

Fire resistance test report

Issuing laboratory: Warringtonfire Testing and Certification Limited

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

Test sponsor: Wood International Agency Limited

16 King Edward Road
Brentwood
Essex
CM14 4HL

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

Report number: 560407/R

Test date: 12 August 2026

Issue: 02

This report supersedes the original report issued 02 October 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 Tested Specimen

For the purposes of the test the doorsets were referenced as **Doorset A** and **Doorset B**.

Doorset A had overall nominal dimensions of 2433 mm high by 1268 mm wide, incorporating a single door leaf (density – 643 kg/m³) with nominal dimension of 2389 mm high by 1200 mm wide by 54 mm thick. The door leaf was hung within a 'Framebreak EU 550 Engineered Hardwood' frame on three stainless steel butt hinges, such that the leaf opened towards the heating conditions. The door leaf was formed from a Talisman (T1) 54 core (density - 659 kg/m³) and incorporated a vision panel glazed with 15 mm thick Pyroguard EI30 INT glass, with overall nominal dimensions of 1200 mm high by 650 mm wide. It possessed hardware of a surface mounted, prostyle overhead door closer, two polymeric letter plates with zinc alloy face plates, a steel lockset and latch set with a zinc alloy lever handle, as well as a butyl/neoprene drop seal with an aluminium body, a steel security chain, metallic numerals fixed with two wood screws and a brass door viewer with a glass lens. The Doorset was latched with the lock disengaged for the duration of the test.

Structural opening – 2455 mm high x 1309 mm wide.

Doorset B had overall nominal dimensions of 2431 mm high by 1050 mm wide, incorporating a single door leaf with nominal dimension of 2389 mm high by 982 mm wide by 54 mm thick. The door leaf was hung within a 'Framebreak EU 550 Engineered Hardwood' frame on three stainless steel butt hinges, such that the leaf opened away from the heating conditions. The door leaf was formed from a Talisman (T1) 54 core (density - 643 kg/m³) and incorporated a vision panel glazed with 15 mm thick Pyroguard EI30 INT glass, with overall nominal dimensions of 1200 mm high by 650 mm wide. It possessed hardware of a surface mounted, prostyle overhead door closer, two polymeric letter plates with zinc alloy face plates, a steel lockset and latch set with a zinc alloy lever handle, as well as a butyl/neoprene drop seal with an aluminium body, a steel security chain, metallic numerals fixed with two wood screws and a brass door viewer with a glass lens. The Doorset was latched with the lock disengaged for the duration of the test.

Structural opening – 2455 mm high x 1091 mm wide.

Detailed drawings of the test specimen(s) and a comprehensive description of the test construction based on a detailed survey of the specimen(s) and information supplied by the sponsor of the test are included in the Test Specimen and Schedule of Components sections of this report.

Test Results

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

	Specimen A		Specimen B	
Sustained flaming	71 minutes	Failure	72 minutes	No failure*
Gap gauge	72 minutes	No failure*	72 minutes	No failure*
Cotton pad	71 minutes	Due to sustained flaming	72 minutes	No failure*

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

Specimen	71 minutes	Due to integrity failure	67 minutes	Exceeded maximum temperature criteria TC 79
Discrete area	47 minutes	Exceeded mean temperature criteria TC's 42-47	48 minutes	Exceeded mean temperature criteria TC's 73-78

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

Specimen	67 minutes	Exceeded maximum temperature criteria TC 27	67 minutes	Exceeded maximum temperature criteria TC 79 (I ₂)
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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	72 minutes*	72 minutes*	72 minutes*	72 minutes*	72 minutes*
Specimen B	72 minutes*	72 minutes*	72 minutes*	72 minutes*	72 minutes*

*Test was discontinued after a period of 72 minutes.

Date of test 12 August 2026

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

Test date: 12/08/2026

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

Test sponsor: Wood International Agency Limited

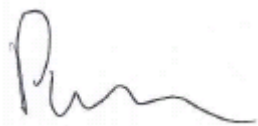
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Quality Management

Issue No: 1		Issue Date: 02 October 2026	
Responsible Officer:	P. White* Technical Officer	Approved By:	S. Collins* Technical Officer
			
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* 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	05/08/2026 to 11/08/2026	SC26237T
Doorset B	05/08/2026 to 11/08/2026	SC26238T

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

Installation The doorsets were received on the 11 August 2026 and were mounted within apertures in a blockwork wall construction. Doorset A opened towards the heating conditions and Doorset B opened away from the heating conditions; both leaves were single acting. Representatives of the **Test Sponsor** conducted the installation on the 11 August 2026.

Specimen Direction **Doorset A** and **Doorset B** were **asymmetrical**. The **Test Sponsor** defined the direction in which the specimens were tested.

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 20.5°C to 30°C and 36.0% to 56.5% respectively.

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

Mr N. 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 35°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.

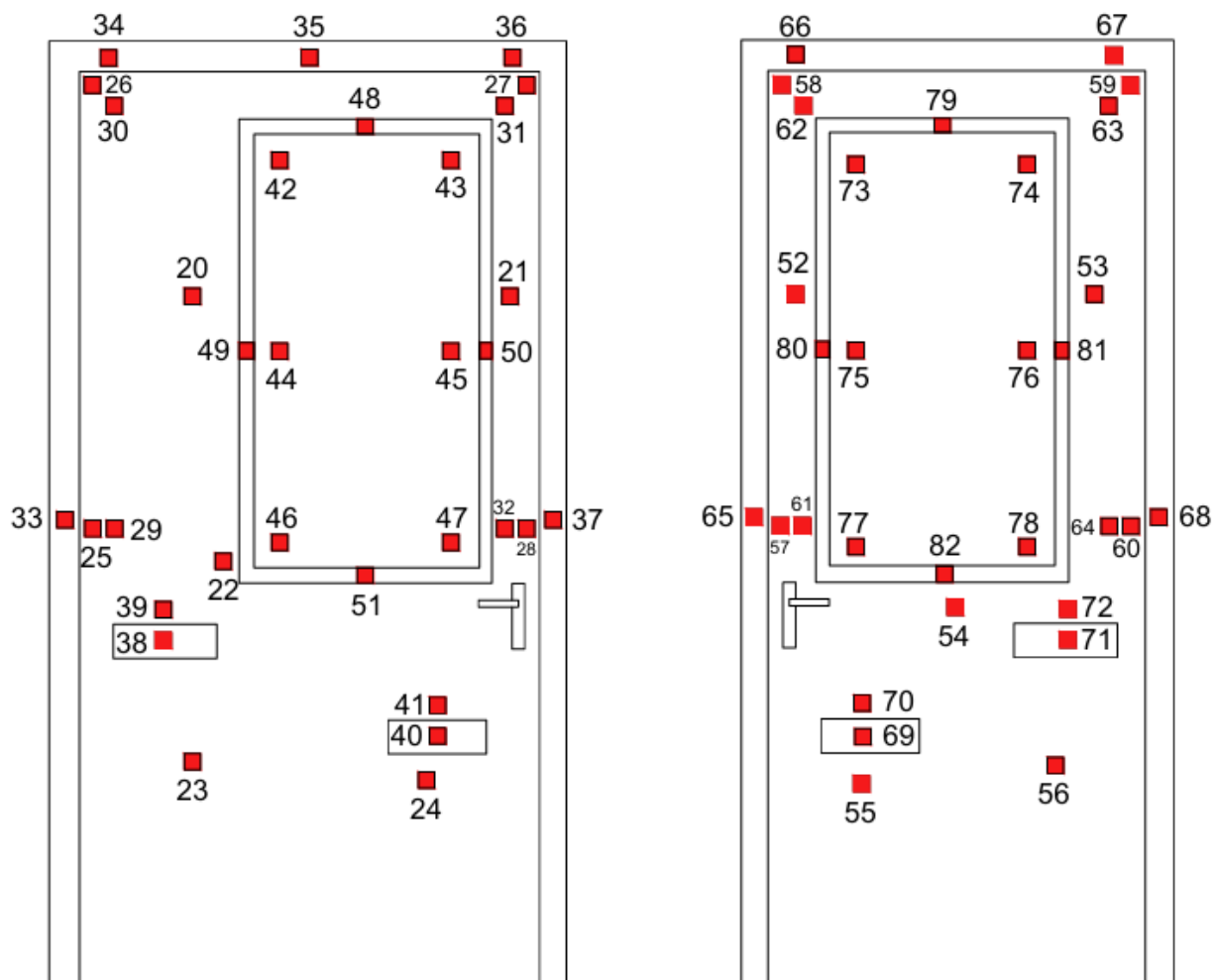
Thermocouples Thermocouples were provided to monitor the unexposed surface of the specimens. The output of all instrumentation was recorded at no less than one-minute intervals. The locations and reference numbers of the various unexposed surface thermocouples are shown in the 'Test Specimen Drawings'.

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 specimen's glazing.

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 16.4 (± 5) Pa between 5 and 10 minutes and 16.4 (± 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



