Fire resistance test report

Issuing laboratory:	Warringtonfire Testing and Certification Limited
Test standard:	BS EN 1634-1:2014 + A1:2018
Test sponsor:	Wood International Agency Ltd Wood International Agency Limited, Wood House, 16 King Edward Road, Brentwood, Essex, CM14 4HL
Product:	Two Asymmetrical, Single-Acting, Single-Leaf Talisman 54 Doorsets
Report number:	556010/R
Test date:	25 November 2025
Issue:	01

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

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

0249
Approved Body Number 0833

Summary of Tested Specimen

For the purposes of the test the doorsets were referenced as A and B and were installed within a standard rigid low-density blockwork supporting construction. Doorset A was installed such that it opened towards the furnace and Doorset B was installed such that it opened away from the furnace.

Doorset A and **Doorset B** had overall nominal dimensions of 2464 mm high by 1218.5 mm wide, incorporating a single door leaf with nominal dimension of 2389 mm high by 1152 mm wide by 54 mm thick. The door leaves were hung within a Sapele hardwood frame using three stainless steel hinges. The leaves were constructed from a ply faced engineered timber core referenced 'Talisman 54'. The door leaves incorporated two glazed vision panels fitted with 29.8 mm thick Pyroguard glass, with overall nominal dimensions of 361 mm high by 361 mm wide. There was a surface mounted door closer referenced 'Eurospec CDG025/SV' installed on the exposed face of Doorset A and on the unexposed face of Doorset B. There was also a lockset installed on Doorset A and Doorset B which remained latched and unlocked throughout the test.

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

Test Results

Integrity

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

	Specimen A		Specimen B	
Sustained flaming	73 minutes	No failure*	68 minutes	Failure
Gap gauge	73 minutes	No failure*	68 minutes	Area extinguished
Cotton pad	73 minutes	No failure*	68 minutes	Due to sustained flaming

Insulation (I_2)

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	59 minutes	Exceeded maximum temperature criteria TC31	59 minutes	Exceeded maximum temperature criteria TC71
Discrete area	55 minutes	Exceeded mean temperature criteria	41 minutes	Exceeded mean temperature criteria

Insulation (I_1)

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

Specimen	59 minutes	Exceeded maximum temperature criteria TC31	59 minutes	Exceeded maximum temperature criteria TC71

Radiation

BS EN 1363-2: 1999 requires that the time for the measured radiation to exceed 5, 10, 15, 20 and 25 kW/m^2 is reported.

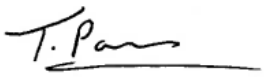
	5 kW/m^2	10 kW/m^2	15 kW/m^2	20 kW/m^2	25 kW/m^2
Specimen A	73 minutes*	73 minutes*	73 minutes*	73 minutes*	73 minutes*
Specimen B	73 minutes*	73 minutes*	73 minutes*	73 minutes*	73 minutes*

*Test was discontinued after a period of 73 minutes.

Date of test 25 November 2025

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

Quality Management

Issue No: 01		Issue Date: 28 November 2025	
Responsible Officer:	**T. Panchbhaya*** Technical Officer	Approved By:	**P. White*** 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
Talisman 54 Doorsets	12/11/2025	SC25279T

Copies of sampling reports are available on request.

Installation

The doorsets were received on 24 November 2025 and mounted within an apertures in a blockwork wall construction. The leaves were single-acting; Doorset A could open towards the furnace only and Doorset B could away from the furnace only. Representatives of **Urquhart Joinery Services** conducted the installation on 24 November 2025.

Specimen Direction

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

Conditioning

The specimen's storage, construction, and test preparation took place in the test laboratory over a total, combined time of six days. Throughout this period of time both the temperature and the humidity of the laboratory were measured and recorded as being within a range of from 12.0°C to 17.5°C and 34.0% to 61.0% respectively.

Instruction to Test

The test was conducted on the 25 November 2025 at the request of Wood International Agency Ltd, the **Test Sponsor**.

Neil Harrison and William Urquhart; representatives 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 19.0ºC at the start of the test with a maximum variation of +2.0ºC during the test.

Furnace

The furnace was controlled so that its mean temperature complied with the requirements of BS EN 1363-1: 2020 Clause 5.1 using nine plate thermometers, distributed over a plane 100 mm from the surface of the test construction.

Thermocouples

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

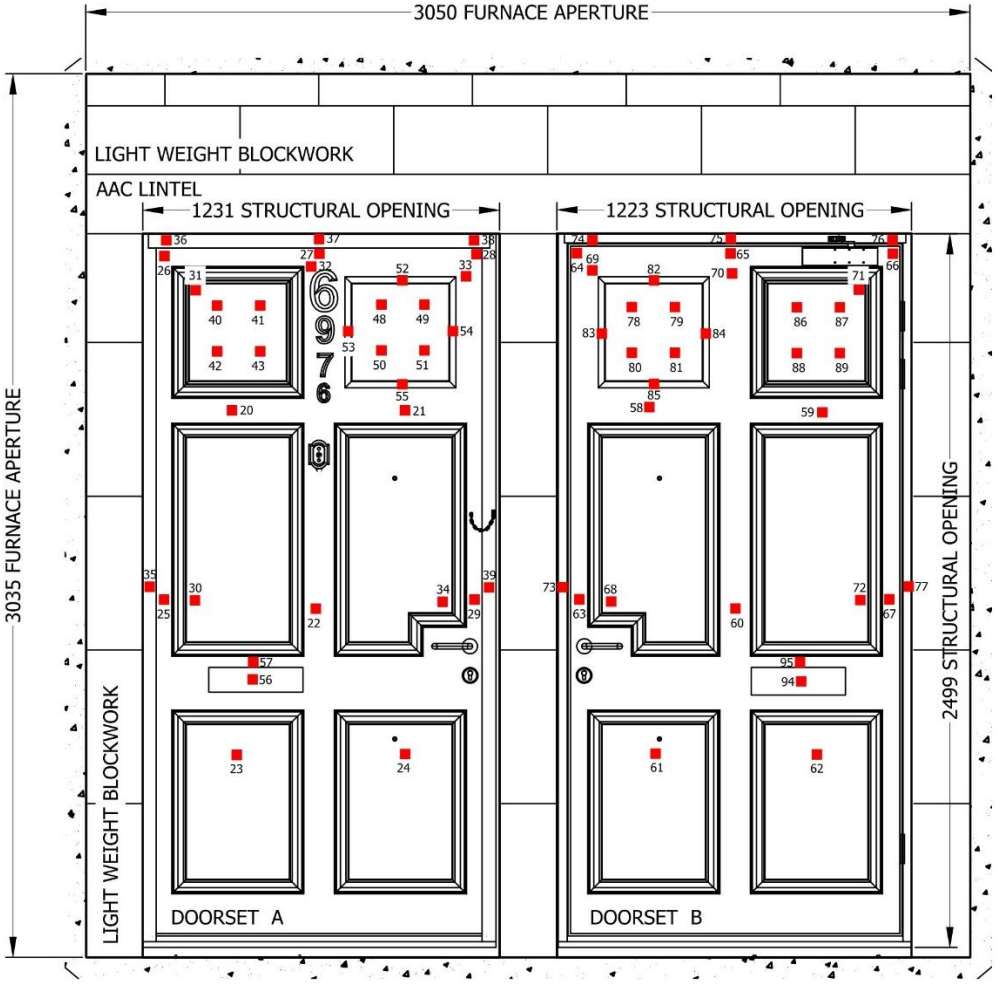
Radiation

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

Furnace Pressure

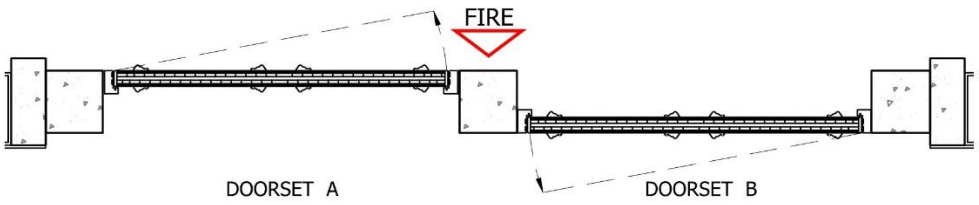
After the first five minutes of testing and for the remainder of the test, the furnace atmospheric pressure was controlled so that it complied with the requirements of BS EN 1363-1: 2020, clause 5.2.1 The calculated pressure differential relative to the laboratory atmosphere at the top of the specimen was 16.7 (± 5) Pa between 5 and 10 minutes and 16.7 (± 3) Pa thereafter.

Test Specimen Drawings



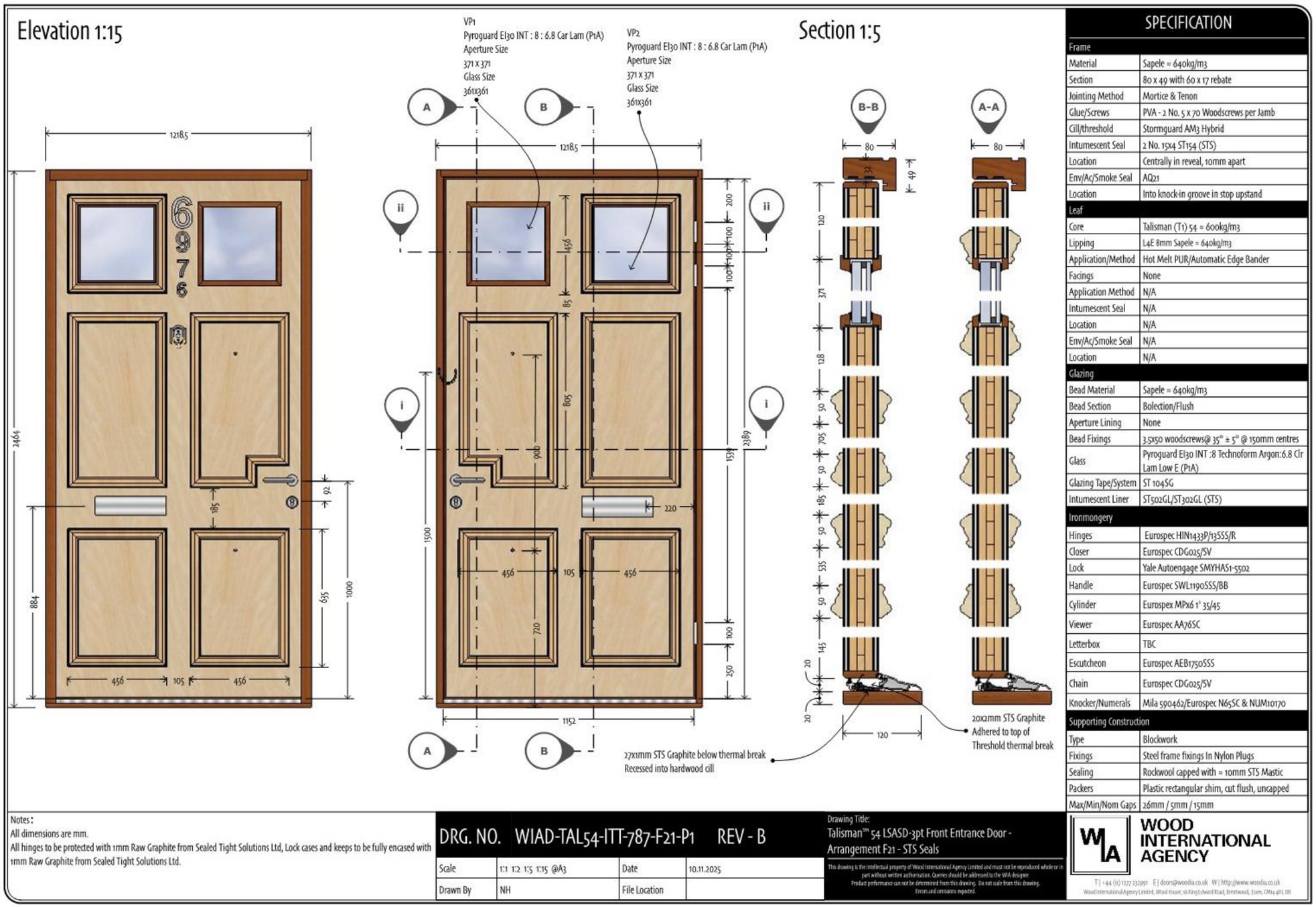
	REFERENCE LEGEND
ITEM	DESCRIPTION
■	SURFACE THERMOCOUPLE POSITIONS

GENERAL ELEVATION OF THERMOCOUPLE POSITIONS
UNEXPOSED FACE



HORIZONTAL SECTION THROUGH TEST CONSTRUCTION

Figure 1. Elevation of Thermocouple Positions – Unexposed Face



SPECIFICATION	
Frame	
Material	Sapele ≈ 640kg/m3
Section	80 x 49 with 60 x 17 rebate
Jointing Method	Mortice & Tenon
Glue/Screws	PVA - 2 No. 5 x 70 Woodscrews per Jamb
Cill/threshold	Stormguard AM3 Hybrid
Intumescent Seal	2 No. 15x4 ST154 (STS)
Location	Centrally in reveal, 10mm apart
Env/Ac/Smoke Seal	AQ21
Location	Into knock-in groove in stop upstand
Leaf	
Core	Talisman (T1) 54 ≈ 600kg/m3
Lipping	L4E 8mm Sapele ≈ 640kg/m3
Application/Method	Hot Melt PUR/Automatic Edge Bander
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/Flush
Aperture Lining	None
Bead Fixings	3.5x50 woodscrews@ 35° ± 5° @ 150mm centres
Glass	Pyroguard EI30 INT :8 Technoform Argon:6.8 Clr Lam Low E (P1A)
Glazing Tape/System	ST 104SG
Intumescent Liner	ST502GL/ST302GL (STS)
Ironmongery	
Hinges	Eurospec HIN1433P/13SSS/R
Closer	Eurospec CDG025/SV
Lock	Yale Autoengage SMYHA51-5502
Handle	Eurospec SWL1190SSS/BB
Cylinder	Eurospex MPx6 1* 35/45
Viewer	Eurospec AA76SC
Letterbox	TBC
Escutcheon	Eurospec AEB1750SSS
Chain	Eurospec CDG025/SV
Knocker/Numerals	Mila 590462/Eurospec N65SC & NUM10170
Supporting Construction	
Type	Blockwork
Fixings	Steel frame fixings In Nylon Plugs
Sealing	Rockwool capped with ≈ 10mm STS Mastic
Packers	Plastic rectangular shim, cut flush, uncapped
Max/Min/Nom Gaps	26mm / 5mm / 15mm

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.

