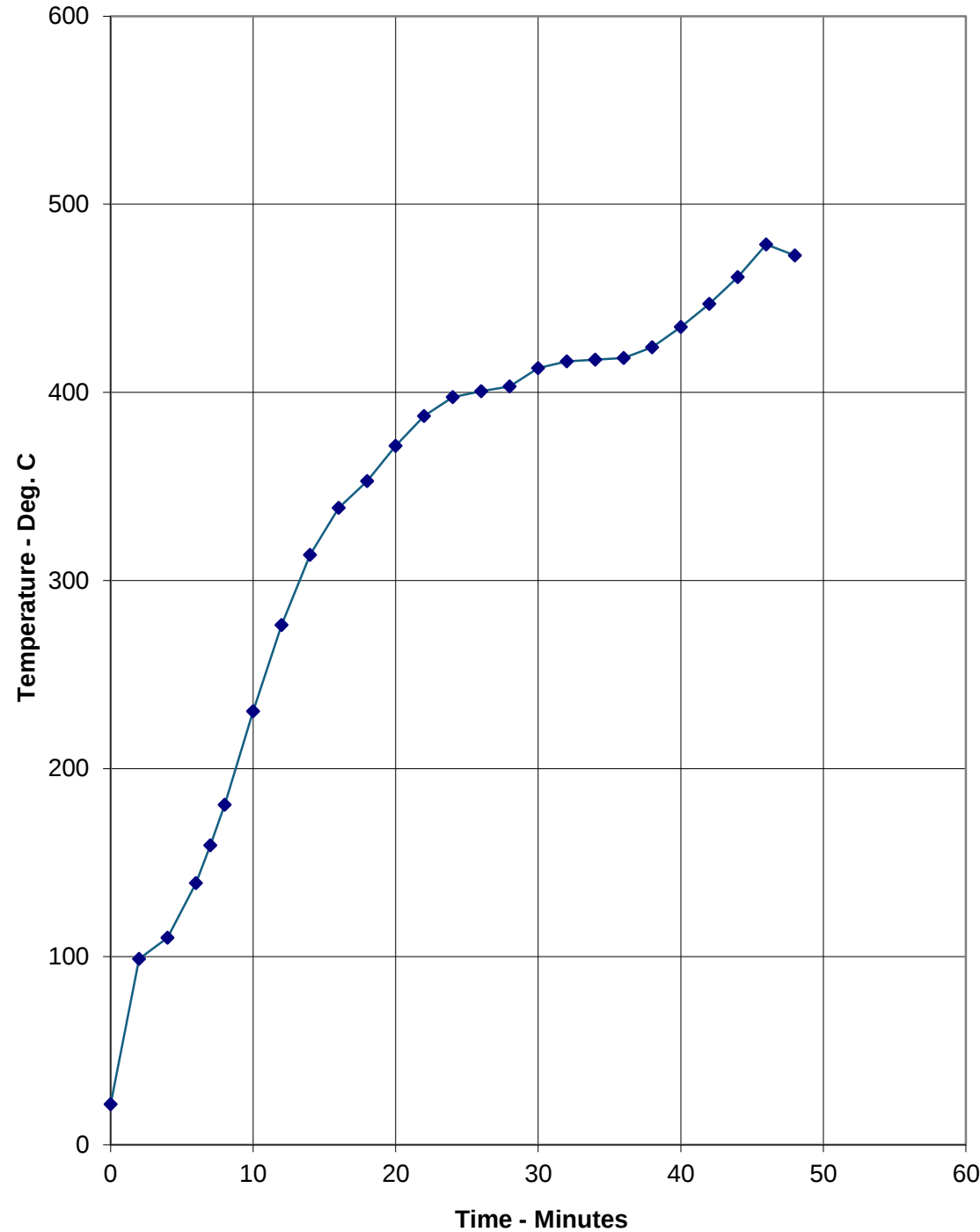
Graph showing mean temperature recorded on the unexposed surface of Doorset A