Elevation of Thermocouple Positions – Unexposed Face

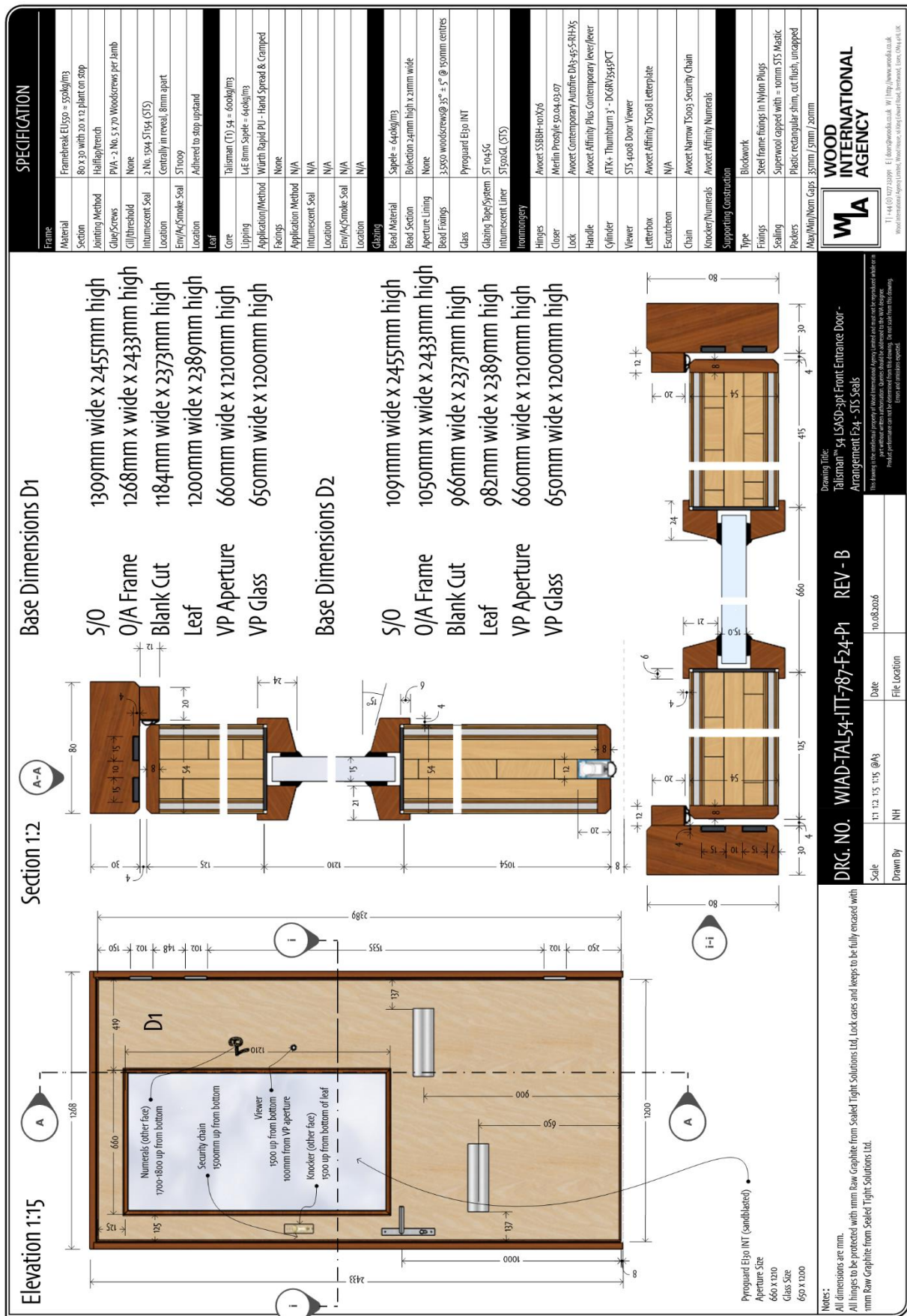


Figure 1. Client Drawing 1 WIAD-TAL54-ITT-787-F24-P1 REV B

Test date: 12/08/2026

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

Test sponsor: Wood International Agency Limited

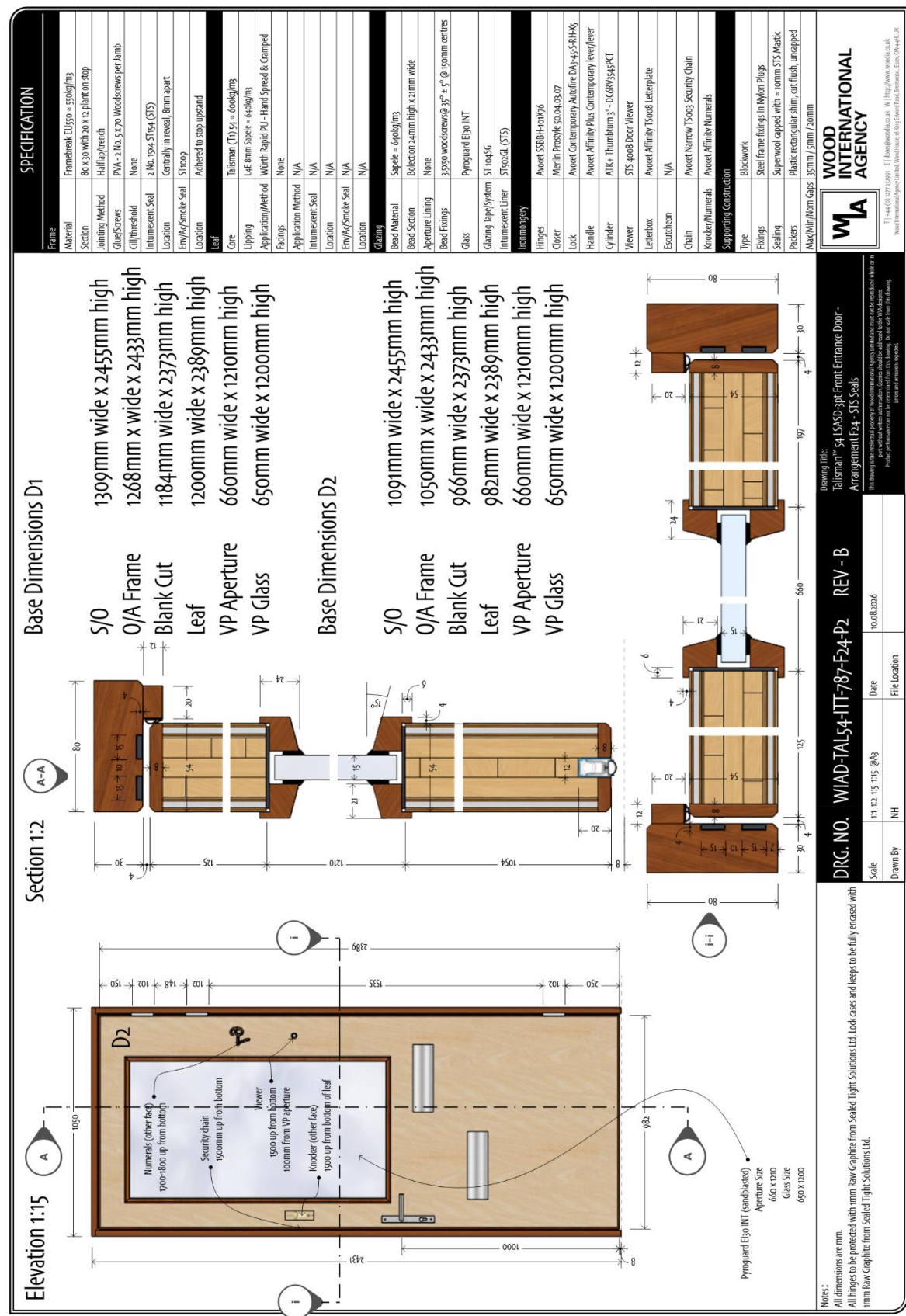
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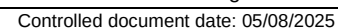
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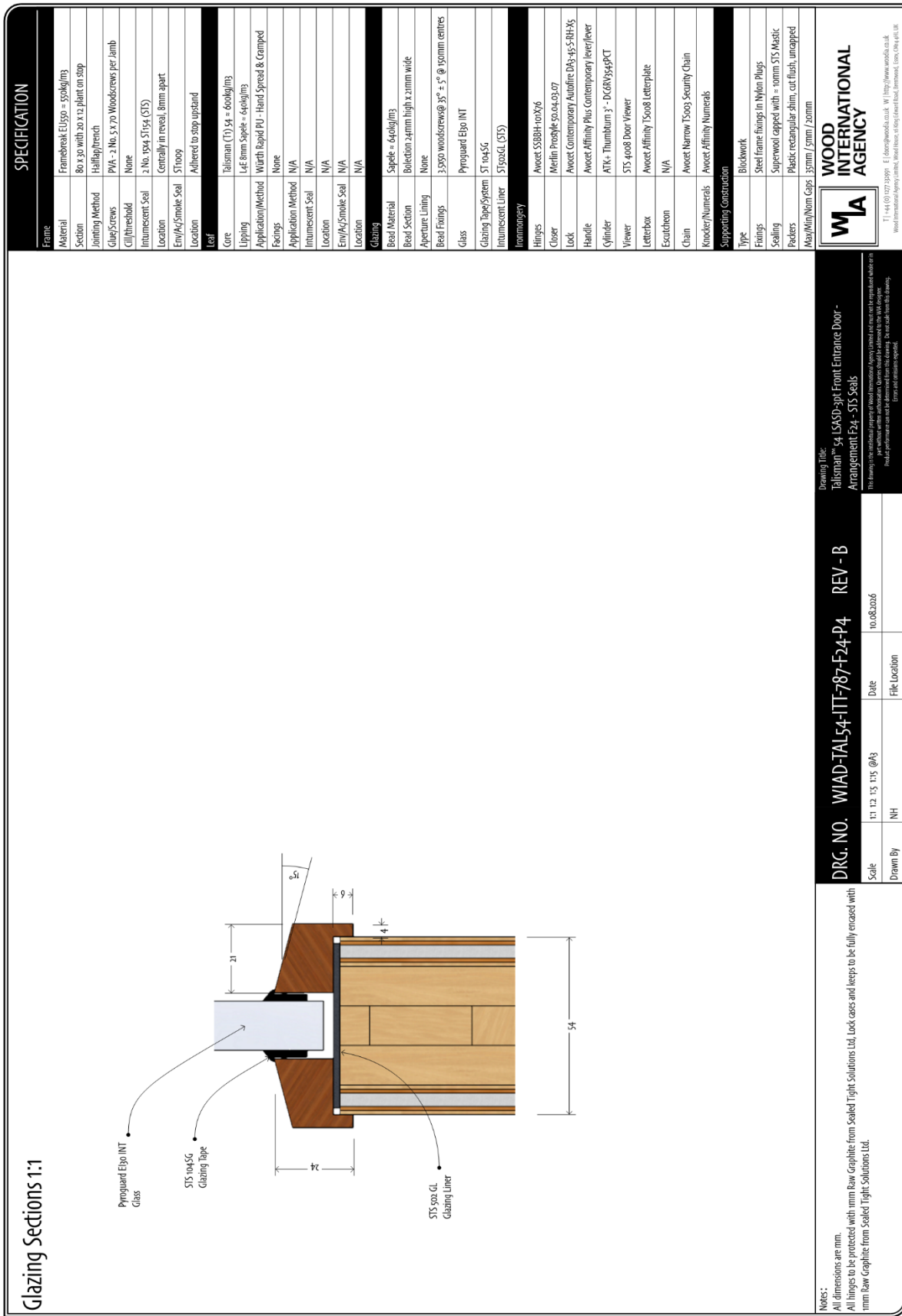