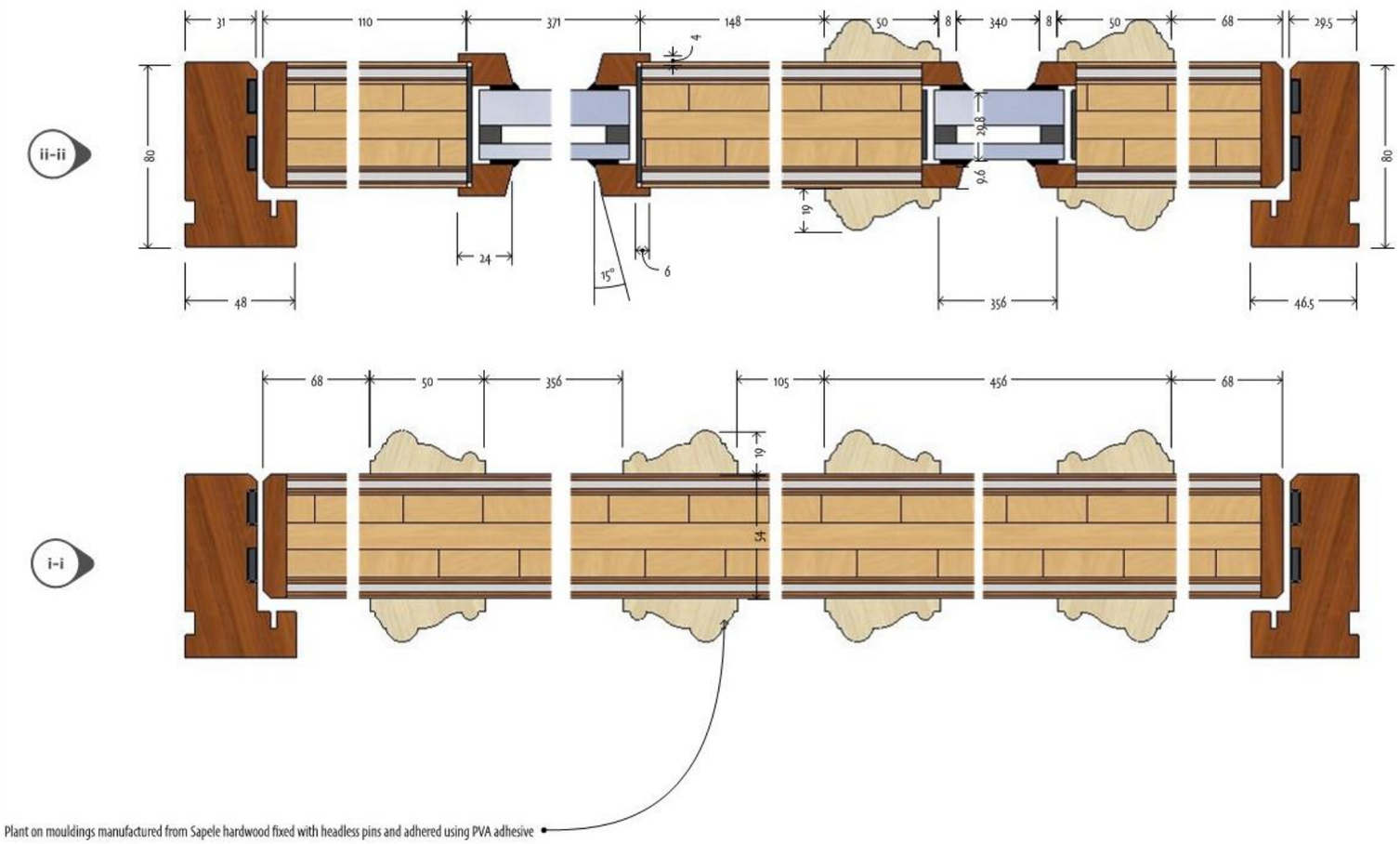
DRG. NO.	WIAD-TAL54-ITT-787-F21-P1	REV - B	
Scale	1:1 1:2 1:5 1:15 @A3	Date	10.11.2025
Drawn By	NH	File Location	

Drawing Title:
Talisman™ 54 LSASD-3pt Front Entrance Door - Arrangement F21 - STS Seals

WOOD INTERNATIONAL AGENCY
T | +44 (0) 1277 233991 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

Figure 2. Drawing WIAD-TAL54-ITT-787-F21-P1 Rev B

Sections 1:2



SPECIFICATION

Frame	
Material	Sapele ≈ 640kg/m3
Section	80 x 49 with 60 x 17 rebate
Jointing Method	Mortice & Tenon
Glue/Screws	PVA - 2 No. 5 x 70 Woodscrews per Jamb
Cill/threshold	Stormguard AM3 Hybrid
Intumescent Seal	2 No. 15x4 ST154 (STS)
Location	Centrally in reveal, 10mm apart
Env/Ac/Smoke Seal	AQ21
Location	Into knock-in groove in stop upstand
Leaf	
Core	Talisman (T1) 54 ≈ 600kg/m3
Lipping	L4E 8mm Sapele ≈ 640kg/m3
Application/Method	Hot Melt PUR/Automatic Edge Bander
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/Flush
Aperture Lining	None
Bead Fixings	3.5x50 woodscrews@ 35° ± 5° @ 150mm centres
Glass	Pyroguard EI30 INT :8 Technoform Argon:6.8 Clr Lam Low E (P1A)
Glazing Tape/System	ST 1045G
Intumescent Liner	ST502GL/ST302GL (STS)
Ironmongery	
Hinges	Eurospec HIN1433P/13SSS/R
Closer	Eurospec CDG025/SV
Lock	Yale Autoengage SMYHA51-5502
Handle	Eurospec SWL1190SSS/BB
Cylinder	Eurospex MPx6 1* 35/45
Viewer	Eurospec AA76SC
Letterbox	TBC
Escutcheon	Eurospec AEB1750SSS
Chain	Eurospec CDG025/SV
Knocker/Numerals	Mila 590462/Eurospec N65SC & NUM10170
Supporting Construction	
Type	Blockwork
Fixings	Steel frame fixings In Nylon Plugs
Sealing	Rockwool capped with ≈ 10mm STS Mastic
Packers	Plastic rectangular shim, cut flush, uncapped
Max/Min/Nom Gaps	26mm / 5mm / 15mm

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-F21-P2 REV - B

Scale	1:1 1:2 1:5 1:15 @A3	Date	10.11.2025
Drawn By	NH	File Location	

Drawing Title:
Talisman™ 54 LSASD-3pt Front Entrance Door - Arrangement F21 - STS Seals

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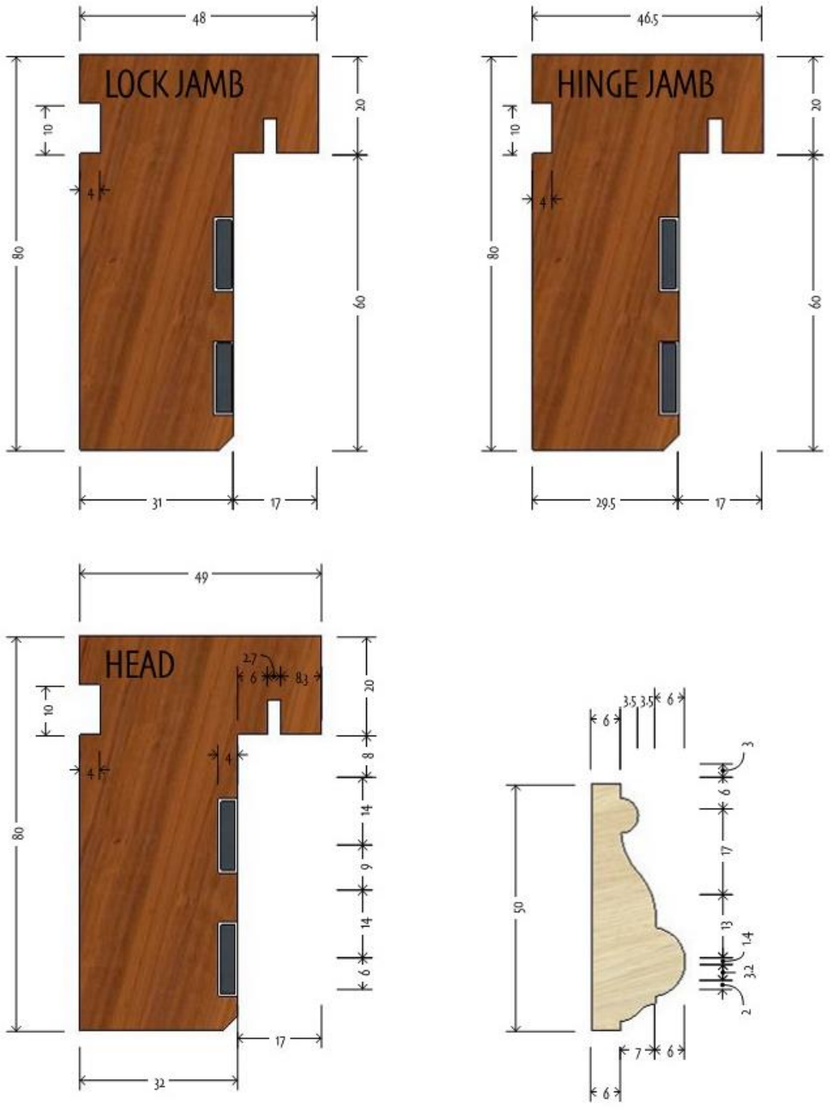
T | +44 (0) 1277 232991 E | doors@woodia.co.uk W | http://www.woodia.co.uk
Wood International Agency Limited, Wood House, 16 King Edward Road, Brentwood, Essex, CM14 4HJ, UK

Figure 3. Drawing WIAD-TAL54-ITT-787-F21-P2 Rev B

Component 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-F21-P3	REV - B	
Scale	1:1 1:2 1:5 1:15 @A3	Date	10.11.2025
Drawn By	NH	File Location	

Drawing Title:
Talisman™ 54 LSASD-3pt Front Entrance Door - Arrangement F21 - STS Seals

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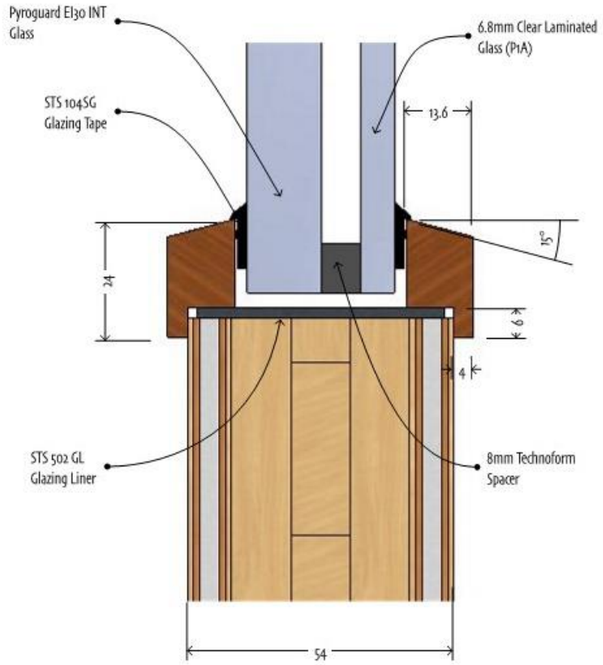
T | +44 (0) 1277 232991 E | doors@woodia.co.uk W | http://www.woodia.co.uk
Wood International Agency Limited, Wood House, 16 King Edward Road, Brentwood, Essex, CM14 4HT, UK

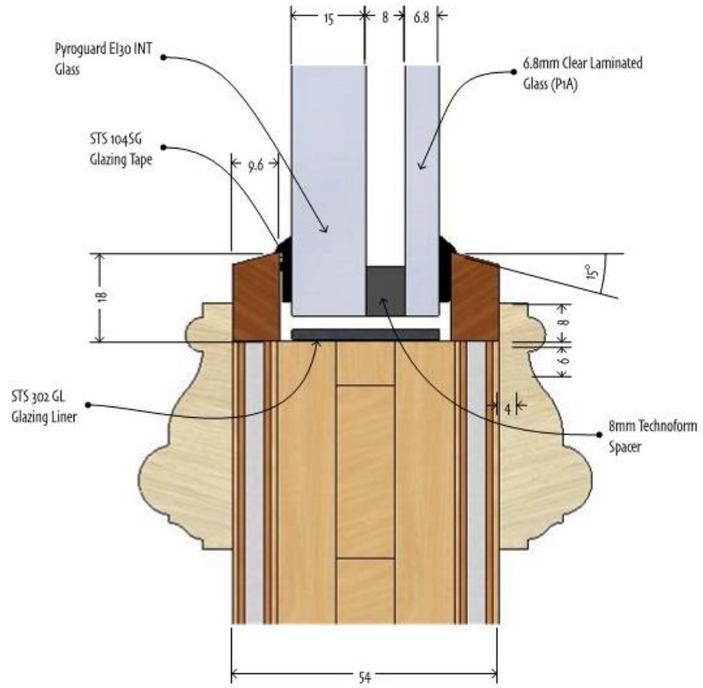
SPECIFICATION

Frame	
Material	Sapele ≈ 640kg/m3
Section	80 x 49 with 60 x 17 rebate
Jointing Method	Mortice & Tenon
Glue/Screws	PVA - 2 No. 5 x 70 Woodscrews per Jamb
Cill/threshold	Stormguard AM3 Hybrid
Intumescent Seal	2 No. 15x4 ST154 (STS)
Location	Centrally in reveal, 10mm apart
Env/Ac/Smoke Seal	AQ21
Location	Into knock-in groove in stop upstand
Leaf	
Core	Talisman (T1) 54 ≈ 600kg/m3
Lipping	L4E 8mm Sapele ≈ 640kg/m3
Application/Method	Hot Melt PUR/Automatic Edge Bander
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/Flush
Aperture Lining	None
Bead Fixings	3.5x50 woodscrews@ 35° ± 5° @ 150mm centres
Glass	Pyroguard EI30 INT :8 Technoform Argon:6.8 Clr Lam Low E (P1A)
Glazing Tape/System	ST 1045G
Intumescent Liner	ST502GL/ST302GL (STS)
Ironmongery	
Hinges	Eurospec HIN1433P/13SSS/R
Closer	Eurospec CDG025/SV
Lock	Yale Autoengage SMYHAS1-5502
Handle	Eurospec SWL1190SSS/BB
Cylinder	Eurospex MPx6 1* 35/45
Viewer	Eurospec AA76SC
Letterbox	TBC
Escutcheon	Eurospec AEB1750SSS
Chain	Eurospec CDG025/SV
Knocker/Numerals	Mila 590462/Eurospec N65SC & NUM10170
Supporting Construction	
Type	Blockwork
Fixings	Steel frame fixings In Nylon Plugs
Sealing	Rockwool capped with ≈ 10mm STS Mastic
Packers	Plastic rectangular shim, cut flush, uncapped
Max/Min/Nom Gaps	26mm / 5mm / 15mm

