

Smoke control test report

Issuing laboratory: Warringtonfire Testing and Certification Limited

Test standard: BS EN 1634-3:2004 + Corr:2007

Test sponsor: Wood International Agency

16 King Edward Road
Saracen Close
Brentwood
Essex
CM14 4HL
United Kingdom

Product: Asymmetrical, Single-Acting, Single-Leaf Doorset D1

Report number: 560408/R

Test date: 12 August 2026

Issue: 02

This report supersedes the original report issued 28 August 2026

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 Test Construction

Test specimen D1	Single leaf single acting timber doorset with glazing.(D1)			
	Height	Width	Depth	Perimeter gap length
	2433 mm	1268 mm	80 mm	6000 mm
Symmetry and orientation	Asymmetrical, with the specimen opening towards the chamber.			
Supporting construction	A low-density rigid wall with 150mm wide x 215mm high x 440 mm long lightweight concrete blocks			
Test	Latching condition		Threshold sealing configuration*	
1	All latches engaged (auto firing mechanism)		Unsealed for the purpose of S _{a4} classification	
2	All latches engaged (Kubu sensor removed)		Unsealed for the purpose of S _{a4} classification	
Notes	The perimeter gap length was measured from the fixed and moving components of the doorset but excluding the length of the threshold gap.			

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

Test	Face exposed to pressure	Leakage rate Q_{spec} (m ³ /h) at pressure difference of			Linear leakage rate Q_l (m ³ /h/m) at pressure difference of		
		10 Pa	25 Pa	50 Pa	10 Pa	25 Pa	50 Pa
1	Side A (positive chamber)	6.27	10.82	15.18	1.04	1.80	2.53
	Side B (negative chamber)	8.82	16.60	27.61	1.47	2.76	4.60
2	Side A (positive chamber)	6.71	12.14	*	1.12	2.02	*
	Side B (negative chamber)	9.78	17.83	*	1.63	2.97	*

- Notes**
- Testing was conducted at ambient temperature only.
 - For the purpose of this test Side A refers to the face inside the chamber, and Side B refers to the face outside the chamber.
 - Client requested 50Pa not required*

Date of test 12 August 2026

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

This report may only be reproduced in full. Extracts or abridgements of reports shall not be published without permission of Warringtonfire. All work and services carried out by Warringtonfire Testing and Certification Limited are subject to, and conducted in accordance with, the Standard Terms and Conditions of Warringtonfire Testing and Certification Limited, which are available at <https://www.element.com/terms/terms-and-conditions> or upon request.

Quality Management

Issue No: 1		Issue Date: 28 August 2026	
Responsible Officer:	P. White* Technical Officer	Approved By:	S. Whittle* Testing Manager
			
Issue No: 2		Issue Date: 14 October 2026	
Reason for review: The original report stated that item 14 letter plate intumescent was both 38 and 37mm. This has been corrected to only state 38mm as per stated in the sampling information			
Responsible Officer:	P. White* Technical Officer	Approved By:	S. Collins* Testing Manager
			

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

This copy has been produced from a .pdf format electronic file that has been provided by **Warringtonfire** to the sponsor of the report and must only be reproduced in full. Extracts or abridgements of reports must not be published without permission of **Warringtonfire**. The pdf copy supplied is the sole authentic version of this document. All pdf versions of this report bear authentic signatures of the responsible **Warringtonfire** staff.

CONTENTS	PAGE NO.
SUMMARY OF TEST CONSTRUCTION.....	2
TEST RESULTS.....	3
QUALITY MANAGEMENT.....	4
TEST CONDITIONS.....	6
TEST SPECIMEN DRAWINGS	8
SCHEDULE OF COMPONENTS.....	21
DOORSET CLEARANCE GAPS.....	39
TEST PHOTOGRAPHS	40
ON-GOING IMPLICATIONS	42
SAMPLE REPORT.....	44

Test Conditions

Standard

In accordance with BS EN 1363-1:2020 'Fire resistance tests - Part 1: General requirements', and BS EN 1634-3:2004 Corr:2007 'Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware – Part 3: Smoke control test for door and shutter assemblies'.

Product standard and/or EAD

Details of product standard / The test sponsor did not provide an instruction to work in accordance with a product standard.

Deviations from test method

Client specified 50Pa was not required for test 2. This still falls in line with the standard for ambient smoke testing

Sampling

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

Component	Sampling date	Sampling report reference
Doorset	05/08/2026	SC26237T

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

Installation

The doorsets were received on the 12 August 2026 and mounted within an apertures in a blockwork wall construction; the leaves were single and could open towards the furnace only. Representatives of **ByDezignCarpentry** and **Wood International Agency Limited** conducted the installation on the 12th August 2026.

Specimen direction

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

Conditioning

The specimen's storage, construction, and test preparation took place in the test laboratory over a total, combined time of 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 26°C to 27°C and 60% to 63% respectively.

Instruction to test

The test was conducted on the 12 August 2026 at the request of Wood International Agency, the **Test Sponsor**.

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

Functionality test

Test	Description
Gap measurements	According to clause 6.4 of BS EN 1634-3:2004 Corr:2007, these measurements were completed before the start of the test. They are shown in Appendix A.
Operability	According to clause A.3.2 of EN 16034, the door(s) were subjected to a series of 25 opening and closing cycles of at least 90° for side-hung doorset(s).
Self-closing	According to clause A.4.1 of BS EN 16034:2014, the door(s) were subjected to 1 cycle which was completed.
Retention force	According to clause 10.1.2 of BS EN 1634-3:2004 Corr:2007 the opening force of the door was measured.
Final setting	According to clause A.3.2 of BS EN 16034:2014, the door(s) were subjected to 1 cycle which was completed.

Pre-test measurements

Opening force	85.3 N
Closing force	34.0 N
Distance from hinges	1000 mm

Ambient temperature

The ambient air temperature in the vicinity of the test construction was 26°C at the start of the test with a maximum variation of ±1°C during the test.

Pressure

The chamber pressure was measured at a height of 1216 mm above the cill of the test specimen.

Air leakage test sequence

The air leakage at ambient temperature was determined in accordance with Clause 10.2 of BS EN 1634-3:2004 Corr:2007 using the following procedure:	
$Q_{app}^{(20)} + Q_{sup}^{(20)}$ (m ³ /h)	The leakage rate through the test chamber and the supporting construction at ambient temperature was determined at pressure differences of 10 Pa, 25 Pa and 50 Pa. This was done by means of sealing the opening for the test specimen. During measurement, the leakage rate was maintained for 2 minutes. The leakage rate did not exceed 10 m ³ /h.
$Q_t^{(20)}$ (m ³ /h)	The total leakage rate at ambient temperature was determined at pressure differences of 10 Pa, 25 Pa and 50 Pa. During measurement, the leakage rate was maintained for 2 minutes.
$Q_{spec}^{(20)}$ (m ³ /h)	The leakage rate through the test specimen at ambient temperature was calculated for the pressure differences of 10 Pa, 25 Pa and 50 Pa using the formula: $Q_{spec}^{(20)} = Q_t^{(20)} - (Q_{app}^{(20)} + Q_{sup}^{(20)})$

Test Specimen Drawings (Only D1 tested for smoke)

