

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: Two Asymmetrical, Single-Acting, Single-Leaf, Timber Doorsets

Report number: 557329/R

Test date: 09 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 A and B and were installed within a standard rigid low-density blockwork supporting construction. Doorset A and B were installed such that they opened away from the furnace only.

Doorset A had overall nominal dimensions of 2222 mm high by 1089 mm wide, incorporating a single door leaf with nominal dimension of 2175 mm high by 1007 mm wide by 66 mm thick. The door leaf was hung in a sapele hardwood frame using three stainless steel hinges referenced 'RT Hi-Load 207'. The leaf was constructed from a ply faced engineered timber core referenced 'Talisman 54' and incorporated two Pyroguard EI60 glazed vision panels with overall nominal dimensions of 165 mm high by 797 mm wide by 23 mm thick and 601 mm high by 797 mm wide by 23 mm thick. There was a drop down seal referenced 'LAS800 si', a pull handle referenced 'D handle – SP-FBD225B.03' on the unexposed face and a concealed door closer referenced 'Rutland ITS. 11204' which ensured the doorset remained closed throughout the test.

Doorset B had overall nominal dimensions of 2222 mm high by 1089 mm wide, incorporating a single door leaf with nominal dimension of 2175 mm high by 1007 mm wide by 56 mm thick. The door leaf was hung in an American poplar hardwood frame using three stainless steel hinges referenced 'RT Hi-Load 207'. The leaf was constructed from a graduated density particleboard core referenced 'Marksman 44'. There was a drop down seal referenced 'LAS800 si', a pull handle referenced 'T Bar pull handle SSS-SP-IH190-250 (secret fix)' on the exposed face, a lever handle referenced 'SP-DU5 / LH.68 Dune lever' on the unexposed face, a lockset referenced 'SP-G7008/76.2', an electric strike/keep referenced 'SP-GK450M-FR.01 Monitored electric strike release', a cylinder referenced 'Strada half euro cylinder SP-V10EP55SPBE', an escutcheon referenced 'SP-FB001.03', a concealed security chain referenced 'SP-TSSCONCHAINS.01 Concealed security door chain', a door viewer referenced 'SP-SWLAFEI30.68 Door Viewer' and a concealed door closer referenced 'Rutland ITS. 11204' which ensured the doorset remained closed throughout the test.

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	91 minutes	Failure	51 minutes	Area blanked off
Gap gauge	91 minutes	Area extinguished	51 minutes	Area extinguished
Cotton pad	82 minutes	Ignited	49 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	69 minutes	Exceeded maximum temperature criteria TC21	49 minutes	Due to integrity failure
Discrete area (Top Glazing Panel)	90 minutes	Exceeded mean temperature criteria	N/A	N/A
Discrete area (Bottom Glazing Panel)	70 minutes	Exceeded mean temperature criteria	N/A	N/A

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

Specimen	69 minutes	Exceeded maximum temperature criteria TC21	49 minutes	Due to integrity failure
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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	105 minutes*	105 minutes*	105 minutes*	105 minutes*	105 minutes*
Specimen B	N/A	N/A	N/A	N/A	N/A

*Test was discontinued after a period of 105 minutes.

Date of test 09 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: 09 June 2026	
Responsible Officer:	P. White* Technical Officer	Approved By:	S. Hankey* Report Co-ordinator / Technical Officer
			

* 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 **Warringtonfire** sample selected the following components of the tested specimen:

Component	Sampling date	Sampling report reference
Doorset A	15/12/2025	SC25307T
Doorset B	15/12/2025	SC25308T

Copies of sampling reports are available on request.

Installation

The doorsets were received on the 6th February 2026 and mounted within apertures in a blockwork wall construction; the leaves were single-acting and could open away from the furnace only. Representatives of the **Test Sponsor** conducted the installation on the 6th February 2026.

Specimen Direction

Tested specimen **A** was **asymmetrical**. Specimen **B** was **asymmetrical**. The **Test Sponsor** defined the direction in which the specimens 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 6 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 12.0°C to 24.0°C and 37.5% to 66.5% respectively.

Instruction to Test

The test was conducted on the 09 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
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 17°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

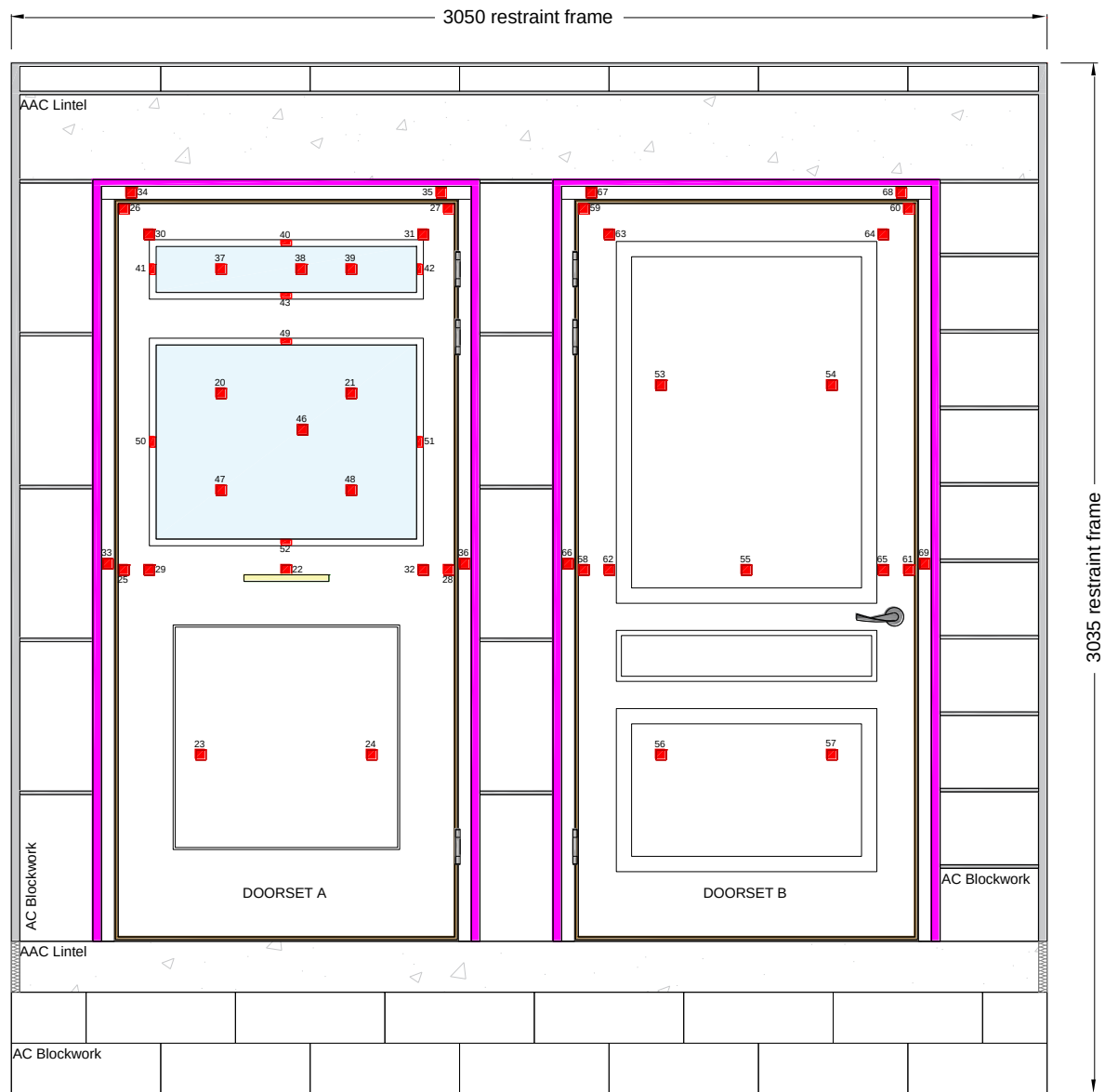
A water-cooled foil heat-flux meters were used to record the heat radiation from the specimens. The heat flux meters were positioned at a distance of 1 metre from the centre of the specimens.

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 $14.6 (\pm 5)$ Pa between 5 and 10 minutes and $14.6 (\pm 3)$ Pa thereafter.

Due to the nature of the test and required temperature adjustments during the test, occasionally the recorded pressure differential was outside the specified limits for short durations of time. The effect of such fluctuation on the test results obtained can be neglected.