Figure 4. Drawing WIAD-TAL54-ITT-787-F21-P3 Rev B

Glazing Sections 1:1





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Location	Centrally in reveal, 10mm apart
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Location	Into knock-in groove in stop upstand
Leaf	
Core	Talisman (T1) 54 ≈ 600kg/m3
Lipping	L4E 8mm Sapele ≈ 640kg/m3
Application/Method	Hot Melt PUR/Automatic Edge Bander
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/Flush
Aperture Lining	None
Bead Fixings	3.5x50 woodscrews@ 35° ± 5° @ 150mm centres
Glass	Pyroguard EI30 INT :8 Technoform Argon:6.8 Clr Lam Low E (P1A)
Glazing Tape/System	ST 104SG
Intumescent Liner	ST502GL/ST302GL (STS)
Ironmongery	
Hinges	Eurospec HIN1433P/13SSS/R
Closer	Eurospec CDG025/SV
Lock	Yale Autoengage SMYHA51-5502
Handle	Eurospec SWL1190SSS/BB
Cylinder	Eurospex MPx6 1* 35/45
Viewer	Eurospec AA76SC
Letterbox	TBC
Escutcheon	Eurospec AEB1750SSS
Chain	Eurospec CDG025/SV
Knocker/Numerals	Mila 590462/Eurospec N65SC & NUM10170
Supporting Construction	
Type	Blockwork
Fixings	Steel frame fixings In Nylon Plugs
Sealing	Rockwool capped with ≈ 10mm STS Mastic
Packers	Plastic rectangular shim, cut flush, uncapped
Max/Min/Nom Gaps	26mm / 5mm / 15mm

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-F21-P4 REV - B

Scale	1:1 1:2 1:5 1:15 @A3	Date	10.11.2025
Drawn By	NH	File Location	

Drawing Title:
Talisman™ 54 LSASD-3pt Front Entrance Door - Arrangement F21 - STS Seals

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T | +44 (0) 1277 332991 E | doors@woodia.co.uk W | http://www.woodia.co.uk
Wood International Agency Limited, Wood House, 55 King Edward Road, Brentwood, Essex, CM14 4HL UK.

Figure 5. Drawing WIAD-TAL54-ITT-787-F21-P4 Rev B

Pyroguard RAPIDE

Pyroguard Rapide Plus

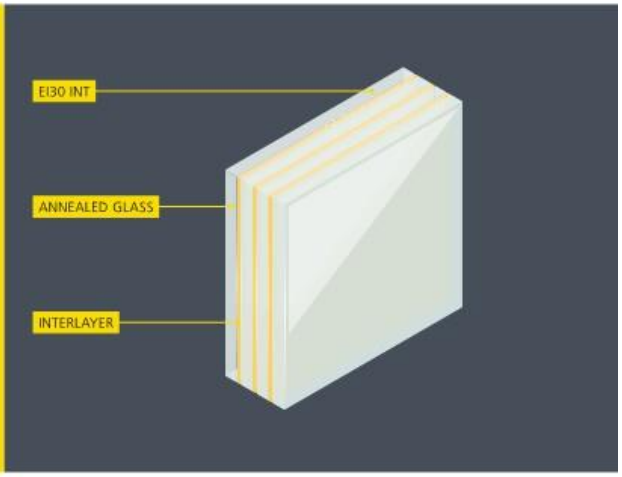
- EI30 INT
- EI30 INT VI
- EI30 EXT
- EI30 EXT VI

EN1279-5+A2 INSULATING GLASS UNITS
EN14449 LAMINATED SAFETY GLASS

Classification: EI

The highest level of protection from flames, smoke and heat.

Structural wall / butt joint



CHARACTERISTICS	EI30 INT	EI30 INT VI 16mm SPACER 33.1 LOW E COUNTERPANE	EI30 EXT	EI30 EXT VI 16mm SPACER 4mm LOW E COUNTERPANE
FIRE RESISTANCE (EN 13501-2)	EW60/EI30	EI30	EI30	EI30
GLASS PRODUCTION SIZE MIN - MAX (mm)	100 x 100 2125 x 3100	100 x 100 2125 x 3100	100 x 100 2125 x 3100	100 x 100 2125 x 3100
THICKNESS AND TOLERANCE (mm)	15 (+3/-3)	37 (+3/-3)	19 (-3/+3)	39 (-3/+3)
WEIGHT (kg/m²)	34	50	43	55
Rw (C;Ctr) SOUND REDUCTION (EN 140-3)	38 (-1;-3)	43 (-2;-5)	39 (-1;-3)	-
Tv LIGHT TRANSMISSION (EN 410) (%)	85	70	84	70
Ug VALUE (EN 673) W/m²K	5.4	1.0	5.3	1.0
g VALUE (EN 410)	0.7	0.46	0.66	0.48
TEMPERATURE RANGE (°C)	-40/+50	-40/+50	-40/+50	-40/+50
ATTACK RESISTANCE (EN 356)*	P1A	P1A	P1A	P1A
IMPACT RESISTANCE (EN 12600)*	1B1	1B1	1B1	1B1
UV STABILITY (EN ISO 12543-4)	-	✓	✓	✓
CE CERTIFICATE OF CONFORMITY	0757-CPR-695B	1812-CPR-1866	0757-CPR-695B	1812-CPR-1866

*impact and attack resistance of counterpane not reported
**VI example construction. Data calculated using WINSLT (90% Ar; Guardian 1.0 Low E counterpane)

CE www.pyroguard.eu

V2 02/2025 57

Figure 6. Details of Item 13

TECHNOFORM

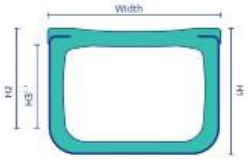
Product specification sheet

SP12 | SP13 | SP14 | Warm edge spacer

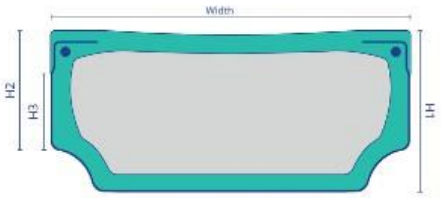
Material: Polypropylene (0.22 W/mK), stainless steel (15 W/mK), steel wire at SP14
Colors: Similar to RAL 7035, RAL 7040, RAL 8003, RAL 8016, RAL 9005, RAL 9016
Certifications: EN 1279 2, 3, 4 & 6, EN ISO 4892-2, BF - Data sheet and RAL quality mark, DTA and ASTM (Currently only valid for the SP14). It is a certified Passive House Component Class phB for Cold Climate.

Spacer bars	Widths ± 0.15 [mm]	Theoretical desiccant quantities [g/m] [2]
6,2 mm [1]	6,2	16
8 mm [3]	7.45	21
10 mm	9.45	26
12 mm	11.45	34
13 mm	12.45	38
14 mm	13.45	42
15 mm	14.45	46
16 mm	15.45	50
17 mm	16.45	53
18 mm	17.45	56
20 mm	19.45	62
22 mm	21.45	70
24 mm	23.45	78
26 mm	25.45	85
28 mm	27.45	93
30 mm	29.45	101
32 mm	31.45	108

SP12



SP13* | SP14



*Other drawing, without wire

H1 = 6,85 ± 0,15 mm, **H2** ≈ 5,10 mm, **H3 Butyl area** = 3,64 mm, **H3**[1,3] **[6,2; 8 mm]** = 5,20 mm

[1] Production in America
[2] Grace 551

	Specification	Test method
	6000 mm +10/-0 mm	Measuring tape
	0.20 mm +0.3/-0.1 mm	Caliper
	≤ 13 kg	Dynamometer
	λ_{eq} 2B= 0.31 W/(m · K)	Test at ift Rosenheim according to EN 12664:2001-01
	No visible impairments when viewed behind glass at a distance of 50 cm	Technoform Guideline for the assessment of visual quality

	Specification	Test method
	Inlet pressure 5 bar ≥ 2 bar - ≤ 4 bar	Manometer
	< 0.02 %	Test at ift Rosenheim according to EN 1279-4:2018 Annex H
	No significant color change after 4000 h	EN ISO 4892-2
	Rp 0.2 ≥ 40 N/mm² reference SP14 width 16 mm	3 point bending test

Version 07. 2024

Thermal edge bond solutions for insulating glass

Figure 7. Details of Item 16

PRODUCT DATASHEET

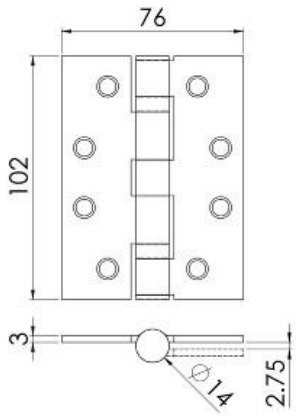
EUROSPEC

Grade 13 Ball Bearing P Hinge

HIN1433P

AB BSS MB MBRZ SB SSS

360°



- BS EN 1935:2002 (4-7-6-1-1-4-0-13)
- CE Marked (CE2812)
- UKCA Marked (1121)
- 120kg Max Leaf Weight
- Certifire (CF5776)
- DoP No. CBA210

CF5776

EU

Eurospec products by
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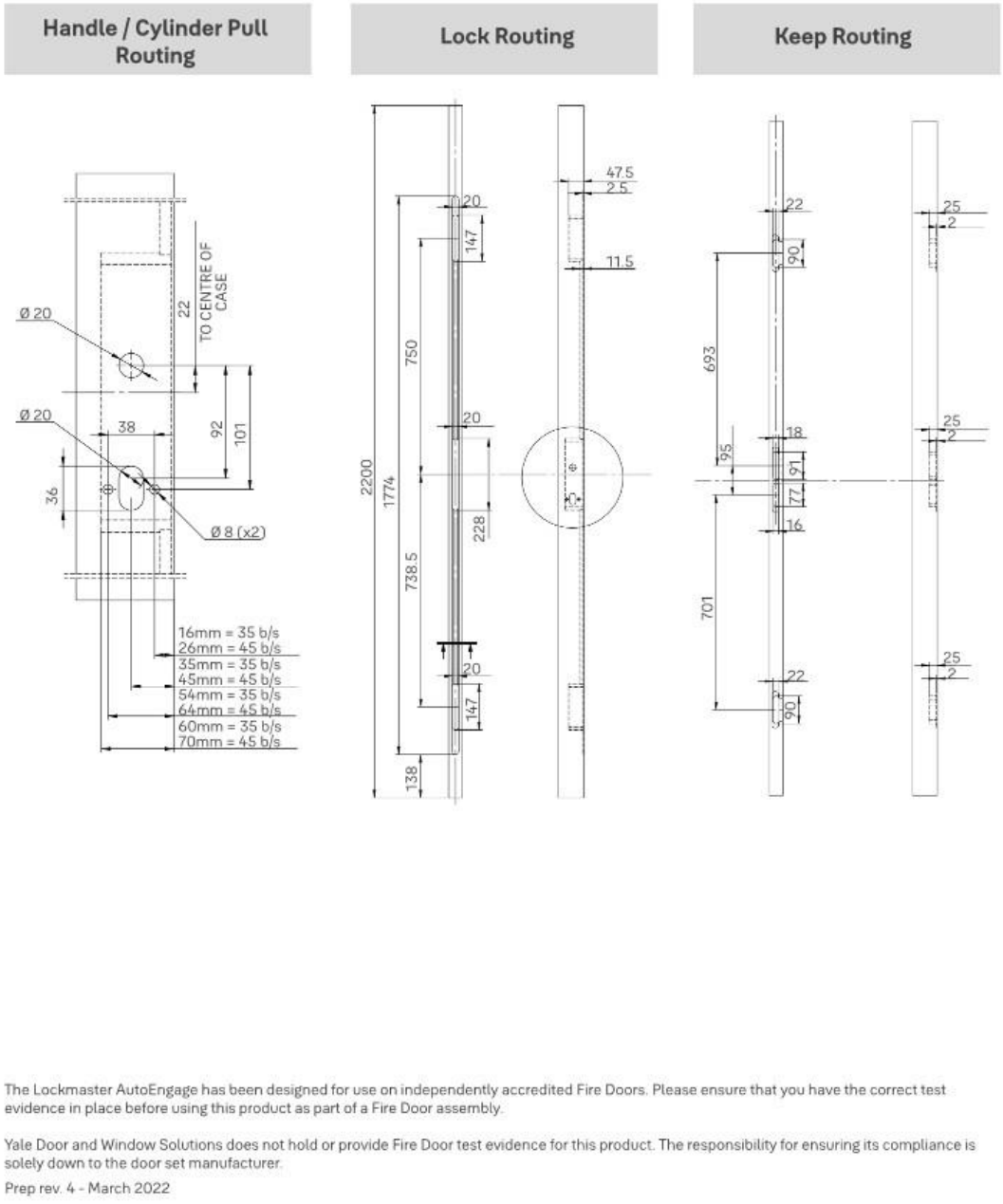
Figure 8. Details of item 21

Lockmaster AutoEngage - **Fire Door Routing Prep**
Classic multipoint lock - YAS1-3500-FD

The incorrect routing can lead to a number of operation and performance issues.



The Lockmaster AutoEngage has been designed for use on independently accredited Fire Doors. Please ensure that you have the correct test evidence in place before using this product as part of a Fire Door assembly.

Yale Door and Window Solutions does not hold or provide Fire Door test evidence for this product. The responsibility for ensuring its compliance is solely down to the door set manufacturer.