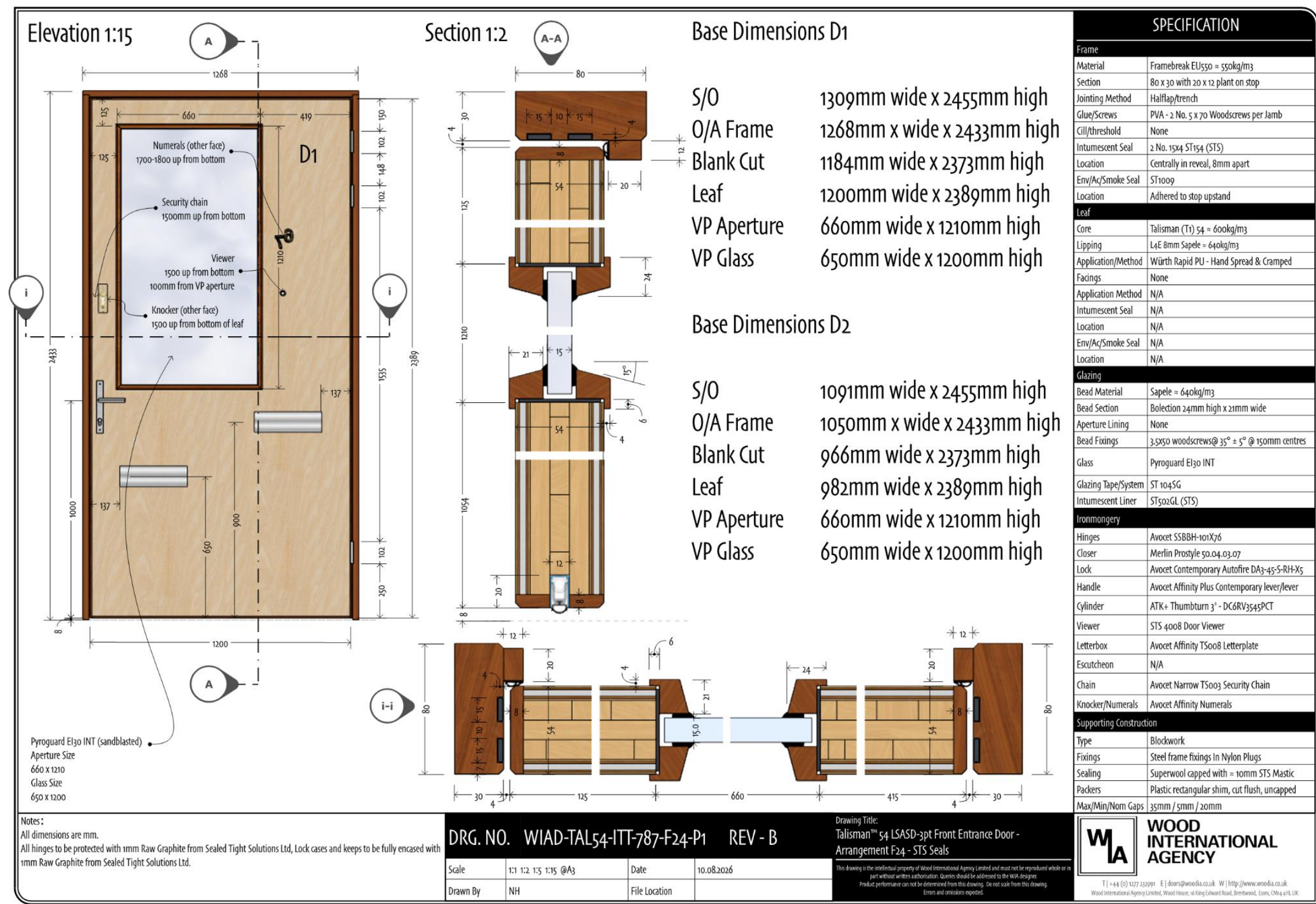


Figure 1. Client Drawing 1 WIAD-TAL54-ITT-787-F24-P1 REV B

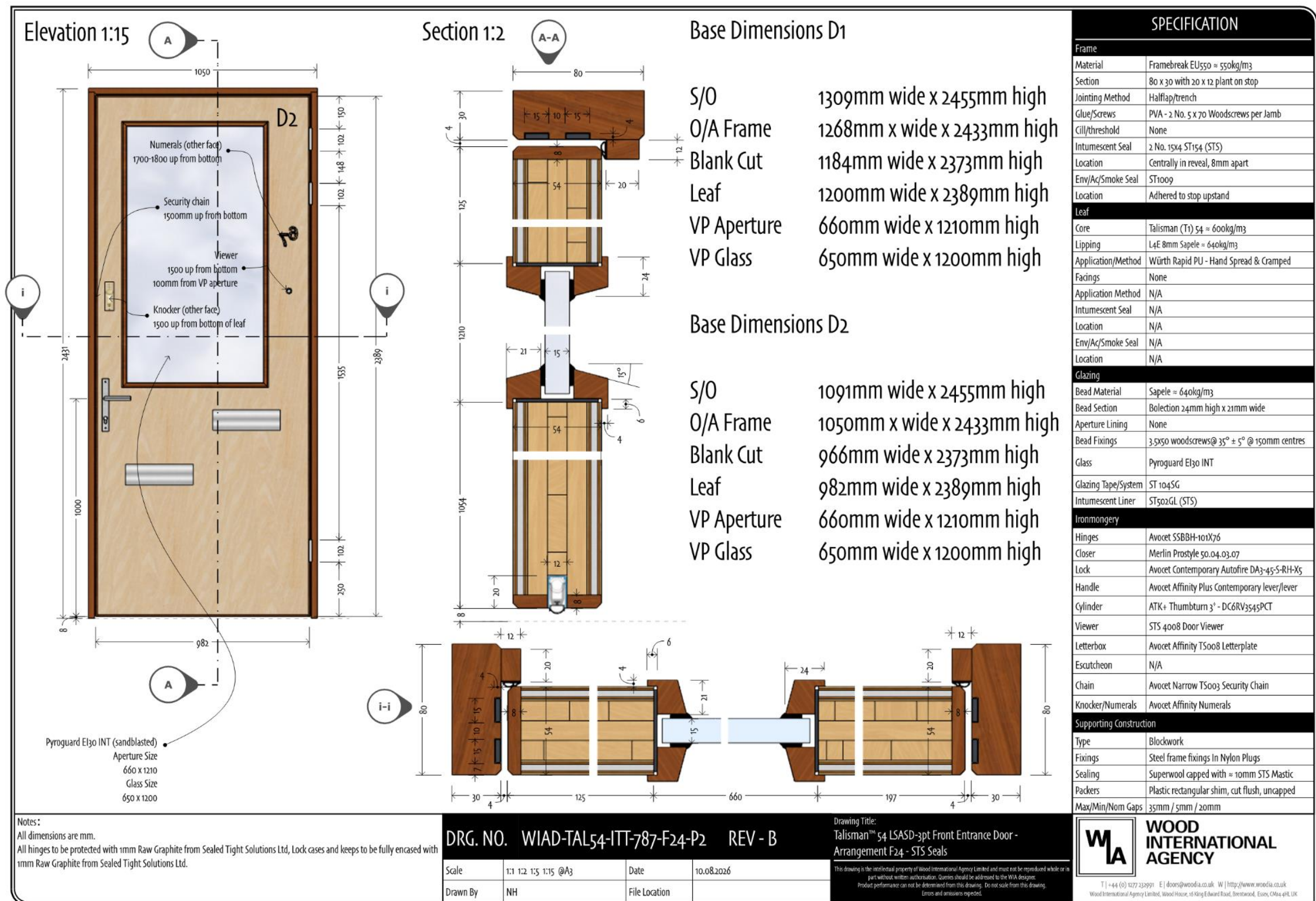


Figure 2. Client Drawing 1 WIAD-TAL54-ITT-787-F24-P2 REV B

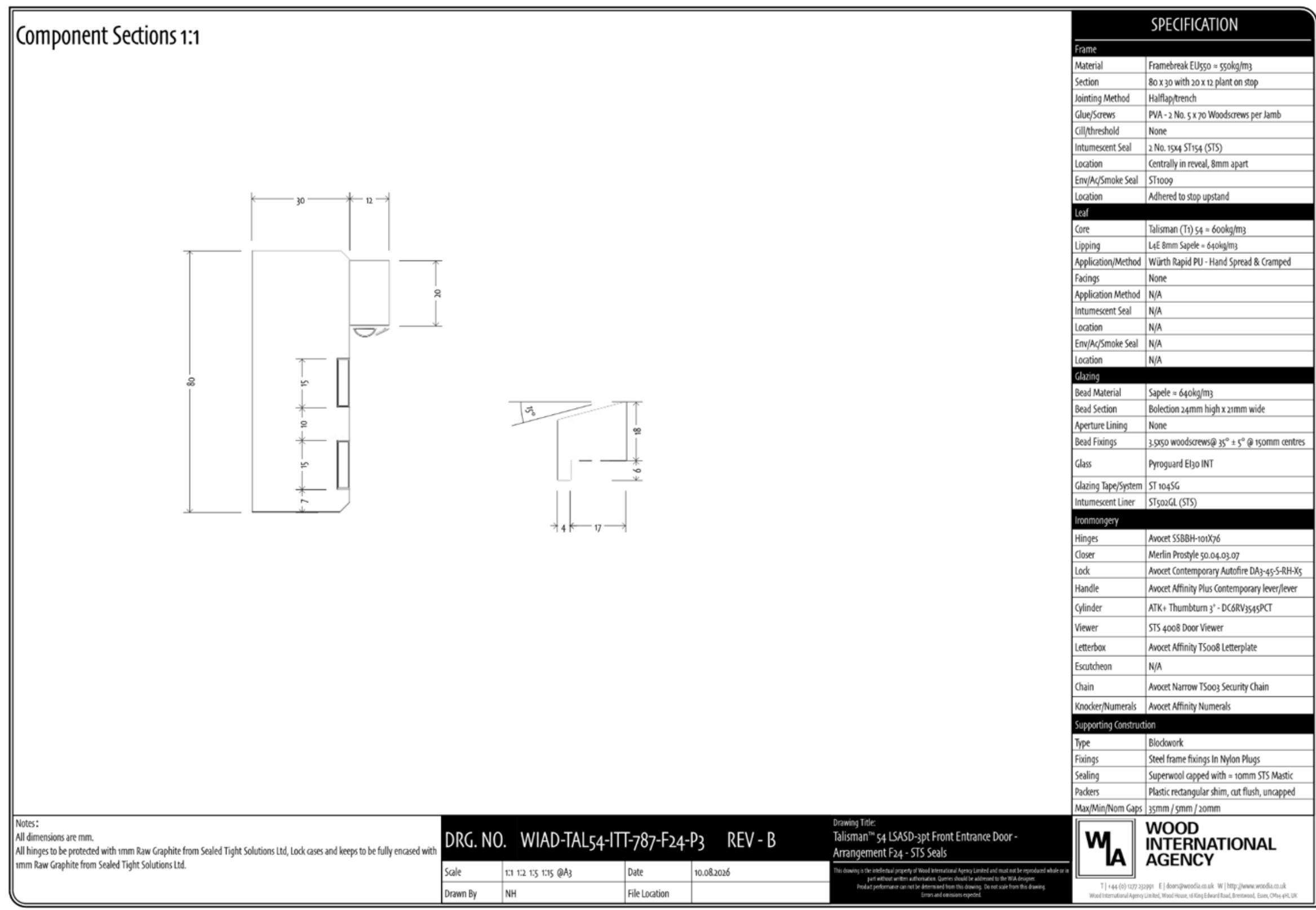
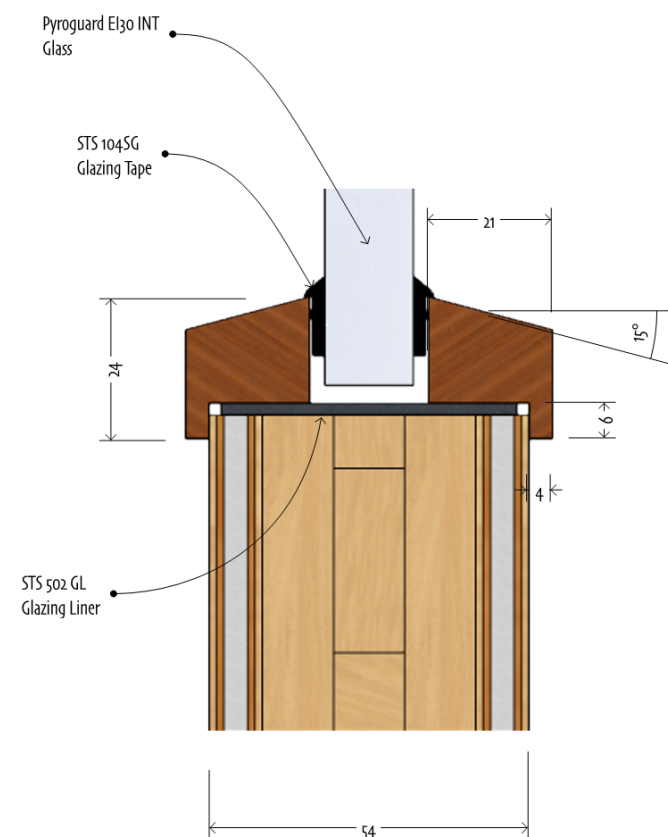