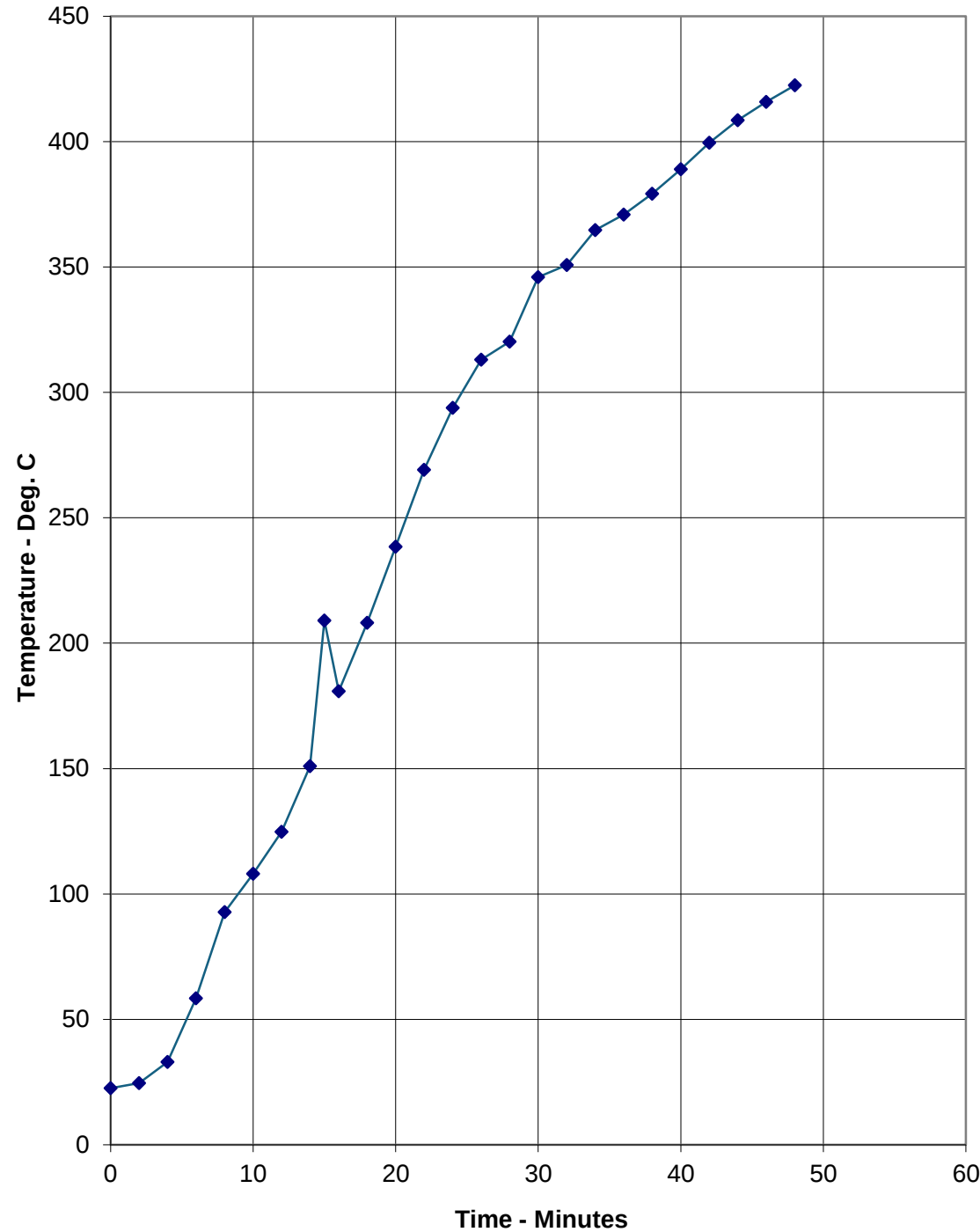
Graph showing mean temperature recorded on the unexposed surface of Doorset B