Figure 4. Client Drawing 1 WIAD-TAL54-ITT-787-F24-P4 REV B

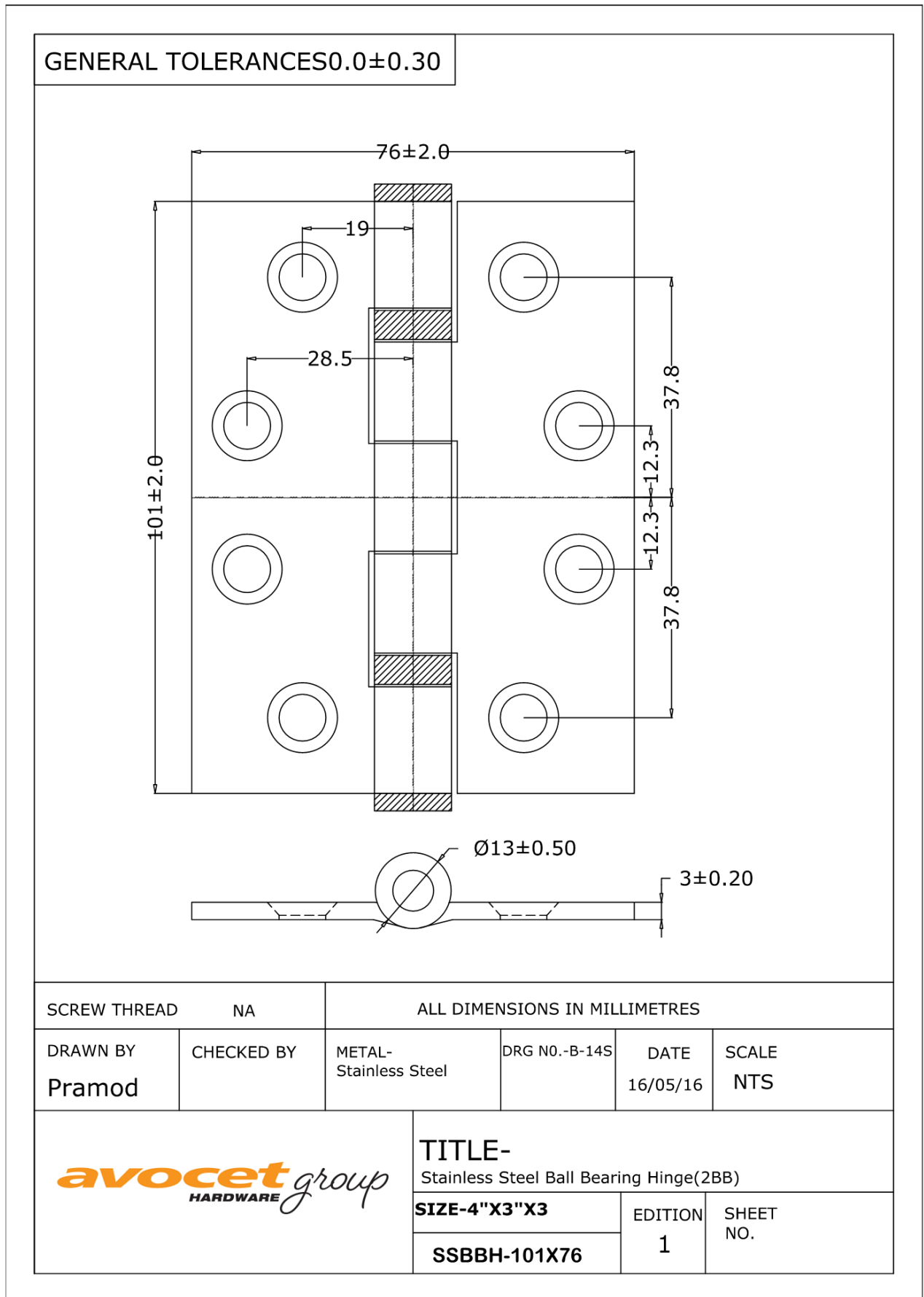


Figure 5. Details of Item 10 Hinge



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



Matt Black
50.04.03.21



Satin Brass
50.04.03.05



Antique Brass
50.04.03.59



Copper
50.04.03.60

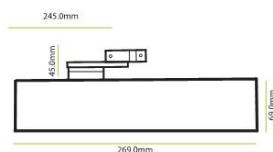
Further finishes available on request



CE 1121

UK
CA
1720

DRAWINGS



Dimensions shown are for the cover



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

Figure 6. Detail of item 11 Door Closer

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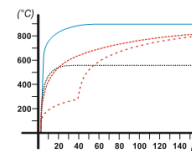


fire & smoke

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.

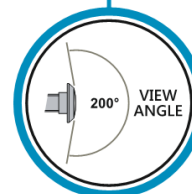
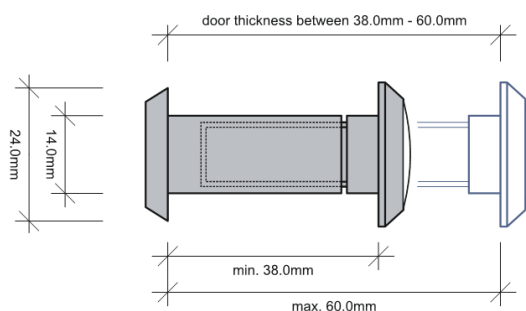


Figure 7. Details Item 12 Door Viewer



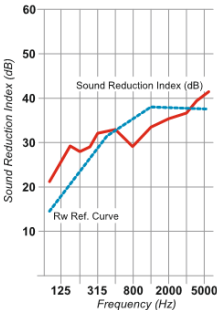
acoustic

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"	VARIOUS	N / A	ACOUSTIC -
See table below	See table below		See STS data sheets :01 - :16

Characteristics / features

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

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.

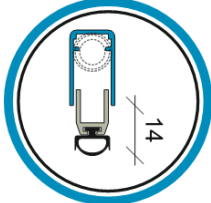
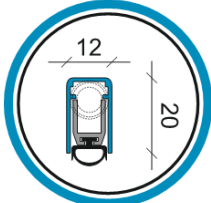
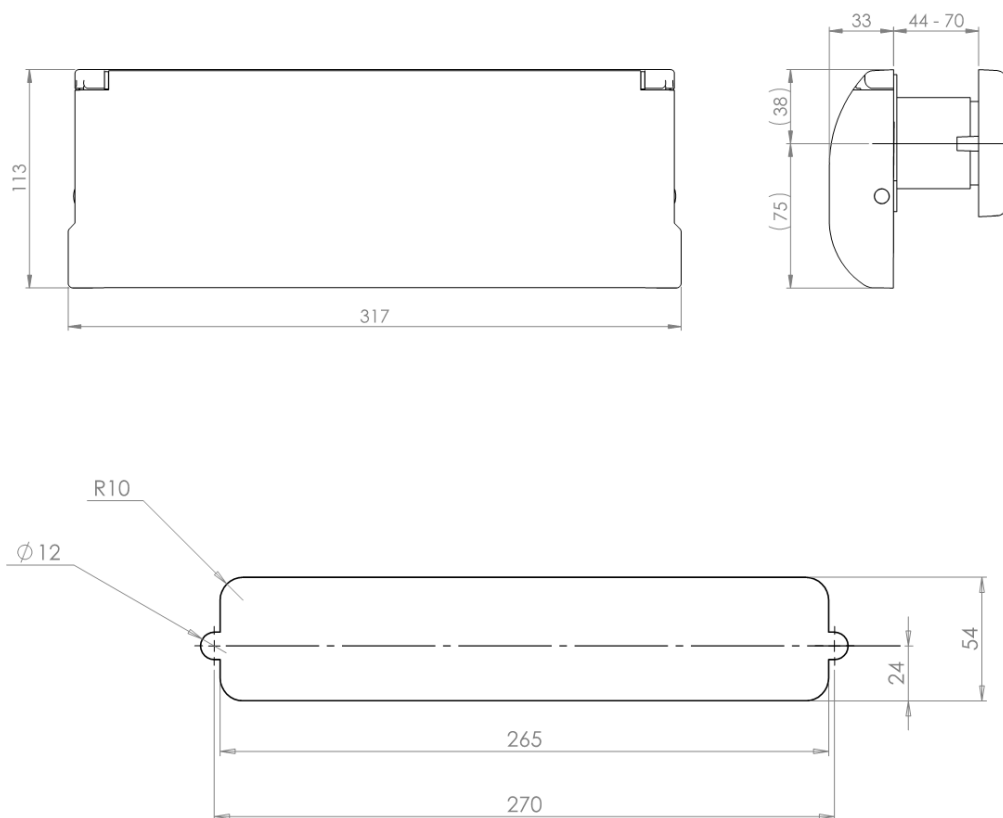


Figure 8. Detail of item 13 Drop Seal

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

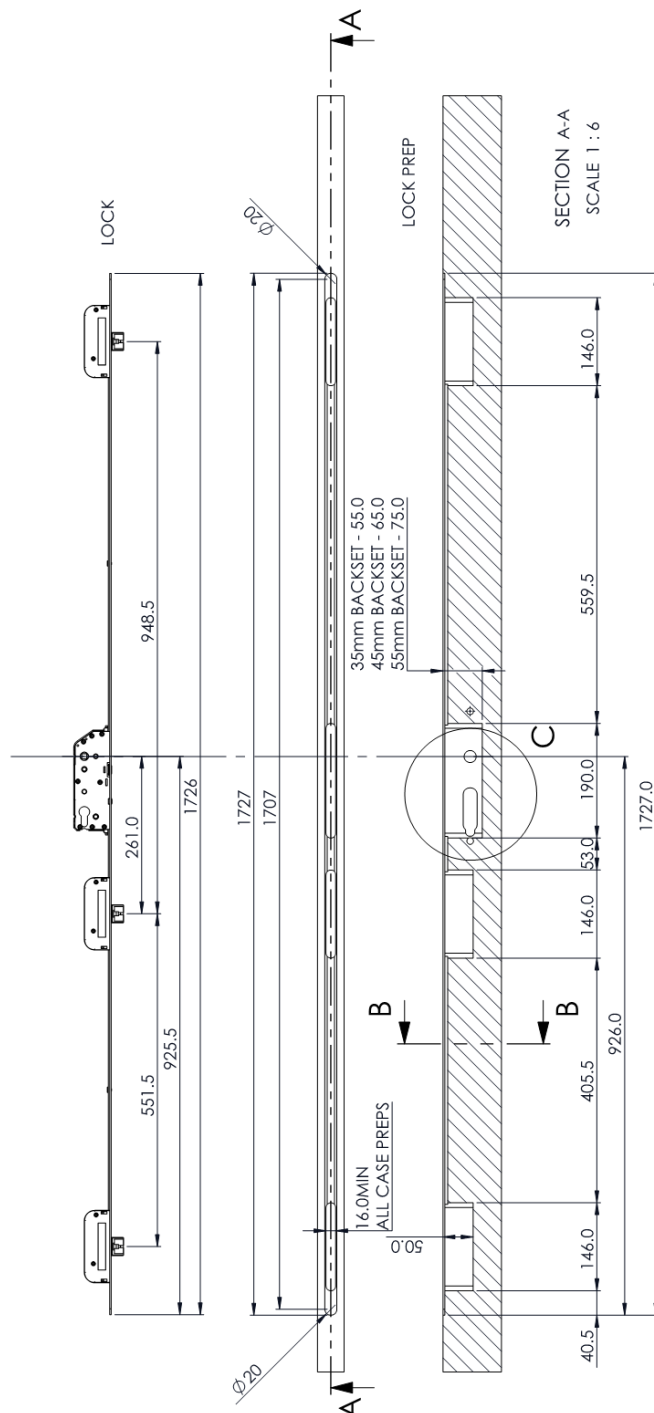
WHITE	BLACK	GOLD	CHROME	BRUSHED NICKEL
LPTS008WH-EXT	LPTS008BL-EXT	LPTS008CG-EXT	LPTS008CH-EXT	LPTS008BN-EXT

avocet
HARDWARE

Figure 9. Detail of item 14 Letter Plate

ABS AUTOFIRE
DOOR LOCK

3 LATCH CONTEMPORARY AUTOFIRE



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avocet
HARDWARE

Figure 10. Detail of item 15 Lockset

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HIGH SECURITY EURO CYLINDER 3 STAR