Figure 3. Client Drawing 1 WIAD-TAL54-ITT-787-F24-P3 REV B

Glazing Sections 1:1



Notes :
All dimensions are mm.
All hinges to be protected with 1mm Raw Graphite from Sealed Tight Solutions Ltd, Lock cases and keeps to be fully encased with 1mm Raw Graphite from Sealed Tight Solutions Ltd.

DRG. NO. WIAD-TAL54-ITT-787-F24-P4 REV - B

Scale	1:1 1:2 1:5 1:15 @A3	Date	10.08.2026
Drawn By	NH	File Location	

Drawing Title:
Talisman™ 54 LSASD-3pt Front Entrance Door -
Arrangement F24 - STS Seals

This drawing is the intellectual property of Wood International Agency Limited and must not be reproduced whole or in part without written authorisation. Queries should be addressed to the WIA designer.
Product performance can not be determined from this drawing. Do not scale from this drawing.
Errors and omissions expected.



T | +44 (0) 1277 230991 E | doors@woodia.co.uk W | http://www.woodia.co.uk
Wood International Agency Limited, Wood House, 16 King Edward Road, Brentwood, Essex, CM14 4HL, UK

SPECIFICATION

Frame	
Material	Framebreak EU550 ≈ 550kg/m3
Section	80 x 30 with 20 x 12 plant on stop
Joining Method	Halflap/trench
Glue/Screws	PVA - 2 No. 5 x 70 Woodscrews per Jamb
Cill/threshold	None
Intumescent Seal	2 No. 15x4 ST154 (STS)
Location	Centrally in reveal, 8mm apart
Env/Ac/Smoke Seal	ST1009
Location	Adhered to stop upstand
Leaf	
Core	Talisman (T1) 54 ≈ 600kg/m3
Lipping	L4E 8mm Sapele ≈ 640kg/m3
Application/Method	Würth Rapid PU - Hand Spread & Cramped
Facings	None
Application Method	N/A
Intumescent Seal	N/A
Location	N/A
Env/Ac/Smoke Seal	N/A
Location	N/A
Glazing	
Bead Material	Sapele ≈ 640kg/m3
Bead Section	Bolection 24mm high x 21mm wide
Aperture Lining	None
Bead Fixings	3.5x50 woodscrews@ 35° ± 5° @ 150mm centres
Glass	Pyroguard EI30 INT
Glazing Tape/System	ST 104SG
Intumescent Liner	ST502GL (STS)
Ironmongery	
Hinges	Avocet SSBH-101X76
Closer	Merlin Prostyle 50.04.03.07
Lock	Avocet Contemporary Autofire DA3-45-S-RH-X5
Handle	Avocet Affinity Plus Contemporary lever/lever
Cylinder	ATK+ Thumbturn 3" - DC6RV3545PCT
Viewer	STS 4008 Door Viewer
Letterbox	Avocet Affinity TS008 Letterplate
Escutcheon	N/A
Chain	Avocet Narrow TS003 Security Chain
Knocker/Numerals	Avocet Affinity Numerals
Supporting Construction	
Type	Blockwork
Fixings	Steel frame fixings In Nylon Plugs
Sealing	Superwool capped with ≈ 10mm STS Mastic
Packers	Plastic rectangular shim, cut flush, uncapped
Max/Min/Nom Gaps	35mm / 5mm / 20mm