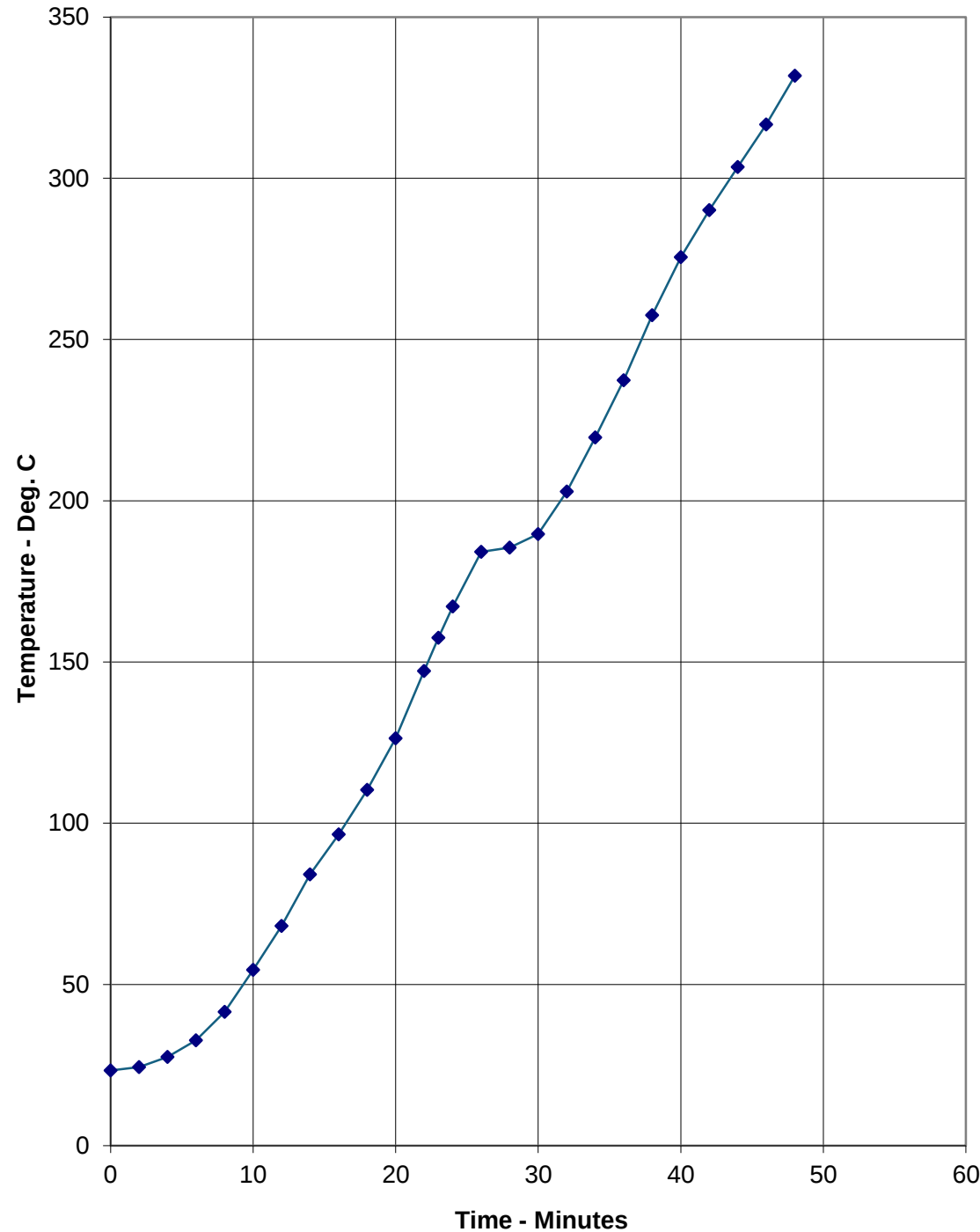
Graph showing mean temperature recorded on the glazing panel VP1 on Doorset A