Test Specimen Drawings



GENERAL ELEVATION OF UNEXPOSED FACE SHOWING THERMOCOUPLE POSITIONS

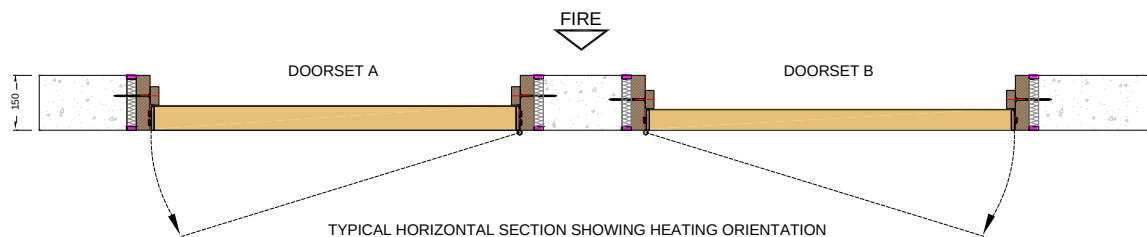


Figure 1. General elevation of unexposed face showing thermocouple positions

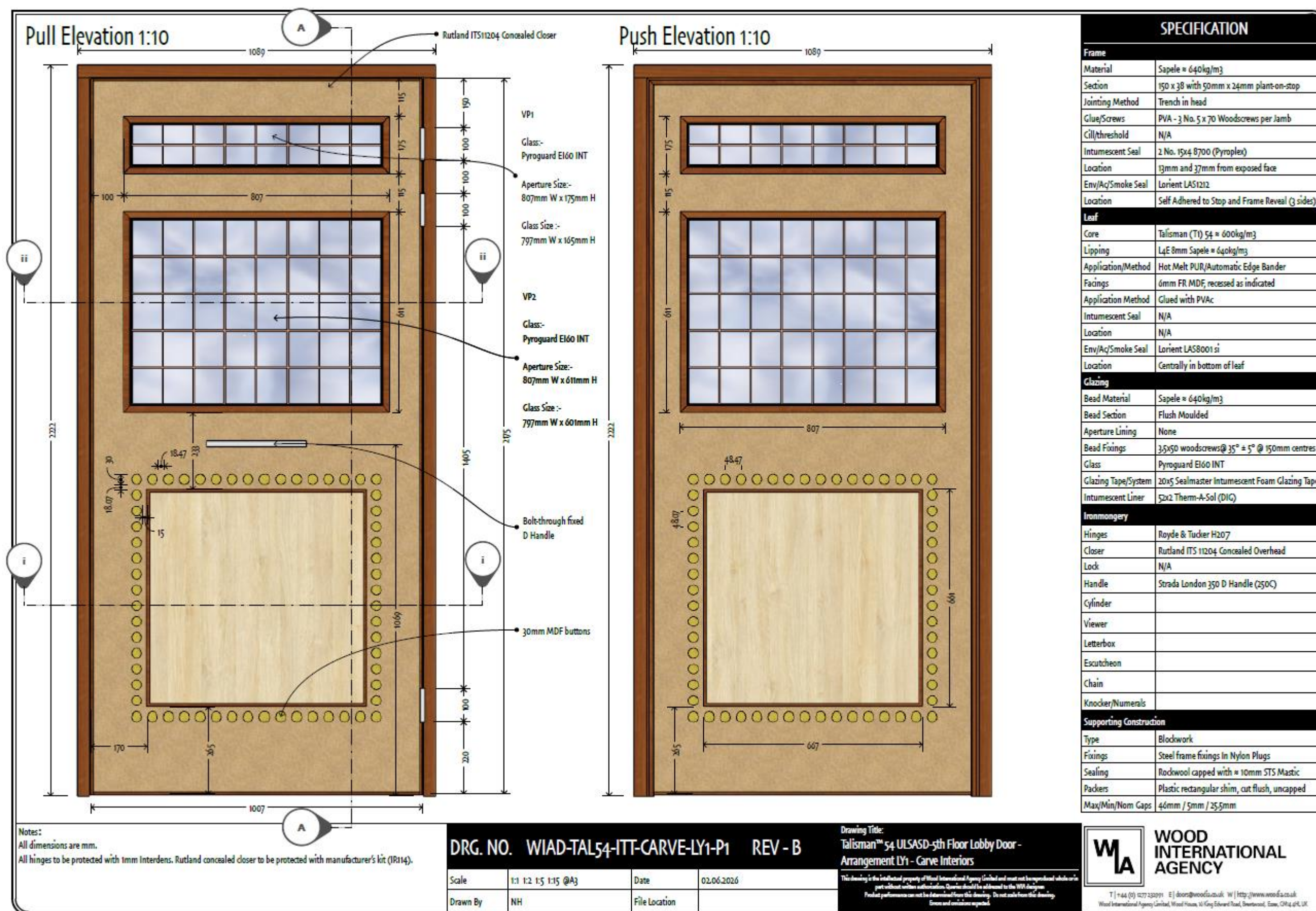


Figure 2. Doorset A - Drawing No. WIAD-TAL54-ITT-CARVE-LY1-P1 Page 1

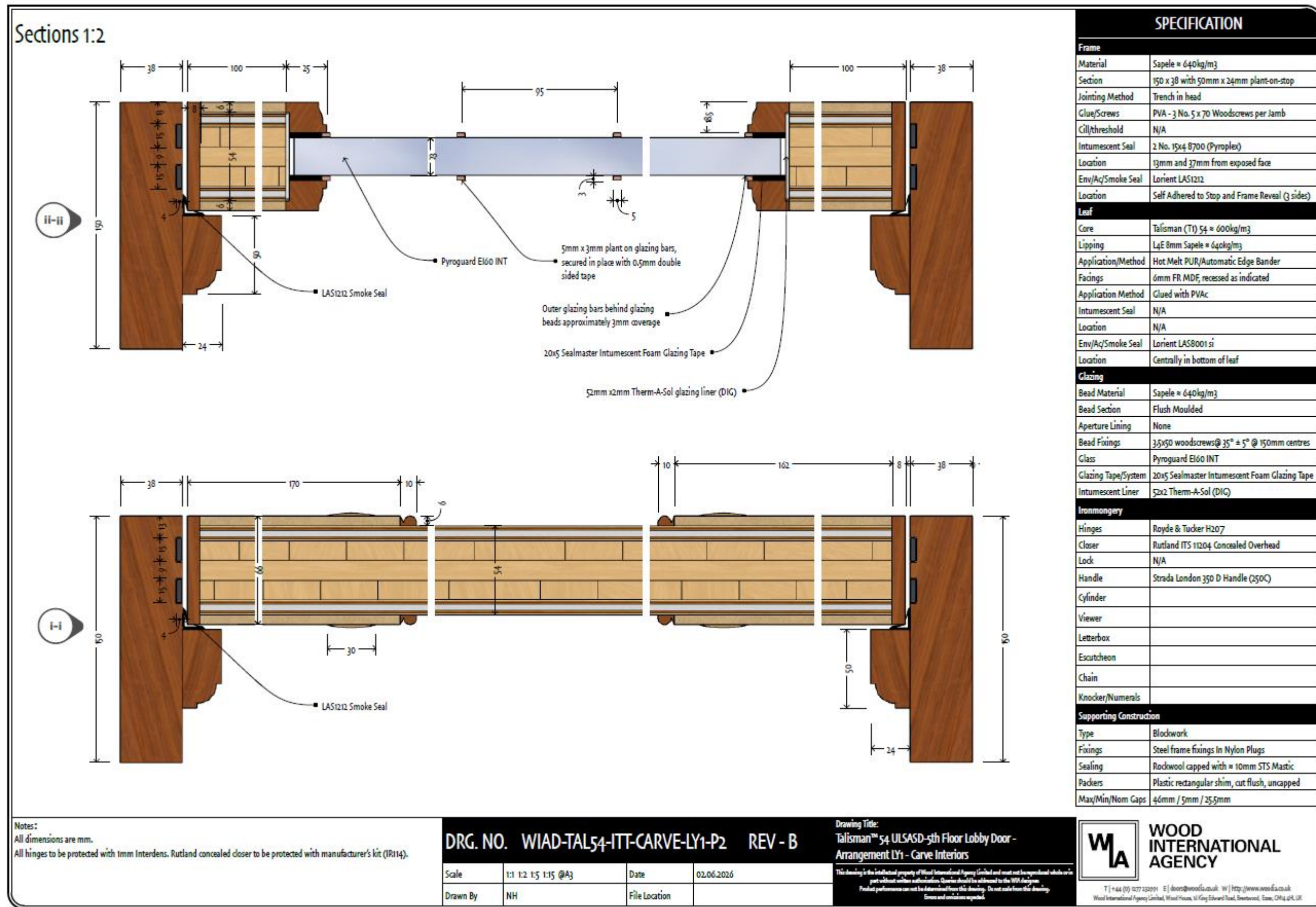


Figure 3. Doorset A - Drawing No. WIAD-TAL54-ITT-CARVE-LY1-P2 Page 2

Test date: 09/02/2026

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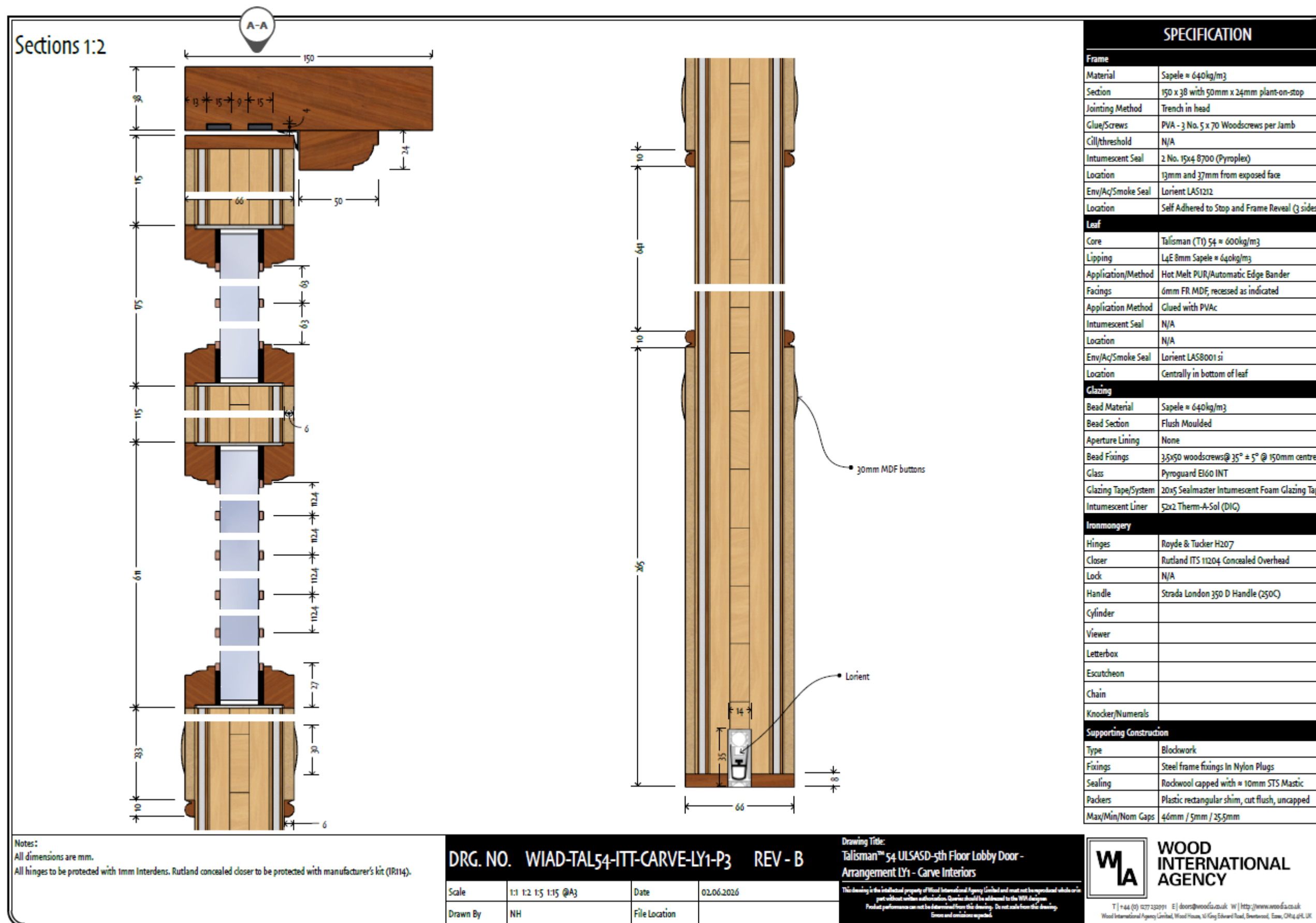


Figure 4. Doorset A - Drawing No. WIAD-TAL54-ITT-CARVE-LY1-P3 Page 3

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

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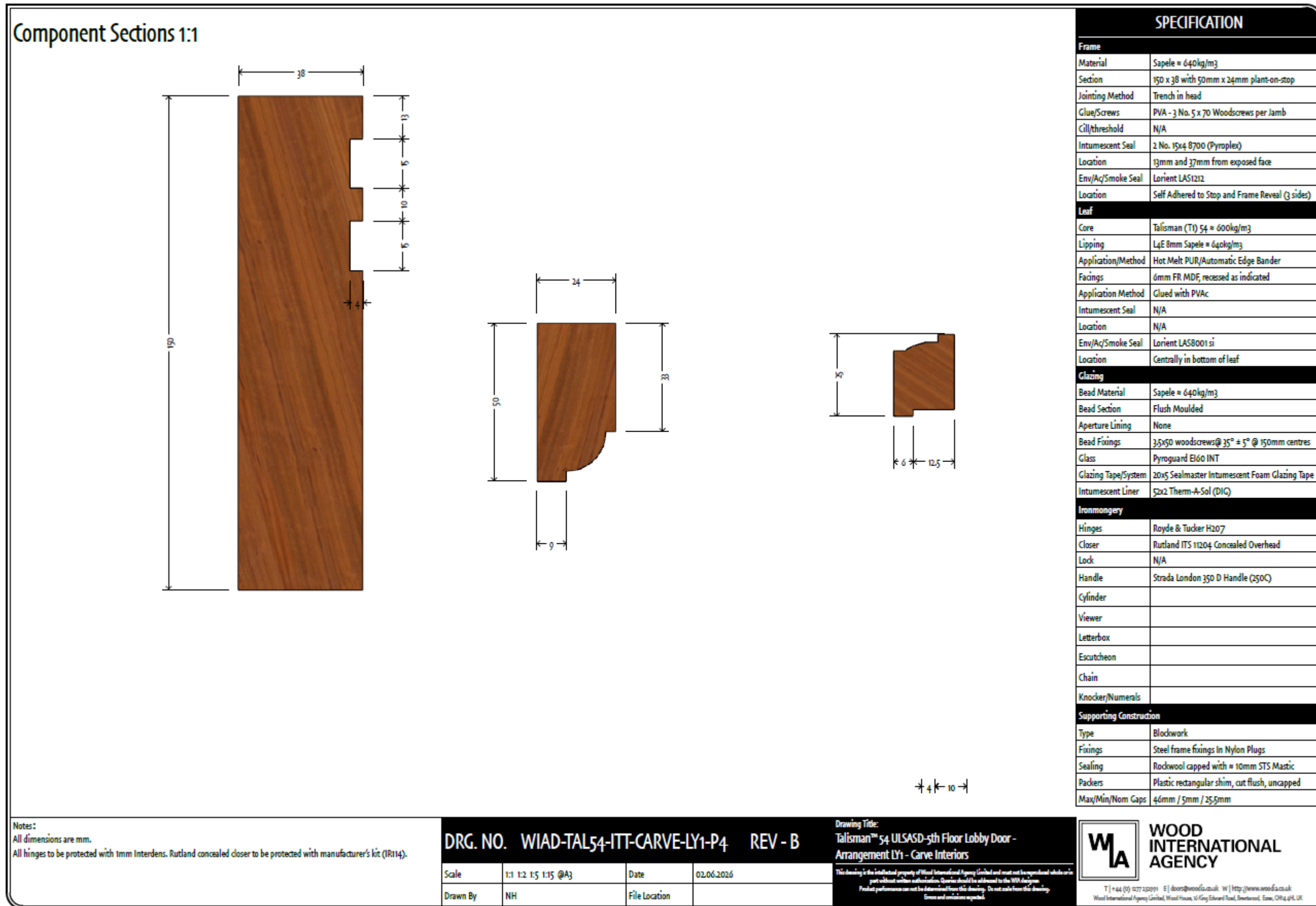
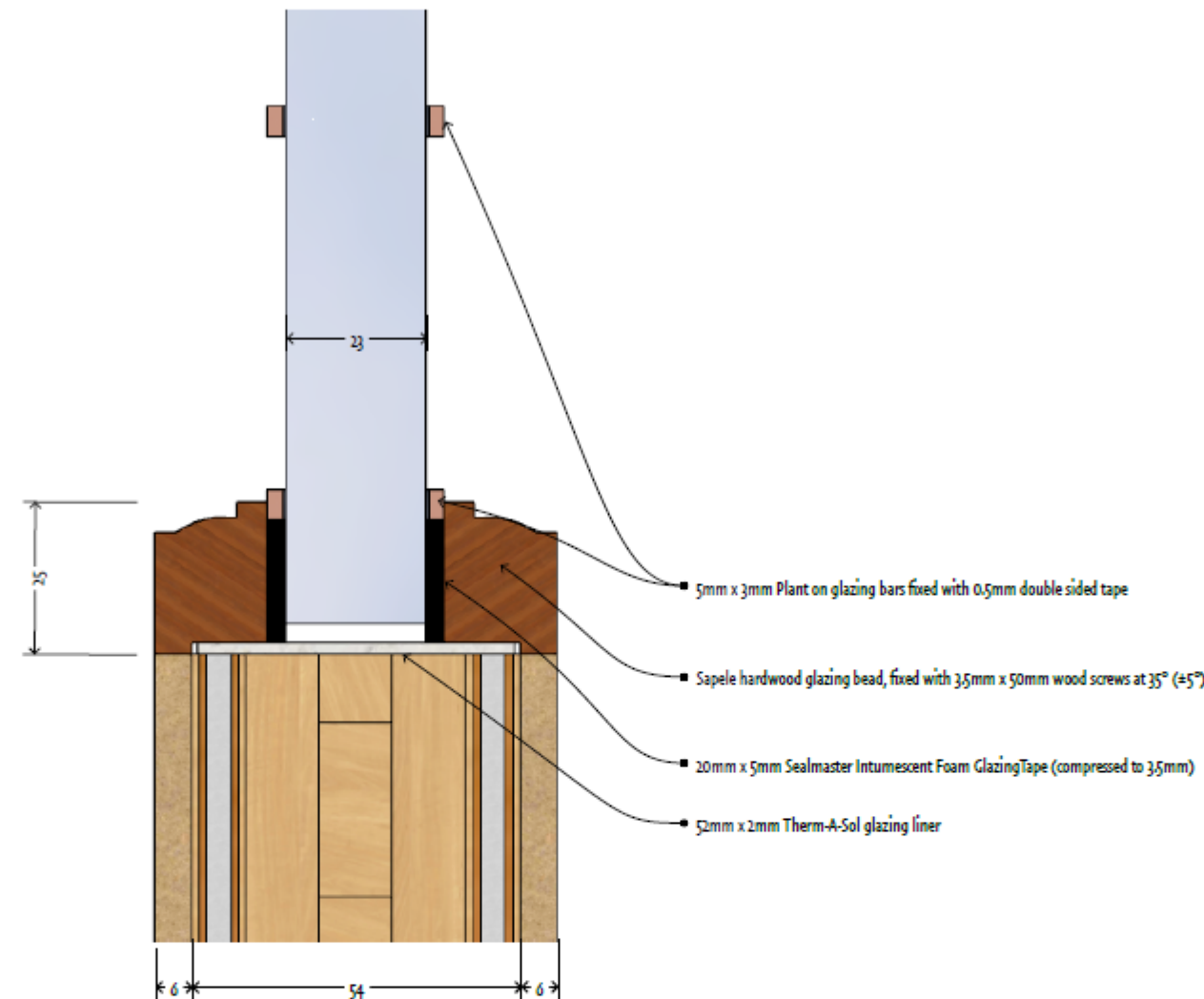


Figure 5. Doorset A - Drawing No. WIAD-TAL54-ITT-CARVE-LY1-P4 Page 4

Glazing Sections 1:1



SPECIFICATION

Frame	
Material	Sapele ≈ 640kg/m ³
Section	150 x 38 with 50mm x 24mm plant-on-stop
Joining Method	Trench in head
Glue/Screws	PVA - 3 No. 5 x 70 Woodscrews per Jamb
Cill/threshold	N/A
Intumescent Seal	2 No. 15x4 8700 (Pyroplex)
Location	13mm and 37mm from exposed face
Env/Ac/Smoke Seal	Lorient LAS1212
Location	Self Adhered to Stop and Frame Reveal (3 sides)
Leaf	
Core	Talisman (T1) 54 ≈ 600kg/m ³
Lipping	L4E 8mm Sapele ≈ 640kg/m ³
Application/Method	Hot Melt PUR/Automatic Edge Bander
Facings	6mm FR MDF, recessed as indicated
Application Method	Glued with PVAc
Intumescent Seal	N/A
Location	N/A
Env/Ac/Smoke Seal	Lorient LAS8001 si
Location	Centrally in bottom of leaf
Glazing	
Bead Material	Sapele ≈ 640kg/m ³
Bead Section	Flush Moulded
Aperture Lining	None
Bead Fixings	3.5x50 woodscrews @ 35° ± 5° @ 150mm centres
Glass	Pyroguard EI60 INT
Glazing Tape/System	20x5 Sealmaster Intumescent Foam Glazing Tape
Intumescent Liner	52x2 Therm-A-Sol (DIQ)
Ironmongery	
Hinges	Royde & Tucker H207
Closer	Rutland ITS 11204 Concealed Overhead
Lock	N/A
Handle	Strada London 350 D Handle (250C)
Cylinder	
Viewer	
Letterbox	
Escutcheon	
Chain	
Knocker/Numerals	
Supporting Construction	
Type	Blockwork
Fixings	Steel frame fixings in Nylon Plugs
Sealing	Rockwool capped with ≈ 10mm STS Mastic
Packers	Plastic rectangular shim, cut flush, uncapped
Max/Min/Nom Gaps	46mm / 5mm / 25.5mm

Notes:
All dimensions are mm.
All hinges to be protected with 1mm Intendens. Rutland concealed closer to be protected with manufacturer's kit (IR114).