Figure 4. Client Drawing 1 WIAD-TAL54-ITT-787-F24-P4 REV B

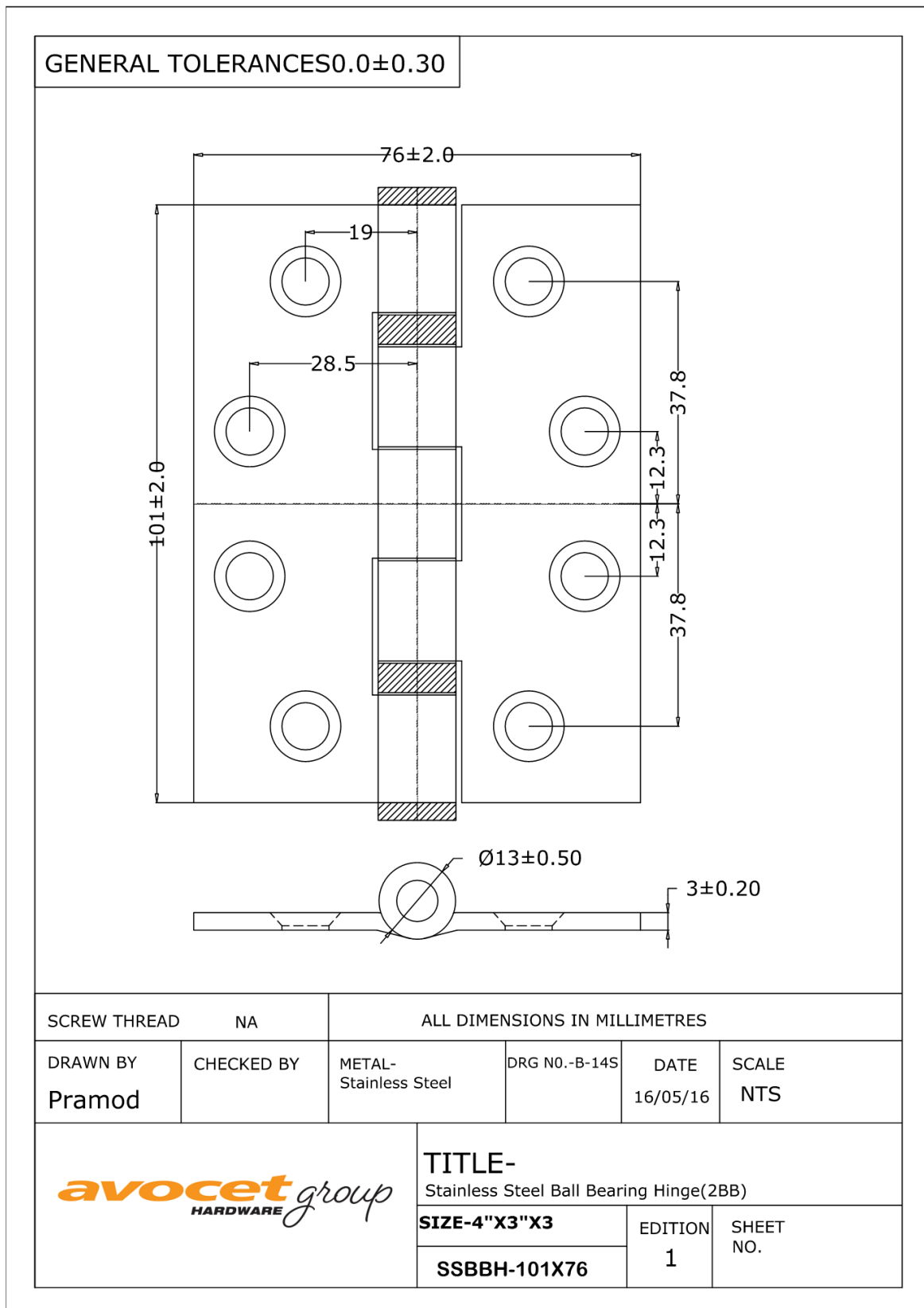


Figure 5. Details of Item 10 Hinge

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

Issue: 02

Test sponsor: Wood International Agency

Page 12 of 45



TECHNICAL PRODUCT DATA SHEET

Prostyle Overhead Door Closer EN2-5 Heavy Duty DABC DDA Delayed Action

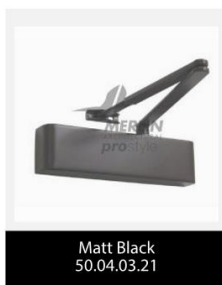
50.04.03.07

- Satin Stainless Steel finish pictured opposite
- Variable power adjustable EN2-5 for doors up to 110kg and 1250mm wide
- Assists BS8300 for DocM contracts, helping to assist door sets with ease of
- Universal application, meaning it can be fitted in standard parallel arm or transom fitting position.
- 50.04.03.07 pictured, in Satin Stainless Steel

TECHNICAL SPECIFICATIONS

- Delayed action and back check
- Opening angle 180°
- Dimensions (inc. cover) W269 x H69
- 25 Year Guarantee
- Available in a range of finishes
- Max door weight <110kg

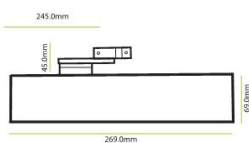
AVAILABLE FINISHES



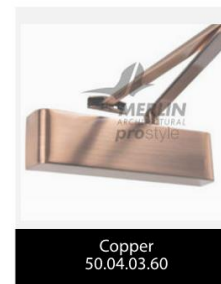
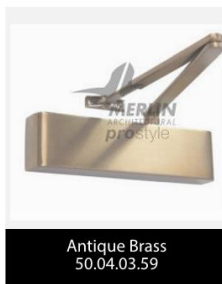
CE 1121

UK
CA
1720

DRAWINGS



Dimensions shown are for the cover



Further finishes available on request



Email info@merlinarc.com | Telephone 0161 927 9292 | Fax 0161 928 8878

Figure 6. Detail of item 11 Door Closer

Test date: 12/08/2026

Test standard: BS EN 1634-3:2004 + Corr:2007

Test sponsor: Wood International Agency

Job number: 560408/R

Issue: 02

Page 13 of 45

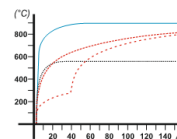


fire & smoke

fire test data

All STS test data is sourced, supplied and verified by independent, UKAS-accredited test facilities in accordance with all relevant British and European standards.

BS 9999
BS 476: 22 - 1987
BS 8214 - 2008
BS EN 1634 - 1: 2008



STS DOOR VIEWERS

:XX

Product Data

Product codes	Finish	Compliant
STS 4008 B	BRASS	BS 476 Part22: 1987 & BS EN 1634-1: 2014
STS 4008 C	CHROME	

Available as fire-rated - FD60*

Characteristics / features

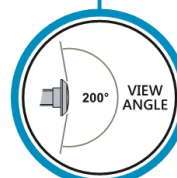
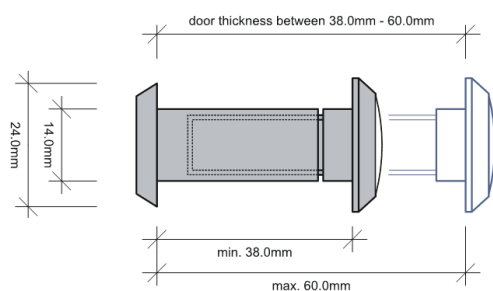
Standard

Designed to minimise damage to timber doors during installation
Rear flange has significantly greater diameter to prevent pull-through during fitting
Recessed drive slots prevent the tightening tool slipping and gouging timber door face
Manufactured in solid brass
Shatterproof lenses

* Product supplied with pre-cut intumescent liner

Liner thickness: 1mm

Liner manufactured from: Intercalated graphite with fillers and process oils.



Derwent House, Station Industrial Estate, Prudhoe, NE42 6NP.

+44 (0)1661 830101

+44 (0)1661 897454

info@sealedtightsolutions.com

www.sealedtightsolutions.com

Figure 7. Details Item 12 Door Viewer

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

Issue: 02

Test sponsor: Wood International Agency

Page 14 of 45



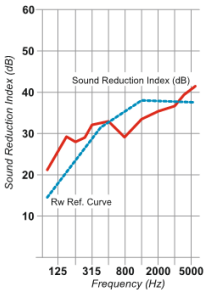
acoustic

acoustic test data

All STS acoustic data is sourced, supplied and verified by independent, UKAS-accredited test facilities in accordance with all relevant British and European standards.

Approved Document - 'E' (Passage of Sound)
Approved Document - 'B' (Fire Safety)
Approved Document - 'M' (Access To and Use of Buildings)
Building Bulletin - 93 (Acoustic design in schools)*

* See also: "Acoustic Performance Standards for the Priority Schools Building Programme"
including: "Technical Guidance Document TGD-021-5 Acoustic Performance in Schools"



STS 422 Door-bottom seal

:16

Characteristics / features

Product code	Size / Length	Colour(s)	Performance
STS 422 - "SIZE" See table below	VARIOUS See table below	N / A	ACOUSTIC - See STS data sheets :01 - :16

Characteristics / features

Protects against / Resists	Fitting / installation	Material(s)
FIRE SMOKE SOUND DRAUGHT DUST INFESTATION	See STS data sheet :17	Casing: ALUMINIUM (T60/60) Seal: NEOPRENE/BUTYL Mechanism: STEEL/NYLON

Sizes

Product size (pre-cut) mm
330 530 730 830 930 1030 1130 1330
70 200 200 200 200 200 200 200
Product cuts back by (maximum) mm

Please note

Pre-cut sizes are available at 925mm, 825mm & 725mm to suit standard width doorsets.

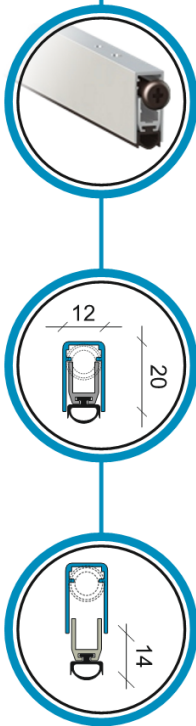
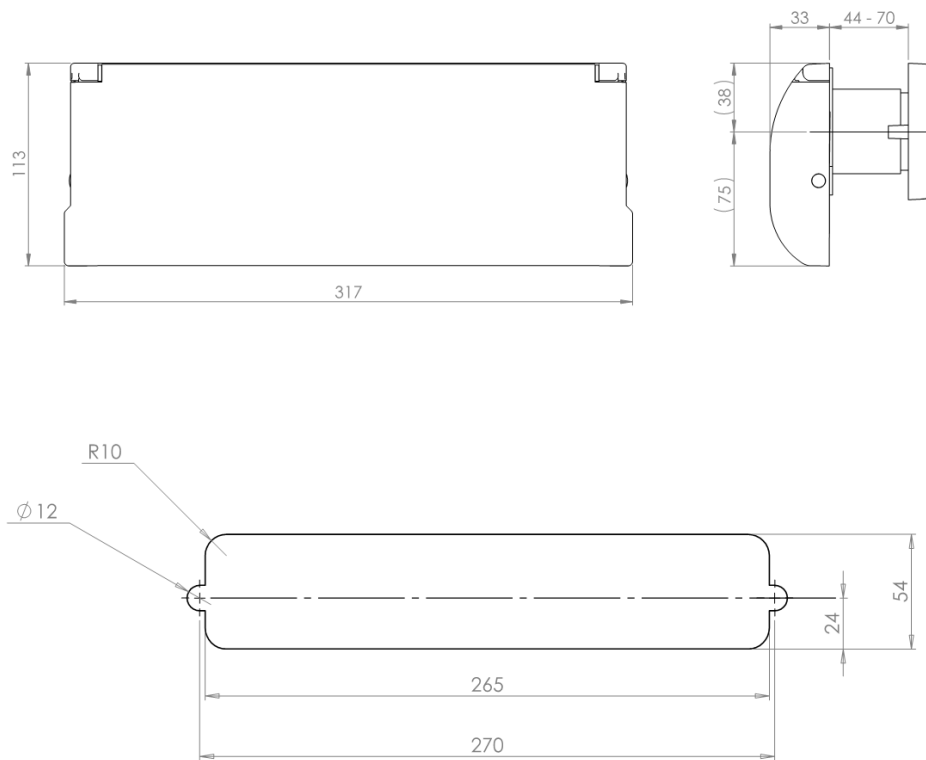