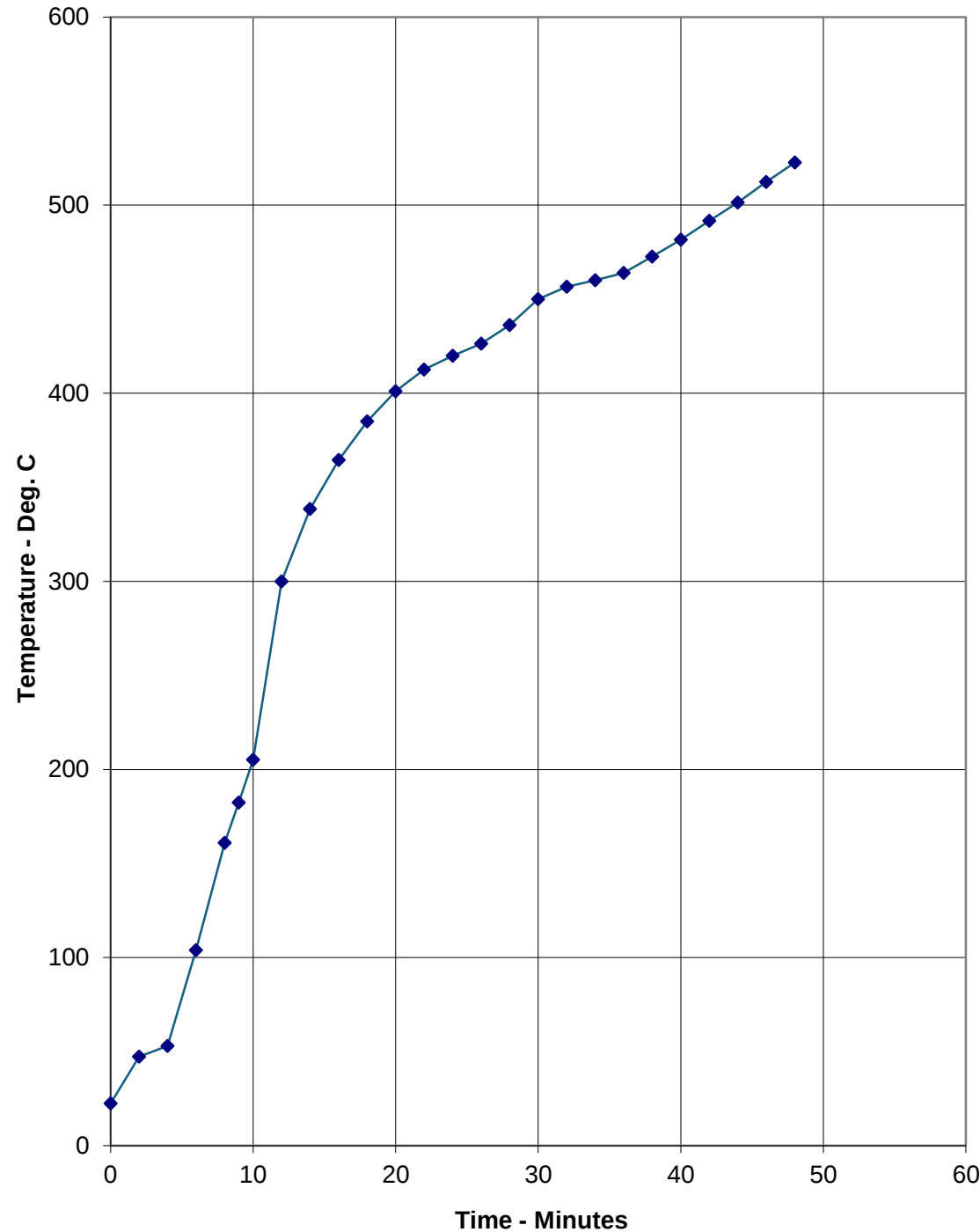
Graph showing mean temperature recorded on the glazing panel VP2 on Doorset A