Figure 11. Details of item 16 Cylinder

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Test sponsor: Wood International Agency Limited

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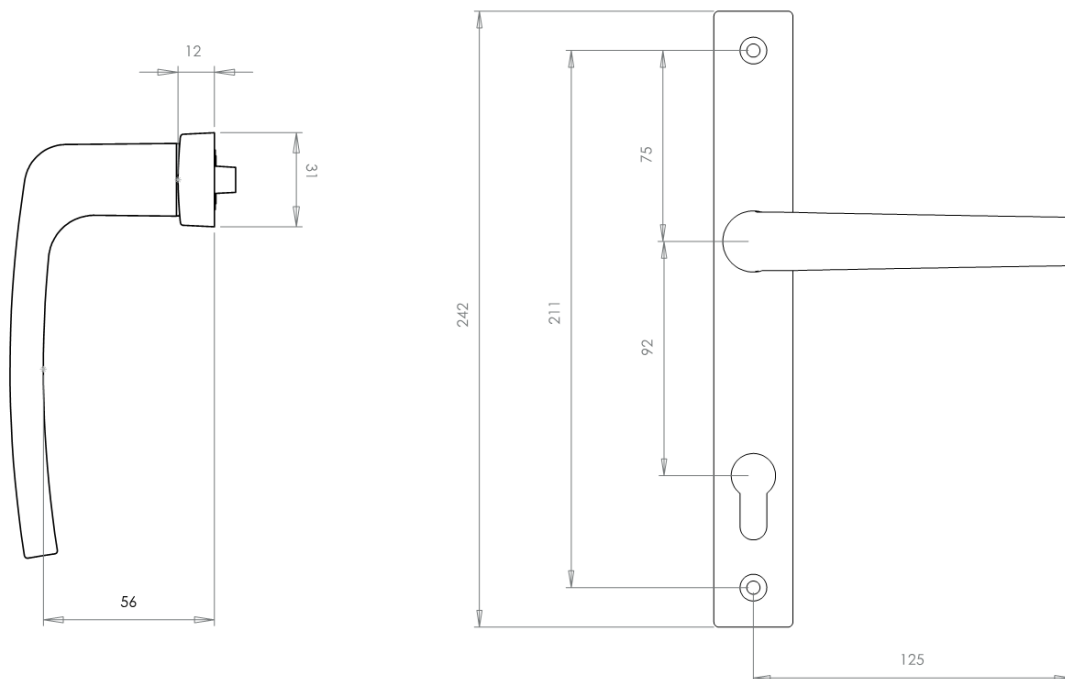
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Controlled document date: 05/08/2025

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

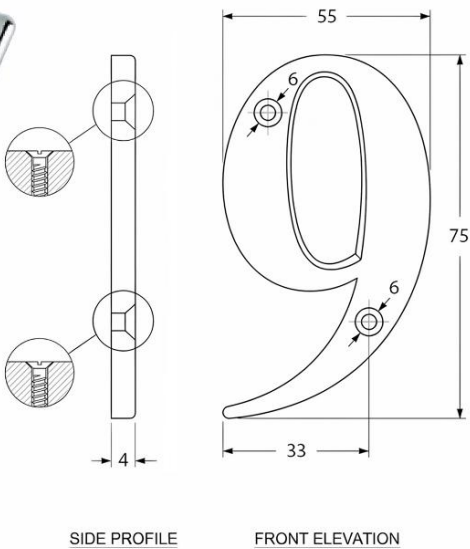
Example: DHCTBNLLI44 = Affinity Plus Contemporary Door Handle, Intermediate Backplate, 211mm centre, Aluminium

avocet
HARDWARE

Figure 12. Details of item 17 Lever Handle

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

Table 1. details 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.

Table 1. Schedule of components

Door Frame

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

1. Door Frame	
Manufacturer	By Dezin Carpentry
Material	Framebreak EU 550 Engineered Hardwood Head and Jambs
Density recorded at sampling visit	536 kg/m ³ (measured)
Moisture content recorded at sampling visit	12-15% (measured)
Moisture content	
D1	14.9 % (measured by Warringtonfire)
D2	11.5 % (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
Overall Size D2	
Frame	1050 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	Wurth
Type	PVA on trenched joints on head
Reference	D4 PVA ready mix

Application Method	Hand spread
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	STS154FO
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

Fire Stopping

5. Sealant to Fire Stopping Detail	
Manufacturer	Sealed Tight Solutions Ltd
Reference	ST88 acoustic intumescent sealant
Material	White water-based 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

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	D1 - SC26237T 05/08/2026 D2 - SC26238T 05/08/2026
Quantity	2
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)
D2	
Overall leaf size prior to trimming	1220 mm wide x 2440 mm high x 54 mm thick
Overall leaf size supplied for testing	982 mm wide x 2389 mm high x 54 mm thick
Density	643 kg/m ³ (measured)
Moisture content	
D1	8% measured at sampling
D2	8% measured at sampling
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 (measured)
D2	643 kg/m ³ (measured)
Moisture content at sampling visit	8% (measured) (inner core)

9. Lippings/Edge banding	
Manufacturer	By Deziign Carpentry
Material	Sapele
Density recorded at sampling visit	
D1	698-732 kg/m ³ (measured)
D2	699-716 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)
D2	
A	7.2 % (measured by Warringtonfire)
B	N/A % (measured by Warringtonfire)
C	N/A % (measured by Warringtonfire)
Overall size	54 mm wide x 8 mm thick 3 mm x 3 mm chamfer around all door edges
Location	All four edges
Fixing Method	Glued to leaf edges, adhesive manually spread and cramped
Adhesives	
Manufacturer	Würth
Type	PU
Reference	Rapid MCPU
Curing method	Moisture
Application method	Hand spread and cramped

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	Stainless steel Woodscrews
• 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 furnace
D 2	Opening away from furnace
Average closing forces (measured by Warringtonfire)	
D 1	34 N
D 2	32.5 N
Average opening force (measured by Warringtonfire)	
D 1	85.3 N
D 2	95.1 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 x 38 mm deep 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
D2	5.25 N
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.
16. Cylinder	
Manufacturer	The Avocet Hardware Group Ltd
Reference	ATK+ Thumbturn 3* - DC6RV3545PCT
Material	Brass/Nickel/Molybdenum
Overall Size	17 mm wide x 33 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	Zinc Alloy
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

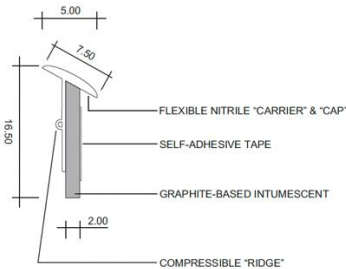
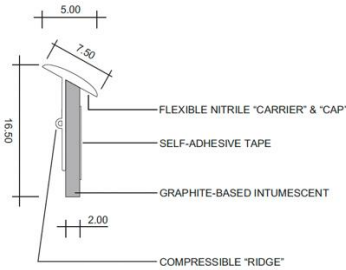
21. Door Sensor

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



Glazing

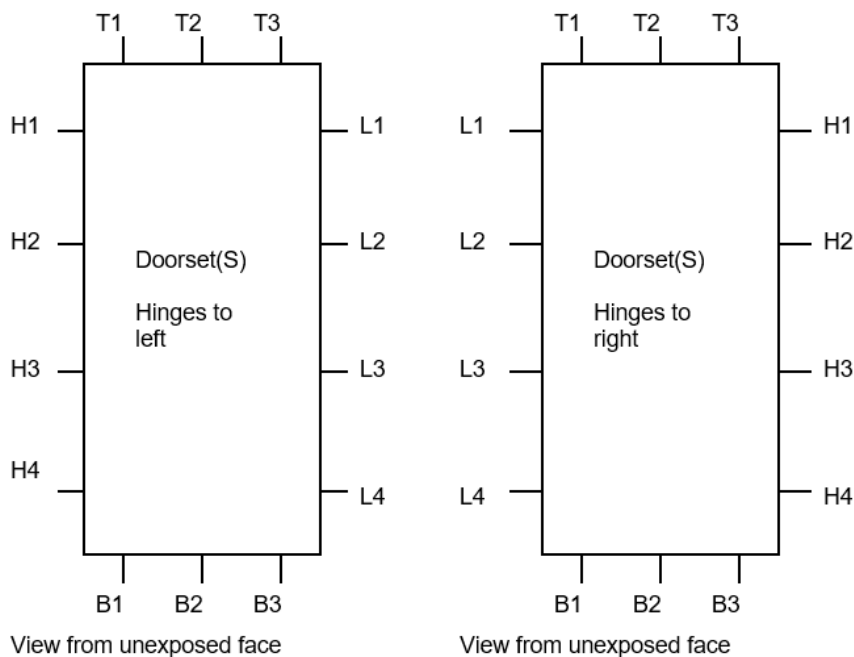
22. Glazed Unit	
Manufacturer / Supplier	Pyroguard UK/Fire Glass UK
Reference (Declaration of Performance)	Pyroguard EI30 INT – Sandblasted to internal (exposed) face Internal (exposed) face to D1 Internal (unexposed) face to D2.
Unit overall size	650 mm wide x 1200 mm high x 15 mm thick
Aperture location 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 DeSIGN Carpentry
Reference	Bolection Bead
Material	Sapele
Density recorded at sampling visit	
D1	641 kg/m ³
Moisture content at sampling visit	9%
Moisture Recorded at test lab	
D1	9.4 % (measured by Warringtonfire)
D2	9.9 % (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

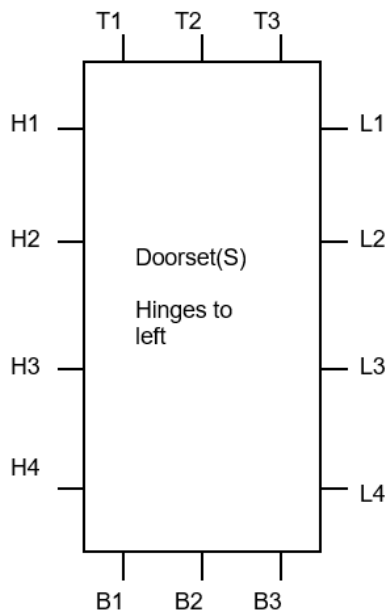
Supporting Construction

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

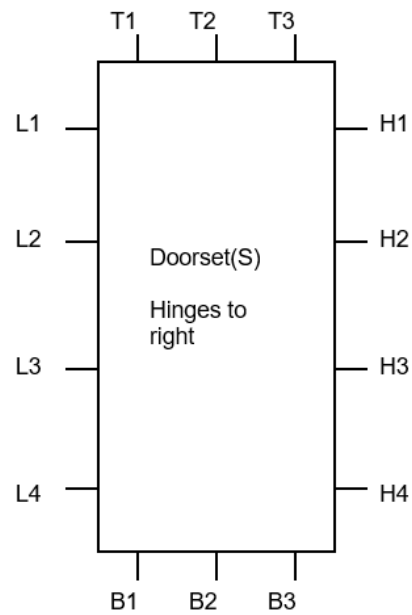
Doorset clearance gaps



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	3.81	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	
Max Permitted	6.07		Max Permitted	5.81	
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	
Max Permitted	6.22		Max Permitted	11.32	