Figure 8. Detail of item 13 Drop Seal

AFFINITY

AFFINITY TS008 LETTERPLATE

TS008 & DOCUMENT Q COMPLIANT



TS008 - INTERNAL LETTERPLATE PART CODES

WHITE	BLACK	GOLD	CHROME	BRUSHED NICKEL
LPTS008WH-INT	LPTS008BL-INT	LPTS008CG-INT	LPTS008CH-INT	LPTS008BN-INT

EXTERNAL LETTERPLATE PART CODES

WHITE	BLACK	GOLD	CHROME	BRUSHED NICKEL
LPTS008WH-EXT	LPTS008BL-EXT	LPTS008CG-EXT	LPTS008CH-EXT	LPTS008BN-EXT

avocet
HARDWARE

Figure 9. Detail of item 14 Letter Plate

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

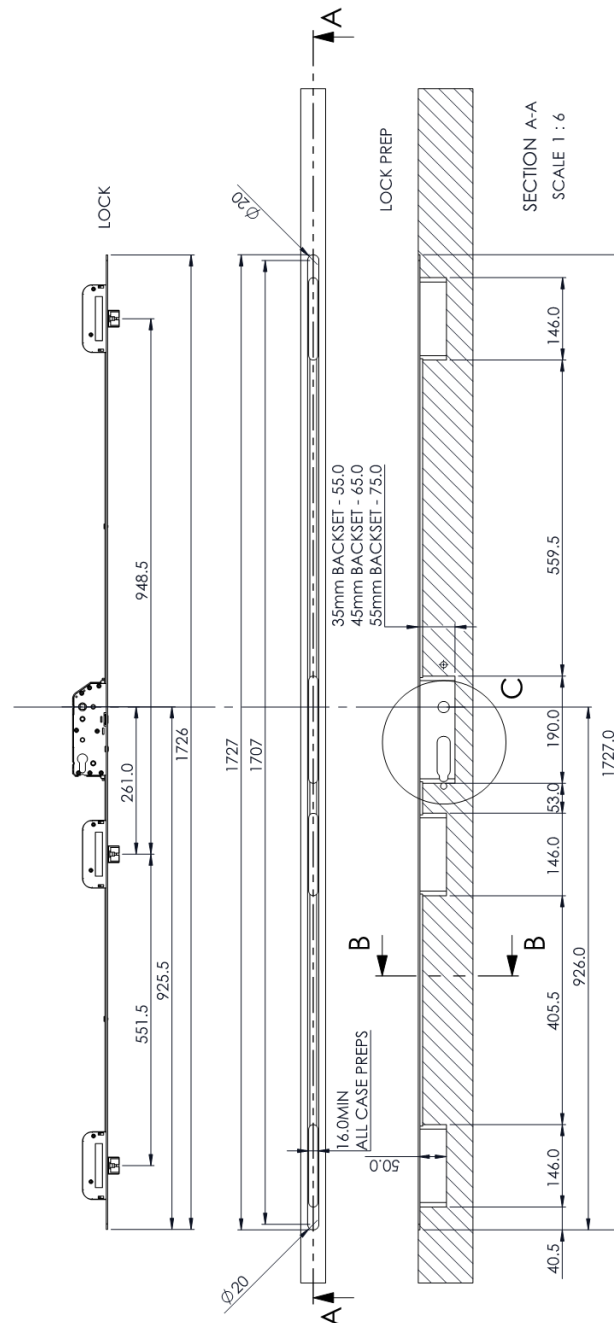
Issue: 02

Test sponsor: Wood International Agency

Page 16 of 45

ABS[®] AUTOFIRE DOOR LOCK

3 LATCH CONTEMPORARY AUTOFIRE



www.avocet-hardware.co.uk

avocet
HARDWARE

Figure 10. Detail of item 15 Lockset

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

Issue: 02

Test sponsor: Wood International Agency

Page 17 of 45

HIGH SECURITY EURO CYLINDER 3 STAR

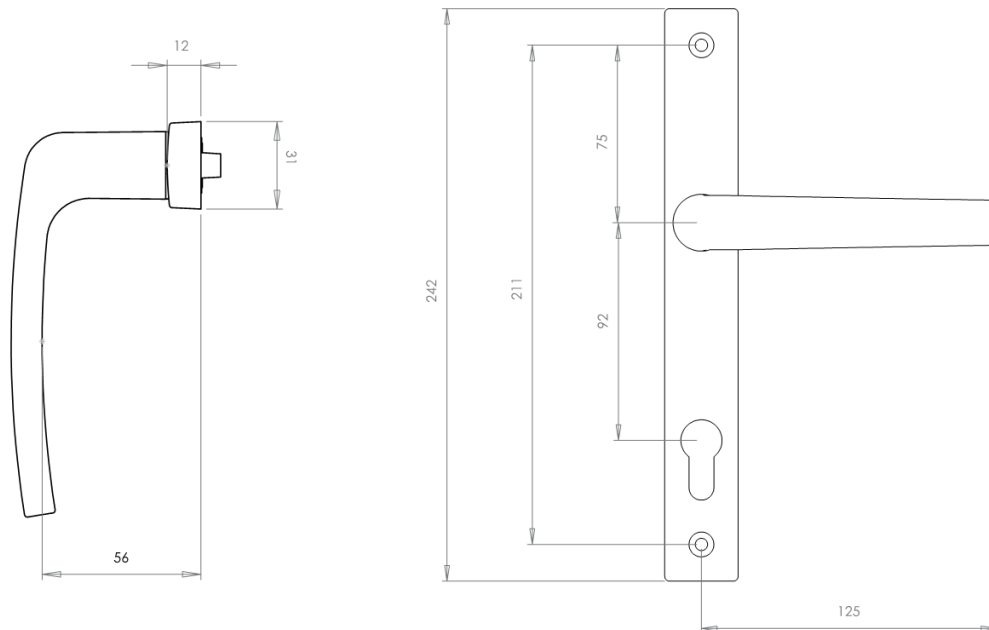


Figure 11. Details of item 16 Cylinder

Affinity

AFFINITY PLUS DOOR HANDLES

LONG BACKPLATE - CONTEMPORARY LEVER LEVER FORMAT



CODE	FINISH	LEVER/ LEVER	211 Screw Centres	COMPOSITE
DHCT	BN	LL	I	44
DHCT	CH	LL	I	44
DHCT	TB	LL	I	44

Example: DHCTBNLLI44 = Affinity Plus Contemporary Door Handle, Intermediate Backplate, 211mm centre, Aluminium

avocet
HARDWARE

Figure 12. Details of item 17 Lever Handle

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

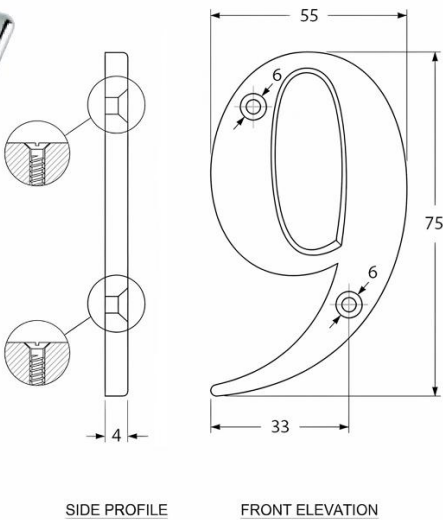
Issue: 02

Test sponsor: Wood International Agency

Page 19 of 45

AFFINITY DOOR NUMERALS

AffINITY



Technical Information

Assessment Data
Corrosion Resistance: Chrome/Flint meet requirements of BS EN 1670:2007 - grade 4 (240 hrs Salt Spray), Powder Coated - grade 5 (480 hrs Salt Spray)

Material Specifications
Powder Coating: White & Black, 60 microns min coating thickness
PVD/Chrome Coating: Chrome/Flint, multiple layer plating process

- Available in White, Black, Champagne Gold, Chrome, Satin Chrome, Flint & Stainless Steel



CODE PREFIX	COLOUR CODE	NUMBERS (0-9)
DAN	WH	0-9
DAN	BL	0-9
DAN	CG	0-9
DAN	CH	0-9
DAN	SC	0-9
DAN	FL	0-9
DAN	SS	0-9

Example: DANWH0 = White, Number 0

www.avocet-hardware.co.uk or call 01484 725000

Figure 13. Details of item 19 Numerals

Schedule of Components

The schedule of components which 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