DRG. NO. WIAD-TAL54-ITT-CARVE-LY1-P5 REV - B

Scale	1:1 1:2 1:5 1:15 @A3	Date	02.06.2026
Drawn By	NH	File Location	

Drawing Title:
Talisman™ 54 ULSASD-5th Floor Lobby Door -
Arrangement LY1 - Carve Interiors

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Figure 6. Doorset A - Drawing No. WIAD-TAL54-ITT-CARVE-LY1-P5 Page 5

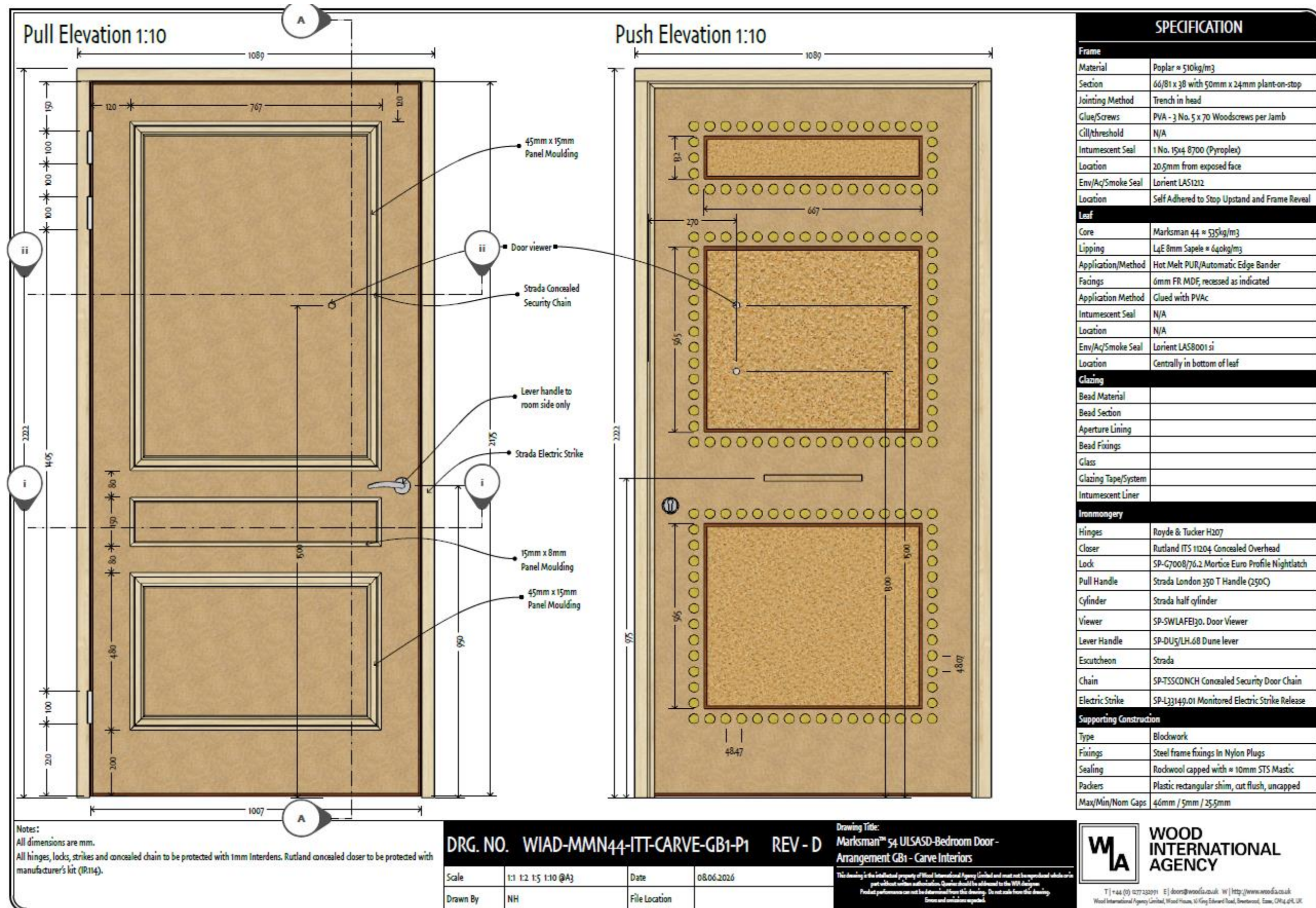


Figure 7. Doorset B - Drawing No. WIAD-MMN44-ITT-CARVE-GB1-P1 Page 1

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

Test sponsor: Wood International Agency Ltd

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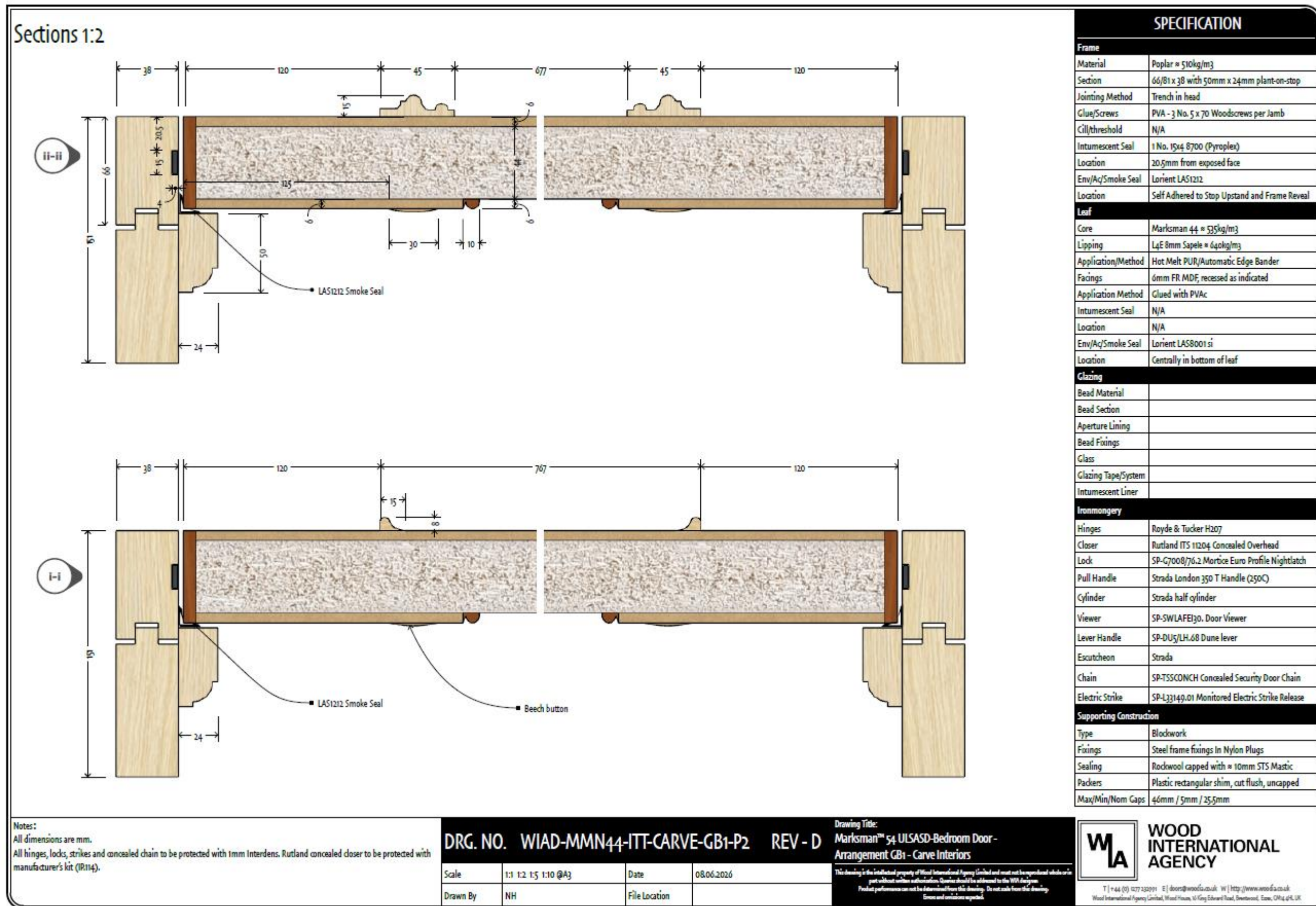


Figure 8. Doorset B - Drawing No. WIAD-MMN44-ITT-CARVE-GB1-P2 Page 2

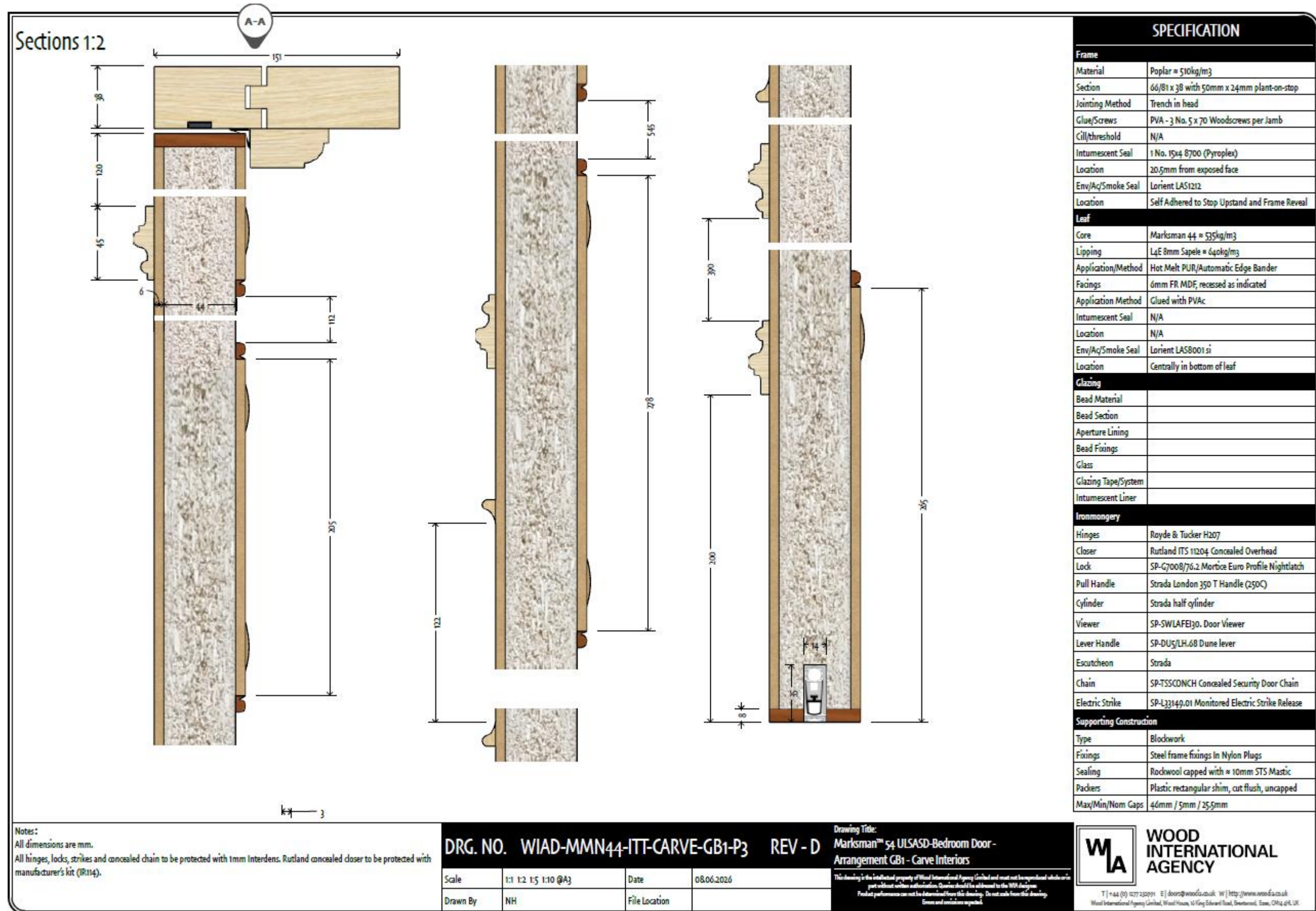


Figure 9. Doorset B - Drawing No. WIAD-MMN44-ITT-CARVE-GB1-P3 Page 3

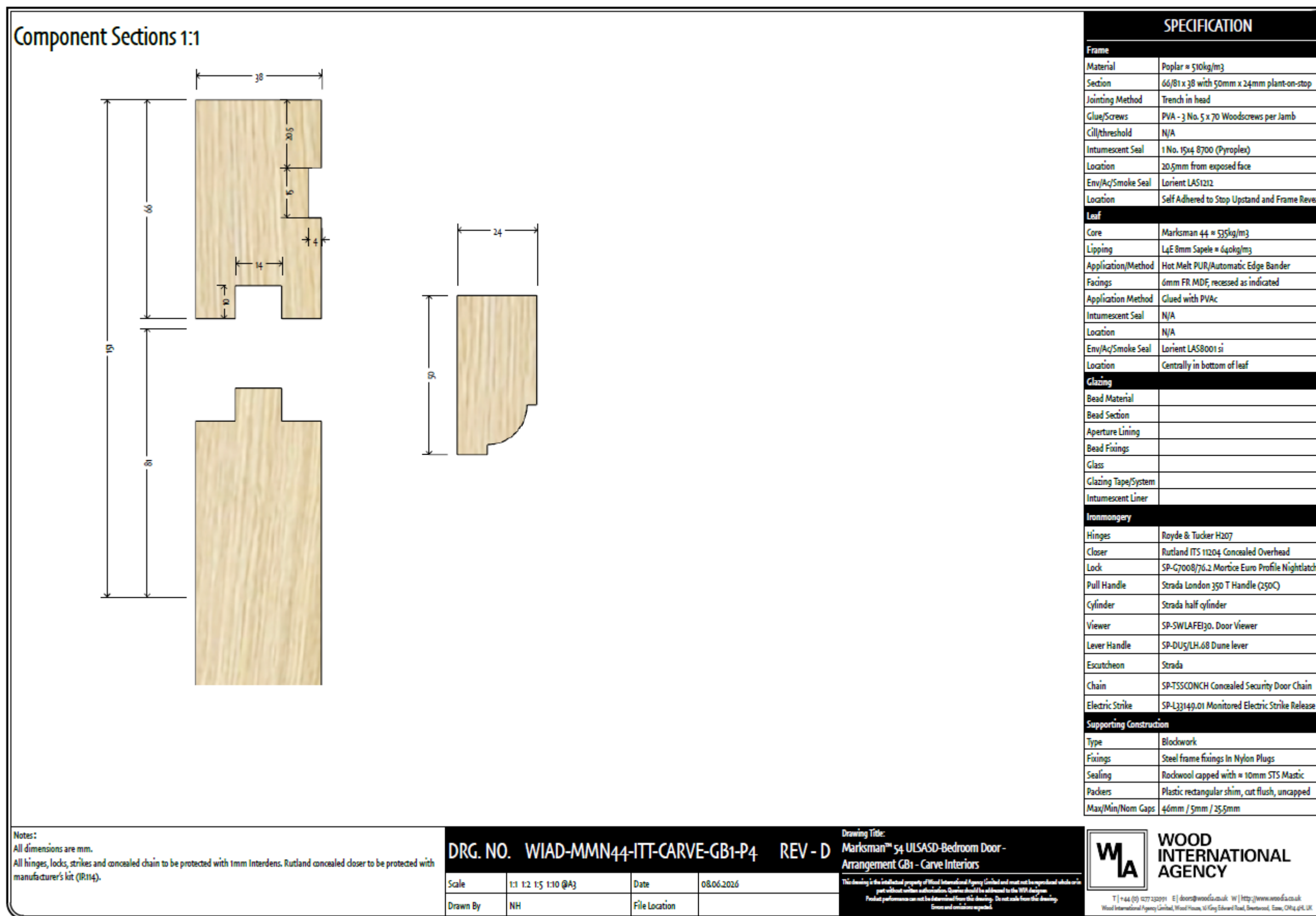


Figure 10. Doorset B - Drawing No. WIAD-MMN44-ITT-CARVE-GB1-P4 Page 4

Schedule of Components

The schedule of components describes the test specimen and lists the components used in the construction of the test specimen. These were provided by the test sponsor and surveyed by Warringtonfire.

All measurements were verified by Warringtonfire unless stated otherwise in the schedule of components. All components marked with an “*” have not been verified by Warringtonfire.