View from unexposed face



View from unexposed face

Doorset B (mm)					
Hinge Side	Primary	Leaf to Stop	Leading Edge	Primary	Leaf to Stop
H1	4.24	2.42	L1	2.99	3.54
H2	4.21	2.58	L2	3.74	3.51
H3	3.53	3.84	L3	3.30	5.27
H4	5.00	3.94	L4	4.01	5.13
Mean	4.25		Mean	3.51	
Max	5.00		Max	4.01	
Min	3.53		Min	2.99	
Max Permitted	6.62		Max Permitted	5.76	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	3.76	2.70	B1	9.54	
T2	4.08	3.18	B2	9.05	
T3	4.11	2.52	B3	9.61	
Mean	3.98		Mean	9.40	
Max	4.11		Max	9.61	
Min	3.76		Min	9.05	
Max Permitted	6.05		Max Permitted	11.51	

Test Observations

Time		All observations are from the unexposed face unless noted otherwise.
mins	secs	
00	00	The Test Commences.
00	30	Smoke/steam release from Doorset A on the leading edge above mid height.
00	40	Audible cracking from both doorsets.
01	10	Discolouration of glazing panels on both doorsets – now opaque.
01	20	Smoke/steam release from Doorset A from top edge.
01	52	Smoke/steam release from Doorset B from top right corner between the leaf and the frame.
02	10	Audible cracking from both doorsets.
02	43	Smoke/steam release from the letterbox of Doorset B.
02	45	Smoke/steam release from Doorset B from the leading edge next to the door handle casing.
04	10	Discolouration of Doorset A at the top of the leaf underneath the frame.
04	50	Discolouration of Doorset B underneath the top letterbox.
06	08	Smoke/steam release from both letterboxes on Doorset B.
06	51	Material detaching from letterboxes on Doorset B.
07	30	Audible cracking from both doorsets.
07	35	Smoke/steam release from Doorset B from the middle of the top edge.
08	47	Smoke/steam release from Doorset B from the hinge side at mid height.
09	22	Discolouration surrounding both letterboxes on Doorset B.
10	46	Smoke/steam release from Doorset B from leading edge below handle casing.
12	10	Smoke/steam release from the keyhole on Doorset A.
12	30	Glazing panel on Doorset A cracking.
13	40	Smoke/steam release from the top left of the glazing beading of Doorset A and the top right of the glazing beading of Doorset B.

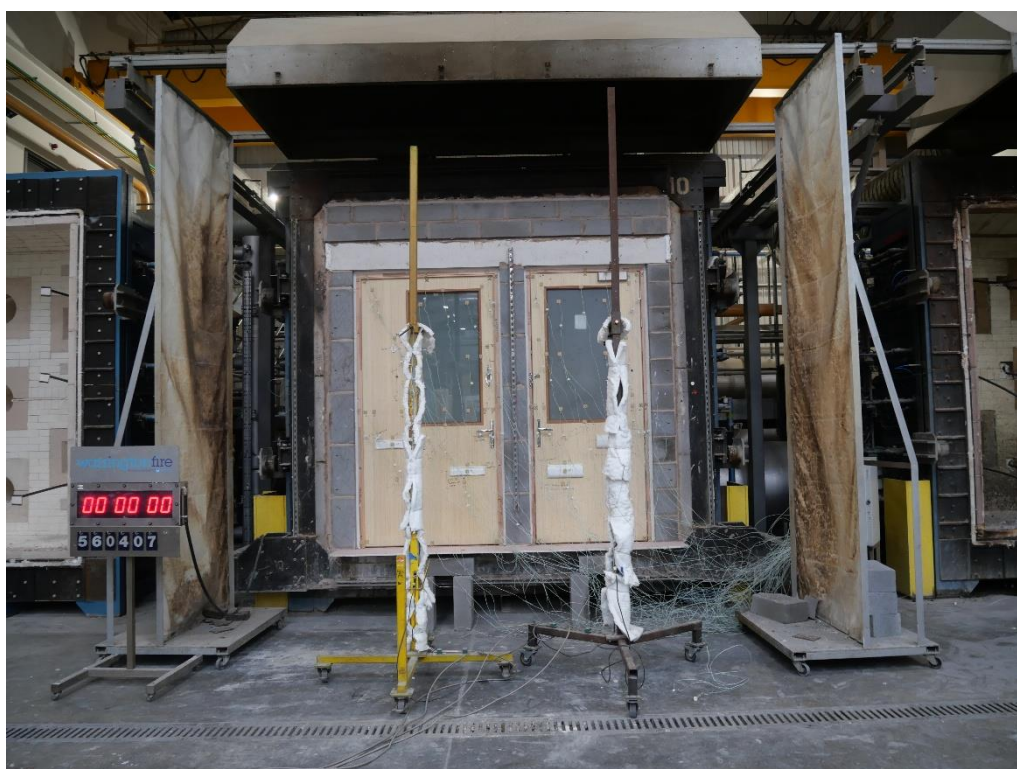
Time		Observations continued.
mins	secs	
16	16	Smoke/steam release from Doorset B from the leading edge below mid height.
17	09	Smoke/steam release from Doorset B from the hinge side above mid height.
18	15	Smoke/steam release from Doorset B from the leading edge at mid height.
19	38	Smoke/steam release from Doorset B from the top edge above the closer.
20	31	Discolouration around the glazing beading at all four corners on both doorsets.
27	28	Smoke/steam release from the Doorset B glazing panel at the top middle/top left.
28	30	Flicker of flame from Doorset B hinge side at the bottom.
40	00	Smoke/steam release from both door locks and casings.
41	20	Smoke/steam release from Doorset A glazing panel.
44	20	Smoke/steam release from both letterboxes on Doorset A.
48	30	Discolouration surrounding both door handle casings.
52	45	Smoke/steam release from Doorset A from the bottom of the glazing beading.
55	21	Cotton pad applied to Doorset B glazing panel at the top middle – no ignition or embers present.
59	20	Cotton pad applied to Doorset B glazing panel at the top middle – no ignition or embers present.
62	20	Cotton pad applied to Doorset B glazing panel at the top middle – no ignition or embers present.
64	05	Cotton pad applied to Doorset B glazing panel at the top middle – no ignition or embers present.
68	30	Cotton pad applied to Doorset B glazing panel at the top middle – no ignition or embers present.
71	35	Sustained flaming on Doorset A on the surrounding glazing frame. Integrity failure is deemed to have occurred on Doorset A.
71	40	Test discontinued due to Health and Safety reasons.

Test Photographs

The exposed face of the specimen prior to testing



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



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



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



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



The unexposed
face of the
specimen after a
test duration of 71
minutes



The exposed face
of the specimen
immediately after
the test



Test Data

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

Time Mins	Specified Furnace Temperature Deg. C	Actual Furnace Temperature Deg. C
0	20	35
3	502	474
6	603	566
9	663	655
12	705	690
15	739	721
18	766	761
21	789	782
24	809	804
27	826	824
30	842	841
33	856	855
36	869	870
39	881	886
42	892	890
45	902	900
48	912	911
51	921	919
54	930	929
57	938	934
60	945	942
63	953	949
66	960	951
69	966	948
72	973	968

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

Time Mins	Specimen T/C 20 Deg. C	Specimen T/C 22 Deg. C	Specimen T/C 23 Deg. C	Specimen T/C 24 Deg. C	Overall Average Temperature Deg. C
0	30	32	32	32	32
3	30	33	32	32	32
6	31	33	32	32	32
9	31	33	33	32	32
12	31	34	33	33	33
15	31	34	33	33	33
18	32	35	33	34	34
21	33	35	34	35	34
24	34	37	35	37	36
27	36	39	36	40	38
30	38	41	38	42	40
33	40	43	40	45	42
36	42	45	42	48	44
39	45	48	45	50	47
42	48	51	47	53	50
45	52	54	51	56	53
48	55	56	54	60	56
51	59	59	59	65	61
54	63	63	67	73	67
57	68	69	77	83	74
60	74	77	89	92	83
63	79	87	93	103	91
66	85	95	104	114	100
69	90	103	130	130	113
72	96	117	179	150	136

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

Time Mins	Specimen T/C 29 Deg. C	Specimen T/C 30 Deg. C	Specimen T/C 31 Deg. C	Specimen T/C 32 Deg. C
0	32	32	32	31
3	33	32	33	32
6	33	32	35	32
9	33	32	43	33
12	34	33	62	37
15	34	33	47	42
18	34	33	47	46
21	35	34	48	50
24	36	35	50	54
27	38	37	51	59
30	40	38	53	60
33	41	40	56	61
36	44	42	61	63
39	46	45	64	66
42	49	48	67	69
45	52	51	69	73
48	56	54	72	78
51	60	57	75	82
54	65	61	81	87
57	70	66	88	91
60	76	73	93	92
63	85	81	96	94
66	95	86	98	99
69	110	95	102	106
72	131	104	133	113

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

Time Mins	Specimen T/C 25 Deg. C	Specimen T/C 26 Deg. C	Specimen T/C 27 Deg. C	Specimen T/C 28 Deg. C
0	31	31	32	33
3	33	31	32	33
6	33	32	33	34
9	33	33	45	38
12	33	35	42	43
15	34	37	49	45
18	36	40	52	50
21	38	43	58	53
24	40	48	60	53
27	42	52	60	46
30	45	57	61	48
33	48	61	64	52
36	51	64	66	55
39	54	68	70	58
42	57	72	74	60
45	60	76	79	64
48	65	81	87	67
51	70	86	94	70
54	75	93	101	71
57	79	98	108	75
60	86	102	119	80
63	95	108	135	85
66	100	118	173	90
67	101	123	200	93
68	103	130	248	95
69	105	139	281	96
72	117	179	418	104

Individual temperatures recorded on the frame of Doorset A

Time Mins	Specimen T/C 33 Deg. C	Specimen T/C 34 Deg. C	Specimen T/C 35 Deg. C	Specimen T/C 36 Deg. C	Specimen T/C 37 Deg. C
0	31	31	29	31	31
3	31	31	33	32	31
6	31	31	34	32	31
9	31	31	35	34	32
12	31	32	37	36	33
15	32	33	39	37	33
18	33	34	40	39	35
21	35	36	41	45	37
24	36	38	44	46	41
27	38	42	48	46	45
30	40	45	51	47	49
33	42	47	52	49	52
36	45	49	54	51	54
39	47	51	57	53	56
42	49	53	59	55	57
45	52	55	62	57	58
48	54	57	66	59	60
51	56	58	69	62	61
54	60	59	73	64	63
57	64	62	80	68	65
60	68	64	85	72	66
63	71	66	88	76	68
66	73	70	91	81	70
69	74	76	96	91	72
72	76	85	129	153	74

Individual and mean temperatures recorded on the glazing of Doorset A

Time Mins	Specimen T/C 42 Deg. C	Specimen T/C 43 Deg. C	Specimen T/C 44 Deg. C	Specimen T/C 45 Deg. C	Specimen T/C 46 Deg. C	Specimen T/C 47 Deg. C	Overall Average Temperature Deg. C
0	32	32	32	32	32	32	32
3	67	68	70	73	71	74	71
6	94	89	99	99	100	101	97
9	109	107	117	119	112	123	115
12	114	117	126	128	120	129	122
15	111	115	121	116	120	124	118
18	110	114	118	111	116	122	115
21	109	117	121	112	117	128	117
24	109	126	130	117	122	135	123
27	113	135	144	122	130	123	128
30	116	130	134	120	122	117	123
33	119	121	122	122	122	117	121
36	121	119	125	131	127	122	124
39	128	126	135	145	138	131	134
42	140	138	148	160	151	145	147
45	155	146	163	174	169	156	161
47	167	158	174	184	182	166	172
48	172	165	180	189	189	172	178
51	196	192	200	210	209	189	199
54	223	220	223	236	230	209	224
57	257	256	243	269	251	229	251
60	291	292	270	314	278	250	283
63	320	318	299	360	307	270	312
66	342	336	324	393	337	288	337
69	361	349	347	403	366	306	355
72	377	365	365	419	381	330	373

Individual temperatures recorded on the glazing beading of Doorset A.