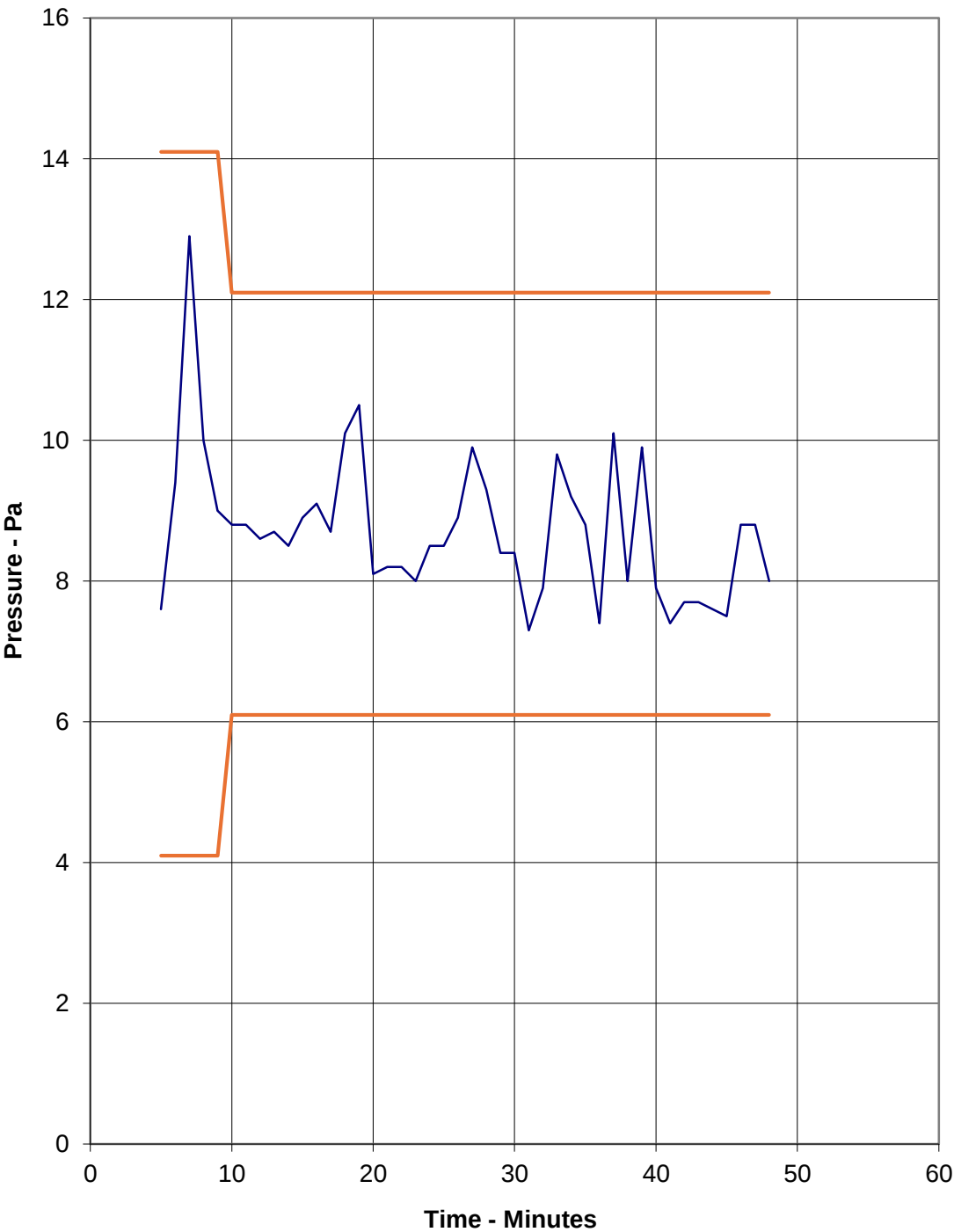
Graph showing mean temperature recorded on the glazing panel VP2 on Doorset B



Graph showing mean temperature recorded on the glazing panel VP1 on Doorset B



Graph showing recorded furnace pressure 1570 mm above the threshold of both doorsets



On-going Implications

Validity

This document is the original version of this test report and is written in English. In case of doubt, the original version prevails over a translation. This document is issued subject to Warringtonfire's standard terms and conditions, which are available at: [Terms and Conditions | Element](#).

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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The report is issued for the benefit of Warringtonfire's direct customer only and may not be relied upon by any third parties without Warringtonfire's express written consent.

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

022-2018 - Discrete areas statement of insulation criteria

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

034-2018 - Opening/closing of doors before test

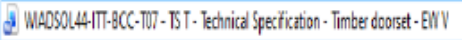
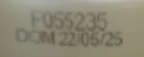
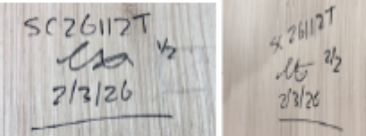
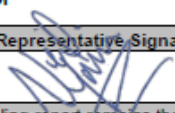
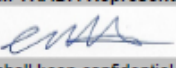
062-2022 V2 - Reporting test results

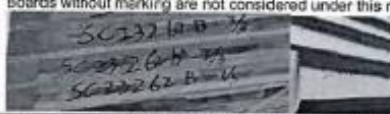
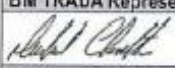
Revision history

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.