Door Frame A

1. Door frame	
Manufacturer	Carve Interiors Ltd
Reference	N/A
Material head and jambs	Sapele hardwood
Density	640 kg/m ³ (nominal)
Moisture content	8.0% (measured by Warringtonfire)
Overall size	2222 mm high x 1089 mm wide
Frame profile size	
Frame (head)	150 mm wide x 38 mm thick with a planted stop (item 2)
Frame (jambs)	150 mm wide x 38 mm thick with a planted stop (item 2)
	
Jamb to head jointing method, fixing detail and location	3 No. 70 mm long x 5 mm diameter woodscrews fixed through trench in head into each jamb
Presence of adhesives	Yes
Manufacturer	Maxitek
Type	D3 PVA
Reference	D3 PVA Wood adhesive
Curing method	Evaporation
Application method	Hand spread

2. Planted door stop	
Manufacturer	Carve Interiors Ltd
Material	Sapele hardwood
Size	50 mm wide x 24 mm thick 
Stop to frame jointing method, fixing detail and location	Pinned to frame using 38 mm 16g pins with at approx. 50 mm from internal corners and a range of 277 mm – 310 mm centres
Density	640 kg/m ³ (nominal)
Presence of adhesives	No

3. Intumescent to frame reveal	
Quantity	2 No.
Manufacturer	Pyroplex®
Reference	8700
Material	Expanding graphite insert encapsulated within a 0.5mm durable unplasticized polyvinyl chloride (PVC-u) outer casing
Overall section size	15 mm wide x 4 mm thick
Application method	Self-adhered to grooves within rebate of frame
Location (relative to the opening face of the door leaf)	13 mm and 37 mm from opening face of door leaf
	
Presence of adhesives	Yes – Self-adhesive to the rear of the seal
4. Smoke seal to frame reveal	
Quantity	1 No.
Manufacturer	Lorient
Reference	LAS1212 Batwing acoustic and smoke seal
Material	Co-extruded rigid back PVC with flexible elastomer fins
Overall section size	12 mm x 12 mm
Application method	Self-adhered by hand
Location	Self-adhered within 3 sides of frame / stop rebate
Presence of adhesives	Yes – Self-adhesive to the rear of the seal

5. Door frame fixings to supporting construction

Fixings

Manufacturer	Würth
Reference	AMO III Schruben Senkfräskopf ø 12 mm
Type	Steel (blue galvanised)
Size	100 mm long x 7.3 mm diameter (measured), 102 mm x 7.2 mm (manufacturer stated)



Location (top 4 fixings taken from inside top corner of frame rebate, bottom fixing taken from base of jamb) No fixings in head	Left jamb: 1st – 100 mm 2 nd – 282 mm 3 rd – 885 mm 4 th – 1485 mm 5 th – 100 mm	Right jamb: 1st – 100 mm 2 nd – 280 mm 3 rd – 880 mm 4 th – 1490 mm 5 th – 100 mm
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Frame to supporting construction gaps	Left jamb 25 mm – 27 mm	Right jamb 27 mm – 31 mm	Head 24 mm – 28 mm
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Packers *

Manufacturer	Easyfix
Reference	Glazing packer shims
Material	Plastic
Size	100 mm x 28 mm x 1 mm / 2 mm / 3 mm / 4 mm / 5 mm / 6 mm
Location	Stacked where necessary
Interruptions to intumescent within the frame reveal *	No

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Door Frame B

6. Door frame	
Manufacturer	Carve Interiors Ltd
Reference	N/A
Material head and jambs	American poplar hardwood
Density	450 kg/m ³ (nominal)
Moisture content	7.6% (measured by Warringtonfire)
Overall size	2222 mm high x 1089 mm wide
Frame profile size	
Frame (head)	150 mm wide – 66 mm / 81 mm (151 mm measured) x 38 mm thick 
Frame (jambs)	150 mm wide – 66 mm / 81 mm (151 mm measured) x 38 mm thick
Jamb to head jointing method, fixing detail and location	3 No. 70 mm long × 5 mm diameter woodscrews fixed through trench in head into each jamb
Presence of adhesives	Yes
Manufacturer	Maxitek
Type	D3 PVA
Reference	D3 PVA Wood adhesive
Curing method	Evaporation
Application method	Hand spread

7. Planted door stop	
Manufacturer	Carve Interiors Ltd
Material	American poplar hardwood
Size	50 mm wide (measured) x 24 mm thick 
Stop to frame jointing method, fixing detail and location	Pinned to frame using 38 mm 16g pins with at approx. 50 mm from internal corners and a range of 242 mm centres
Density	450 kg/m ³ (nominal)
Presence of adhesives	No
8. Intumescent to frame reveal	
Quantity	1 No.
Manufacturer	Pyroplex®
Reference	8700
Material	Expanding graphite insert encapsulated within a 0.5mm durable unplasticized polyvinyl chloride (PVC-u) outer casing
Overall section size	15 mm wide x 4 mm thick
Application method	Self-adhered to grooves within rebate of frame
Location (relative to the opening face of the door leaf)	20 mm from opening face of door leaf 
Presence of adhesives	Yes – Self-adhesive to the rear of the seal

9. Smoke seal to frame reveal

Quantity	1 No.
Manufacturer	Lorient
Reference	LAS1212 Batwing acoustic and smoke seal
Material	Co-extruded rigid back PVC with flexible fins
Overall section size	12 mm x 12 mm
Application method	Self-adhered by hand
Location	Self-adhered within 3 sides of frame / stop rebate
Presence of adhesives	Yes – Self-adhesive to the rear of the seal

10. Door frame fixings to supporting construction

Fixings		
Manufacturer	Würth	
Reference	AMO III Schrauben Senkfräskopf ø 12 mm	
Type	Steel (blue galvanised)	
Size	100 mm long x 7.3 mm diameter (measured), 102 mm x 7.2 mm (manufacturer stated)	
	  	
Location (top 4 fixings taken from inside top corner of frame rebate, bottom fixing taken from base of jamb) No fixings in head	Left jamb: 1st – 100 mm 2 nd – 282 mm 3 rd – 885 mm 4 th – 1485 mm 5 th – 100 mm	Right jamb: 1st – 100 mm 2 nd – 280 mm 3 rd – 880 mm 4 th – 1490 mm 5 th – 100 mm

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Frame to supporting construction gaps	Left jamb 27 mm – 34 mm	Right jamb 18 mm – 31 mm	Head 24 mm – 28 mm
Packers *			
Manufacturer	Easyfix		
Reference	Glazing packer shims		
Material	Plastic		
Size	100 mm x 28 mm x 1 mm / 2 mm / 3 mm / 4 mm / 5 mm / 6 mm		
Location	Stacked where necessary		
Interruptions to intumescent within the frame reveal *	No		

Fire stopping – Doorset A and B

11. Frame to supporting construction fire stopping detail	
Ceramic fibre	
Manufacturer	Morgan Advanced Materials
Reference	Superwool Plus
Material	Alkaline Earth Silicate Fibre Based Insulation
Thickness	25 mm, uncompressed
Density	96 kg/m ³ (stated)
Application method	Compressed into gap between frame and supporting construction
Intumescent sealant to fire stopping	
Manufacturer	Sealed Tight Solutions Ltd
Reference	ST88
Material	Intumescent acrylic sealant
Application method	Cartridge gunned over the ceramic fibre between the full perimeter of the frame and the supporting construction, nominally 10 mm deep

Door Leaf A

12. Door leaf	
Manufacturer	Wood International Agency Ltd
Reference	Talisman 54
Quantity of leaves per doorset	1 No.
Glazing location relative to the head and closing edge	VP1 - 115 mm from the head of leaf and 100 mm from the closing edge of leaf. VP2 - 405 mm from head of leaf (115 mm from VP1) and 100 mm from closing edge of leaf
Overall leaf size prior to trimming *	1220 mm x 2440 mm x 54 mm
Overall thickness and reduced thickness if door leaf incorporates fielded areas	N/A (not relevant for this blank type)
Overall leaf size supplied for testing	2175 mm high x 1007 mm wide x 66 mm thick (67 mm measured) 
Location trimming was performed and by how much	None
Orientation of heating conditions	Opening away from furnace
Intumescent to leaf edge	None
13. Leaf decoration	
Manufacturer	Wood International Agency Ltd
Reference	Buttons
Material	European beech
Size	30 mm diameter x 9 mm thick (5 mm exposed)
Density	700 kg/m ³ (nominal)
Location	Buttons positioned in linear arrays along the perimeter of recessed panels
Fixing method	Glued and pinned using Omer® 22 mm long x 23g headless pins
Presence of adhesives	Yes, Maxitek D3 PVA

14. Core element	
Manufacturer	Wood International Agency Ltd
Reference	Talisman 54
Material	Ply faced engineered timber
Thickness	54 mm
Density	600 kg/m ³ (nominal)
Presence of mechanical fixings	Yes
15. Lipping	
Manufacturer	Carve Interiors Ltd
Reference	N/A
Material	Sapele
Density	640 kg/m ³ (stated)
Moisture content at sampling visit	11% (stated)
Moisture Content	10.8% (measured by Warringtonfire)
Overall size	66 mm wide x 8 mm thick 
Fixing method	Hand applied, bonded with PVA adhesive and clamped until cured
Location	All four edges of the door leaf
Presence of mechanical fixings	No
Details of adhesive	
Manufacturer	Maxitek
Type	D3 PVA
Product (product reference)	D3 PVA Wood adhesive
Application (example: spatula, nozzle, roller, hot press, cold press, edge bander)	Hand spread and clamped
Quantity of adhesive applied (g/m ²)	Approximately 150g – 200g/m ²
Curing / drying (UV, IR, RF, moisture)	Evaporation
Glue spread (example: g/m ² or coat weight)	Approximately 150g – 200g/m ²
Pressure (example: N/mm ²)	Not recorded

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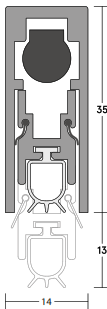
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16. Facings	
Manufacturer	Meditate
Reference	FR Euroclass B MDF
Material	6 mm Fire-retardant medium density fibreboard
Location	To both sides
Density	700 kg/m ³ (nominal)
Overall thickness and reduced thickness if door leaf incorporates fielded areas	6 mm thick. Full cut-outs: For glazing: 807 mm wide x 175 mm high (100 mm from side, 115 mm from top) 807 mm wide x 611 mm high (100 mm from side, 115 mm from top aperture) For panel: (MDF fully cut-out to expose blank facing) 667 mm wide x 661 mm high (170 mm from side, 265 mm from bottom) Panel recess is lined with a 10 mm x 6 mm poplar hardwood bead
Application method	Adhered with polyvinyl acetate glue (PVAc)
Details of adhesive	
Manufacturer	Übabond
Type	Single component resin adhesive
Product (product reference)	Ü30
Application (example: spatula, nozzle, roller, hot press, cold press, edge bander)	Roller
Quantity of adhesive applied (g/m ²)	80g – 100g/m ²
Curing / drying (UV, IR, RF, moisture)	Evaporation
Glue spread (example: g/m ² or coat weight)	80g – 100g/m ²
Pressure (example: N/mm ²)	19 N/mm ²

17. Drop down seal	
Manufacturer	Lorient
Reference	LAS800 si
Material	
Body	Mill finish aluminium carrier
Seal	Silicon rubber
Overall size	
Body	35 mm high x 14 mm wide  ▲ LAS8001 si
Length	To suit leaf width
Fixing method, type and location	As per manufacturers specification
Location within leaf	Centrally on bottom of leaf
Maximum operating drop	13 mm

Door Leaf B

18. Door leaf	
Manufacturer	Wood International Agency Ltd
Reference	Marksman 44
Quantity of leaves per doorset	1 No.
Overall leaf size prior to trimming *	1220 mm x 2440 mm x 44 mm
Overall thickness and reduced thickness if door leaf incorporates fielded areas	44 mm reduced by 6 mm (to top panel only), filled with 6 mm FR MDF adhered using PVA adhesive. Numbers engraved into MDF 4.5 mm deep
Overall leaf size supplied for testing	2175 mm high x 1007 mm wide x 56 mm thick 
Location trimming was performed and by how much	N/A (not relevant for this core type)
Orientation of heating conditions	Opening away from furnace
Intumescent to leaf edge	None

19. Leaf decoration			
Manufacturer	Wood International Agency Ltd		
Reference	Beech Buttons		
Material	Beech hardwood		
Size	30 mm diameter x 9 mm thick (5 mm exposed)		
Density	700 kg/m³ (nominal)		
Location	Beech hardwood buttons positioned in linear arrays along the perimeter of recessed panels		
Fixing method	Glued and pinned using Omer® 22 mm long x 23g headless pins and PVA adhesive		
Presence of adhesives	Yes, to recess accepting buttons using Maxitek D3 PVA		
			

20. Panel moulding			
Manufacturer	Carve Interiors Ltd		
Reference	Panel moulding		
Material	American poplar hardwood		
Size	1st panel: 1066 mm high x 767 mm wide x 45 mm x 15 mm	2nd panel: 150 mm high x 767 mm wide x 15 mm x 8mm	3rd panel: 480 mm high x 767 mm wide x 45 mm x 15 mm
Density	510 kg/m³		
Location relative to top of leaf and closing edge of leaf	120 mm in from closing edge of leaf and 120 mm from top of leaf. There is an 80 mm space between the top – middle moulding and 80 mm space between the middle – bottom moulding.		
Fixing method	Glued and pinned using Omer® 22 mm long x 23g headless pins		
Presence of adhesives	Yes, Maxitek D3 PVA		

21. Core element	
Manufacturer	Wood International Agency Ltd
Reference	Marksman 44
Material	Graduated density particleboard
Thickness	44 mm
Density	535 kg/m ³
Presence of mechanical fixings	No
22. Lipping	
Manufacturer	Carve Interiors Ltd
Reference	N/A
Material	Sapele hardwood
Density	640 kg/m ³ (nominal)
Moisture content at sampling visit	11% (stated)
Moisture Content	15.6% (measured by Warringtonfire)
Overall size	56 mm wide x 8 mm thick 
Fixing method	Automatic edge bander
Location	Adhered to all four edges of the door leaf and applied facings
Presence of mechanical fixings	No
Details of adhesive	
Manufacturer	Ostermann
Type	Hot Melt Polyurethane
Product (product reference)	Redocol Kantomelt
Application (example: spatula, nozzle, roller, hot press, cold press, edge bander)	Automatic edge bander
Quantity of adhesive applied (g/m ²)	11g/m ²
Curing / drying (UV, IR, RF, moisture)	Chemical reactive
Glue spread (example: g/m ² or coat weight)	11g/m ²
Pressure (example: N/mm ²)	0.6894 N/mm ²

Test date: 09/02/2026

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

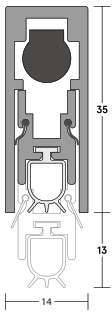
Test sponsor: Wood International Agency Ltd

Job number: 557329/R

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23. Facings	
Manufacturer	Medite
Reference	Medite Premier FR Euroclass B
Material	6 mm Fire-retardant medium density fibreboard
Location	To both faces
Density	Nominally 750 kg/m ³
Overall thickness and reduced thickness if door leaf incorporates fielded areas	Reduced
Application method	Adhered with polyvinyl acetate glue (PVAc)
Details of adhesive	
Manufacturer	Übabond
Type	Single component resin adhesive
Product (product reference)	Ü30
Application (example: spatula, nozzle, roller, hot press, cold press, edge bander)	Roller
Quantity of adhesive applied (g/m ²)	80g – 100g/m ²
Curing / drying (UV, IR, RF, moisture)	Evaporation
Glue spread (example: g/m ² or coat weight)	80g – 100g/m ²
Pressure (example: N/mm ²)	19 N/mm ²

24. Drop down seal	
Manufacturer	Lorient
Reference	LAS800 si
Material	
Body	Mill finish aluminium carrier
Seal	Silicon rubber
Overall size	
Body	35 mm high x 14 mm wide  ▲ LAS8001 si
Length	To suit leaf width
Fixing method, type and location	As per manufacturers specification
Location within leaf	Centrally on bottom of leaf
Maximum operating drop	13 mm

Glazing – Doorset A

25. Glass	
Manufacturer / supplier	Pyroguard
Reference (Declaration of Performance)	Pyroguard E160 INT
Unit overall size *	VP1 - 165 mm high x 797 mm wide x 23 mm thick VP2 - 601 mm high x 797 mm wide x 23 mm thick
Aperture size (prior to any lining) *	VP1 - 175 mm high x 807 mm wide VP2 - 611 mm high x 807 mm wide
Sight size	VP1 - 115 mm high x 748 mm wide VP2 - 550 mm high x 748 mm wide
Expansion allowance	5 mm all around including intumescent liner (so 3 mm + 2 mm Liner)
Presence of timber aperture lining	No
Glass to exposed / unexposed face	Both glazing panels are dual orientation so both orientations are tested in the same leaf
26. Beading	
Manufacturer	Carve Interiors Limited
Reference	N/A
Material	Sapele hardwood
Density	640 kg/m ³ (nominal)
Overall size (bead profile)	Type 1 – 25 mm x 19 mm
Fixing method, fixing material and size	50 mm long x 3.5 mm diameter woodscrews at 35° ± 5°
Location	50 mm in from inside corners and 150 mm centres at 35° ± 5° to the face of the glass
Planted glazing bars	7 mm (measured) x 3 mm secured in place with 0.5 mm double sided tape x 95 mm centres
27. Glazing liner	
Manufacturer	Dixon International Group Limited
Reference	Therm-A-Sol (ISL)
Material	Sodium silicate
Overall size	52 mm x 2 mm
Fixing method	Self-adhesive tape

28. Seal applied between glazing bead on internal face of leaf

Manufacturer	Dixon International Group Limited
Reference	Sealmaster intumescent foam glazing tape
Material	Open cell foam glazing tape
Overall size	20 mm wide x 5 mm thick
Fixing method	Adhered to upstand of glazing bead

29. Seal applied between glazing bead on external face of leaf

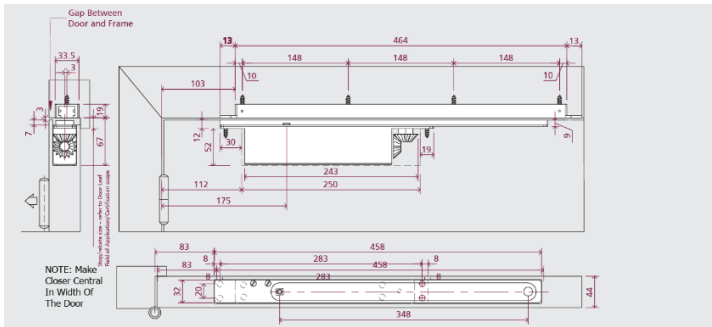
Manufacturer	Dixon International Group Limited
Reference	Sealmaster intumescent foam glazing tape
Material	Open cell foam glazing tape
Overall size	20 mm wide x 5 mm thick
Fixing method	Adhered to upstand of glazing bead

30. Glazing setting blocks

Manufacturer / Supplier	Carve Interiors Ltd
Reference	Sapele hardwood
Overall size	30 mm x 12 mm x 4 mm
Fixing method and location	As required
Presence of adhesives to seal unit	No