See Client Drawings (WIAD-TAL54-ITT-787-F24-P1 to P4)

1. Door Frame	
Manufacturer	By Deziign Carpentry
Material	Framebreak EU 550 Engineered Hardwood Head and Jambs
Density recorded at sampling visit	536 kg/m ³ (stated)
Moisture content recorded at sampling visit	12-15% (stated)
Moisture content	
D1	14.9 % (measured by Warringtonfire)
Overall Size D1	
Frame	1268 mm wide x 2433 mm high
Frame (Head)	80 mm wide x 30 mm thick
Frame (Jambs)	80 mm wide x 30 mm thick
Stop	20 mm wide x 12 mm deep
Stop to Frame jointing method	Pinned to frame with 30 mm 18 g pins
Jamb to Head jointing method, fixing detail and location	2 No. Woodscrews 5 mm x 70 mm/40 mm through head into end grain of each jamb. Pilot Holes beforehand. Heads trenched by 10 mm
Adhesives Used	
Manufacturer	Würth
Type	PVA on trenched joints on head
Reference	D4 PVA ready mix

2. Frame Fixing Method to Supporting Construction

Manufacturer	Rawlplug
Reference	Nylon Frame Fixing
Type & material	Nylon plug with steel screws
Overall size	8 mm diameter x 120 mm long plug 4.8 mm diameter x 125 mm long screw
Spacing	100mm from top corner of jamb, 100 mm from bottom corner of jamb and at no more than 600 mm centres
Does the fixing penetrate intumescent seal within frame reveal	No
Packing Material	Plastic (Manufactured By Timco)
Packing Material Dimension	28 mm wide x 100 mm long x 1/2/3/4/5/6 mm thick
Packing Material Location	Behind fixings, stacked as necessary

3. Intumescent to Frame Reveal

Quantity	2
Manufacturer	Sealed Tight Solutions Limited
Reference	STS154 FO
Material	PVC Encased Graphite
Overall section size	2 No. 15 mm wide x 4 mm thick
Application method	Friction & self-adhesive back
Location (relative to the opening face of the door leaf)	7 mm and 31 mm (so 8 mm apart) Seals closest to stop on hinge side have butt joints 400 mm from bottom Seals closest to pull face on lock side have butt joints 457 mm from top
Presence of Adhesives	Yes
Location	Self-adhesive on back of strips
Manufacturer	Tessa
Type	Self-Adhesive Tape
Reference	51865
Curing method	Pressure
Application method	In-line rollers

4. Smoke Seal to Frame Reveal	
Manufacturer	Sealed Tight Solutions Limited
Reference	ST1009 APB
Material	Anti-paint block polymeric
Overall section size	11 mm x 5 mm
Application method	Self-adhered to stop upstand
Location	Against stop Note butt join 300 mm up from bottom of frame both sides.
Presence of Adhesives	Yes
Location	Rear of seal
Manufacturer	Tessa
Type	Self-Adhesive Tape
Reference	51865
Curing method	Pressure
Application method	In-line rollers

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

Issue: 02

Test sponsor: Wood International Agency

Page 23 of 45

Fire Stopping

5. Sealant to Fire Stopping Detail	
Manufacturer	Sealed Tight Solutions Ltd
Reference	ST88 acoustic intumescent sealant
Material	White water based acoustic sealant
Overall dimension	20 mm bead at vertical edges 20 mm at head 10 mm depth
Application method	Cartridge gunned around perimeter of the door frame to both faces
6. Insulation Wool Fire Stopping Detail	
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	Fitted around frame between frame and structural opening

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

Issue: 02

Test sponsor: Wood International Agency

Page 24 of 45

Door Leaf

See Client Drawings (WIAD-TAL54-ITT-787-F24-P1 to P4)

7. Door Leaf	
Manufacturer	Wood International Agency Limited
Reference	Talisman 54
Sample Reference	SC26237T 05/08/2026
Quantity	1
D1	
Overall leaf size prior to trimming	1220 mm wide x 2440 mm high x 54 mm thick
Overall leaf size supplied for testing	1200 mm wide x 2389 mm high x 54 mm thick
Density	659 kg/m ³ (measured)
Moisture content	
D1	8% Measured at sampling

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

Issue: 02

Test sponsor: Wood International Agency

Page 25 of 45

8. Core Element	
Manufacturer	Wood International Agency Limited
Reference	Talisman
Material	Pine/Spruce/poplar/MGO Blank
Density recorded at sampling visit	
D1	659 kg/m ³ (stated)
Moisture content at sampling visit	8% (measured) Inner core
9. Lippings/Edge banding	
Manufacturer	By Dezign Carpentry
Material	Sapele
Density recorded at sampling visit	
D1	698-732 kg/m ³ (Measured)
Moisture content at sampling visit	11-12% (Measured)
Moisture content recorded at test lab	
D1	
A	7.9 % (measured by Warringtonfire)
B	9.9 % (measured by Warringtonfire)
C	10.1 % (measured by Warringtonfire)
Overall size	54 mm wide x 8 mm thick
Location	All four edges
Fixing Method	Glued to leaf edges, adhesive manually spread, ambient temperature
Adhesives	
Manufacturer	Würth
Type	PU
Reference	Rapid MCPU
Curing method	Moisture
Application method	Hand spread and clamped

Hardware

Please see figures: 5 & 13 (All hardware sizes stated by client & verified by surveyor unless otherwise stated)

10. Hinge	
Supplier	The Avocet Hardware Group Ltd
Manufacturer	Sichorn
Reference	SSBBH-101X76
Quantity	3
Primary material	Stainless Steel
Type	Butt hinges
Size	102 mm x 76 mm x 3 mm 14 mm knuckle
• knuckle	14 mm diameter x 107 mm high
• blades	30 mm wide x 102 mm high x 3 mm thick
Fixings	
• type	Wooden screws
• material	Stainless steel
• sizes	30 mm x 4.5 mm
number off per blade	4
Position of each hinge relative to the head of the leaf	150 mm, 339 mm ,2036 mm
Details of intumescent protection	
Manufacturer	Sealed Tight Solutions
Material	Graphite
Size	1 mm
Location & Application Method	100 mm x 30 mm placed under each blade before fitting
Interruptions to Intumescent within the frame reveal	First seal fully interrupted, second seal uninterrupted.

11. Door Closer	
Manufacturer	Merlin
Reference	Prostyle Overhead Door Closer 50.04.03.07
Type	Surface mounted
Materials:	
• Body	Aluminium
• Closer arm	Satin Nickel Plated Steel
• Cover	Satin Nickel Plated Steel
Sizes:	
• Body	54 mm high x 236 mm wide x 38 mm deep
• Cover	69 mm high x 269 mm wide x 40 mm deep
Fixing method, material, size, quantity and location	2 No. 50 mm x 4.8 mm pan head woodscrews to arm bracket 4 No. 50 mm x 4.8 mm countersink head woodscrews to body
Orientation	
D 1	Opening towards smoke chamber
Average closing forces (measured by Warringtonfire)	
D 1	34.0 N
Average opening force (measured by Warringtonfire)	
D 1	85.3 N
Distance from hinge measured from handle position	1000 mm
Details of intumescent protection	None Added

12. Door Viewer	
Manufacturer	Sealed Tight Solutions Limited
Reference	STS 4008
Material	Brass with glass lens
Overall Size	
Cut Out Diameter	16mm Ø
Body diameter	14mm Ø
Diameter at Internal Face	24mm Ø
Diameter at External Face	26mm Ø
Location	1500 mm from the bottom of the leaf and 100 mm from the glazing aperture of the leaf to the centre.
Details of intumescent protection	
Manufacturer	Sealed Tight Solutions Ltd
Material	Graphite
Size	1 mm
Fixing method and location	A 49 mm x 49 mm x 1mm STS graphite sheet wrapped around body. Flanges pointed with small bead of STS 88 Intumescent Mastic
13. Drop Seal	
Manufacturer	Sealed Tight Solutions Ltd
Reference	ST422
Material	
Body	Aluminium
Seal	Butyl/Neoprene
Overall Size	
Body	20 mm high x 12 mm wide length to suit leaf.
Face Plate	14 mm width x 35 mm length
Maximum operating drop	13 mm
Fixing method	2 No. 3 mm x 20 mm steel woodscrews

14. Letter Plate	
Manufacturer	The Avocet Hardware Group Ltd
Reference	Affinity TS008 Letter Plate
Material	
Body	Polymeric
Internal Face Plate	Zinc Alloy
External Face Plate	Zinc Alloy
Overall Size	
Body size	47 mm high x 260 mm wide
Cut out size	Internal 60 mm high x 272 mm wide External 50 mm high x 263 mm wide
External Face	76 mm high x 308 mm wide x 16 mm thick
Internal Face	113 mm high x 317 mm wide x 33 mm thick
Fixing method	4 No. 3.5 mm x 40 mm Woodscrews per side in manufacturers predetermined locations. 2 No. 4.8 mm x 80 mm Machine screws from internal side in manufacturers predetermined locations.
Intumescent Protection	
Manufacturer	Sealed Tight Solutions Ltd
Reference	STS-TS008-KIT
Material	Graphite
Fixing method and location	1 mm graphite behind face plates 38 mm x 4 mm thick graphite in rebate formed in opening