Prep rev. 4 - March 2022

Figure 9. Details of Item 22

PRODUCT DATASHEET

EUROSPEC

MPx6 Euro Cylinder and Turn

CYX713 Range

PB PC SC

- Supplied with a 5 Year Mechanical Guarantee
- BS Kitemarked KM 585549
- BS EN 1303 Cylinder Security (maximum grade)
- TS007:2014 + A2:2018 - 1 Star
- Anti Snap, Pick, bump, Drill, plug & Twist
- Large Master keying Capabilities (systems up to 1,000 doors)

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Figure 10. Details of Item 24

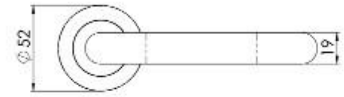
PRODUCT DATASHEET

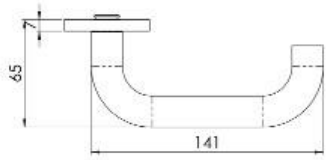
EUROSPEC

SWL Nera Lever on Rose

SWL1190

BSS MB SPVD SSS





- Grade 4 Lever – Mounted on a concealed fix threaded rose.
- Substantial Round Bar Design – Return to door lever for a comfortable grip.
- Premium Material – Crafted from Grade 316 Stainless Steel for superior durability.
- Certified to BS EN 1906 – Meets high-performance standards.
- 10-Year Mechanical Guarantee – Ensures long-lasting reliability.
- Fire Door Rated – Suitable for fire-rated door applications.
- Versatile Use – Ideal for both domestic and commercial setting
- Grade 316 in all finishes apart from MB and SPVD
- Unsprung and Sprung option available in SSS

FD30/60 TIMBER FD120 STEEL

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Figure 11. Details of Item 25

PRODUCT DATASHEET

EUROSPEC

2 Star Security Escutcheon

AEB1750

AB BSS MB SPVD SSS

BSI Kitemark licence KM 585549 to TS007:2014 + A2:2018, the AEB1750 security escutcheon achieves 2 star security, and corrosion resistance in excess of grade 4 (240 hours). Approved by Secured by Design, it meets the security requirements of the UK police flagship initiative supporting the principles of 'designing out crime'. The external section is constructed from grade 304 stainless steel, and includes hardened steel keyway protection disc providing enhanced cylinder protection. Supplied complete with two sets of stainless steel fixing bolts to suit 44mm and 55mm doors.

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Figure 12. Details of Item 26

Figure 13. Details of Item 27

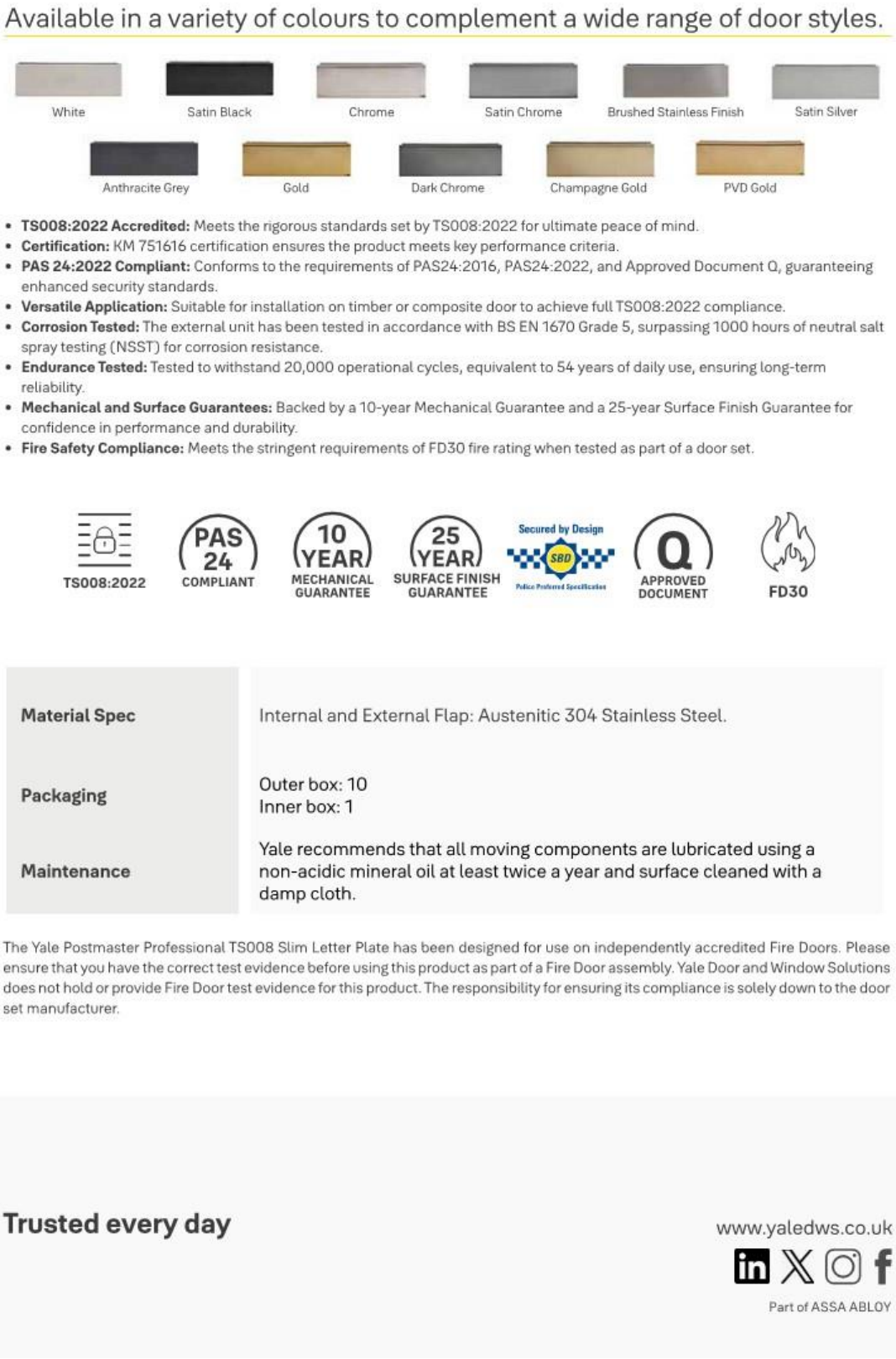


Figure 14. Details of Item 27

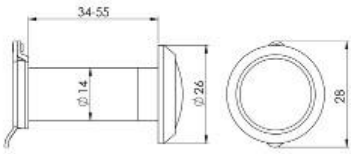
PRODUCT DATASHEET

CARLISLE BRASS

Door Viewer Glass Lens

AA77 Range

CP MB PB SC



Standard style door viewer adds a useful security aspect to any door by enabling the user to see who is on the other side of the door before opening it. The viewer gives a 180° angle of vision.carlislebrass.

10 YEAR FD30/60 TIMBER

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enquiries@carlislebrass.com
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Figure 15. Details of Item 28

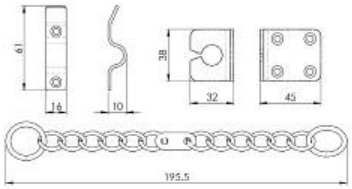
PRODUCT DATASHEET

CARLISLE BRASS

Heavy Door Chain

AA75 Range

CP PB SC



The conventional first step for retro additional door security is either a door chain or door bolt. This sturdy chain is the perfect solution giving reassurance and peace of mind. (Breaking strain 180 newton's). Comes with a 10 year mechanical guarantee.

10 YEAR
PREPACK
FD30/60/120 TIMBER
FD120 STEEL

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Figure 16. Details of Item 29

PRODUCT DATASHEET

EUROSPEC

Stainless Steel Large Numerals & Letters

NUM10170

BSS SSS

Large size numeral and letter range in Grade 316 Stainless Steel ensuring longevity and easy maintenance. Bold typeface will provide clarity at a distance. Finish options BSS or SSS. Concealed 10mm offset pin fixing for easy and secure fitting.

10 YEAR

FD30/60 TIMBER

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enquiries@carlislebrass.com
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Figure 17. Details of Item 30

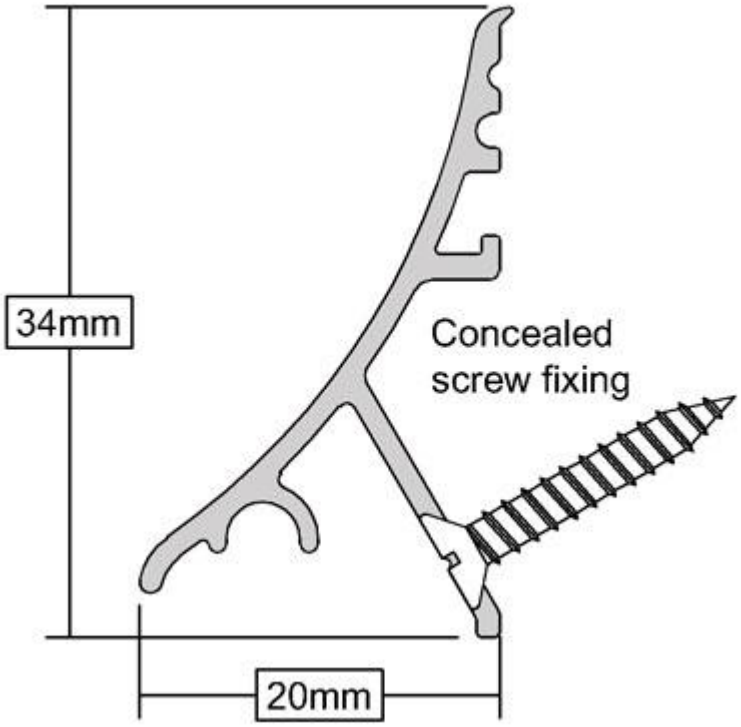


Figure 18. Details of Item 32

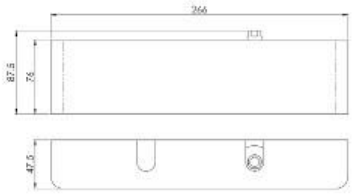
PRODUCT DATASHEET

EUROSPEC

Overhead Door Closer Variable Power

CDG025

PNP SNP SV



Overhead door closer EN2-5 by spring c/w Fig 6 Bracket EN1154. Suitable for left and right hand application, Suitable for doors up to 100kg and/or 1250mm wide, Power size 2-5 adjustable by spring, Manufactured with flat arm set. The product is fire rated and CE marked to BS EN 1154 standards. The range is Certifire approved to CF5400.

CF5400

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Figure 19. Details of Item 33

Schedule of Components

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

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

Door Frame

Please see technical drawings : WIAD-TAL54-ITT-787-F21-P1, P2, P3, P4 Rev B

1. Door Frame	
Manufacturer	Urquhart Joinery Services
Reference	Frame assembly – Please see Figure 5
Material	Sapele hardwood
Density recorded at sampling visit	Nominally 640 kg/m^3 Measured 686-710 kg/m^3
Moisture content recorded at sampling visit	7-9%
Moisture content recorded at test lab	
Doorset A	7.3% (measured by WFR)
Doorset B	7.2% (measured by WFR)
Overall size	1218.5 mm wide x 2464 mm high
Frame (Head & Jambs)	Lock Side – 80 mm wide x 48 mm thick with 60 mm wide x 17 mm deep rebate Hinge Side – 80 mm wide x 46.5 mm thick with 60 mm wide x 17 mm deep rebate Head – 80mm wide x 49mm thick with 60mm wide x 17mm deep rebate
Stop	Integral 20 mm wide x 17 mm deep
Stop to Frame jointing method, fixing detail and location	Integral
Jambs to head jointing method	2 No. 4.5 mm x 70 mm WURTH Wüpofast 2.0 Screw – Jamb to Head 1 No. 4.5 mm x 70 mm WURTH Wüpofast 2.0 Screws – Head to Jamb

Presence of Adhesives	Yes - jamb to head/threshold joints
Manufacturer	Hafele
Type	PVA
Reference	Premium Grade PVA Adhesive – D3
Curing method	Solvent Release
Application method	Nozzle applied, hand spread.
Gap Filling	Gaps between the specimen jambs and the restraint frame refectory lining, on both faces, sealed with bead of ST88 Intumescent Mastic (item 8)
Gap size	
Doorset A	Latch Jamb – Top 2.95 mm, Mid 3.79 mm, Bot 7.75 mm Hinge Jamb – Top 9.78 mm, Mid 5.47 mm, Bot 1.97 mm Head – 25 mm to underside of Concrete Lintel
Doorset B	Latch Jamb – Top 4 mm, Mid 2 mm, Bot 4 mm Hinge Jamb – Top 8 mm, Mid 2 mm, Bot 2 mm Head – 25 mm to underside of Concrete Lintel
2. Threshold	
Manufacturer	Stormguard
Reference	Proline AM3 Hybrid FD60 04CP161
Material	Aluminium/Plastic
Overall section size	114 mm deep x 25 mm high
Fixing method, location and fixing details	Fitted between jambs,. Screwed into hardwood threshold
Details of fixings	
Type	Steel wood screws
Size	3 No. SecurFix 3 mm x 20 mm screws
Details of intumescent protection	
Manufacturer	Sealed Tight Solutions Limited
Type	Graphite based strip
Fixing method	Self-Adhesive
Size	20 mm x 2 mm (installed tight between jambs)
Location	Placed within a recess in the threshold

3. Cill	
Manufacturer	Urquhart Joinery Services
Material	Sapele
Density	Nominally 640 kg/m^3 Measured 686-710 kg/m^3
Overall section size	120 mm x 20 mm
Fixing method	Screwed to underside of jambs
Details of fixings	2 No. 4.5 mm x 70 mm WURTH Wüpofast 2.0 Screws
Presence of sealants	Yes
Sealant Manufacturer	Sealed Tight Solutions Limited
Reference	ST88
Type	Intumescent Mastic
Nominal application thickness	10x5 (compressed flat with weight of doorset)
Location	2 No. beads, nominally 100mm apart to underside of threshold
Presence of Adhesives	Yes
Location	In trench to accept jamb
Manufacturer	Hafele
Type	PVA
Reference	Premium Grade PVA Adhesive – D3
Curing method	Solvent Release
Application method	Nozzle applied, hand spread.
Details of intumescent protection	
Manufacturer	Sealed Tight Solutions Limited
Type	Graphite based strip
Fixing method	Self-Adhesive
Size	27 mm x 1 mm
Location	Placed in recess in cill, aligning with centre of thermal break in aluminium threshold

4. Frame fixing method to supporting construction	
Manufacturer	WURTH
Reference	AMO® III Spacing assembly screw
Type & material	Yellow zinc-plated concrete screw
Overall size	72 mm x 7.5 mm diameter
Spacing centres frame	
Doorset A and B	Screw centres from the threshold Cill, through screwed through the rebate of the frame. Latch jamb – *95 mm/700 mm/1285 mm/1915/*2295 mm Hinge Jamb – *100 mm/690 mm/1300 mm/1905 mm/*2290 mm. * - Screwed though the face of the rebated frame
5. Intumescent to frame reveal	
Manufacturer	Sealed Tight Solutions Limited
Reference	STS 154FO
Material	PVC encased Graphite
Overall section size	15mm wide x 4mm thick
Location (relative to the opening face of the door leaf)	
Doorset A	30 mm, 7 mm
Doorset B	7 mm, 30 mm
Application method	Friction/Adhesive Tape
6. Smoke Seal	
Manufacturer/Supplier	Exitex/Sealco
Reference	A10
Material	Polyurethane foam core with polyethylene outer skin
Overall section size	10 mm x 8 mm
Location	Stop rebate
Fixing method	Friction fitted into stop upstand groove