Hardware – Doorset A

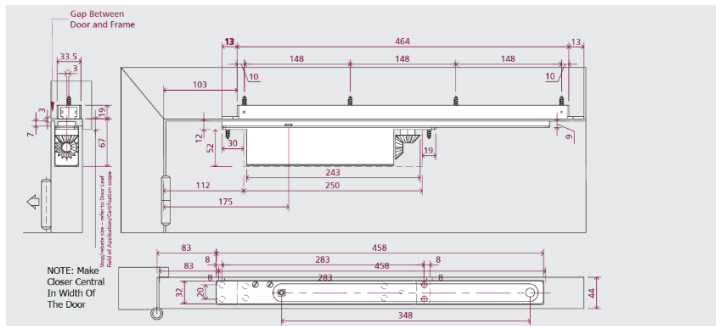
31. Hinges	
Manufacturer / supplier	Royde & Tucker Ltd
Reference	RT Hi-Load 207 
Quantity	3 No.
Primary material	Grade 13 stainless steel
Type	3 Knuckle butt-hinge
Size	
Knuckle	106 mm high x 13 mm diameter
Blades	102 mm high x 38 mm wide
Fixings	
Type	Countersunk pozi-drive wood screws
Material	Steel
Size	32 mm long x 5 mm diameter
Number off per blade	4 No.
Position of each hinge relative to the head of the leaf and top of hinge knuckle	Top: 150 mm Middle: 350 mm Bottom: 1850 mm
Details of intumescent protection (as per client notes)	
Manufacturer	Wolman Wood and Fire Protection GmbH
Reference	Interdens® intumescent
Material	Monoammonium phosphate
Overall size	1 mm
Fixing method and location	Behind each hinge blade
Interruptions to intumescent within the frame reveal	Fully interrupted strip at 13 mm from the opening face of leaf

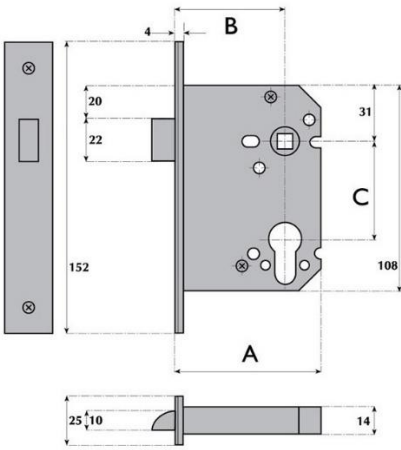
32. Pull handle (unexposed face)	
Manufacturer	Strada London Ltd
Reference	D handle – SP-FBD225B.03
Material	Brass
Overall Section Size	250 mm long x 19 mm diameter x 50 mm diameter x 8mm projection rose
Cut out size in leaf	N/A
Fixing method	Face fixed behind rose with 4 No. steel woodscrews 28 mm x 8g
Intumescent protection	None
33. Door closer	
Manufacturer / supplier	Rutland
Reference	Rutland ITS. 11204
Material	
Body	Die-cast aluminium
Closer arm	Steel
Cover	Aluminium
Configuration	Concealed within door leaf
Overall size	
Body	243 mm long × 52 mm height × 32 mm depth  NOTE: Make Closer Central In Width Of The Door
Cover	N/A
Fixing method	Using manufactures fixing instructions
Details of intumescent protection	Manufacturers kit. IP.114 - 2 mm thick graphite-based intumescent sheet material
Interruptions to intumescent within the frame reveal	Partially interrupted strip at 13 mm from opening face and fully interrupted strip at 37 mm from opening face
Average opening force	29.3 N (measured by Warringtonfire)
Average closing force	21.9 N (measured by Warringtonfire)
Distance from hinge	750 mm

Hardware – Doorset B

34. Hinges	
Manufacturer / supplier	Royde & Tucker Ltd
Reference	RT Hi-Load 207
	
Quantity	3 No.
Primary material	Grade 13 stainless steel
Type	3 Knuckle butt-hinge
Size	
Knuckle	106 mm high x 13 mm diameter
Blades	102 mm high x 38 mm wide
Fixings	
Type	Countersunk pozi-drive wood screws
Material	Steel
Size	32 mm long x 5 mm diameter
Number off per blade	4 No.
Position of each hinge relative to the head of the leaf and top of hinge knuckle	Top: 150 mm Middle: 350 mm Bottom: 1850 mm
Details of intumescent protection (as per client notes)	
Manufacturer	Wolman Wood and Fire Protection GmbH
Reference	Interdens® intumescent
Material	Monoammonium phosphate
Overall size	1 mm
Fixing method and location	Behind each hinge blade
Interruptions to intumescent within the frame reveal	Partially interrupted strip

35. Pull handle (exposed face)	
Manufacturer	Strada London Ltd
Reference	T Bar pull handle SSS-SP-IH190-250 (secret fix)
Material	Stainless steel
Overall Section Size	350 mm long x 20 mm diameter (measured)
Cut out size in leaf	N/A
Fixing method	Secret fix – 28 mm M5 screw
Intumescent protection	None
36. Lever handle (unexposed face)	
Manufacturer	Manital
Supplier	Strada London Ltd
Reference	SP-DU5 / LH.68 Dune lever
Material	Brass
Overall size	
Lever	127 mm long x 20 mm wide with a 73 mm projection
Rose	50 mm diameter x 10 mm thick
Fixing method and location	Concealed screw-fixed to unexposed face only
Details of intumescent protection	None

37. Door closer	
Manufacturer / supplier	Rutland
Reference	Rutland ITS. 11204
Material	
Body	Die-cast aluminium
Closer arm	Steel
Cover	Aluminium
Configuration	Concealed within door leaf
Overall size	
Body	243 mm long × 52 mm height × 32 mm depth 
Cover	N/A Concealed closer
Fixing method	Using manufactures fixing instructions
Details of intumescent protection	Manufacturers kit. IP.114 - 2 mm thick graphite-based intumescent sheet material
Interruptions to intumescent within the frame reveal	Partially interrupted strip at 13 mm from opening face and fully interrupted strip at 37 mm from opening face
Average opening force	30.6 N (measured by Warringtonfire)
Average closing force	20.8 N (measured by Warringtonfire)
Distance from hinge	750 mm

38. Lockset	
Manufacturer / supplier	Imperial Locks – supplied by Strada London Ltd
Reference	SP-G7008/76.2
Material	
Lockcase	Steel
Forend plate	Stainless steel
Latch bolt	Solid brass
Lock bolt	N/A
Overall sizes	
Central Lockcase *	108 mm high x 76 mm deep x 14 mm wide with a 57 mm backset (latch removed) 
Forend plate	152 mm high x 25 mm wide x 4 mm thick
Latch bolt	22 mm high x 10 mm wide with 12 mm projection (removed for test purposes)
Fixing method	Screw-fixed
Operation of latch bolt	Disengaged
Details of intumescent protection (as per client notes)	
Central lockcase	1 mm Interdens® intumescent
Forend plate	1 mm Interdens® intumescent
Interruptions to Intumescent on the door leaf edge	N/A
Location of centre of the spindle relative to the bottom of the leaf	950 mm
Location of centre of latch bolt relative to the bottom of the leaf	N/A (removed)

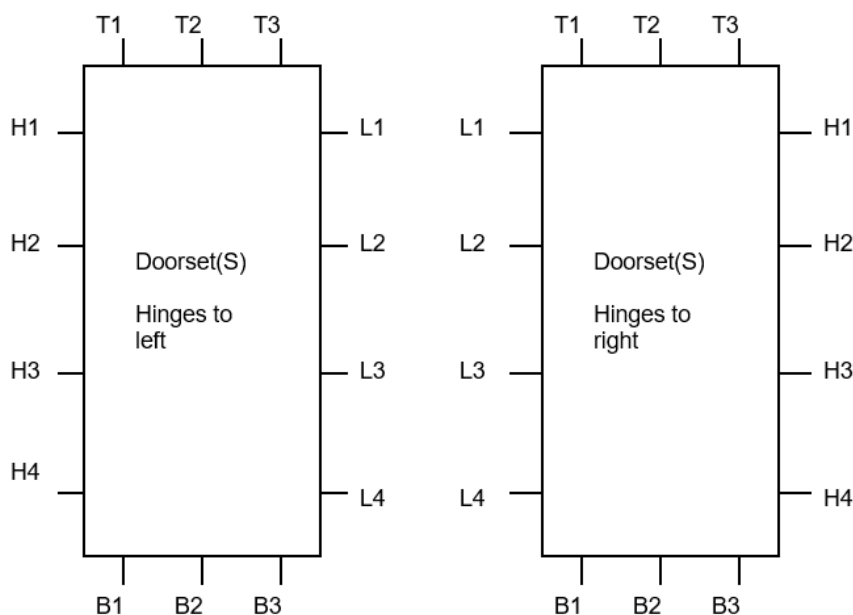
39. Electric strike / keep	
Manufacturer / supplier	GEM - Strada London Ltd
Reference	SP-GK450M-FR.01 Monitored electric strike release
Material	
Centre strike plate and keep	Stainless steel
Overall sizes	
Centre strike plate	123.8 mm high x 31.75 mm wide with 85 mm 17 mm tongue
Centre keep plate	45 mm high x 26 mm wide
Fixing method	
Centre strike plate and keep	Screw-fixed
Details of intumescent protection (as per client notes)	1 mm Interdens® intumescent
Interruptions to intumescent within the frame reveal	Fully interrupted
40. Cylinder *	
Manufacturer / supplier	Strada London Ltd
Reference	Strada half euro cylinder SP-V10EP55SPBE
Material	Brass
Overall size	55 mm x 32 mm
Fixing method	Fixed with supplied machine screw
Intumescent protection	None
41. Escutcheon	
Manufacturer / supplier	Strada London Ltd
Reference	SP-FB001.03
Material	Brass
Overall size	50 mm diameter x 8 mm thick
Fixing method	Fixed using supplied screws 28 mm x 8g
Details of intumescent protection	None

42. Concealed security chain	
Manufacturer / supplier	Trade Security Supplies (TSS) / Strada London Ltd
Reference	SP-TSSCONCHAINS.01 Concealed security door chain
Material	
Face plate to leaf	Stainless steel
Face plate to frame	Stainless steel
Chain	Steel
Overall size	
Face plate to leaf	25.4 mm wide x 57.5 mm high
Face plate to frame	25.4 mm wide x 57.5 mm high with 50 mm 43 mm return
Location	Concealed within the door leaf edge and corresponding door frame reveal (lock side)
Fixing method	Faceplates screw-fixed into pre-morticed recesses in the door leaf and door frame using countersunk wood screws
Details of intumescent protection (as per client notes)	1 mm Interdens
43. Door viewer	
Manufacturer	Strada London Ltd
Reference	SP-SWLAFEI30.68 Door Viewer
Material	Brass and glass
Overall size	
Body	14 mm diameter
Footprint	27 mm diameter x 3 mm projection
Cut out	15 mm diameter
Fixing method	Morticed
Location of centre of the viewer relative to the bottom of the leaf	1500 mm
Details of intumescent protection	1 mm graphite (integral to viewer)

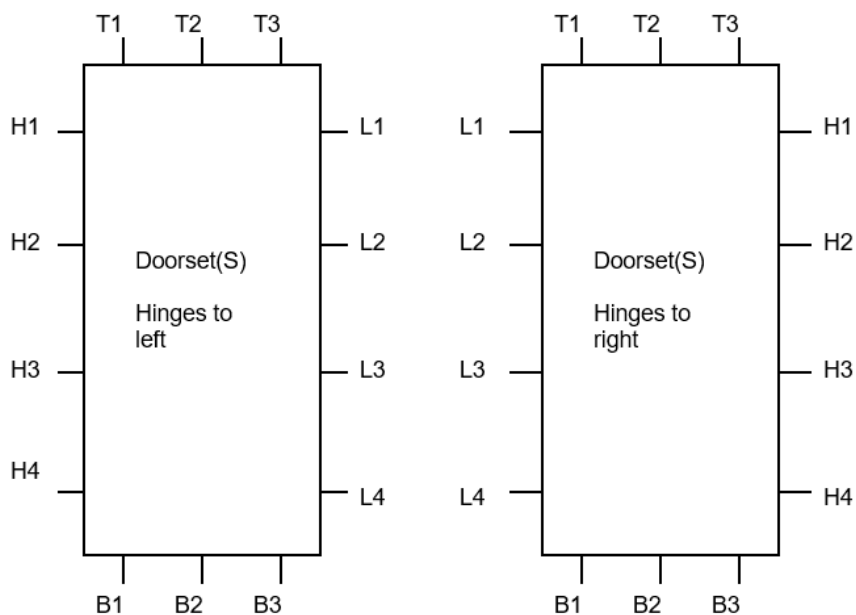
Supporting construction

44. AAC Base lintel	
Type	Steel reinforced concrete lintel
Material	Steel reinforced autoclaved aerated concrete
Overall size	600 mm wide x 150 mm high x 3000 mm long
Density	550 ~ 650 kg/m ³
Fixing method	Ordinary sand/cement mortar, mix 3:1
45. Lightweight blockwork	
Manufacturer	THERMALITE
Reference	THERMALITE Shield
Material	Lightweight concrete blocks
Thickness	150 mm high x 215 mm wide x 440 mm long
Density	884 kg/m ³ (measured)
Fixing method	Ordinary sand/cement mortar, mix 3:1
Aperture door A and door B	2242 mm high x 1140 mm wide
46. AAC lintel	
Type	Steel reinforced concrete lintel
Material	Steel reinforced autoclaved aerated concrete
Overall size	150 mm wide x 250 mm high x 3000 mm long
Density	550 ~ 650 kg/m ³
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	3.57	1.35	L1	1.83	3.53
H2	3.86	1.29	L2	1.70	3.26
H3	2.95	1.23	L3	2.84	2.62
H4	2.61	2.13	L4	3.72	1.87
Mean	3.25		Mean	2.52	
Max	3.86		Max	3.72	
Min	2.61		Min	1.70	
Max Permitted	5.55		Max Permitted	5.12	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	2.64	2.26	B1	6.43	
T2	3.26	2.72	B2	5.89	
T3	4.55	3.53	B3	5.29	
Mean	3.48		Mean	5.87	
Max	4.55		Max	6.43	
Min	2.64		Min	5.29	
Max Permitted	6.02		Max Permitted	8.15	



Doorset B (mm)					
Hinge Side	Primary	Leaf to Stop	Leading Edge	Primary	Leaf to Stop
H1	3.41	2.01	L1	1.87	2.42
H2	1.39	1.43	L2	2.10	2.62
H3	2.70	1.39	L3	1.74	2.98
H4	3.35	1.41	L4	1.99	3.54
Mean	2.71		Mean	1.93	
Max	3.41		Max	2.10	
Min	1.39		Min	1.74	
Max Permitted	5.06		Max Permitted	4.01	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	4.46	1.56	B1	3.87	
T2	4.74	0.72	B2	4.98	
T3	2.93	1.82	B3	6.60	
Mean	4.04		Mean	5.15	
Max	4.74		Max	6.60	
Min	2.93		Min	3.87	
Max Permitted	6.39		Max Permitted	7.88	

Test Observations

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

mins secs

00	00	The Test Commences.
00	50	Smoke release from the head of both doorsets.
01	52	Glazing turning milky and opaque.
02	05	Audible cracking heard from specimens.
03	10	Smoke release from corners of head on both doorsets.
04	30	Both doorsets unrestrained.
05	15	Yellow discolouration middle of frame head.
05	20	Glazing Doorset A discolouring yellow.
05	36	Metallic "popping" noise heard from specimen.
06	32	Cracking sounds continue.
07	32	Visible moisture on top panel Doorset B.
09	52	Yellow discolouration on the lintel above Doorset A.
10	32	Smoke release from door handle and middle hinges on Doorset B.
12	29	Moisture/fluid seeping from the centre top frame Doorset A.
14	43	Smoke release from leading edge of Doorset B and Doorset A head.
18	32	Fluid dripping from pull handle Doorset B.
20	15	Black discolouration frame top centre Doorset B.
21	33	Intense cracking sounds heard from Doorset B.
24	20	Black discolouration on frame spreading across top Doorset B.
25	50	Doorset B pulsating back and forth
26	20	Black discolouration leading edge Doorset B frame.