15. Lockset/Latch	
Manufacturer	The Avocet Hardware Group Ltd
Reference	Contemporary Autofire DA3-45-S-RH-X5
Material	
Lockcase	Mild Steel
Forend plate	Mild Steel,Bichromate coating
Top and bottom lock case	Mild Steel
Top and bottom lock bolts	Zinc Alloy
Overall Size	
Central Lockcase	165 mm high x 59 mm wide x 15 mm thick
Forend plate	1726 mm high x 20 mm wide x 2.5 mm thick
Top and bottom lock case	120 mm high x 41 mm wide x 15 mm thick
Top and bottom lock bolts	30 mm high x 10 mm wide x 20 mm projection
Fixing method	9 No. 3.5 mm x 50 mm Woodscrews
Location from base of leaf to centre of spindle	1000 mm
Operation of lock bolt	Disengaged
Intumescent Protection	
Manufacturer	Sealed Tight Solutions Ltd
Reference	STS-AFLOCK-KIT
Material	Graphite
Size	1 mm
Fixing method and location	Wrapped around body of top bottom and central cases and adhered to recess in between bolt cases before fitting
Keep	
Manufacturer	The Avocet Hardware Group Ltd
Reference	AVLATCHKEEP
Material	
Top and Bottom Strike Plate and Keep	Mild Steel & Plastic
Overall Size	
Top and Bottom Strike Plate	130 mm high x 24 mm wide x 2 mm thick plus 57 mm high x 12 mm strike
Top and Bottom Back Box	46 mm high x 18 mm wide x 20 mm deep
Fixing Method	3.5 mm x15 mm steel woodscrews
Latching Force	
D1	5.45 N

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

Issue: 02

Test sponsor: Wood International Agency

Page 31 of 45

Intumescent Protection	
Manufacturer	Sealed Tight Solutions Ltd
Reference	STS-AFLOCK-KIT
Material	Graphite
Size	1 mm
Fixing method and location	Fitted behind keeps before installation
Interruptions	Fully interrupts first seal, partially interrupts second seal.

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

Issue: 02

Test sponsor: Wood International Agency

Page 32 of 45

16. Cylinder	
Manufacturer	The Avocet Hardware Group Ltd
Reference	ATK Thumbturn 3* - DC6RV3545PCT
Material	Brass/Nickel/Molybdenum
Overall Size	17 mm wide x 13 mm high – Euro Profile
Fixing Method	1 No. M5 steel machine screw
Details of intumescent protection	None added
17. Lever Handle	
Manufacturer	The Avocet Hardware Group Ltd
Reference	Affinity Plus Contemporary Lever/Lever Handle
Material	Zinc Alloy
Overall size	Backplate = 242 mm high x 31 mm wide x 12 mm deep Lever = 135 mm long x 12 mm thick x 53 mm projection
Fixing method, fixing material, sizes, quantity and location	2 No. 4.8 mm x 60 mm steel bolt through fixings at 211 mm centres.
Details of intumescent protection	None added
18. Security Chain	
Manufacturer	The Avocet Hardware Group Ltd
Reference	Avocet Narrow TS003 Door chain
Material	
Face plate to leaf	Steel
Face plate to frame	Steel
Chain	Steel
Overall size	
Face plate to leaf	38.7 mm high x 41.9 mm wide x 4 mm thick
Face plate to frame	61.2 mm high x 12 mm wide x 3 mm thick
Chain	230 mm long, 12 mm wide links, 3 mm link thickness.
Location	1475 mm from bottom of leaf
Fixing method	4 No. 4.8 mm x 40 mm to leaf face plate 2 No. 4.8 mm x 70 mm to frame face plate
Details of intumescent protection	None

19. Numerals	
Manufacturer	The Avocet Hardware Group Ltd
Reference	Affinity Door Letters/Numbers
Material	
Overall size	75 mm high x 55 mm wide x 4 mm thick
Location	1750 mm from the bottom of the leaf and within 100-150 mm from the vision panel aperture
Fixing method	2 No. woodscrews 3 mm x 17 mm
Details of intumescent protection	None added
Presence of Adhesives	No
20. Door Knocker	
Manufacturer	The Avocet Hardware Group Ltd
Reference	Affinity Slimline Door Knocker - DAAFDKSLCH (CH=Chrome)
Material	Zinc alloy
Overall size	200 mm high x 55 mm wide x 14 mm thick
Fixing method, fixing material, sizes, quantity and location	Affixed to clip fastened with 2 No. 3.5 mm x 20 mm woodscrews. 1500 mm from bottom of leaf, 62 mm from lock stile and vision panel aperture.
Details of intumescent protection	None added

21. Door Sensor

Smoke Test 1

Manufacturer	Kubu
Reference	AnywhereTM Pro Smart Security Sensor
Material	Polymeric with some circuitry.
Overall size	Carrier = 110 mm high x 25 mm wide x 3 mm thick with 70 mm x 18 mm x 10 mm deep back box. Sensor = 70 mm long x 18mm wide x 7 mm thick
Detail of batteries	2 No. CR1632
Fixing method, fixing material, sizes, quantity and location	2 No. 3.5 mm x 15 mm steel wood screws at 98 mm centres. Fitted into recess in frame opposing lock case (centre from bottom of leaf = 920 mm)
Interruptions to intumescent seal	Partially interrupts both seals.
Details of intumescent protection	
Manufacturer	STS
Reference	STS-CRADLE-KIT
Material	Graphite
Size	1 mm
Location	Around box and behind flanges

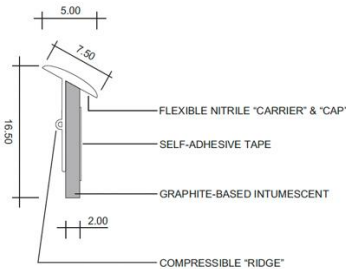
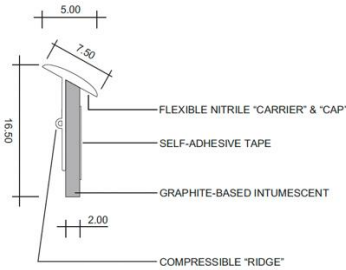


Smoke Test 2

	Component removed
--	-------------------

Glazing

22. Glazed Unit	
Manufacturer / Supplier	Pyroguard UK/Fire Glass UK
Reference (Declaration of Performance)	Pyroguard EI30 INT – Sandblasted to internal (exposed) face
Unit overall size	650 mm wide x 1200 mm high x 15 mm thick
Aperture location relative to the head and closing edge of the leaf	125 mm from lock stile and top
Aperture size (prior to any lining)	660 mm wide x 1210mm high
Sight size	624 mm wide x 1174mm high
Expansion allowance	3 mm all around (+2mm liner all around)
Presence of Timber aperture lining	None used
23. Beading	
Manufacturer	By Dezin Carpentry
Reference	Bolection Bead
Material	Sapele
Density recorded at sampling visit	641 kg/m ³
Moisture content at sampling visit	9%
Moisture Recorded at test lab	
D1	9.4 % (measured by Warringtonfire)
Overall size	24 mm high x 21 mm wide including a 15° splay and a 6 mm high x 4 mm deep bolection
Fixing method, fixing material and sizes	3.5 mm x 50 mm steel woodscrews
Fixing distances from corners, centres and angle relative to the face of the glass	50 mm from corners, max 150 mm centres at 35° (±5°)

24. Glazing Lining / Intumescent liner / Wet mastic system	
Manufacturer	Sealed Tight Solutions Limited
Reference	STS 502GL
Material	Graphite
Overall size	50 mm x 2 mm
Fixing method	Self Adhesive
25. Sealant applied to glass on the internal face of the leaf	
Manufacturer	Sealed Tight Solutions Limited
Reference	STS 104SG
Material	Graphite with nitrile carrier and cap
Overall size	16.5 mm high x 5 mm wide: - SECTION PROFILE STS 104SG - INTUMESCENT GLAZING GASKET 
Application method	Self Adhesive to Bead Upstand
26. Sealant applied to glass on the external face of the leaf	
Manufacturer	Sealed Tight Solutions Limited
Reference	STS 104SG
Material	Graphite with nitrile carrier and cap
Overall size	16.5 mm high x 5 mm wide:- SECTION PROFILE STS 104SG - INTUMESCENT GLAZING GASKET 
Application method	Self Adhesive to Bead Upstand

Supporting Construction

27. Lightweight Blockwork	
Manufacturer	THERMALITE
Reference	THERMALITE Shield
Material	Lightweight concrete blocks
Overall size	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
28. AAC Concrete 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 (stated)
Fixing method	Ordinary sand/cement mortar, mix 3:1