Firestopping

7. Gap fill to supporting construction	
Manufacturer	UNIFLEX
Reference	Insulfrax® LTX
Material	High temperature insulation wool
Overall size	25 mm, uncompressed
Density	96 kg/m3 (stated)
Application method	Used at the specimen head, sealed with ST88 Mastic (item 8)
8. Sealant to supporting construction	
Manufacturer	Sealed Tight Solutions Limited
Reference	ST88
Batch Number	1408250142
Material	Intumescent Acrylic Mastic
Overall size	5 mm bead
Application method	Cartridge gunned

Door Leaf

Please see technical drawing : WIAD-TAL54-ITT-787-F21-P1, P2, P3, P4 Rev B

9. Door Leaf	
Manufacturer/Supplier	Wood International Agency Limited
Reference	Talisman 54
Material	Engineered Timber Cored Door Blank with Specialist Ply Faces
Overall leaf size	1152 mm wide x 2389 mm high x 54 mm thick
Glazing location relative to the head and closing edge	120 mm from the head of the leaf and 110 mm from the closing edge of the leaf
10. Core Element	
Manufacturer	Wood International Agency Limited
Reference	Talisman (T1) 54
Sample information	The construction of this door blank has been sampled and detailed in Sampling Contract Ref SC23275B
Material	Engineered Timber Cored Door Blank with Specialist Ply Faces
Density recorded at sampling visit	610-658 kg/m^3 (measured)
Location	Centre of leaf
Overall thickness	54 mm

11. Lippings	
Manufacturer	Urquhart Joinery Services
Material	Sapele
Density recorded at sampling visit	Nominally 640 kg/m^3, Sampled 629-661 kg/m^3
Moisture content at sampling visit	11%
Moisture content recorded at test lab	
Doorset A	7.8% (measured by WFR)
Doorset B	6.2% (measured by WFR)
Overall size	54 mm wide x 10 mm thick
Fixing method	Automatic Edge Bander
Location	All 4 edges
Adhesives	
Manufacturer	Henkel
Type	Hot Melt Polyurethane
Reference	Technomelt PUR270/7 G
Curing method	Chemical Reactive
Application method	Automatic Edge Bander
Presence of Mechanical Fixings	No

12. Plant on Moulding	
Manufacturer	Urquhart Joinery Services
Material	Sapele
Density recorded at test lab	Nominally 640 kg/m^3 Measured 669 kg/m3
Overall thickness and size	50 mm wide x 19 mm thick
Location	Please see: WIAD-TAL54-ITT-787-F21-P1, P2, P3, P4 Rev A
Adhesives	
Manufacturer	Hafele
Type	PVA
Reference	Premium Grade PVA Adhesive – D3
Curing method	Solvent Release
Application method	Nozzle applied, hand spread.
Presence of Mechanical Fixings	Yes
Type, size, Material, location and Frequency	23g (0.6 mm) x 25 mm long headless pins. Stainless Steel. 3-4 No. per length as required to secure moulding whilst adhesive cures.

Glazing

Please see technical drawings : WIAD-TAL54-ITT-787-F21-P1, P3 Rev B

13. Double glazed unit / Glass	
Manufacturer / Supplier	Pyroguard/Fireglass UK
Reference (Declaration of Performance)	Pyroguard EI30 INT IGU 8mm Technoform Spacer 6.8 Low E Laminate Argon Gas
Unit overall size	VP1 – 1 No. 361mm high x 361mm wide x 29.8mm thick VP2 – 1 No. 361mm high x 361mm wide x 29.8mm thick
Aperture location relative to the head and closing edge of the leaf	120mm from the head of the leaf and 110mm from the closing edge of the leaf
Aperture size (prior to any lining)	VP1 – 1 No. 371mm high x 371mm wide VP2 – 1 No. 371mm high x 371mm wide
Sight size	VP1 – 1 No. 335mm high x 335mm wide VP2 – 1 No. 335mm high x 335mm wide
Expansion allowance	5mm all around including intumescent liner (so 3mm + 2mm Liner)
Presence of Timber aperture lining	No
14. Pyroguard EI30 INT – 15 mm	
Manufacturer	Pyroguard UK
Reference	Pyroguard EI30 INT
Thickness	15mm thick
Doorset A	
VP1	Exposed
VP2	Exposed
Doorset B	
VP1	Unexposed
VP2	Unexposed

15. Pyroguard Clear Lam Low E - 6.8mm	
Manufacturer	NSG
Reference	Pilkington Optilam 6.8mm Clear Low E
Thickness	6.8 mm thick
Doorset A	
VP1	Unexposed
VP2	Unexposed
Doorset B	
VP1	Exposed
VP2	Exposed
16. Glass spacer	
Manufacturer	Technoform
Reference	SP14
Datasheet	Figure 16
Material	Polypropylene, steel wire & stainless steel.
Overall size	7.45 mm wide x 6.85 mm thick
Fixing method	Butyl primary seal and Hot melt butyl secondary seal IGU seal
Presence of Adhesives to seal unit	Yes
Location	Around parameter of IGU typically with >6 mm edge bite of Hot melt butyl secondary seal and 1 mm diameter bead of butyl primary seal applied then compressed.
Manufacturer	1^{o} = Ingas, 2^{o} = Bostick
Type	1^{o} Butyl primary seal 2^{o} Hot melt butyl secondary seal
Reference	1^{o} PIB tape 2^{o} Bostik 5000
Curing method	Cures on cooling
Application method	Gunned

17. Beading	
Manufacturer	Urquhart Joinery Services
Reference	Please see Figures 4 & 5
Material	Sapele hardwood
Density	640 kg/m^3 (nominal)
Density recorded at sampling visit	669-832 kg/m^3
Moisture content at sampling visit	7-8 %
Moisture content recorded at test lab	
Doorset A – Left vision panel	7.1% (measured by WFR)
Doorset A – Right vision panel	6.4% (measured by WFR)
Doorset B – Left vision panel	6.8% (measured by WFR)
Doorset B – Right vision panel	8.7% (measured by WFR)
Overall size	Type 1 – 24 mm high x 13.6 mm thick including a 6 mm x 4 mm bolection and a 15° splay Type 2 – 18 mm high x 9.6 mm thick including a 15° splay
Fixing method, fixing material and sizes	3.5 x 50 mm Woodscrews
Fixing distances from corners, centres and angle relative to the face of the glass	50 mm from corners, 150 mm centres and at 35°(±5°) to the face of the glass 3 No. fixings per side
18. Glazing Lining / Intumescent liner	
Manufacturer	Sealed Tight Solutions Limited
Reference	Type 1 - STS 502GL Type 2 - STS 302GL
Material	Graphite
Overall size	Type 1 – 50 mm x 2 mm Type 2 – 30 mm x 2 mm
Fixing method	Self-adhesive tape

19. Sealant applied to glass on the internal face of the leaf	
Manufacturer	Sealed Tight Solutions Limited
Reference	STS 104 SG
Material	Graphite with a Nitrile Cap
Overall size	16.5 mm high x 5 mm thick
Application method	Adhered to bead upstand
20. Sealant applied to glass on the external face of the leaf	
Manufacturer	Sealed Tight Solutions Limited
Reference	STS 104 SG
Material	Graphite with a Nitrile Cap
Overall size	16.5 mm high x 5 mm thick
Application method	Adhered to bead upstand

Hardware

21. Hinges	
Supplier	Carlisle Brass
Reference	Eurospec HIN1433P/13SSS/R
Certifire Number	CF5776
Datasheet	Figure 8
Quantity	3 No. per leaf
Primary material	Stainless Steel
Type	Butt Hinge
Size	
Knuckle	14 mm diameter x 107 mm high
Blades	101 mm high x 30 mm wide x 3 mm thick
Fixings	
Type	Woodscrews
Material	Stainless Steel
Sizes	4.5 mm diameter x 31 mm long
Number off per blade	4
Hinge centres	Relative to top of leaf from the top of the hinge: 200 mm, 400 mm, 2039 mm
Details of intumescent protection	1 mm STS Graphite behind each blade
Interruptions to Intumescent within the frame reveal	1st seal fully interrupted

22. Lockset	
Manufacturer	Yale
Reference	Autoengage SMYHAS1-5502
Datasheet	Figures 9
Material	
Lock case	Mild Steel
Forend plate	Stainless Steel
Latch Bolt	Zinc Alloy
Lock Bolt	Zinc Alloy
Top and bottom lock case	Mild Steel
Top and bottom lock bolts	Mild Steel
Overall sizes	
Lockcase	200 mm high x 70 mm deep x 15.5 mm thick
Forend plate	20 mm wide x 2.5 mm thick x 1770 mm long
Latch bolt	30 mm high x 10 mm wide x 10 mm projection
Lock bolt	32 mm high x 6 mm wide x 21 mm projection
Top and bottom lock case	130 mm high x 40 mm deep x 15.5 mm deep
Top and bottom lock bolts	30 mm high x 10 mm wide x 20 mm projection (when fully thrown)
Trigger bolt	7.8 mm high x 10 mm wide x 6 mm projection
Fixing method	10 No. 4 mm x 50 mm
Operation of latch bolt	Engaged
Operation of Top and bottom lock bolts	Autofiring – engaged
Operation of lock bolt	Disengaged
Details of intumescent protection	
Central lockcase	1 mm Sealed Tight Solutions Graphite encasing case with cut outs around moving parts
Top and bottom lock case	1 mm Sealed Tight Solutions Graphite encasing case with cut outs around moving parts
Forend plate	1 mm Sealed Tight Solutions Graphite – to ends of forend only
Interruptions to Intumescent on the door leaf edge	None

Location of centre of the spindle relative to the bottom of the leaf	1000 mm from the bottom of the leaf
Location of centre of latch bolt relative to the bottom of the leaf	1025 mm from the bottom of the leaf
Location of centre of lock bolt relative to the bottom of the leaf	935 mm from bottom of leaf
Average latch forces	
Doorset A	7.8 N (measured by WFR)
Doorset B	7.2 N (measured by WFR)
23. Keeps	
Manufacturer	Yale
Reference	Top/Btm = PLK1016-19, Centre PLK1010-19
Material	
Centre Strike Plate and Keep	Mild Steel / Zinc alloy / Plastic
Top and Bottom Strike Plate and Keep	Mild Steel / Zinc alloy
Overall sizes	
Centre Strike Plate	46 mm high x 18 mm wide x 2 mm thick
Centre Keep Plate	260 mm high x 22 mm wide x 2 mm thick
Top and Bottom Strike Plate	93 mm high x 21 mm wide x 2 mm thick
Top and Bottom Keep Plate	145 mm high x 22 mm wide x 2 mm thick
Fixing method	
Centre Strike Plate and Keep	3 No. 3.5 mm x 30 mm woodscrews
Top and Bottom Strike Plate and Keep	2 No. 3.5 mm x 30 mm woodscrews
Details of intumescent protection	
Centre Strike Plate and Keep	1 mm STS Graphite lining entire mortice
Top and Bottom Strike Plate and Keep	1 mm STS Graphite lining entire mortice
Interruptions to Intumescent within the frame reveal	
Centre Strike Plate and Keep	2 mm from second intumescent, fully interrupts first intumescent.
Top and Bottom Strike Plate and Keep	2 mm from second intumescent, fully interrupts first intumescent.

24. Cylinder	
Manufacturer	Carlisle Brass
Reference	Eurospec MP x 6 1* 45/35
Datasheet	Figure 10
Material	Brass - Satin Chrome Plated
Overall size	33 mm high x 17/10 mm wide x 80 mm long
Fixing Method	1 No M5 x 65mm Steel Machine Screw
25. Lever Handle Set	
Manufacturer	Carlisle Brass
Reference	Eurospec SWL1190SSS/BB
Datasheet	Figure 11
Material	Stainless steel handle with plastic insert.
Overall size	52 mm diameter x 7 mm rose, 141 mm long x 65 mm projection x 19 mm diameter handle with a 50 mm return
Fixing method	2 No. bolt through M4 x 60 mm long steel machine screw fixings with 15 mm receivers
26. Escutcheon	
Manufacturer	Carlisle Brass
Reference	Eurospec AEB1750SSS
Datasheet	Figure 12
Material	Outside- Cast Stainless Steel / Inner - ZP Steel with Stainless Steel Push on Cover
Overall size	54 mm diameter x 18 mm thick to outside, 54 mm diameter x 8 mm thick to inside
Location	Over Euro Cylinder
Fixing method	2 No M6 x 70 mm steel machine screws

27. Letter plate	
Manufacturer	Yale
Reference	Postmaster Professional TS008 Slim Letterplate (0793-6000)
Datasheet	Figures 13 & 14
Materials	
Body	ABS
Face plate	Stainless Steel
Overall size	
Body size	59.5 mm high x 265.25 mm wide x 44-63 mm thick (telescoping range)
Cut out size	66 mm high x 272 mm wide plus 4 No. 14 mm diameter at 284 mm x 32 mm centres
Footprint	External Side = 325 mm wide x 85 mm high Internal Side = 325 mm wide x 95 mm high
Fixing method	4 No. Bolt Through Fixings 12 No Woodscrews (5 on internal side, 7 to outside).
Presence of sealants	Yes
Sealant Manufacturer	Lorient Polyproducts Limited
Reference	Undisclosed
Type	Undisclosed
Nominal application thickness	Various – comes as part of letter plate.
Location	880 mm from bottom of leaf to centre of letter plate aperture, 220 mm from side of door to side of letter plate aperture
Details of intumescent protection	Integral to letterplate kit
Manufacturer	Assa Abloy T/A Lorient
Type 1	2 No. Y-L52503-230-19101, 25 mm x 3 mm x 230 mm, PVC ENCAPSULATED GRAPHITE STRIP
Type 2	1 No. Y-L52303-232-X2-CNC, 23 mm x 6 mm x 232 mm, 2 x BONDED PVC ENCAPSULATED GRAPHITE STRIP-PROFILED
Type 3	2 No. Y-ITA-YALE1868-1MM, 44 mm x 54 mm x 1 mm, SIDE CAVITY GRAPHITE INTUMESCENT PADS
Type 4	4 No. Y-GP01051250T-TUBE, 10.5 mm OD, GRAPHITE POST TUBES
Type 5	1 No. Y-RK-TFP38.5-650SA, GRAPHITE SLEEVE WRAP, 38.5mm x 650mm x 1.8mm