Time Mins	Specimen T/C 48 Deg. C	Specimen T/C 49 Deg. C	Specimen T/C 50 Deg. C	Specimen T/C 51 Deg. C
0	32	32	31	31
3	35	32	32	32
6	39	33	33	32
9	42	35	35	33
12	46	37	37	53
15	51	41	41	60
18	54	44	44	65
21	57	48	47	64
24	59	50	50	60
27	63	52	52	59
30	66	54	56	59
33	69	56	60	61
36	72	59	64	63
39	77	61	69	66
42	83	66	74	69
45	91	71	79	73
48	95	76	83	77
51	98	79	87	81
54	100	82	92	85
57	107	84	99	88
60	124	88	109	96
63	139	94	121	106
66	158	99	135	115
69	181	102	149	131
71	206	107	159	142
72	257	118	210	148

Individual temperatures recorded on (TC40) and 50 mm above (TC41) the lower letterplate on Doorset A

Time Mins	Specimen T/C 40 Deg. C	Specimen T/C 41 Deg. C
0	32	32
3	54	32
6	91	37
9	99	42
12	96	47
15	96	52
18	98	56
21	95	60
24	95	62
27	94	65
30	95	68
33	94	71
36	94	73
39	90	74
42	94	76
45	97	79
48	102	86
51	111	90
54	119	95
57	127	101
60	136	112
63	142	129
66	148	159
69	154	200
70	157	216
72	160	244

Individual temperatures recorded on (TC38) and 50 mm above (TC39) the upper letterplate on Doorset A

Time Mins	Specimen T/C 38 Deg. C	Specimen T/C 39 Deg. C
0	32	32
3	51	32
6	96	36
9	103	42
12	99	48
15	99	52
18	103	57
21	99	61
24	97	65
27	96	68
30	95	70
33	96	72
36	97	74
39	96	76
42	99	78
45	100	81
48	111	85
51	121	88
54	131	92
57	141	97
60	148	102
63	152	109
66	154	117
69	155	128
72	158	142

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

Time Mins	Specimen T/C 53 Deg. C	Specimen T/C 54 Deg. C	Specimen T/C 55 Deg. C	Specimen T/C 56 Deg. C	Overall Average Temperature Deg. C
0	30	32	32	33	32
3	30	33	36	33	33
6	32	35	46	35	37
9	33	36	45	34	37
12	32	36	40	34	36
15	32	36	39	34	35
18	33	36	39	34	36
21	34	36	39	35	36
24	35	37	40	36	37
27	37	38	42	37	39
30	39	40	44	39	41
33	42	42	46	42	43
36	44	45	48	44	45
39	47	47	51	47	48
42	49	49	54	49	50
45	52	53	58	52	54
48	55	57	61	56	57
51	59	62	65	59	61
54	63	67	70	63	66
57	68	72	77	69	72
60	74	75	85	76	78
63	80	79	93	86	85
66	84	83	100	94	90
69	88	88	111	105	98
72	91	91	118	114	104

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

Time Mins	Specimen T/C 61 Deg. C	Specimen T/C 62 Deg. C	Specimen T/C 63 Deg. C	Specimen T/C 64 Deg. C
0	35	35	35	35
3	35	35	35	36
6	36	36	36	38
9	38	38	37	41
12	39	42	36	40
15	40	45	39	41
18	41	45	38	41
21	43	45	38	40
24	46	45	40	41
27	48	47	42	43
30	51	48	44	45
33	54	50	46	47
36	57	53	49	49
39	61	56	51	51
42	65	59	54	53
45	70	63	57	56
48	75	66	60	58
51	81	70	64	61
54	87	75	68	64
57	91	81	73	68
60	95	89	79	73
63	101	95	85	80
66	105	100	91	86
69	112	104	96	91
72	129	109	99	95

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

Time Mins	Specimen T/C 57 Deg. C	Specimen T/C 58 Deg. C	Specimen T/C 59 Deg. C	Specimen T/C 60 Deg. C
0	32	33	32	*
3	33	35	32	35
6	35	42	33	36
9	39	49	33	36
12	41	51	33	36
15	42	50	36	37
18	46	51	38	38
21	47	52	41	40
24	49	53	44	41
27	52	56	46	43
30	55	59	48	45
33	58	61	50	47
36	60	64	53	49
39	63	66	55	52
42	66	69	58	55
45	68	72	61	57
48	69	75	64	60
51	73	78	68	64
54	78	82	72	68
57	86	85	76	72
60	94	90	80	78
63	99	94	85	84
66	102	97	90	90
69	105	102	94	96
72	118	107	98	101

*thermocouple malfunction

Individual temperatures recorded on the frame of Doorset B

Time Mins	Specimen T/C 65 Deg. C	Specimen T/C 66 Deg. C	Specimen T/C 67 Deg. C	Specimen T/C 68 Deg. C
0	34	34	33	33
3	35	45	33	34
6	40	52	35	35
9	46	56	35	35
12	47	59	43	35
15	52	58	53	36
18	54	57	57	46
21	55	54	57	45
24	55	55	54	43
27	59	56	54	44
30	63	57	60	46
33	65	58	66	51
36	68	59	70	56
39	70	60	69	60
42	71	61	68	63
45	73	61	70	67
48	74	63	72	70
51	76	65	73	73
54	81	68	73	76
57	85	71	73	81
60	87	75	74	86
63	89	79	77	91
66	93	82	80	95
69	99	87	82	100
72	109	91	87	105

Individual and mean temperatures recorded on the glazing of Doorset B

Time Mins	Specimen T/C 73 Deg. C	Specimen T/C 74 Deg. C	Specimen T/C 75 Deg. C	Specimen T/C 76 Deg. C	Specimen T/C 77 Deg. C	Specimen T/C 78 Deg. C	Overall Average Temperature Deg. C
0	35	35	35	35	35	34	35
3	72	65	71	65	65	63	67
6	103	99	98	97	91	94	97
9	124	118	110	114	108	112	114
12	123	118	110	114	109	112	114
15	120	119	110	115	109	112	114
18	121	120	114	118	111	114	116
21	126	126	107	124	116	119	120
24	132	136	109	128	113	128	124
27	131	138	112	127	112	138	126
30	124	130	113	121	113	129	122
33	125	125	115	120	115	128	121
36	130	127	122	124	118	129	125
39	138	134	134	133	126	137	134
42	148	146	146	143	141	150	146
45	162	163	157	148	160	165	159
48	180	182	178	158	169	175	174
49	187	188	191	162	170	178	179
51	203	194	230	174	175	183	193
54	229	206	310	196	203	202	224
57	266	227	396	226	259	223	266
60	317	252	423	265	327	249	306
63	375	279	430	305	398	290	346
66	416	304	435	339	436	347	380
69	426	327	440	374	451	424	407
72	440	362	447	407	464	464	431

Individual temperatures recorded on the glazing beading of Doorset B

Time Mins	Specimen T/C 79 Deg. C	Specimen T/C 80 Deg. C	Specimen T/C 81 Deg. C	Specimen T/C 82 Deg. C
0	35	35	35	35
3	37	35	36	35
6	42	37	39	37
9	47	40	40	39
12	51	43	41	40
15	55	46	44	43
18	57	49	46	46
21	60	52	49	47
24	63	55	52	50
27	67	57	54	52
30	70	60	56	55
33	74	63	58	57
36	79	69	61	61
39	83	74	65	65
42	89	78	72	69
45	97	83	77	71
48	102	87	80	74
51	106	91	83	77
54	111	97	86	81
57	118	106	91	86
60	143	114	96	92
63	176	127	102	100
66	204	141	111	108
67	211	146	115	111
68	217	152	119	115
69	224	156	124	119
72	247	169	138	133

Individual temperatures recorded on (TC69) and 50 mm above (TC70) the lower letterplate on Doorset B

Time Mins	Specimen T/C 69 Deg. C	Specimen T/C 70 Deg. C
0	35	35
3	65	36
6	95	41
9	114	50
12	105	59
15	101	66
18	102	74
21	100	75
24	98	76
27	98	78
30	98	80
33	98	82
36	99	83
39	96	85
42	100	88
45	103	91
48	108	94
51	112	97
54	116	101
57	121	105
60	127	109
63	132	115
66	135	120
69	139	127
72	143	136

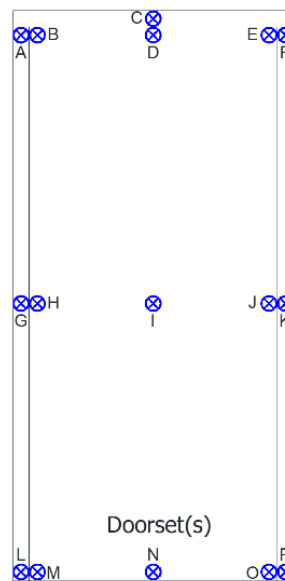
Individual temperatures recorded on (TC71) and 50 mm above (TC72) the upper letterplate on Doorset B

Time Mins	Specimen T/C 71 Deg. C	Specimen T/C 72 Deg. C
0	35	35
3	95	41
6	137	49
9	128	59
12	111	65
15	102	70
18	99	74
21	96	73
24	93	73
27	92	74
30	92	78
33	93	80
36	94	82
39	94	83
42	98	87
45	102	90
48	107	92
51	114	95
54	121	97
57	129	101
60	136	106
63	143	110
66	148	115
69	151	121
72	155	127

Additional temperatures recorded on Doorset A (TC21) and Doorset B (TC52), in between the glazing and the leading edge