Sample Report

 Proud to be part of element		SAMPLING VISIT REPORT		Company Name Wood International Agency Limited
				Customer ID. E003760
				BM TRADA Approved Body ID: 1224
Company Head Office Address Wood House, 16 King Edward Road, Brentwood, Essex, CM14 4HL	Contact Name Neil Harrison			
	Telephone +44 7949468220			
	Email Address neil@woodia.co.uk			
Location where sampling was conducted if different from Head Office Address By Dezin Carpentry, Ffordd Erw Las, Colomendy Industrial Estate, Denbigh, LL18 5TA			Visit Date 2 nd March 2026	BMT Representative Eion Watkin
Requirement		Evidence / Comments		
Opening Meeting (names of those present)		Eion Watkin (BMT) Shaun Harrison & Neil Harrison (By Dezin Carpentry & WIA)		
Sampling Contract Reference		SC26112T		
Technical Specification document / FoA reference		 19/03/2026 13:13		
Description of product(s) sampled		2No. Single Doorsets with door leaf glazing (2 glazing options per doorset)		
Batch number(s) / Product identification		Door Leaf Processed under SC23262B – Photos held on file Lipping Adhesive		
Date of manufacture		2 nd March 2026 		
Traceability of material records i.e. Purchase Orders and delivery notes		PO Ref: Covered under SC23262B/WIA/Door Leaf PO Ref: 0000166723/Rutland/Hardware (Closer & Door Viewer) PO Ref: T00482335/Travis Via BCC/Hardware (Lock) PO Ref: T00432174/Travis Via BCC/Intumescent (Hinge Pads) PO Ref: T00408211/Travis Via BCC/Hardware (Hinges)		
Example of sampler's markings applied to the product(s) (contract reference, signature/initials of sampler, date of manufacture)				
Confirmation of minimum mandatory video/live checks undertaken		☒ Glazing assembly (where applicable) ☒ Finished doorset with markings ☒ Hardware prep and fitting (where applicable) ☒ Sampling pack discussion		
Details of any further FPC processes witnessed during the visit.		M&D records sent (taken during sampling) from WIA covering the timber used within the doorset, as ITT no further FPC documents supplied as part of this sampling		
Determine the essential characteristics of the product and confirm the details of in-process checks conducted on the sample to ensure conformity.		TST followed with this ITT being used to create a EXAP/FoA.		
State any items from the Technical Specification / FoA that were not witnessed and require further lab sampling		☐ Side screen / overpanel ☐ Handles ☒ Other (see tech spec marked with 'not seen' and see next line) ☒ Door closer (supplied loose) ☐ Frame re-assembly		
Confirm any clauses within the Technical Specification that were found to be different on the sampled product/s. <i>Non-conformances may be raised for pre-cert and audit test sampling</i>		All changes noted on original TST noted in changed TST held on the system		
Closing Meeting (names of those present)		Eion Watkin (BMT) Shaun Harrison & Neil Harrison (By Dezin Carpentry & WIA)		
Company Representative Name (Print)		Declaration for the Company		
Neil Harrison		I declare that the product/s witnessed during this sampling visit are representative of normal production.		
Company Representative Position		No changes will be made prior to delivery to the test laboratory.		
Director				
Company Representative Signature		BM TRADA Representative Signature		
				
This sampling report remains the property of BM TRADA. BM TRADA shall keep confidential all information relating to the sampling process and your organisation and shall not disclose such information to any third party except as required by law or by BM TRADA's Accreditation Bodies. This sampling report will be shared with others within Warringtonfire Testing and Certification Ltd.				