28. Door Viewer	
Manufacturer	Carlisle Brass
Reference	Eurospec AA77SC
Datasheet	Figure 15
Material	Brass SC Plated
Cut Out Diameter	16 mm diameter
Body diameter	13.7 mm diameter
Diameter at Internal Face	26 mm diameter
Diameter at External Face	17.9 mm diameter
Fixing method	Internal screws into external sleeve by approximately 10mm
Location	680 mm and 1580 mm from the bottom of the leaf and 320 mm from the closing edge of the leaf to the centre of the aperture
Details of intumescent protection	1 mm x 50 mm STS Graphite fully lining 16 mm hole
29. Security chain	
Manufacturer	Carlisle Brass
Reference	Eurospec AA75SC
Datasheet	Figure 16
Material	
Face plate to leaf	Chrome Plate Steel
Face plate to frame	Chrome Plate Steel
Chain	Chrome Plate Steel
Overall size	
Face plate to leaf	38 mm high x 45 mm wide 32 mm projection x 2.5 mm thick
Face plate to frame	61 mm high x 16 mm wide x 2.5 mm thick
Location	1581 mm from bottom of leaf
Fixing method	4 No 4.2 mm x 37 mm woodscrews to leaf plate 2 No. 4.2 mm x 37 mm woodscrews to frame plate
Details of intumescent protection	None

30. Numerals	
Manufacturer	Carlisle Brass/Carlisle Brass/UAP/UAP
Reference	Eurospec Eurospec NUM10106/9SSS Eurospec N65C UAP 7TRSAC UAP 6TRSSSSA-NANO
Datasheet	Figure 17
Material	NUM10106/9SSS Stainless Steel / Eurospec N6SC – Brass SC Plated / 7TRSAC Stainless Steel / 6TRSSSSA-NANO COAST - Aluminium
Overall size	NUM10106/9SSS – 100 mm high x 75 mm wide x 5mm thick N65SC - 73 mm high x 42 mm wide x 4 mm thick 7TRSAC – 76 mm high x 4 8mm wide x 2.5 mm 6TRSSSSA-NANO COAST – 78 mm high x 48 mm x 1.35 mm
Location	Between 2285 mm and 1845 mm from the bottom of the leaf centrally between vision panels
Fixing method	NUM10170 – 2 No. 3.5 mm x 16 mm woodscrews N6SC - 2 No. 3 mm x 16 mm woodscrews 7TRSAC - Self-Adhered 6TRSSSSA-NANO COAST – Self-Adhered
Details of intumescent protection	None
Presence of Adhesives	UAP 7TRSAC UAP 6TRSSSSA-NANO
Location	Rear of numeral
Manufacturer	Undisclosed
Type	Self-Adhesive Tape
Reference	Undisclosed
Curing method	Pressure Activated
Application method	Self-Adhesive Tape

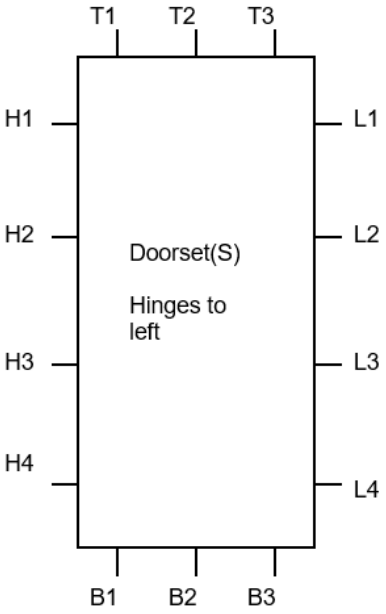
31. Door Knocker	
Manufacturer	Mila
Reference	Supa 6” Urn Door Knocker
Material	Stainless Steel
Overall size	70 mm wide x 172 mm high
Location	1675 mm from bottom of leaf to pivot
Fixing method	3 No. 3.5 mm x 30 mm woodscrews
Details of intumescent protection	None
Presence of Adhesives	None
32. Rain guard / Weatherbar	
Manufacturer	Stormguard
Datasheet	Figure 18
Reference	ICD
Material	Aluminium
Overall size	34 mm x 20 mm

33. Door Closer	
Manufacturer	Carlisle Brass
Reference	Eurospec CDG025/SV
Datasheet	Figure 19
Materials	
Body	Cast aluminium
Closer arm	Steel
Cover	Not fitted
Configuration	Scissor Arm Overhead Door Closer
Overall size	
Body	226 mm wide x 60 mm high x 44 mm deep
Cover	Not fitted
Fixing method	4 qty mechanism fixings – fixed into the door – 4.5 mm x 60 mm countersunk wood screws 2 qty arm fixings (pull side) – fixed into the frame – 4.5 x 23 mm Dome head wood screws 3 qty arm fixings (push side) – fixed into the frame – 5.8 mm x 25 mm countersunk wood screws
Closer Forces – Doorset A	
Average Opening force	51.3 N (measured by WFR)
Average Closing force	20.1 N (measured by WFR)
Distance from hinge	1050 mm (measured at handle position)
Closer Forces – Doorset B	
Average Opening force	66.3 N (measured by WFR)
Average Closing force	15.7 N (measured by WFR)
Distance from hinge	1050 mm (measured at handle position)

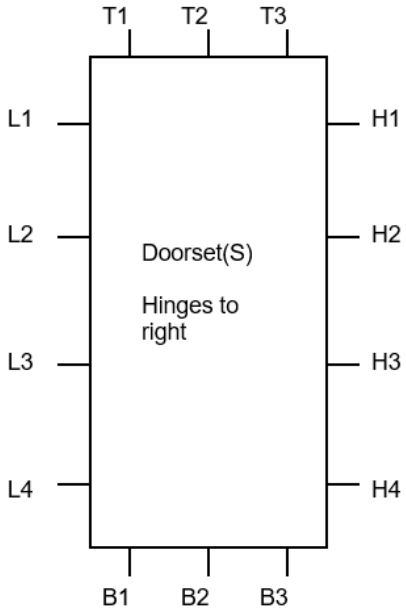
Supporting Construction

34. Light Weight Blockwork	
Manufacturer	Thermalite
Reference	Thermalite Shield
Material	Lightweight concrete blocks
Thickness	100 mm x 215 mm x 440 mm
Density	915 kg/m^3
35. Concrete Lintel	
Type	Steel reinforced concrete lintel
Material	Steel reinforced autoclaved aerated concrete
Density	670 kg/m^3
Thickness	150 mm
Overall Size	150 mm wide x 250 mm high x 3000 mm long

Doorset clearance gaps

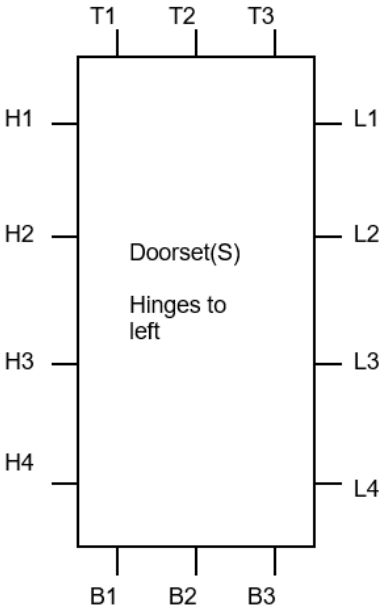


View from unexposed face

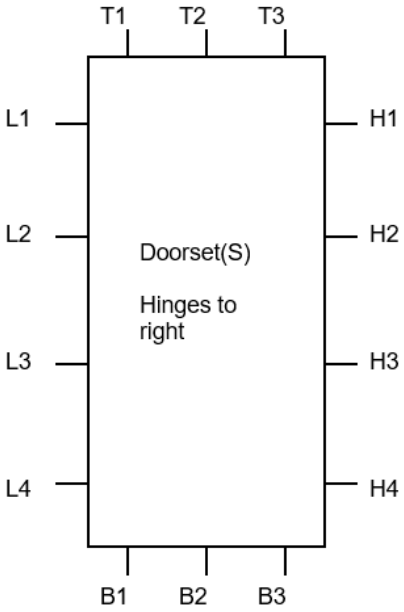


View from unexposed face

Doorset A (mm)					
Hinge Side	Primary	Leaf to Stop	Leading Edge	Primary	Leaf to Stop
H1	3.68	2.46	L1	2.50	1.87
H2	3.13	2.58	L2	2.57	1.92
H3	3.18	2.67	L3	2.39	1.90
H4	2.49	3.04	L4	4.18	1.94
Mean	3.12		Mean	2.91	
Max	3.68		Max	4.18	
Min	2.49		Min	2.39	
Max Permitted	5.40		Max Permitted	5.55	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	3.06	2.71	B1	20.33	
T2	3.89	2.65	B2	20.22	
T3	4.52	2.60	B3	18.57	
Mean	3.82		Mean	19.71	
Max	4.52		Max	20.33	
Min	3.06		Min	18.57	
Max Permitted	6.17		Max Permitted	22.02	



View from unexposed face



View from unexposed face

Doorset B (mm)					
Hinge Side	Primary	Leaf to Stop	Leading Edge	Primary	Leaf to Stop
H1	3.49	1.30	L1	2.63	2.35
H2	2.92	1.23	L2	2.72	2.32
H3	3.30	1.31	L3	1.99	2.26
H4	2.29	1.27	L4	3.01	2.28
Mean	3.00		Mean	2.59	
Max	3.49		Max	3.01	
Min	2.29		Min	1.99	
Max Permitted	5.25		Max Permitted	4.80	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	3.43	2.75	B1	17.68	
T2	3.48	2.84	B2	16.04	
T3	3.94	2.56	B3	16.21	
Mean	3.62		Mean	16.64	
Max	3.94		Max	17.68	
Min	3.43		Min	16.04	
Max Permitted	5.78		Max Permitted	19.16	

Test Observations

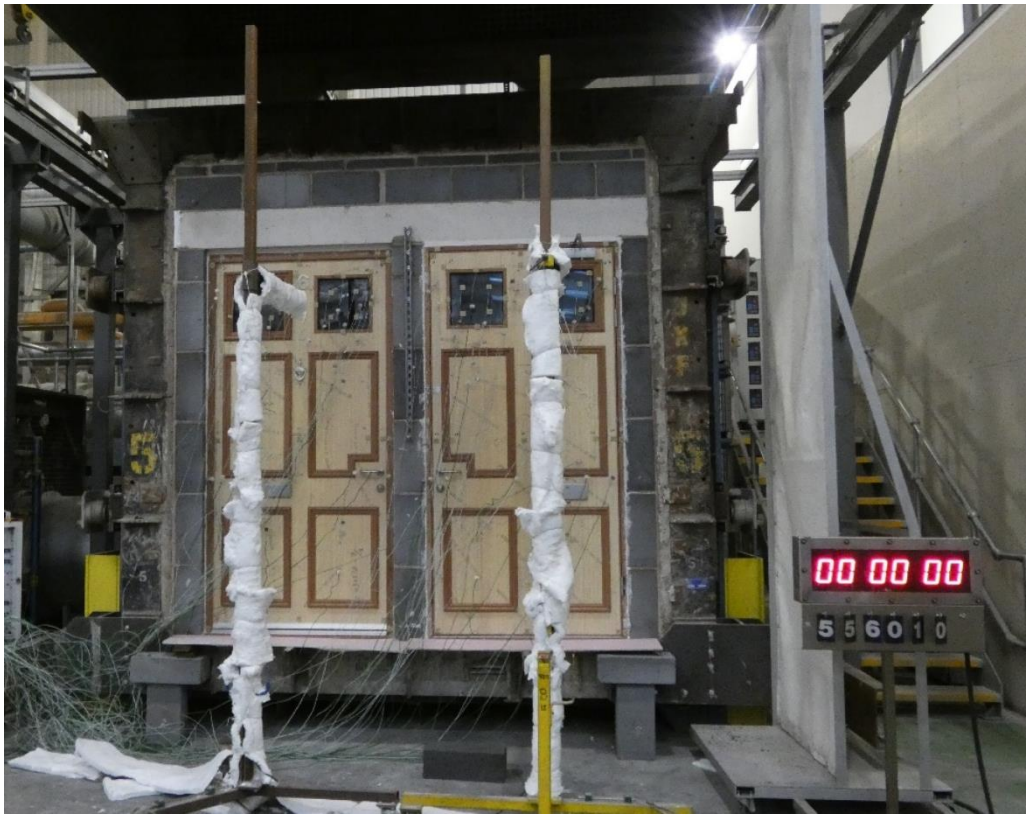
Time		All observations are from the unexposed face unless noted otherwise.
mins	secs	
00	00	**The Test Commences.**
00	52	Crackling sound coming from the glazing.
01	42	Smoke release from top left-hand side corner of Doorset B.
01	51	Smoke release from letterplate and keyhole on Doorset A.
02	21	Smoke release from letterplate on Doorset B.
02	07	Vision panels on Doorset A and Doorset B have started to react.
02	27	Vision panels on Doorset A have reacted and turned white.
04	11	Patches of brown discolouration on vision panels of Doorset A.
06	07	Moisture discolouration around letterplates on Doorset A and Doorset B.
08	32	Brown/black discolouration around letterplates on Doorset A and Doorset B.
12	14	Vision panels on Doorset B have reacted and turned white.
17	52	Moisture discolouration around handle rose and escutcheon on Doorset A.
19	32	Patches of brown discolouration on right vision panel of Doorset B.
20	21	Moisture discolouration around handle rose and escutcheon on Doorset B.
21	22	Intumescent around top and bottom door viewer on Doorset B now visible.
21	24	Intumescent around top door viewer on Doorset A now visible.
24	39	Smoke release from handle rose and escutcheon on Doorset B.
25	24	Patches of brown discolouration on left vision panel of Doorset B.
28	43	Brown discolouration on escutcheon of Doorset A.
32	41	Intumescent around bottom door viewer on Doorset A now visible.
33	07	Brown/black discolouration around handle rose and escutcheon on Doorset A.
34	01	Crackling sound coming from the glazing.