Time Mins	Specimen T/C 21 Deg. C	Specimen T/C 52 Deg. C
0	30	30
3	33	31
6	31	31
9	31	32
12	33	32
15	33	33
18	34	33
21	36	35
24	38	36
27	41	39
30	44	41
33	47	44
36	51	46
39	55	49
42	60	52
45	67	55
48	76	58
51	81	62
54	84	68
57	87	75
60	92	81
63	97	88
66	100	92
69	103	96
72	110	100

Horizontal deflections of Doorset A



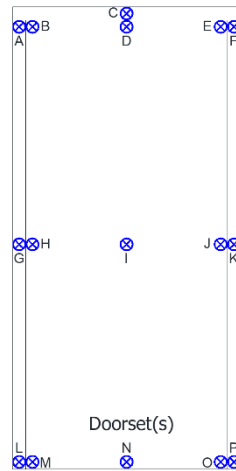
Deflections - mm																
Time-mins	A	B	C	D	E	F	G	H	I*	J	K	L	M	N	O	P
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	2	-3	1	2	-1	-3	0	-4	1	**	**	-1	2	-1	1	-2
20	3	2	3	7	3	-1	-1	2	-45	**	**	-2	0	2	4	-2
30	1	-3	0	3	10	-4	-1	-1	-46	**	**	-1	1	2	0	-2
40	2	-1	-2	6	0	-8	0	1	-44	**	**	0	3	0	3	0
50	-1	2	-3	3	-2	-2	-1	0	-44	**	**	0	3	-4	4	-1
60	7	1	-2	-6	3	-13	-10	-2	-53	**	**	1	1	-9	6	0
70	0	-5	-3	1	-35	-5	2	8	-46	**	**	1	-18	-10	4	-4

*deflection marker on glazing panel

**Indicates deflection malfunction

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
10	-7	-1	0	0	2	-4	-1	-3	-2	-5	-3	1	-1	1	0	0
20	3	11	-2	7	3	-7	-2	2	9	-1	-2	2	0	2	3	-2
30	2	15	2	6	4	0	-2	-1	-16	-7	-5	2	0	0	2	-4
40	5	12	-3	4	5	6	-1	0	-20	-6	-4	3	0	1	2	-1
50	-1	14	-9	3	5	-3	-1	-7	-21	-5	-9	6	7	-5	-1	-3
60	-2	8	-2	4	4	-2	-2	-10	-31	-10	-5	4	0	-3	1	0

*deflection marker on glazing panel

Positive values indicate movement towards the furnace

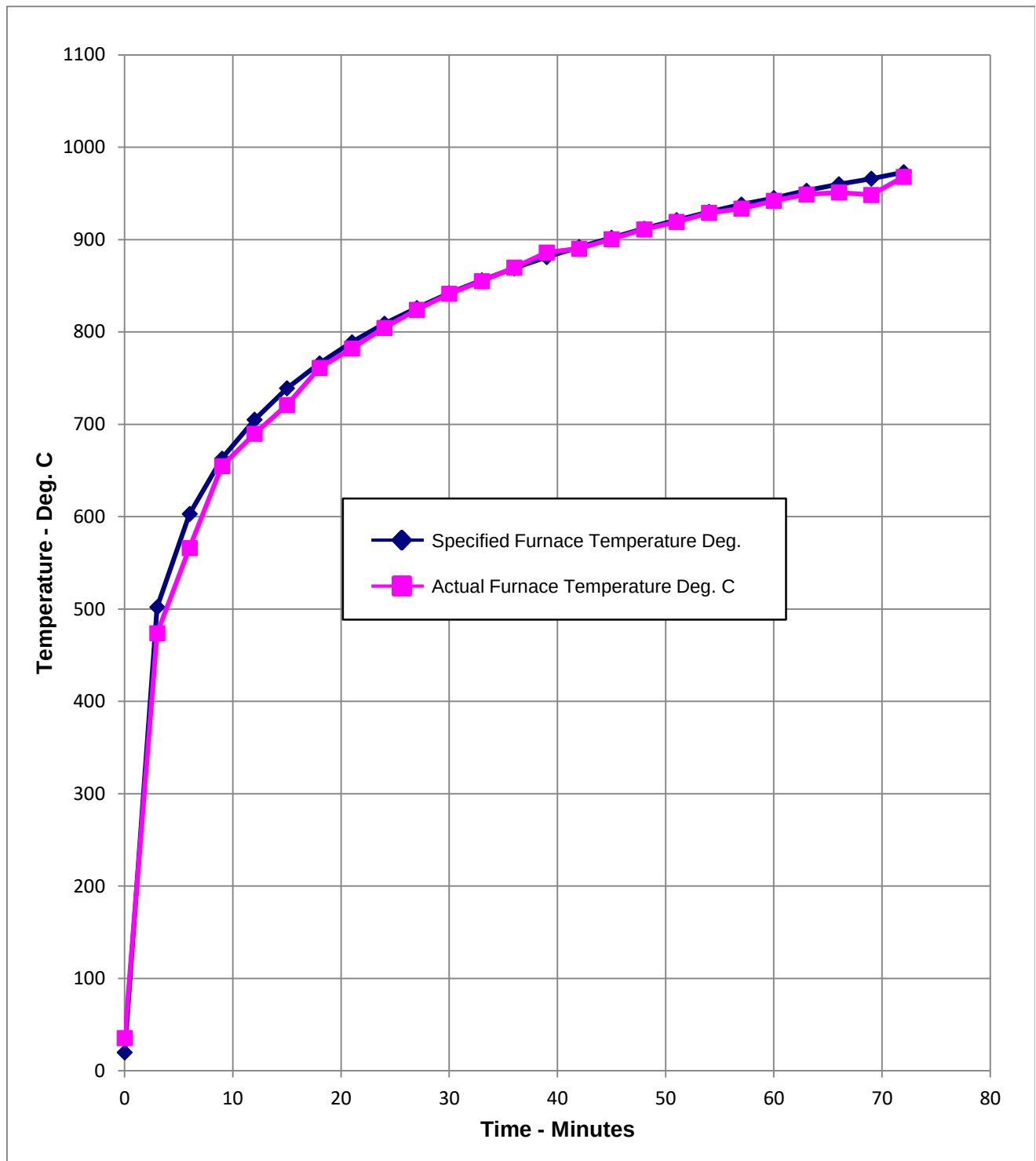
Recorded heat radiation intensity from Doorset A

Time Mins	Radiation Intensity A kW/m ²
0	0
3	0.064
6	0.114
9	0.15
12	0.163
15	0.151
18	0.152
21	0.164
24	0.178
27	0.187
30	0.184
33	0.190
36	0.217
39	0.258
42	0.307
45	0.368
48	0.454
51	0.56
54	0.675
57	0.849
60	1.041
63	1.277
66	1.446
69	1.607
72	2.755

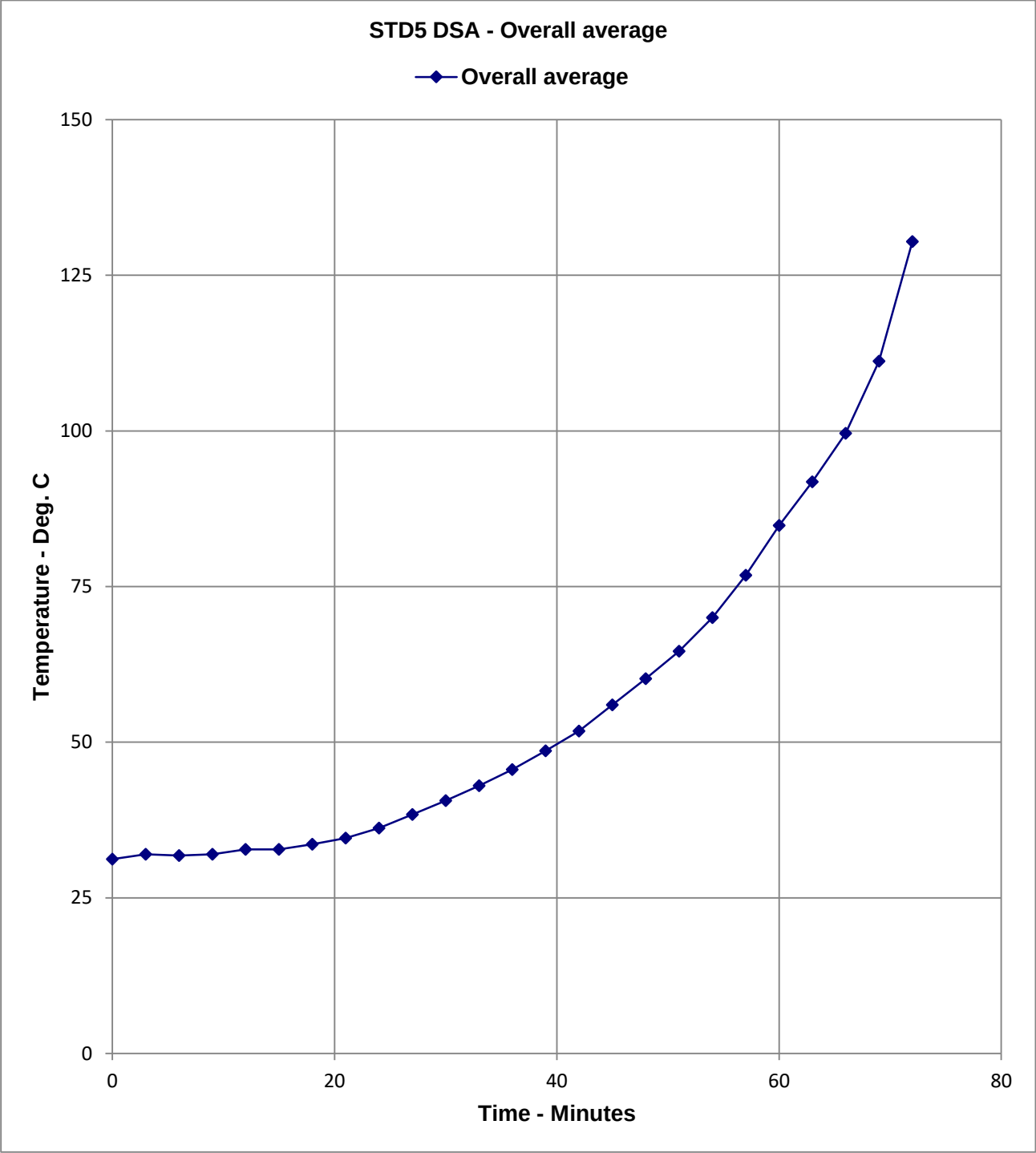
Recorded heat radiation intensity from Doorset B

Time Mins	Radiation Intensity B kW/m ²
0	0
3	0.064
6	0.118
9	0.153
12	0.152
15	0.149
18	0.151
21	0.158
24	0.171
27	0.171
30	0.168
33	0.177
36	0.195
39	0.220
42	0.265
45	0.321
48	0.394
51	0.519
54	0.683
57	0.896
60	1.156
63	1.369
66	1.581
69	1.734
72	2.394