Time		All observations are from the unexposed face unless noted otherwise.
mins	secs	
27	30	Black discolouration spreading top mid frame Doorset A.
28	30	Smoke release pulsating out both Doorset B hinge side and leading edge.
29	32	Flicker of flame hinge side Doorset B.
31	00	Cotton pad applied above the middle hinges on Doorset B for 30 seconds. Cotton pad did not ignite.
31	10	Flicker of flame above the top hinges on Doorset B.
33	19	Black discolouration all parts of frame above mid height Doorset B.
36	10	Cotton pad applied above the top hinges on Doorset B for 30 seconds. Cotton pad did not ignite.
40	55	Cotton pad applied below the pull handle on Doorset B for 30 seconds. Cotton pad did not ignite.
42	36	Cotton pad applied above the pull handle on Doorset B for 30 seconds. Cotton pad did not ignite.
48	20	Cotton pad applied above the pull handle on Doorset B for 30 seconds. Cotton pad did not ignite.
49	30	Cotton pad applied middle hinge Doorset B and ignited. Cotton pad integrity failure is deemed to have occurred on Doorset B.
51	20	Doorset B sprayed with water, all modes of integrity failure have occurred on Doorset B.
51	50	All thermocouples on Doorset B removed and doorset blanked off with plasterboard. The doorset can now no longer satisfy any remaining criteria.
56	27	Black discolouration top left frame Doorset A.
65	20	Black fluid leaking from corners of frame.
65	50	Large glazing Doorset A discolouring brown.
66	23	Glazing panes shattered on Doorset A.
73	20	Left side glazing deflecting inwards revealing intumescent.
75	05	Black/brown discolouration on lower decorative timber panel Doorset A.

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

mins secs

76	17	Smoke release from timber panel Doorset A.
77	32	Glazing panels cracking further on Doorset A.
80	00	Burn through forming on the decorative panels as two holes start to form on Doorset A.
80	30	Burn through beginning to glow
81	03	Cotton pad applied to the top burn through on the bottom decorative panel on Doorset A for 30 seconds. Cotton pad did not ignite.
82	29	Cotton pad applied to the top bottom decorative panel on Doorset A at the burn through point and ignited. Cotton pad integrity failure is deemed to have occurred on Doorset A.
87	26	Burn through spreading and flicker of flame.
88	29	Glazing glowing and bowing inwards.
91	24	Sustained flaming on burn through Doorset A. Sustained flaming integrity failure is deemed to have occurred on Doorset A.
91	42	Area extinguished, gap gauge failure is deemed to have occurred on Doorset A.
93	35	Sustained flaming continuing in the same area at burn through.
93	40	Area continuing to be extinguished.
94	40	Chunks of embers falls out of doorset.
95	10	Large hole gaping into furnace on lower decorative panel.
97	32	White discolouration of embers.
99	32	Flaming extinguished.
101	32	Flaming extinguished again.
104	53	Glazing panels bowing inwards.
105	23	Both glazing panels sustained flaming for 10 seconds.
105	40	Test Stopped at the request of the sponsor

Test Photographs

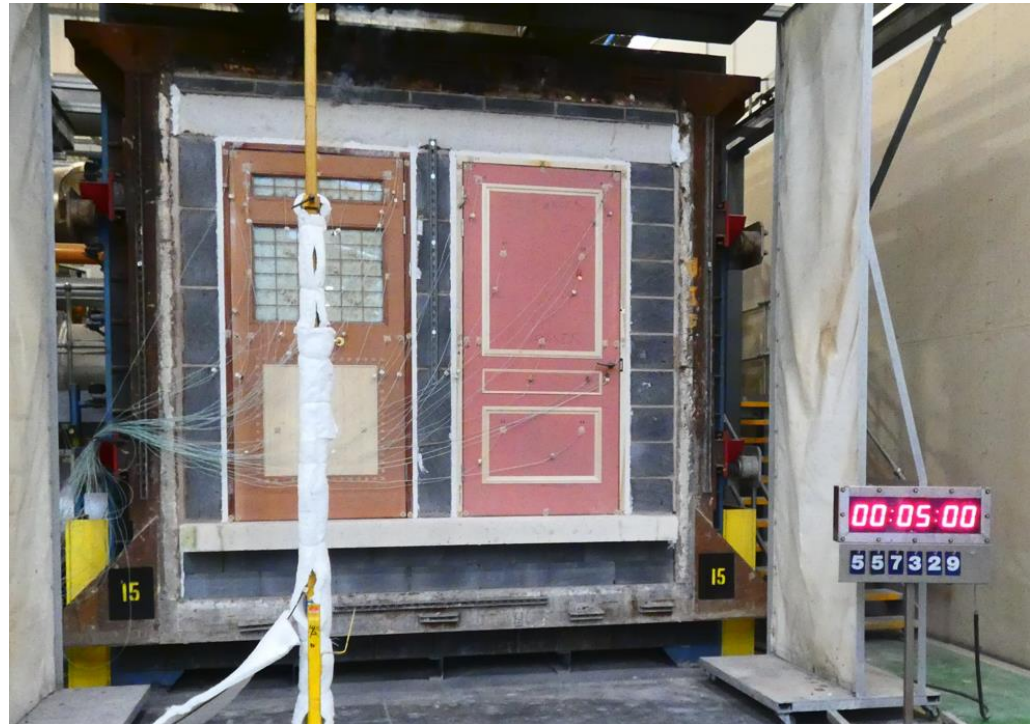
The exposed face of the specimens prior to testing



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



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



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



The unexposed face of the specimens after a test duration of 15 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 25 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 35 minutes



The unexposed face of the specimens after a test duration of 39 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



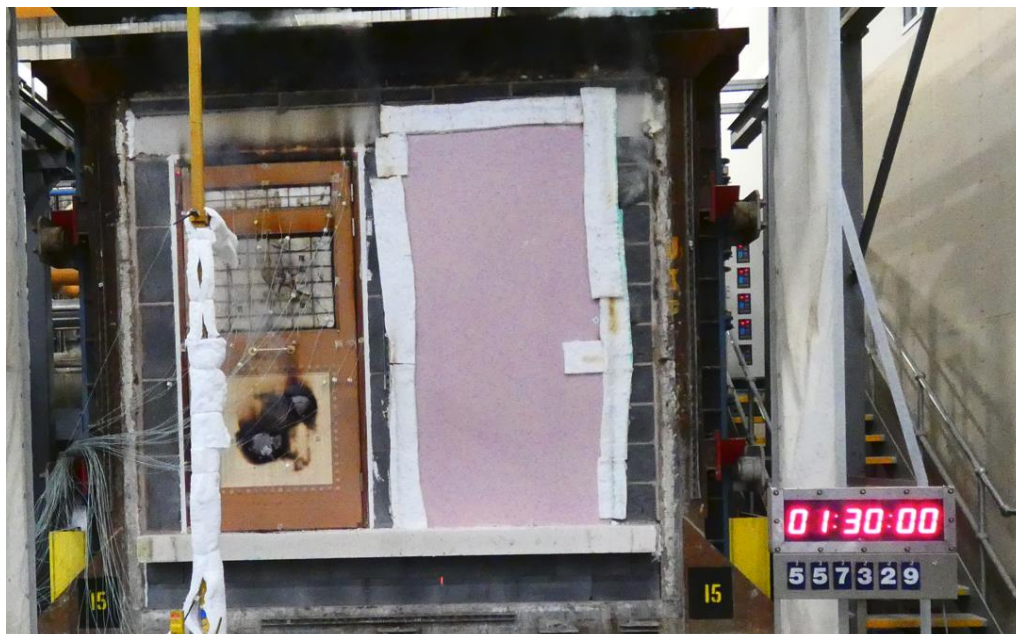
The unexposed
face of the
specimens after a
test duration of 70
minutes



The unexposed
face of the
specimens after a
test duration of 79
minutes



The unexposed
face of the
specimens after a
test duration of 90
minutes



The unexposed
face of the
specimens after a
test duration of 91
minutes showing
sustained flaming
on the decorative
panel on Doorset
A



The unexposed face of the specimens after a test duration of 100 minutes



The unexposed face of the specimens after a test duration of 105 minutes showing sustained flaming on the glazing panel on Doorset A



The exposed face
of the specimens
immediately after
the test



Test date: 09/02/2026

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

Test sponsor: Wood International Agency Ltd

Job number: 557329/R

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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	564
6	603	651
9	663	677
12	705	684
15	739	735
18	766	769
21	789	784
24	809	811
27	826	823
30	842	842
33	856	853
36	869	868
39	881	883
42	892	896
45	902	912
48	912	922
51	921	932
54	930	934
57	938	933
60	945	934
63	953	956
66	960	963
69	966	965
72	973	971
75	979	983
78	985	982
81	990	993
84	996	996
87	1001	1005
90	1006	988
93	1011	1008
96	1016	1009
99	1020	1014
102	1025	1027
105	1029	1032

Individual and mean temperatures recorded on the unexposed surface of 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	16	16	16	16	17	16
3	21	22	16	16	17	18
6	46	47	16	16	17	28
9	66	68	17	16	17	37
12	85	87	17	17	17	45
15	101	96	17	17	17	50
18	104	97	17	17	18	51
21	105	100	17	18	19	52
24	107	106	17	20	20	54
27	107	107	18	22	22	55
30	107	105	18	24	25	56
33	106	103	20	27	28	57
36	106	104	21	30	31	58
39	107	108	23	33	35	61
42	111	111	25	37	40	65
45	112	109	27	41	45	67
48	111	108	30	45	50	69
51	111	110	33	49	55	72
54	113	121	36	54	60	77
57	118	117	39	61	65	80
60	125	117	42	67	72	85
63	136	126	45	75	80	92
66	136	152	50	81	86	101
69	125	196	54	86	90	110
70	123	211	56	87	90	113
72	121	245	60	86	91	121
75	127	305	65	86	100	137
77	141	345	70	87	105	150
78	152	366	71	89	106	157
81	193	413	73	102	111	178
84	252	430	75	120	122	200
87	318	442	79	139	137	223
90	366	445	86	172	153	244
93	387	446	98	231	161	265
96	396	451	102	247	175	274
99	409	467	109	388	222	319
102	428	483	120	535	342	382
105	453	497	142	264	371	345

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	17	16	17	16
3	17	16	17	16
6	17	16	17	17
9	17	16	18	17
12	17	17	20	17
15	17	18	20	17
18	17	19	20	17
21	17	21	21	17
24	17	23	23	17
27	18	26	25	18
30	18	29	27	18
33	19	32	29	19
36	21	35	30	20
39	22	37	32	21
42	23	38	35	23
45	25	40	37	24
48	26	41	39	26
51	28	43	42	28
54	30	44	44	29
57	33	47	47	32
60	36	50	50	34
63	40	54	53	36
66	45	57	56	39
69	49	59	59	42
72	53	62	61	46
75	57	65	62	50
78	60	67	64	55
81	62	69	67	59
84	63	71	70	63
87	64	73	73	64
90	66	76	75	68
93	71	78	78	73
96	75	82	81	79
99	79	89	88	86
102	83	92	92	90
105	85	95	95	95

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	16	16	16	17
3	16	16	17	17
6	17	17	18	17
9	17	19	22	17
12	17	21	24	17
15	17	23	27	17
18	17	24	29	17
21	17	25	31	17
24	17	26	33	17
27	17	28	35	17
30	18	30	38	18
33	18	33	46	18
36	19	36	49	19
39	20	39	49	20
42	22	41	52	22
45	24	43	54	24
48	28	45	54	25
51	33	46	54	27
54	39	47	54	28
57	43	49	55	30
60	46	50	55	32
63	48	51	57	34
66	51	53	59	37
69	53	56	63	39
72	53	57	65	42
75	54	59	67	44
78	56	60	68	48
81	59	62	69	52
84	63	64	70	56
87	65	67	71	59
90	67	69	72	65
93	70	71	74	70
96	74	73	77	75
99	76	74	82	79
102	78	77	86	83
105	80	80	89	87

Individual temperatures recorded on the frame of Doorset 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	17	15	16	17
3	17	16	16	17
6	17	41	17	17
9	17	38	21	17
12	17	41	52	17
15	17	35	66	17
18	17	34	71	17
21	17	37	58	17
24	17	42	54	17
27	17	43	57	17
30	17	42	55	17
33	18	38	61	18
36	19	36	59	18
39	19	35	60	19
42	20	36	61	20
45	23	37	59	21
48	28	40	56	21
51	30	43	54	23
54	34	45	52	25
57	39	45	54	27
60	39	44	54	28
63	38	45	55	30
66	39	48	55	32
69	39	51	55	34
72	41	50	55	36
75	43	51	57	37
78	47	53	58	39
81	49	55	61	41
84	51	57	65	43
87	54	59	66	46
90	57	61	67	49
93	61	63	67	53
96	66	65	68	60
99	68	67	71	65
102	70	69	74	72
105	71	72	77	71

Individual and mean temperatures recorded on the top glazing panel on Doorset A

Time Mins	T/C Number 37 Deg. C	T/C Number 38 Deg. C	T/C Number 39 Deg. C	Mean Temp Deg. C
0	16	17	17	17
3	20	21	21	21
6	40	44	42	42
9	56	61	59	59
12	70	77	76	74
15	83	90	87	87
18	91	96	92	93
21	94	99	96	96
24	97	102	103	101
27	99	103	110	104
30	98	104	110	104
33	99	102	104	102
36	99	101	101	100
39	99	101	100	100
42	100	102	100	101
45	100	102	101	101
48	101	102	102	102
51	103	103	104	103
54	104	104	107	105
57	104	104	109	106
60	102	105	103	103
63	101	106	103	103
66	100	112	107	106
69	101	114	110	108
72	104	118	114	112
75	109	118	118	115
78	113	121	127	120
81	117	127	134	126
84	125	136	141	134
87	128	147	150	142
90	137	161	161	153
91	143	166	167	159
93	157	176	178	170
96	179	193	195	189
97	188	200	201	196
99	204	215	215	211
102	226	235	233	231
105	251	257	275	261

Individual temperatures recorded on the top glazing beading on Doorset A

Time	T/C	T/C	T/C	T/C
Mins	Number	Number	Number	Number
	40	41	42	43
	Deg. C	Deg. C	Deg. C	Deg. C
0	17	16	17	17
3	17	17	17	17
6	18	17	17	18
9	19	17	19	19
12	22	18	20	22
15	25	20	21	24
18	28	22	23	26
21	32	26	25	29
24	35	30	29	31
27	39	34	32	34
30	43	36	35	36
33	47	40	37	38
36	48	42	40	40
39	50	44	43	43
42	51	45	46	45
45	53	47	48	48
48	54	49	50	51
51	56	51	52	58
54	58	52	54	63
57	61	54	57	67
60	65	55	59	70
63	69	57	65	71
66	71	60	68	72
69	72	63	71	73
72	77	67	72	77
75	81	71	74	81
78	87	74	76	85
81	91	76	78	90
84	98	78	82	95
87	103	80	84	98
90	106	82	86	101
93	110	84	88	106
96	114	86	90	108
99	120	89	94	113
102	127	92	97	119
105	135	96	100	128

Individual and mean temperatures recorded on the bottom glazing panel on Doorset A

Time Mins	T/C Number 46 Deg. C	T/C Number 47 Deg. C	T/C Number 48 Deg. C	Mean Temp Deg. C
0	17	17	17	17
3	22	22	23	22
6	48	48	50	49
9	67	67	71	68
12	86	84	91	87
15	99	100	102	100
18	100	105	103	103
21	102	105	108	105
24	106	104	113	108
27	108	103	113	108
30	107	103	108	106
33	106	103	106	105
36	105	104	106	105
39	109	109	105	108
42	111	112	108	110
45	109	114	108	110
48	107	112	108	109
51	107	108	108	108
54	115	109	110	111
57	135	112	120	122
60	116	108	116	113
63	114	109	113	112
66	128	112	129	123
69	154	115	170	146
70	164	117	184	155
71	176	122	191	163
72	190	129	210	176
75	252	157	283	231
78	327	192	356	292
81	474	263	425	387
84	488	351	477	439
87	488	434	517	480
90	492	442	523	486
93	510	456	524	497
96	526	475	528	510
99	541	495	531	522
102	561	516	540	539
105	579	555	541	558

Individual temperatures recorded on the bottom glazing beading on Doorset A

Time	T/C	T/C	T/C	T/C
Mins	Number	Number	Number	Number
	49	50	51	52
	Deg. C	Deg. C	Deg. C	Deg. C
0	17	16	17	17
3	17	16	17	17
6	18	16	17	17
9	21	16	18	17
12	24	17	19	18
15	28	19	21	19
18	33	21	23	21
21	39	24	26	23
24	43	27	30	25
27	47	31	34	28
30	50	34	37	30
33	52	37	40	33
36	54	39	42	35
39	56	42	45	38
42	57	44	47	41
45	59	46	49	44
48	61	48	52	48
51	63	50	54	51
54	68	52	56	55
57	73	54	58	58
60	78	56	61	62
63	80	58	65	66
66	82	61	69	69
69	84	64	72	72
72	88	67	76	75
75	92	69	79	77
78	98	71	83	81
81	105	74	87	84
84	110	77	91	88
87	118	80	94	93
90	125	83	96	99
93	134	88	98	105
96	142	92	101	109
99	153	96	107	117
102	165	101	113	130
105	182	106	120	149