Time		All observations are from the unexposed face unless noted otherwise.
mins	**secs**	
36	**07**	Brown discolouration around top and bottom door viewer on Doorset B and top door viewer on Doorset A.
38	**31**	Smoke release from leading edge of Doorset B.
41	**53**	Brown discolouration around handle rose on Doorset B.
44	**23**	Patches of black discolouration on beading below letterplate of Doorset A caused by liquid dripping.
47	**16**	Vision panels on Doorset A appear slightly yellow.
48	**49**	Smoke release from cracks in right vision panel of Doorset B.
51	**41**	Black/brown discolouration on top left-hand side and right-hand side corners of Doorset B.
52	**46**	Intumescent has liquefied and is visible between the layers of glazing on right vision panel of Doorset A.
54	**17**	Black discolouration around inner perimeter of vision panels on Doorset A and Doorset B.
59	**31**	Cracks on right vision panel of Doorset B have discoloured to brown.
61	**36**	Intumescent has liquefied and is visible between the layers of glazing on left vision panel of Doorset A.
63	**41**	Brown/black discolouration on leading edge of Doorset B.
65	**09**	Black debris fallen from left vision panel of Doorset B on the unexposed face.
65	**40**	Black debris fallen from right vision panel of Doorset A on the unexposed face.
68	**21**	Glazing on the left vision panel of Doorset B has begun to detach.
68	**40**	**Sustained flaming from left vision panel on Doorset B. This means sustained flaming and cotton pad integrity failure are deemed to have occurred on Doorset B.**
68	**57**	**Sustained flaming on Doorset B extinguished.**
73	**33**	**The test is discontinued at the Sponsor's request.**

Test Photographs

The exposed face of the specimens prior to testing

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



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

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

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

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

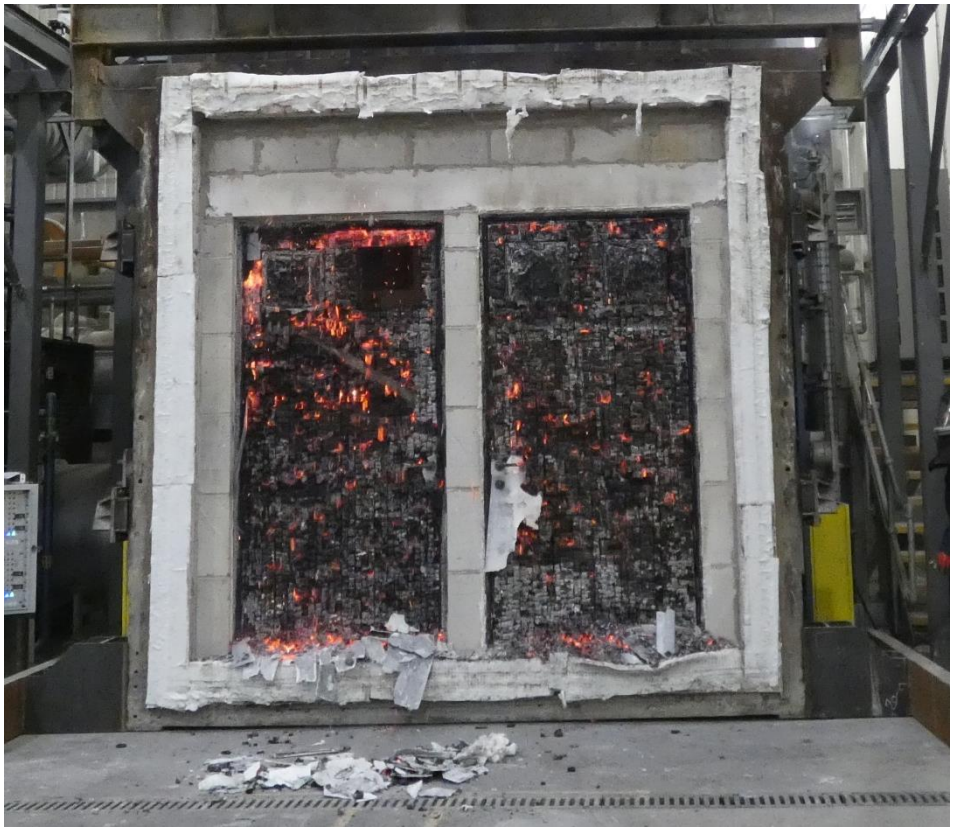
The unexposed face of the specimens after a test duration of 50 minutes

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

The unexposed face of the specimens after a test duration of 68 minutes showing sustained flaming on Doorset B

The unexposed face of the specimens after a test duration of 73 minutes

The exposed face of the specimens immediately after the test



Test Data

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

Time Mins	Specified Furnace Temperature Deg. C	Actual Furnace Temperature Deg. C
0	20	20
2	445	325
4	544	564
6	603	621
8	645	575
10	678	663
12	705	670
14	728	697
16	748	734
18	766	741
20	781	756
22	796	772
24	809	796
26	820	822
28	831	843
30	842	858
32	851	859
34	860	866
36	869	875
38	877	879
40	885	882
42	892	887
44	899	894
46	906	901
48	912	915
50	918	929
52	924	936
54	930	934
56	935	936
58	940	941
60	945	947
62	950	952
64	955	955
66	960	957
68	964	958
70	968	959
72	973	968
73	975	971

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

Time Mins	T/C Number 20 Deg. C	T/C Number 21 Deg. C	T/C Number 22 Deg. C	T/C Number 23 Deg. C	T/C Number 24 Deg. C	Mean Temp Deg. C
0	20	20	19	20	20	20
2	20	20	19	20	20	20
4	20	19	19	20	20	20
6	20	20	19	20	20	20
8	20	20	19	20	20	20
10	20	19	19	19	20	19
12	20	20	19	20	20	20
14	20	20	19	20	20	20
16	20	20	20	20	20	20
18	20	20	20	20	20	20
20	21	21	20	20	21	21
22	21	21	21	21	22	21
24	22	22	21	22	23	22
26	23	23	22	23	24	23
28	24	24	23	24	26	24
30	25	25	24	25	28	25
32	27	27	25	26	30	27
34	28	28	27	28	32	29
36	30	30	28	30	35	31
38	32	32	30	32	37	33
40	35	34	31	34	39	35
42	37	36	33	37	41	37
44	39	38	36	40	43	39
46	41	40	39	42	46	42
48	43	43	42	45	49	44
50	46	45	46	48	52	47
52	48	48	51	51	55	51
54	50	51	56	54	60	54
56	53	54	60	57	63	57
58	56	58	65	61	68	62
60	59	62	69	65	73	66
62	62	67	74	70	78	70
64	66	71	76	75	83	74
66	70	76	75	79	82	76
68	74	80	75	81	82	78
70	78	84	76	80	84	80
72	83	87	79	82	87	84
73	85	88	82	83	88	85

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

Time Mins	T/C Number 25 Deg. C	T/C Number 26 Deg. C	T/C Number 27 Deg. C	T/C Number 28 Deg. C	T/C Number 29 Deg. C
0	19	19	21	21	20
2	19	19	21	21	20
4	19	19	20	21	20
6	19	20	21	21	20
8	20	20	21	22	20
10	21	22	21	23	21
12	22	23	22	24	22
14	23	25	22	25	23
16	24	27	23	26	24
18	26	30	24	27	25
20	27	32	26	29	26
22	29	34	28	32	28
24	31	37	30	37	30
26	33	39	32	40	33
28	35	42	35	43	35
30	37	45	37	46	37
32	39	47	40	48	40
34	41	49	43	51	43
36	42	52	46	53	46
38	44	54	50	56	48
40	46	56	53	58	51
42	48	59	56	61	54
44	50	61	59	63	57
46	53	65	61	65	61
48	55	68	64	69	64
50	58	71	66	73	70
52	61	75	69	77	76
54	65	79	71	79	82
56	68	81	73	83	88
58	72	85	76	85	91
60	76	87	78	88	93
62	81	89	81	92	95
64	85	93	84	94	97
66	89	95	87	97	99
68	90	98	91	101	100
70	93	99	96	106	101
72	97	104	103	111	103
73	99	106	106	114	104

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

Time Mins	T/C Number 30 Deg. C	T/C Number 31 Deg. C	T/C Number 32 Deg. C	T/C Number 33 Deg. C	T/C Number 34 Deg. C
0	20	20	21	21	20
2	19	20	21	21	20
4	19	21	21	22	20
6	20	23	21	25	20
8	20	26	21	27	20
10	20	30	21	31	20
12	20	37	21	35	20
14	21	60	21	38	20
16	22	66	22	40	20
18	23	72	22	42	20
20	23	77	23	43	21
22	24	79	23	49	21
24	24	80	24	55	22
26	25	85	25	59	23
28	26	90	27	60	23
30	27	92	28	62	24
32	28	94	30	63	26
34	29	96	33	65	28
36	31	98	35	68	29
38	32	101	38	68	31
40	34	104	41	68	33
42	36	110	43	69	35
44	39	117	46	70	38
46	41	124	48	73	40
48	44	133	51	75	43
50	46	142	53	77	45
52	48	154	56	80	48
54	51	165	59	82	51
56	53	177	61	85	54
58	56	189	64	89	58
59	58	195	66	91	60
60	60	201	68	92	62
62	65	210	71	96	66
64	70	221	75	97	69
66	75	232	79	99	72
68	79	249	82	101	74
70	79	265	85	106	74
72	80	295	88	110	76
73	80	310	89	113	77

Individual temperatures recorded on the frame of Doorset A

Time Mins	T/C Number 35 Deg. C	T/C Number 36 Deg. C	T/C Number 37 Deg. C	T/C Number 38 Deg. C	T/C Number 39 Deg. C
0	18	19	21	21	19
2	18	19	21	21	19
4	18	19	21	21	19
6	18	19	21	21	19
8	18	19	21	21	19
10	18	20	21	22	20
12	19	20	22	22	20
14	19	21	22	23	*
16	20	22	22	23	*
18	21	24	23	24	*
20	22	25	24	25	*
22	24	26	26	26	*
24	26	28	27	28	26
26	30	30	29	30	28
28	35	32	32	32	29
30	39	34	34	34	31
32	41	37	36	36	33
34	40	39	38	38	35
36	43	41	40	40	38
38	45	43	42	41	40
40	47	45	43	43	42
42	48	47	45	44	44
44	48	49	46	46	45
46	49	50	48	48	47
48	49	52	49	50	49
50	50	53	50	51	50
52	51	55	52	53	51
54	52	56	53	54	53
56	53	57	55	56	54
58	54	58	56	57	55
60	54	59	57	59	57
62	55	61	59	60	59
64	56	61	60	61	61
66	57	63	62	63	63
68	58	64	64	64	65
70	59	64	67	66	67
72	61	66	69	68	70
73	61	66	70	69	71

***Thermocouple malfunction**

Individual temperatures recorded on left vision panel of Doorset A

Time Mins	T/C Number 40 Deg. C	T/C Number 41 Deg. C	T/C Number 42 Deg. C	T/C Number 43 Deg. C	Mean Temp Deg. C
0	21	20	21	21	21
2	21	20	22	21	21
4	21	21	22	22	22
6	24	23	25	24	24
8	26	25	27	26	26
10	29	29	30	31	30
12	34	35	34	39	36
14	40	40	39	50	42
16	47	46	45	56	49
18	52	51	50	56	52
20	57	56	54	56	56
22	64	61	58	57	60
24	72	68	63	60	66
26	81	78	68	68	74
28	85	84	74	75	80
30	88	86	81	81	84
32	90	88	88	88	89
34	92	89	91	91	91
36	93	89	93	91	92
38	95	89	94	92	93
40	98	90	97	92	94
42	102	91	101	92	97
44	106	94	105	94	100
46	113	98	110	96	104
48	121	103	117	100	110
50	129	111	125	105	118
52	138	120	134	111	126
54	149	131	143	120	136
56	160	142	153	130	146
58	171	155	163	141	158
59	176	161	168	149	164
60	182	169	172	155	170
62	194	184	182	167	182
64	198	193	191	179	190
65	201	197	193	184	194
66	203	201	195	191	198
68	211	213	198	200	206
70	222	225	207	206	215
72	231	235	214	210	223
73	236	240	219	213	227

Individual temperatures recorded on right vision panel of Doorset A

Time Mins	T/C Number 48 Deg. C	T/C Number 49 Deg. C	T/C Number 50 Deg. C	T/C Number 51 Deg. C	Mean Temp Deg. C
0	22	21	22	20	21
2	22	*	22	20	21
4	23	*	23	*	23
6	25	*	25	*	25
8	28	*	28	*	28
10	33	*	32	*	33
12	40	*	35	*	38
14	45	38	38	37	40
16	50	42	41	39	43
18	57	50	46	43	49
20	67	59	52	47	56
22	78	66	59	54	64
24	85	73	69	65	73
26	90	77	79	75	80
28	92	79	86	80	84
30	95	79	89	83	87
32	100	78	92	85	89
34	105	78	92	85	90
36	112	79	94	84	92
38	117	83	96	84	95
40	120	88	99	85	98
42	122	94	103	87	102
44	126	101	108	90	106
46	134	108	115	95	113
48	144	117	123	101	121
50	156	124	132	109	130
52	169	133	144	117	141
54	186	143	155	125	152
55	195	148	160	128	158
56	200	154	166	131	163
57	205	156	171	133	166
58	212	160	177	136	171
60	228	167	188	141	181
62	244	174	196	146	190
64	258	184	204	153	200
66	271	194	213	160	210
68	282	204	224	157	217
70	295	220	241	164	230
72	307	227	259	183	244
73	312	229	267	190	250

***Thermocouple malfunction**

Individual temperatures recorded on right vision panel frame of Doorset A

Time Mins	T/C Number 52 Deg. C	T/C Number 53 Deg. C	T/C Number 54 Deg. C	T/C Number 55 Deg. C
0	21	22	21	11
2	20	22	21	11
4	20	22	21	11
6	20	22	21	11
8	20	25	23	11
10	*	28	28	12
12	*	33	35	15
14	37	37	39	18
16	40	39	42	22
18	43	41	44	25
20	45	44	47	28
22	47	46	49	30
24	47	48	50	31
26	47	50	52	34
28	46	52	53	36
30	46	54	54	38
32	47	57	55	39
34	47	58	56	41
36	48	61	58	42
38	50	63	60	44
40	52	65	62	46
42	54	68	65	47
44	57	71	68	49
46	59	74	72	52
48	60	77	77	53
50	60	80	79	55
52	60	82	81	57
54	58	86	83	59
56	56	89	86	61
58	54	92	87	63
60	53	96	89	66
62	54	99	91	68
64	58	103	93	70
66	63	108	96	73
68	67	113	99	76
70	73	119	103	78
72	79	126	109	81
73	81	129	111	82