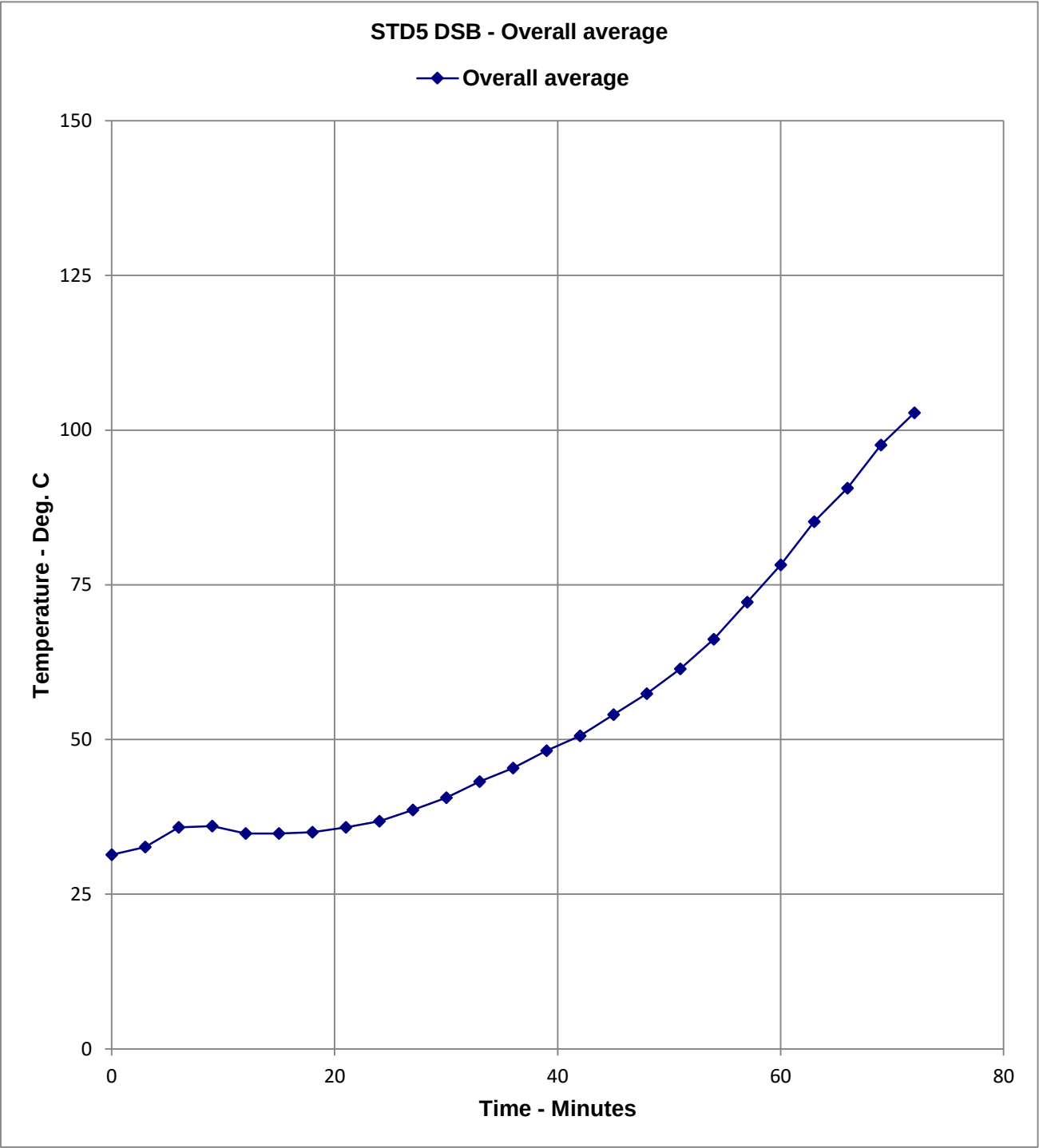
Graph showing mean furnace temperature, together with the temperature/time relationship specified in BS EN 1363-1: 2020



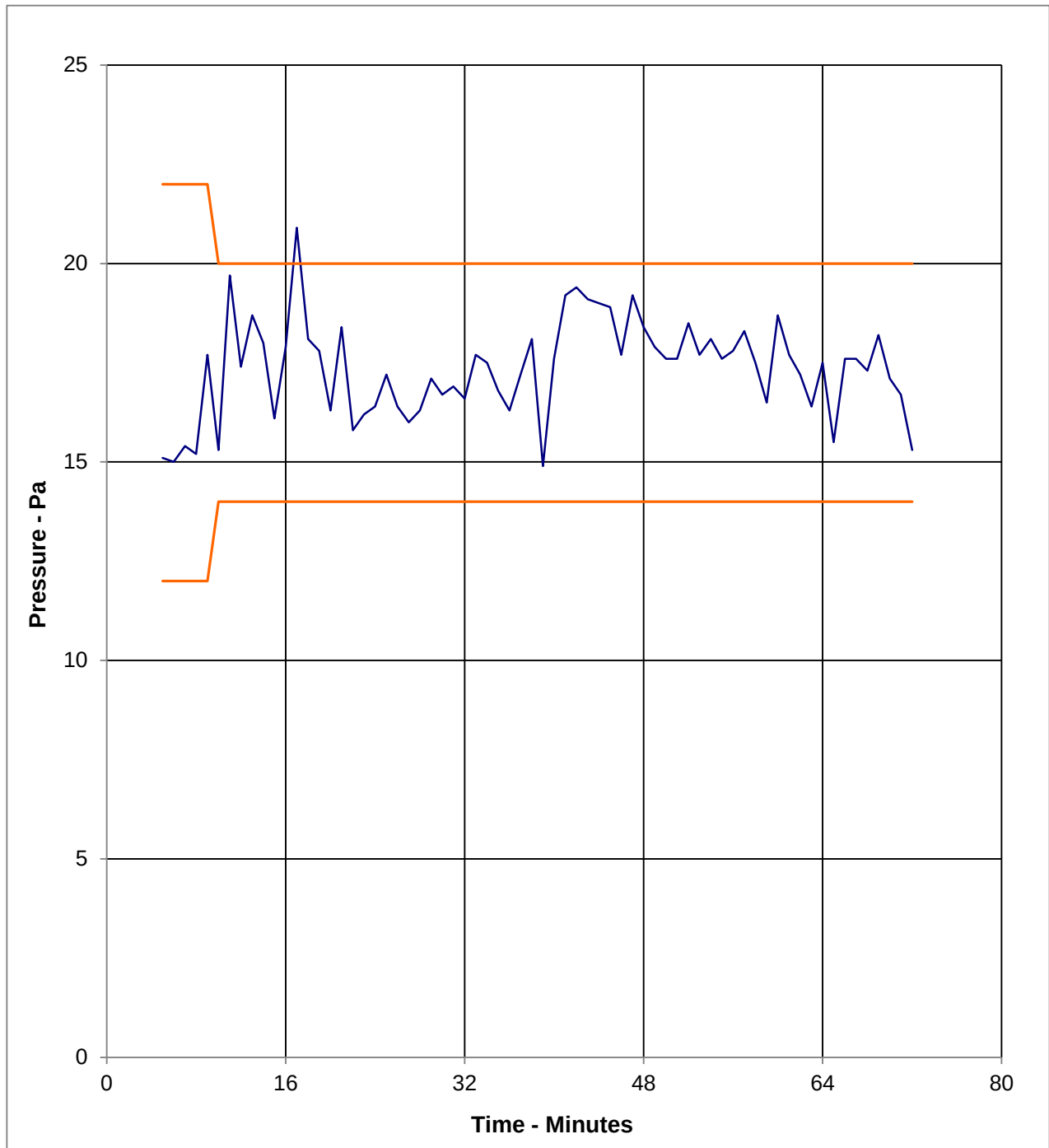
Graph showing mean temperature recorded on the unexposed surface of the Doorset A



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



Graph showing recorded furnace pressure at the head of the doorset.



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.

On-going Implications

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

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

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

The results stated in this report apply to the test specimens as received. The results relate only to the behaviour of the specimens of the element of construction under the particular conditions of test. They are not intended to be the sole criteria for assessing the potential fire performance of the element in use, nor do they reflect the actual behaviour in fires.

This report details the method of construction, the test conditions and the results obtained when the specific element of construction described herein was tested following the procedure outlined in BS EN 1634-1:2014+A1:2018, BS EN 1363-1:2020, and where appropriate BS EN 1363-2:1999.

Any significant deviation with respect to size, constructional details, loads, stresses, edge or end conditions other than those allowed under the field of direct application in the relevant test method is not covered by this report.

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

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

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

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

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.

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

017-2018 - Position of thermocouples on door frame

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

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

022-2018 - Discrete areas statement of insulation criteria

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

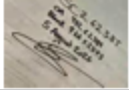
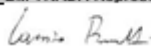
034-2018 - Opening/closing of doors before test

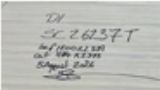
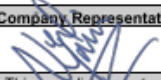
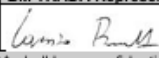
062-2022 V2 - Reporting test results

Revision history This document supersedes initial issue, dated 02 October 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 5 th , 11 th 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	SC26238T			
Technical Specification document / FoA reference	☒ SC26238 WIAD-TAL54-ITT-787-F24 (6) - 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 ST400B, 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-FD60 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.		
Company Representative Position		No changes will be made prior to delivery to the test laboratory.		
Director				
Company Representative Signature		BM TRADA Representative Signature		
				
This sampling report remains the property of BM TRADA. BM TRADA shall keep confidential all information relating to the sampling process and your organisation and shall not disclose such information to any third party except as required by law or by BM TRADA's Accreditation Bodies. This sampling report will be shared with others within Warringtonfire Testing and Certification Ltd.				

bmtrada Proud to be part of element		SAMPLING VISIT REPORT		Company Name Wood International Agency Limited	Wood International Agency Limited
				Customer ID. E003760	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			Visit Date	BMT Representative	
By Dezin Carpentry, Unit 11B Erw Las, Colomendy Industrial Estate, Denbigh, LL16 5TN			5 th , 11 th August 2026	L. Bersanetti	
Requirement		Evidence / Comments			
Opening Meeting (names of those present)		Shawn Harrison (By Dezin Carpentry), Neil Harrison (Wood International Agency Limited), Lorenzo Bersanetti (BMT representative for sampling)			
Sampling Contract Reference		SC26237T			
Technical Specification document / FoA reference		SC26237 WAD-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-FD60 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 Dezin 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.		
Company Representative Position			No changes will be made prior to delivery to the test laboratory.		
Director					
Company Representative Signature			BM TRADA Representative Signature		
					
This sampling report remains the property of BM TRADA. BM TRADA shall keep confidential all information relating to the sampling process and your organisation and shall not disclose such information to any third party except as required by law or by BM TRADA's Accreditation Bodies. This sampling report will be shared with others within Warringtonfire Testing and Certification Ltd.					

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



Approved Body Number 0833





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