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

Time Mins	T/C Number 53 Deg. C	T/C Number 54 Deg. C	T/C Number 55 Deg. C	T/C Number 56 Deg. C	T/C Number 57 Deg. C	Mean Temp Deg. C
0	17	17	17	16	17	17
3	17	17	17	16	17	17
6	17	19	17	16	17	17
9	17	27	17	17	17	19
12	18	26	17	17	18	19
15	21	31	17	19	20	22
18	24	31	20	21	23	24
21	26	31	24	23	25	26
24	29	32	29	25	28	29
27	31	35	33	27	30	31
30	34	37	37	30	32	34
33	37	40	40	34	35	37
36	41	44	42	38	39	41
39	45	48	45	42	42	44
42	50	52	47	47	46	48
45	55	57	49	52	51	53
48	60	63	52	58	55	58
49	61	65	52	60	57	59
51	65	68	54	63	60	62
54	*	*	*	*	*	*
57	*	*	*	*	*	*
60	*	*	*	*	*	*
63	*	*	*	*	*	*
66	*	*	*	*	*	*
69	*	*	*	*	*	*
72	*	*	*	*	*	*
75	*	*	*	*	*	*
78	*	*	*	*	*	*
81	*	*	*	*	*	*
84	*	*	*	*	*	*
87	*	*	*	*	*	*
90	*	*	*	*	*	*
93	*	*	*	*	*	*
96	*	*	*	*	*	*
99	*	*	*	*	*	*
102	*	*	*	*	*	*
105	*	*	*	*	*	*

*Doorset B blanked off at 51 minutes

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

Time Mins	T/C Number 62 Deg. C	T/C Number 63 Deg. C	T/C Number 64 Deg. C	T/C Number 65 Deg. C
0	18	18	18	18
3	18	18	18	18
6	18	18	18	18
9	18	18	18	18
12	18	18	18	18
15	18	18	19	19
18	20	21	22	22
21	24	26	26	26
24	29	32	30	31
27	33	38	35	36
30	37	43	38	40
33	39	46	41	43
36	42	50	43	46
39	44	52	46	49
42	47	54	48	51
45	49	56	50	53
48	52	58	52	55
49	53	59	53	56
51	55	59	55	57
54	*	*	*	*
57	*	*	*	*
60	*	*	*	*
63	*	*	*	*
66	*	*	*	*
69	*	*	*	*
72	*	*	*	*
75	*	*	*	*
78	*	*	*	*
81	*	*	*	*
84	*	*	*	*
87	*	*	*	*
90	*	*	*	*
93	*	*	*	*
96	*	*	*	*
99	*	*	*	*
102	*	*	*	*
105	*	*	*	*

*Doorset B blanked off at 51 minutes

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

Time Mins	T/C Number 58 Deg. C	T/C Number 59 Deg. C	T/C Number 60 Deg. C	T/C Number 61 Deg. C
0	17	17	18	18
3	17	17	18	18
6	17	17	18	18
9	17	17	19	18
12	17	18	20	18
15	17	20	21	26
18	18	22	24	32
21	20	25	27	34
24	24	30	30	36
27	29	35	36	39
30	33	45	43	43
33	38	56	50	47
36	42	59	59	49
39	45	59	58	52
42	48	60	60	56
45	50	62	61	58
48	53	64	63	61
49	54	64	63	63
51	56	65	65	65
54	*	*	*	*
57	*	*	*	*
60	*	*	*	*
63	*	*	*	*
66	*	*	*	*
69	*	*	*	*
72	*	*	*	*
75	*	*	*	*
78	*	*	*	*
81	*	*	*	*
84	*	*	*	*
87	*	*	*	*
90	*	*	*	*
93	*	*	*	*
96	*	*	*	*
99	*	*	*	*
102	*	*	*	*
105	*	*	*	*

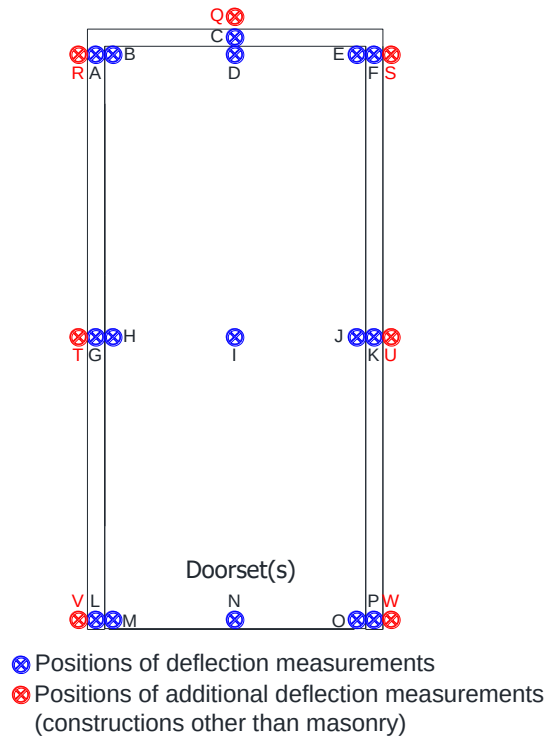
*Doorset B blanked off at 51 minutes

Individual temperatures recorded on the frame 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
0	17	18	18	18
3	17	18	18	18
6	17	18	18	18
9	17	18	19	18
12	18	19	21	18
15	18	24	27	42
18	19	41	34	51
21	19	70	36	48
24	20	56	45	42
27	24	53	67	42
30	30	49	63	42
33	33	51	65	44
36	33	51	59	44
39	34	51	52	46
42	35	51	50	52
45	36	52	51	60
48	40	55	57	67
49	42	57	61	70
51	47	61	87	75
54	*	*	*	*
57	*	*	*	*
60	*	*	*	*
63	*	*	*	*
66	*	*	*	*
69	*	*	*	*
72	*	*	*	*
75	*	*	*	*
78	*	*	*	*
81	*	*	*	*
84	*	*	*	*
87	*	*	*	*
90	*	*	*	*
93	*	*	*	*
96	*	*	*	*
99	*	*	*	*
102	*	*	*	*
105	*	*	*	*

*Doorset B blanked off at 51 minutes

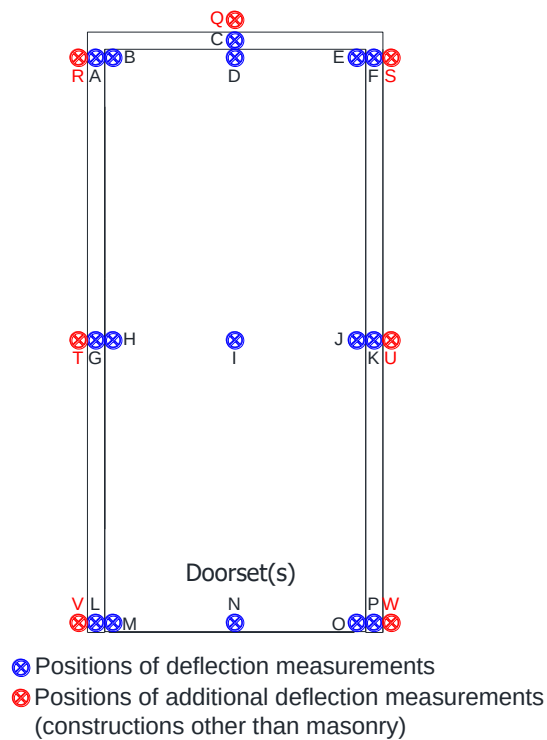
Horizontal deflections of Doorset A



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	-2	-2	-1	0	4	-2	-3	0	-10	9	-2	-2	-4	-2	-1	1
20	-6	-3	-10	-4	-7	-1	0	0	-9	4	1	-2	-3	-2	0	0
30	-4	0	-7	-2	0	-3	-4	-5	0	9	0	-1	-6	-2	-2	-1
40	-6	-1	2	-1	3	-2	-1	-7	-2	7	-7	-1	-5	-3	0	2
50	-8	3	-5	-2	-2	-4	-5	-2	-8	5	-2	1	-5	-5	-1	1
60	-5	7	-4	2	0	-6	-4	-2	-8	3	-4	3	-2	-4	0	0
70	-1	4	-7	-2	-1	-6	-3	-2	-3	4	-6	4	-3	-3	0	0
80	-8	4	0	-3	1	-1	-5	-9	-5	4	-2	1	-1	-2	0	0
90	-3	8	-7	-2	3	-1	-4	-5	-3	4	-2	-2	-3	-3	0	1
100	-4	3	-11	-7	1	2	-2	-3	-3	7	-2	-5	-15	-2	2	2

Positive values indicate movement towards the furnace

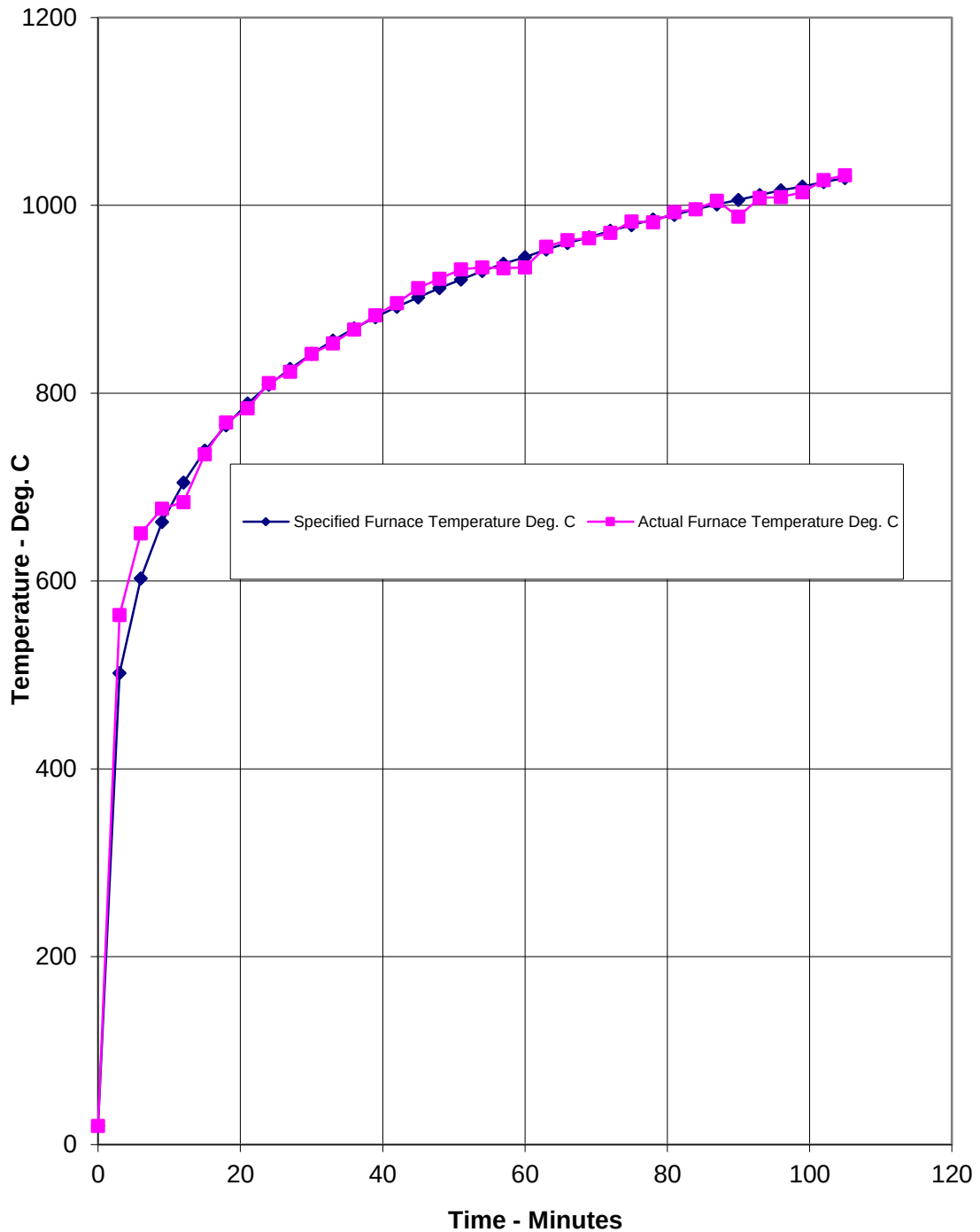
Horizontal deflections of Doorset B



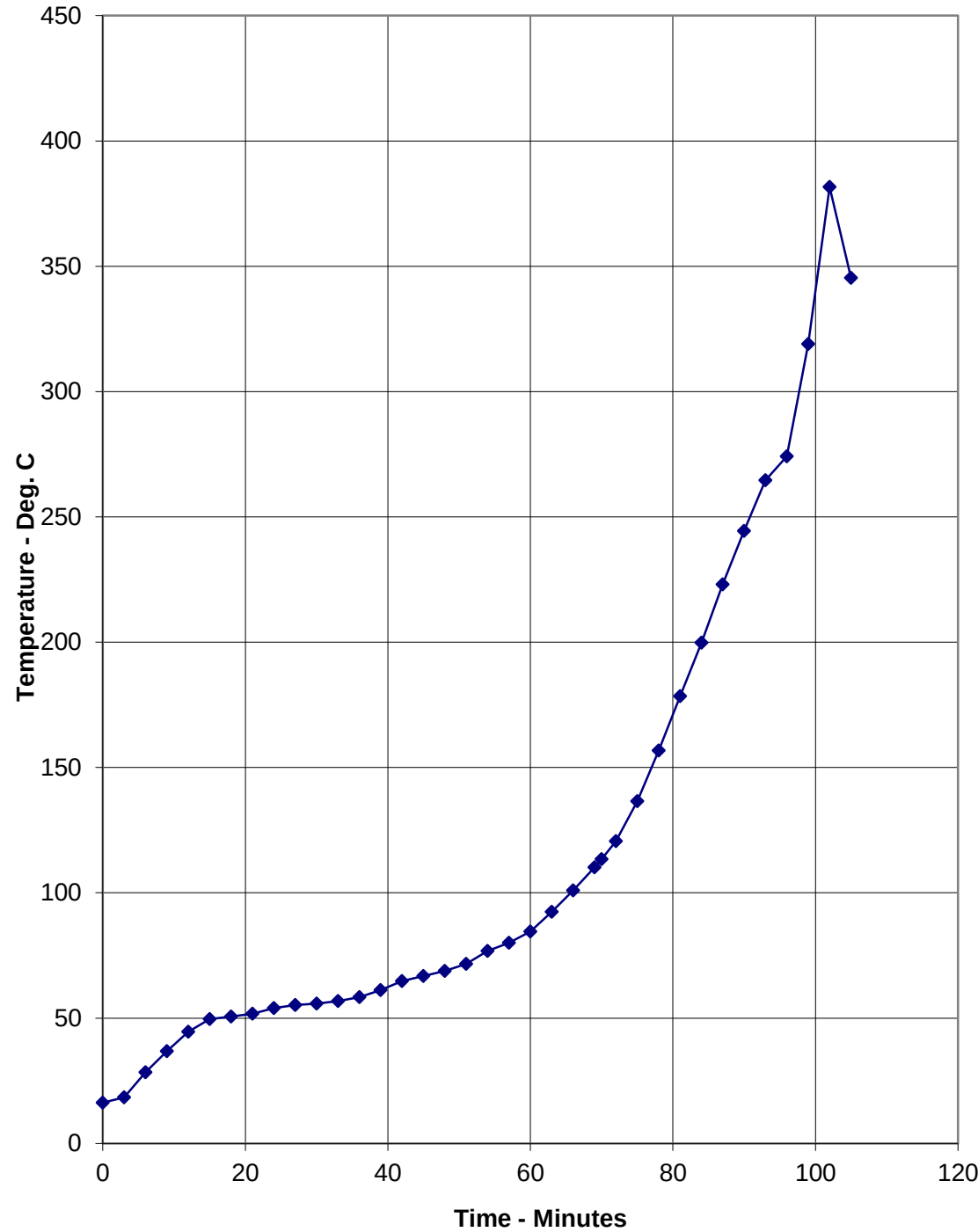
Deflections (mm)																
Time-mins	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	3	1	3	0	0	0	1	-1	-1	3	-1	0	0	1	-1	0
10	0	-1	1	2	5	-6	1	-2	-1	-2	-4	0	1	0	0	1
15	4	-3	-1	3	6	-7	-2	-2	-8	-4	-16	1	1	0	-2	0
20	2	2	4	4	3	-2	0	-13	-6	-4	-7	-1	1	-2	-3	-2
25	0	-2	1	1	0	-3	-1	-12	-4	-12	4	0	1	-2	-5	-4
30	2	-10	-5	3	-2	2	2	-3	-6	-9	-2	-6	1	-2	-5	-4
35	4	4	-5	2	1	-1	2	-7	-2	-5	-5	-1	2	4	-4	-2
40	0	-4	-8	0	3	-6	-1	-2	-7	-30	-5	-2	1	-1	-5	-3
45	4	1	-4	0	2	-5	1	-3	-6	-7	-1	0	1	0	-3	0
50	0	-2	-3	0	3	-7	-4	-3	-12	-12	-5	-1	1	-2	-5	-2