bctrada Proud to be part of element		SAMPLING VISIT REPORT		Company Name	Wood International Agency Ltd
				Establishment No.	047/21200. CO
				BM TRADA Notified Body ID: 1224	
Company Head Office Address	Wood International Agency Ltd Woods House 16 King Edward Road Brentwood Essex CM5 0RQ		Contact Name	Neil Harrison	
			Telephone	+44 (0) 1277 232991	
			Email Address	doors@woodia.co.uk	
Location where sampling was conducted if different from Head Office Address				Visit Date	BMT Representative
				07/11/2023	Michael Charlton
Requirement		Evidence / Comments			
Opening Meeting (names of those present)		Remote sampling from live production.			
Contract Reference		SCT23262B			
Technical Specification document / FoA reference Photographs to be taken of all critical areas highlighted in the Technical Specification		WIAL technical datasheet (Draft version): WIAD-SOL44-SPA-003-A1-P1 Rev -. A specification has also been drafted in BM TRADA "Scope" format which must be read in conjunction with this report.			
Description of product(s) sampled		44mm Lamel based timber door blank 3No. cross laminated layers of 12.7mm thick locally sourced spruce barecore, calibrated to 36.8mm. Outer facings 4mm Poplar plywood. Adhesive for lamel/barecore production: E1 MUF. Adhesive for barecore and plywood lamination: E1 MUF.			
Product identification / reference numbers / codes		WIAL branded as "Soloman™ 44 PLY faced".			
Batch number(s)		N/A			
Date of manufacture		Barecores run 26-30 October 2023. Laminated 26-30 November 2023. Cutting, final facing and final trimming 2-6 November 2023.			
Quantity of stock and size of sample(s) taken		24No. blanks at 1220mm wide x 2440mm high x 44mm thick 3No. blanks at 1060mm wide x 2440mm high x 44mm thick			
Traceability of material records ie Purchase Orders and delivery notes		Locally sourced spruce for lamels (Inspection report), 4mm poplar plywood (Inspection report), MUF adhesive (Lab Inspection report held on file by BM TRADA). Products traceable throughout the process via route card.			
Example of sampler's markings applied to the product(s) (contract reference, signature of client, date of manufacture)					
Confirmation of minimum mandatory video/live checks undertaken		☒ Glazing assembly (where applicable) ☐ Finished doorset with markings ☒ Hardware prep and fitting (where applicable) ☐ Sampling pack discussion			
Details of any further FPC processes witnessed during the visit.		Manufacturer are Q-Mark certified in their own right for alternative specifications. A full audited FPC system in place. The factory is intended to become BM TRADA Q-Mark certified for supply of the above sampled products after successful testing.			
Determine the essential characteristics of the product and confirm the details of in-process checks conducted on the sample to ensure conformity.		Manufacturing recipe (held on file), FPC manual, in process inspection and final laboratory testing to demonstrate compliance with requirements. Key points: Grading, moisture content and density of Lamel barecores, Glue type & application to lamels (g/m²). Facing supply and inspection. Lamel pressing, curing and repairs. Glue type & application to barecores (g/m²). Press conditions. Trimming to size.			
State any items from the Technical Specification / FoA that were not witnessed and require further lab sampling		☐ Side screen/overpanel ☐ Handles ☐ Other (see tech spec marked with 'not seen') ☐ Door closer ☐ Frame re-assembly			
Confirm any clauses within the Technical Specification that were found to be different on the sampled product/s. <i>Non-conformances may be raised for pre-cert and audit test sampling</i>		None			
Closing Meeting (names of those present)		Victor Fu (MS Teams). Draft sampling report sent for approval and signing.			
Declaration		I declare that the product/s witnessed during this sampling visit are representative of normal production.			
Company Representative Name (Print)		Company Representative Position			
Sent to WIAL and Factory for review and approval.					
BM TRADA Representative Signature		Company Representative Signature			
					
This sampling report remains the property of BM TRADA. BM TRADA shall keep confidential all information relating to the sampling process and your organisation and shall not disclose such information to any third party except as required by law or by BM TRADA's Accreditation Bodies. This sampling report will be shared with others within Warringtonfire Testing and Certification Ltd.					

Stocking Lane, Hughenden Valley, High Wycombe, Buckinghamshire, HP14 4ND. Tel: 01494 569700
Wood International Agency Ltd SCT23262B 44mm ply SVR MC Final

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Registered Company No. 11371436

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a UKAS accredited testing laboratory No.0249

Element Materials Technology
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