Test date: 12/08/2026

Job number: 560408/R

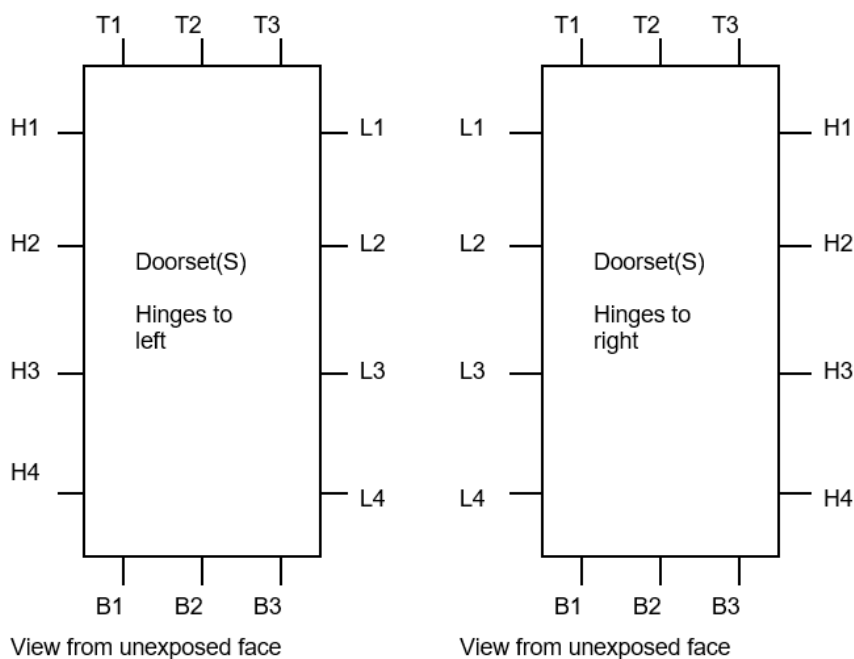
Test standard: BS EN 1634-3:2004 + Corr:2007

Issue: 02

Test sponsor: Wood International Agency

Page 38 of 45

Doorset clearance gaps



Doorset A (mm)					
Hinge Side	Primary	Leaf to Stop	Leading Edge	Primary	Leaf to Stop
H1	4.23	3.31	L1	3.17	4.14
H2	4.26	2.67	L2	3.14	3.43
H3	4.02	3.87	L3	3.84	4.22
H4	3.04	3.24	L4	4.07	3.90
Mean	3.89		Mean	3.56	
Max	4.26		Max	4.07	
Min	3.04		Min	3.14	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	4.36	3.19	B1	9.21	
T2	4.34	2.93	B2	9.24	
T3	3.54	2.94	B3	9.36	
Mean	4.08		Mean	9.27	
Max	4.36		Max	9.36	
Min	3.54		Min	9.21	

Test Photographs

Outside face of the specimen



Inside face of the specimen



Letter plate



Handle set



Test date: 12/08/2026

Test standard: BS EN 1634-3:2004 + Corr:2007

Test sponsor: Wood International Agency

Job number: 560408/R

Issue: 02

Page 41 of 45

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.

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 1634-3:2004+Corr:2007 and BS EN 1363-1:2020.

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 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.

This report may only be reproduced in full. Extracts or abridgements shall not be published without the express written permission of Warringtonfire.

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.

Field of direct application

BS EN 1363-1:2020, Fire resistance tests - Part 1: General requirements, states within Section 12.1, Clause v) that "The field of direct application of the results taken from the appropriate standard (or the test method) for the specimen being evaluated, either in the form of the full text from the appropriate standard or only those clauses which are relevant for the specimen tested" shall be included within the test report. The full text of the field of direct application for the results of the specimen being evaluated herein, can be found within the appropriate test standard, which is referenced on the front cover of this report.

EGOLF

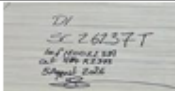
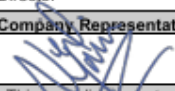
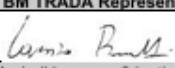
Certain aspects of some test specifications are open to different interpretations. EGOLF have identified a number of such areas and have agreed Resolutions which define common agreement of interpretations between fire test laboratories which are members of the Groups. Where such Resolutions are applicable to this test they have been followed:

EGA 037 – 2018

Revision history This document supersedes initial issue, dated 28 August 2026

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

bmtrada 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 Design Carpentry, Unit 11B Erw Las, Colomendy Industrial Estate, Denbigh, LL16 5TN			Visit Date 5th, 11th August 2026	BMT Representative L. Bersanetti
Requirement		Evidence / Comments		
Opening Meeting (names of those present)		Shawn Harrison (By Design Carpentry), Neil Harrison (Wood International Agency Limited), Lorenzo Bersanetti (BMT representative for sampling)		
Sampling Contract Reference		SC26237T		
Technical Specification document / FoA reference		SC26237 WIAD-TAL54-ITT-787-F24 - marked by sampler 25/08/2026 09:51		
Description of product(s) sampled		1 x LSASD glazed doorset, door blank is Talisman 54 Q-Mark Certified		
Batch number(s) / Product identification				
Date of manufacture		5 th August 2026: cutting/lipping 11 th August: Glazing and Ironmongery		
Traceability of material records i.e. Purchase Orders and delivery notes		DN "TEST WOODIA" inv. STS-57142 - Sealed Tight Solutions - STS104SG, STSGL502, strips ST1504 FO, hinge pads STS100x30 1mm, door viewer ST4008, numerals, avocet kits, 422 drop down seal, STS graphite sheets DN SH00533976 / AVOCET Group / lock/keeps, knocker. PO 5048 / Jiangsu Sainly Land Up Pro Trading Co Ltd / Framebreak EU550 DN / APB-FO60 Test - FOC 030826 / SealedTightSolutionsHouse/ smoke seal ST1009 Various Components delivered free issue and identification via labels/stickers.		
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.		All key stages of door cutting/lipping, frame assembly, intumescent protection and hardware fitting, glazing witnessed including check of density and moisture content on timber based materials.		
Determine the essential characteristics of the product and confirm the details of in-process checks conducted on the sample to ensure conformity.		1 x LSASD glazed doorset, door blank used was Talisman 54 Q-Mark Certified. Components traceable to technical specification supplied before and during sampling via information shown in delivery/purchasing papers and packaging. Production plan was implemented accordingly, full traceability kept and in process checks conducted by approved personnel.		
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' including smoke seal) ☐ Door closer ☐ Frame re-assembly		
Confirm any clauses within the Technical Specification that were found to be different on the sampled product/s. Non-conformances may be raised for pre-cert and audit test sampling		Initial Type testing - deviations from Technical specification are commented upon directly within the technical specification form.		
Closing Meeting (names of those present)		Shawn Harrison (By Design Carpentry), Neil Harrison (Wood International Agency Limited), Lorenzo Bersanetti (BMT representative for sampling)		
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. No changes will be made prior to delivery to the test laboratory.		
Company Representative Position				
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.				

Stocking Lane, Hughenden Valley, High Wycombe, Buckinghamshire, HP14 4ND. Tel: 01494 569700
SVR - Sampling Visit Report - Iss 5 - 190924

Page 1 of 1

Test date: 12/08/2026

Job number: 560408/R

Test standard: BS EN 1634-3:2004 + Corr:2007

Issue: 02

Test sponsor: Wood International Agency

Page 44 of 45

Controlled document no. 117601

Controlled document version no. 02

Controlled document date: 09/04/2026



Registered office:

Warringtonfire Testing and Certification Limited
3rd Floor, Davidson Building, 5 Southampton Street, London,
WC2E 7HA, United Kingdom
Registered Company No. 11371436

Location of performance of laboratory activities:

Warringtonfire Testing and Certification Limited
Holmesfield Road, Warrington WA1 2DS, United Kingdom
a UKAS accredited testing laboratory No.0249

Element Materials Technology
722 Birchwood Park, Warrington WA3 6FW, United Kingdom
a UKAS accredited testing laboratory No.0249

Fire resistance laboratory locations:

High Wycombe, United Kingdom
a UKAS accredited testing laboratory No.1762
T: +44 (0) 1494 840 780

Warrington, United Kingdom
a UKAS accredited testing laboratory No.0249
T: +44 (0) 1925 655 116

Ghent, Belgium
BELAC accredited laboratory 196-TEST
T: +32 9 243 77 50

Tisselt, Belgium
BELAC accredited laboratory 196-TEST
T: +32 9 243 77 50

Heywood, United Kingdom
a UKAS accredited testing laboratory No.0249
T: +44 (0) 1925 655 116

General conditions of use

The data, methodologies, calculations and results documented in this report specifically relate to the tested specimen/s and must not be used for any other purpose. This report may only be reproduced in full. Extracts or abridgements must not be published without permission from Warringtonfire.

All work and services carried out by Warringtonfire are subject to, and conducted in accordance with, our standard terms and conditions. These are available on request or at <https://www.element.comrms/terms-and-conditions>.