Positive values indicate movement towards the furnace

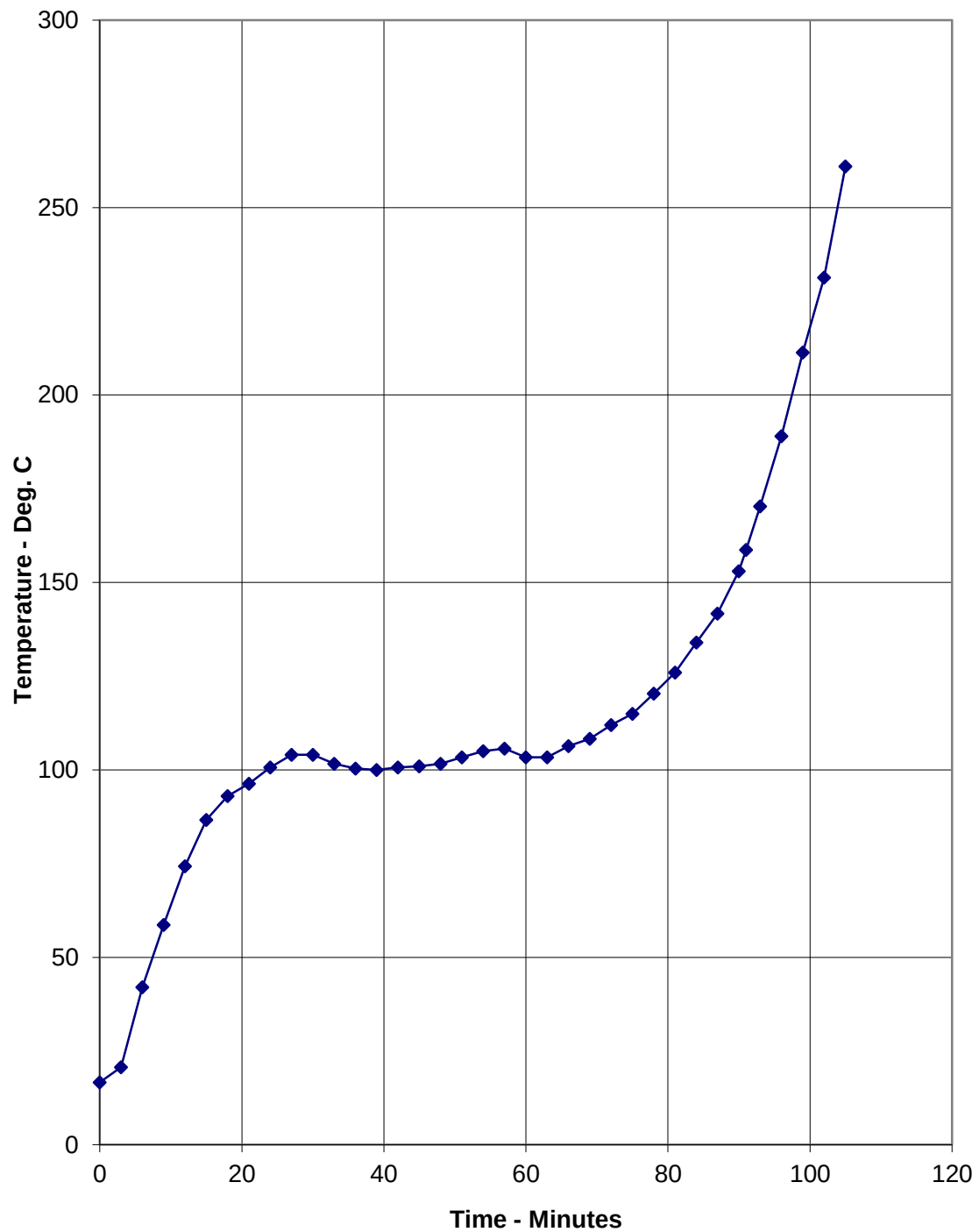
Graph showing mean furnace temperature, together with the temperature/time relationship specified in BS EN 1363-1: 2020



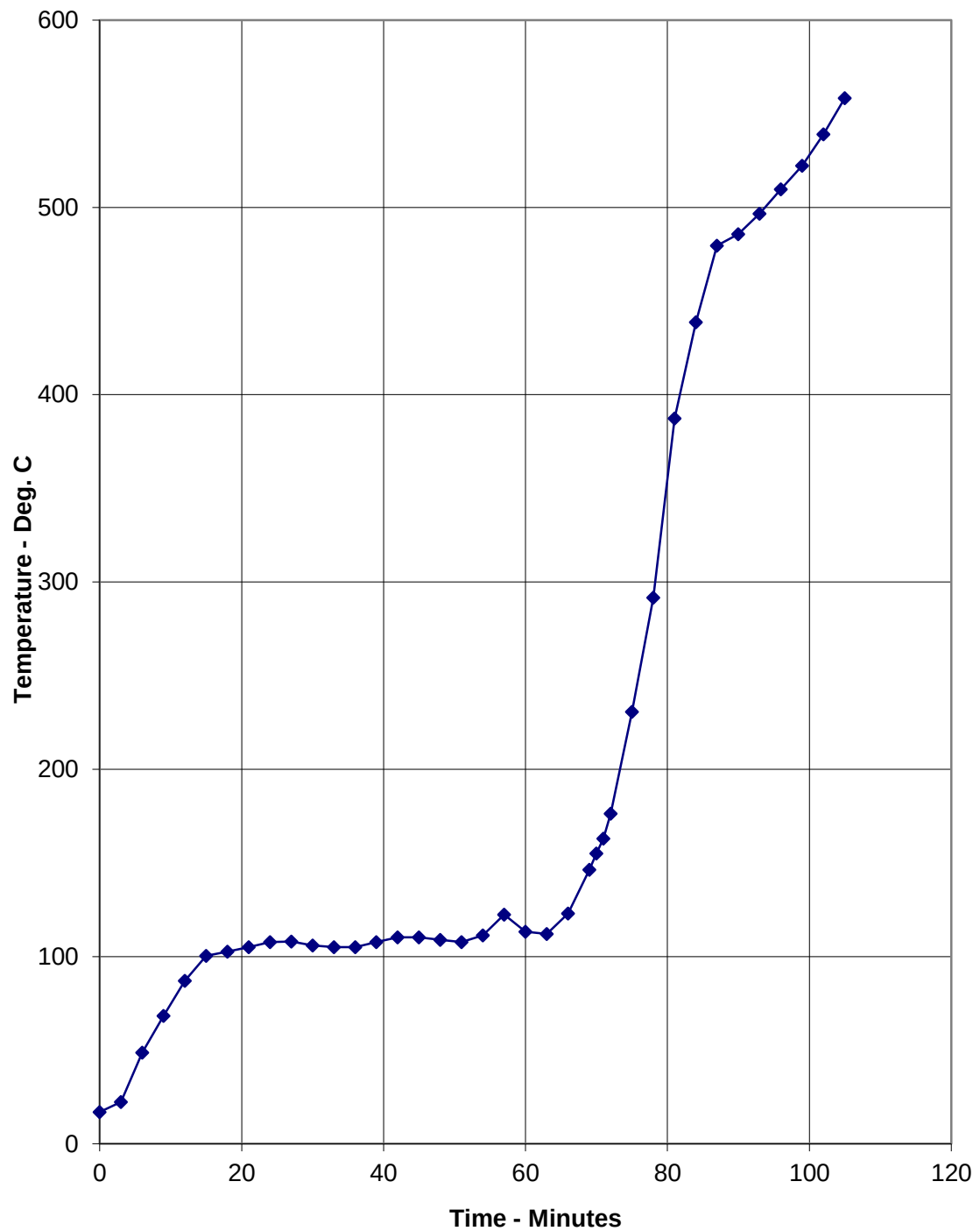
Graph showing mean temperature recorded on the unexposed surface of Doorset A



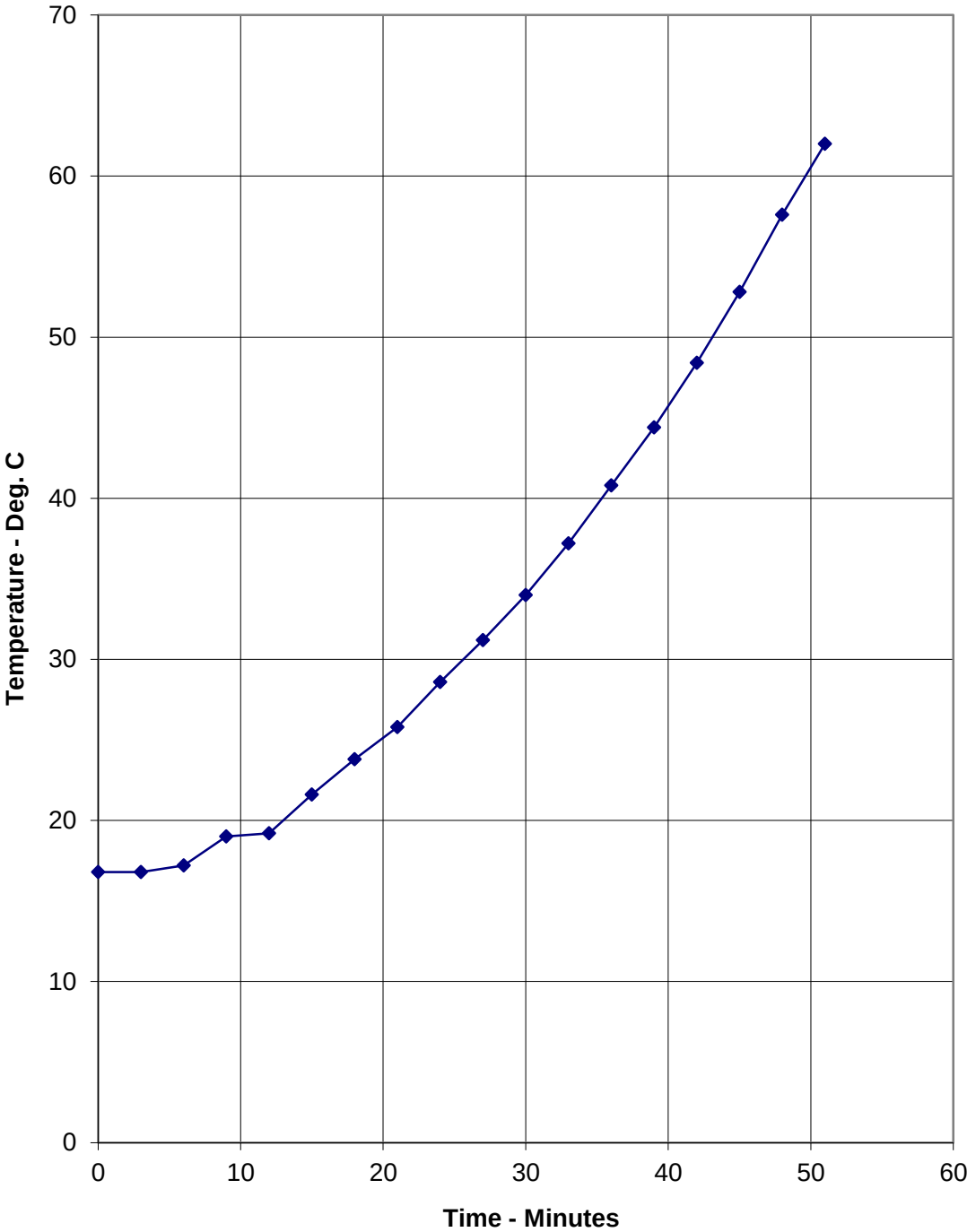
Graph showing mean temperature recorded on the unexposed surface of the top glazing panel on Doorset A



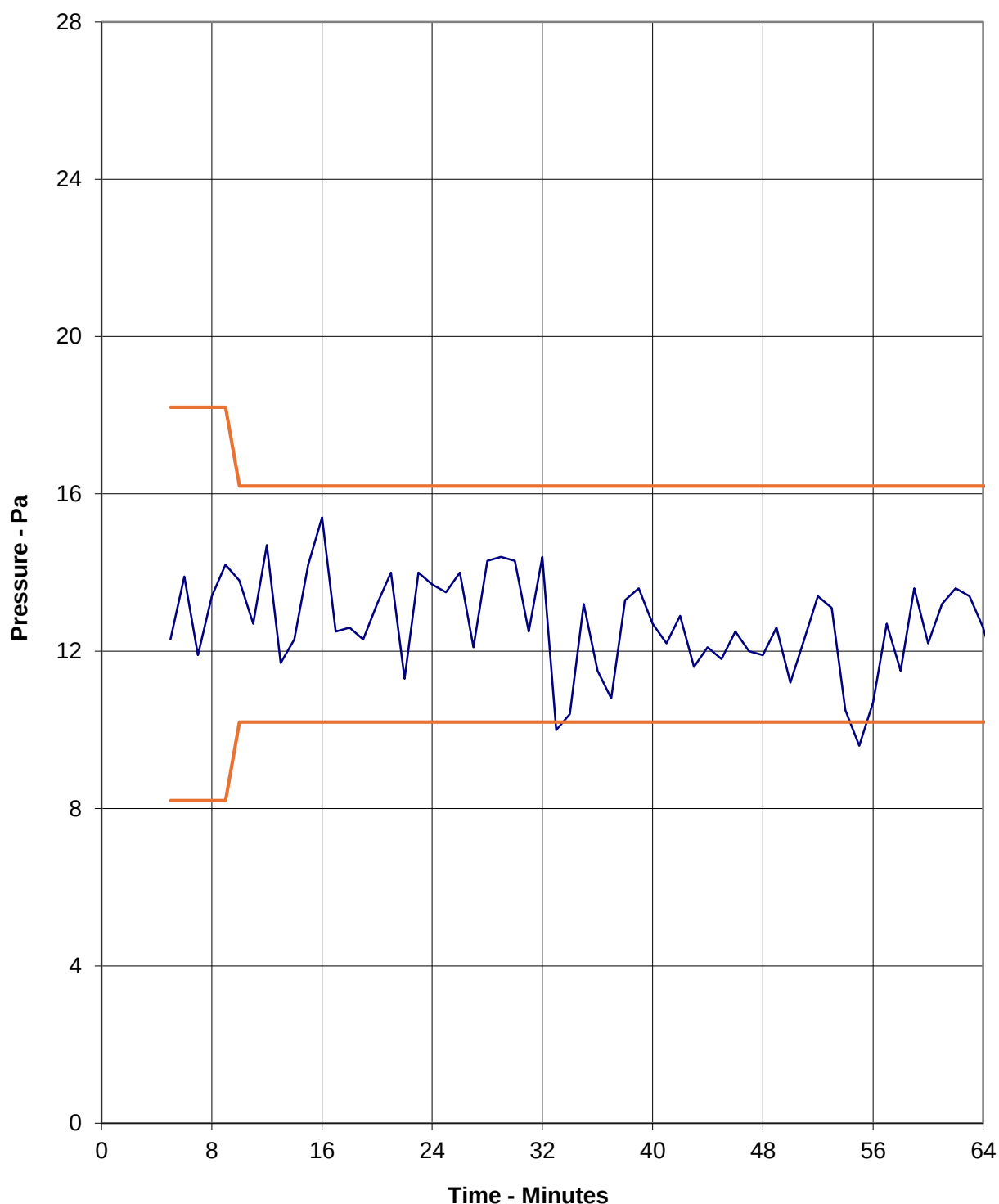
Graph showing mean temperature recorded on the unexposed surface of the bottom glazing panel on Doorset A



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



Graph showing recorded furnace pressure at 2500 mm above the notional floor level



Due to the combustible nature of the test and required temperature adjustments during the test, occasionally the recorded pressure differential was outside the specified limits for short durations of time. The effect of such fluctuation on the test results obtained can be neglected.

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

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

Not attached - Copies of sampling reports available on request.



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