***Thermocouple malfunction**

Individual temperatures recorded on and above letterplate of Doorset A

Time Mins	T/C Number 56 Deg. C	T/C Number 57 Deg. C
0	20	20
2	21	20
4	30	21
6	40	22
8	46	25
10	49	39
12	53	45
14	58	59
16	60	59
18	61	60
20	60	63
22	59	66
24	59	73
26	60	73
28	60	74
30	60	73
32	60	76
34	60	75
36	60	74
38	60	71
40	60	73
42	60	73
44	61	75
46	63	75
48	63	78
50	65	78
52	67	79
54	70	81
56	72	86
58	75	92
60	79	96
62	82	94
64	85	93
66	86	92
68	91	98
70	98	101
72	105	107
73	108	110

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

Time Mins	T/C Number 58 Deg. C	T/C Number 59 Deg. C	T/C Number 60 Deg. C	T/C Number 61 Deg. C	T/C Number 62 Deg. C	Mean Temp Deg. C
0	20	20	18	18	19	19
2	20	20	18	18	18	19
4	20	20	18	18	19	19
6	20	20	19	18	18	19
8	20	20	19	18	18	19
10	20	20	24	18	18	20
12	20	20	23	18	18	20
14	20	20	22	18	19	20
16	20	20	22	18	19	20
18	20	20	21	18	19	20
20	21	21	21	19	19	20
22	21	21	21	20	20	21
24	22	22	22	20	21	21
26	23	22	22	21	22	22
28	24	23	23	23	23	23
30	25	24	24	24	25	24
32	27	26	25	25	26	26
34	28	27	26	27	28	27
36	30	29	27	29	30	29
38	32	31	29	31	32	31
40	34	33	30	33	34	33
42	36	35	32	36	36	35
44	38	37	34	38	38	37
46	40	39	36	41	40	39
48	41	41	38	44	41	41
50	44	43	41	47	43	44
52	46	45	44	51	45	46
54	49	47	46	55	48	49
56	52	49	50	60	51	52
58	56	52	53	64	54	56
60	60	54	57	68	57	59
62	64	56	60	73	61	63
64	69	60	65	77	65	67
66	77	63	69	81	69	72
68	84	68	75	84	74	77
70	70	73	78	87	77	77
72	65	78	78	90	80	78
73	63	80	77	93	82	79

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

Time Mins	T/C Number 63 Deg. C	T/C Number 64 Deg. C	T/C Number 65 Deg. C	T/C Number 66 Deg. C	T/C Number 67 Deg. C
0	19	20	26	17	19
2	18	20	25	17	18
4	19	20	25	20	18
6	19	22	25	20	18
8	18	23	25	19	18
10	18	25	*	20	18
12	19	27	*	21	18
14	19	29	*	22	19
16	19	31	*	24	19
18	19	32	*	26	19
20	20	33	*	28	19
22	22	34	*	30	19
24	23	35	*	32	20
26	26	36	29	35	20
28	28	37	30	37	21
30	30	38	32	39	22
32	33	40	33	41	23
34	35	41	35	42	24
36	37	42	36	44	25
38	39	43	38	45	27
40	41	45	40	46	29
42	43	46	41	47	31
44	44	47	42	49	32
46	47	49	44	50	34
48	48	51	46	52	36
50	51	53	48	53	38
52	53	55	50	55	39
54	58	58	53	57	41
56	60	60	56	59	43
58	64	63	60	65	44
60	67	66	62	69	46
62	73	68	65	71	48
64	77	71	68	72	50
66	82	73	70	74	52
68	86	76	73	75	55
70	89	79	75	76	59
72	89	77	77	75	65
73	91	82	81	75	68

***Thermocouple malfunction**

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

Time Mins	T/C Number 68 Deg. C	T/C Number 69 Deg. C	T/C Number 70 Deg. C	T/C Number 71 Deg. C	T/C Number 72 Deg. C
0	19	*	18	18	18
2	19	*	18	18	18
4	19	*	18	19	18
6	19	*	18	23	18
8	19	*	18	31	19
10	19	*	19	41	19
12	19	*	19	55	19
14	19	*	19	72	19
16	19	*	19	88	19
18	20	*	20	95	19
20	20	*	20	99	19
22	20	*	21	103	20
24	21	*	22	108	20
26	22	*	23	112	21
28	23	*	25	113	21
30	24	*	26	112	22
32	25	*	28	109	23
34	26	*	30	107	25
36	27	32	32	104	26
38	29	32	34	105	27
40	30	33	36	106	28
42	32	34	38	109	29
44	33	36	40	113	31
46	36	38	43	119	33
48	38	41	46	125	35
50	41	44	49	134	37
52	44	48	52	145	39
54	48	51	55	159	41
56	51	55	59	173	44
58	55	59	65	190	46
59	57	60	67	197	47
60	59	62	68	204	49
62	64	66	71	221	52
64	69	69	73	243	55
66	73	72	75	269	60
68	77	74	78	293	66
70	78	72	71	317	70
72	77	64	74	343	75
73	79	68	78	357	76

***Thermocouple malfunction**

Individual temperatures recorded on the frame of Doorset B

Time Mins	T/C Number 73 Deg. C	T/C Number 74 Deg. C	T/C Number 75 Deg. C	T/C Number 76 Deg. C	T/C Number 77 Deg. C
0	18	20	20	18	18
2	18	21	20	18	18
4	18	29	20	19	18
6	18	55	20	18	18
8	18	53	20	19	18
10	18	60	21	19	18
12	18	63	20	19	18
14	18	69	25	20	18
16	18	62	31	23	*
18	19	54	33	26	*
20	25	50	35	30	*
22	33	49	38	33	*
24	38	49	39	35	19
26	44	49	38	39	20
28	49	50	38	41	19
30	55	53	38	43	20
32	60	50	38	44	22
34	61	52	39	45	22
36	63	55	41	47	23
38	64	55	42	47	24
40	67	55	43	47	25
42	66	55	44	47	28
44	65	57	45	48	29
46	64	58	47	49	30
48	63	59	48	50	31
50	63	60	49	50	32
52	63	61	50	51	34
54	64	61	51	51	36
56	65	62	53	52	38
58	66	63	55	54	39
60	67	64	56	56	41
62	69	66	58	57	43
64	70	67	59	59	44
66	71	69	61	61	46
68	74	71	62	62	46
70	78	75	63	64	47
72	81	75	66	65	47
73	83	79	69	65	48

***Thermocouple malfunction**

Individual temperatures recorded on left vision panel of Doorset B

Time Mins	T/C Number 78 Deg. C	T/C Number 79 Deg. C	T/C Number 80 Deg. C	T/C Number 81 Deg. C	Mean Temp Deg. C
0	20	21	18	18	19
2	21	21	18	18	20
4	23	24	20	20	22
6	29	32	26	26	28
8	43	46	39	39	42
10	62	66	56	55	60
12	84	88	75	74	80
14	109	113	98	97	104
16	114	121	108	109	113
18	117	122	109	106	114
20	118	121	111	106	114
22	110	116	111	106	111
24	107	116	108	106	109
26	108	121	108	113	113
28	113	128	103	123	117
30	115	125	103	128	118
32	116	121	106	117	115
34	125	121	106	116	117
36	140	130	111	122	126
38	159	140	122	128	137
40	176	152	130	135	148
41	185	158	136	138	154
42	194	166	142	142	161
43	201	174	149	146	168
44	209	184	155	151	175
46	227	202	168	164	190
48	247	220	181	177	206
50	268	238	193	189	222
52	292	257	210	203	241
54	316	275	226	218	259
56	339	294	243	236	278
58	360	310	259	253	296
60	382	324	275	270	313
62	399	337	290	286	328
64	402	350	305	301	340
66	404	363	317	313	349
68	410	377	329	326	361
70	**	**	**	**	**
72	**	**	**	**	**
73	**	**	**	**	**

***Thermocouple malfunction** ****Thermocouples detached during extinguishing of sustained flaming

Individual temperatures recorded on left vision panel frame of Doorset B

Time Mins	T/C Number 82 Deg. C	T/C Number 83 Deg. C	T/C Number 84 Deg. C	T/C Number 85 Deg. C
0	19	19	20	20
2	19	19	20	20
4	19	19	20	20
6	20	20	20	20
8	25	20	22	21
10	32	21	27	23
12	38	23	31	29
14	44	25	35	35
16	50	28	39	39
18	53	33	43	42
20	55	38	45	44
22	57	42	47	46
24	58	45	49	47
26	60	48	51	49
28	61	50	52	50
30	62	51	53	51
32	63	53	55	52
34	64	55	57	54
36	66	57	60	56
38	69	60	63	58
40	72	63	68	61
42	76	67	71	64
44	80	71	73	67
46	84	74	76	70
48	88	76	78	72
50	93	79	82	74
52	98	82	84	77
54	102	86	88	80
56	107	91	91	83
58	114	94	93	85
60	122	98	95	89
62	133	103	99	92
64	145	110	104	95
66	185	119	116	98
67	210	124	124	100
68	220	130	133	103
70	*	*	*	*
72	*	*	*	*
73	*	*	*	*

*Thermocouple malfunction

Individual temperatures recorded on right vision panel of Doorset B

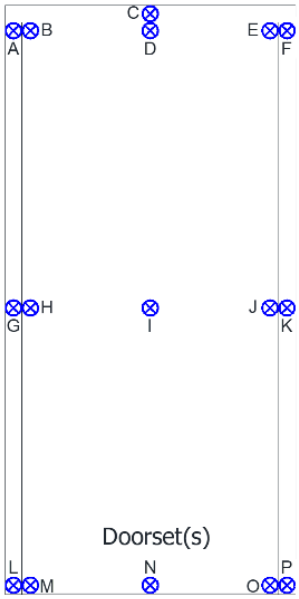
Time Mins	T/C Number 86 Deg. C	T/C Number 87 Deg. C	T/C Number 88 Deg. C	T/C Number 89 Deg. C	Mean Temp Deg. C
0	20	21	18	20	20
2	20	21	18	20	20
4	*	22	19	21	21
6	*	26	23	25	25
8	*	34	32	32	33
10	*	46	46	44	45
12	69	62	62	59	63
14	88	80	82	77	82
16	93	90	92	92	92
18	94	93	96	97	95
20	97	96	101	100	99
22	101	101	110	105	104
24	99	110	110	106	106
26	96	111	108	105	105
28	97	109	106	105	104
30	101	111	106	105	106
32	107	116	108	108	110
34	101	119	105	115	110
36	98	115	105	117	109
38	99	117	107	118	110
40	102	115	109	113	110
42	109	117	113	112	113
44	118	123	121	102	116
46	127	129	130	102	122
48	135	136	141	103	129
50	143	143	154	106	137
52	153	151	168	112	146
54	164	163	182	119	157
55	168	169	189	124	163
56	172	176	194	128	168
57	178	183	200	133	174
58	183	190	206	139	180
60	194	203	221	150	192
62	203	216	238	163	205
64	211	228	253	174	217
66	218	238	267	184	227
68	223	249	278	194	236
70	233	258	289	204	246
72	246	269	298	214	257
73	247	274	303	219	261

***Thermocouple malfunction**

Individual temperatures recorded on and above letterplate of Doorset B

Time Mins	T/C Number 94 Deg. C	T/C Number 95 Deg. C
0	19	20
2	20	20
4	44	24
6	58	32
8	88	41
10	119	62
12	110	59
14	101	61
16	94	57
18	88	57
20	85	60
22	84	59
24	84	55
26	85	52
28	85	52
30	85	52
32	84	53
34	83	53
36	82	54
38	82	54
40	82	57
42	82	59
44	83	59
46	85	60
48	85	62
50	86	65
52	88	67
54	89	69
56	90	71
58	91	74
60	92	76
62	94	78
64	95	80
66	96	83
68	98	85
70	99	88
72	101	90
73	102	92

Horizontal deflections of Doorset A

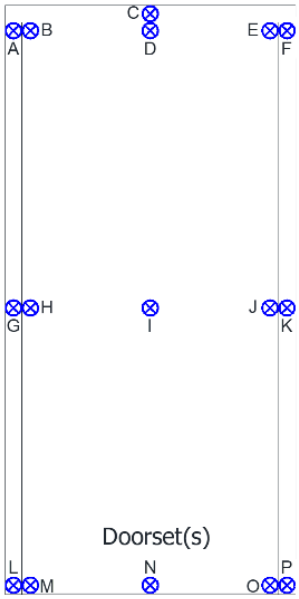


Deflections (mm)															
Time-mins	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	-3	0	1	0	0	0	-8	5	5	0	1	3	0	3	3	-2
20	9	-3	8	*	2	1	-3	3	10	1	1	3	0	4	3	-1
30	-2	2	2	*	2	0	-3	0	7	3	3	3	1	3	1	0
40	3	1	-3	-2	1	-4	-5	2	2	3	2	3	2	-1	0	0
50	16	-6	4	-7	-2	-3	-5	0	-4	1	2	1	3	-3	3	0
60	-2	0	-3	-6	2	-6	-2	-2	-9	0	2	4	3	-1	0	-1
68	3	-9	-1	*	1	0	-5	0	-	0	1	1	8	2	1	0

*Deflection gauge 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	1	-4	0	-3	-5	1	0	2	1	0	-1	0	0	1	-1	-2
20	3	-3	-2	2	-4	-2	-2	2	9	-2	-5	-2	-2	3	0	0
30	1	-7	-2	-1	2	-6	-1	1	5	0	*	0	3	1	1	0
40	5	2	-3	-7	-2	-4	-4	1	-3	-1	3	0	-2	-3	1	-1
50	3	-2	-3	-6	-3	5	2	0	-2	-3	5	0	0	-5	2	0
60	3	-3	-7	-4	-2	0	1	-2	-12	-3	1	0	1	-8	0	0
68	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**

*Deflection gauge malfunction

**Unable to measure deflections due to the extinguishing of sustained flaming on Doorset B

Positive values indicate movement towards the furnace

Recorded heat radiation intensity from Doorset A

Time Minutes	Radiation Intensity kW/m^2
0	0.000
2	0.061
4	0.027
6	0.030
8	0.031
10	0.031
12	0.036
14	0.045
16	0.046
18	0.058
20	0.056
22	0.072
24	0.066
26	0.079
28	0.077
30	0.084
32	0.093
34	0.095
36	0.099
38	0.117
40	0.124
42	0.136
44	0.143
46	0.144
48	0.170
50	0.184
52	0.202
54	0.215
56	0.240
58	0.255
60	0.290
62	0.324
64	0.373
66	0.391
68	0.415
70	0.440
72	0.489
73	0.637

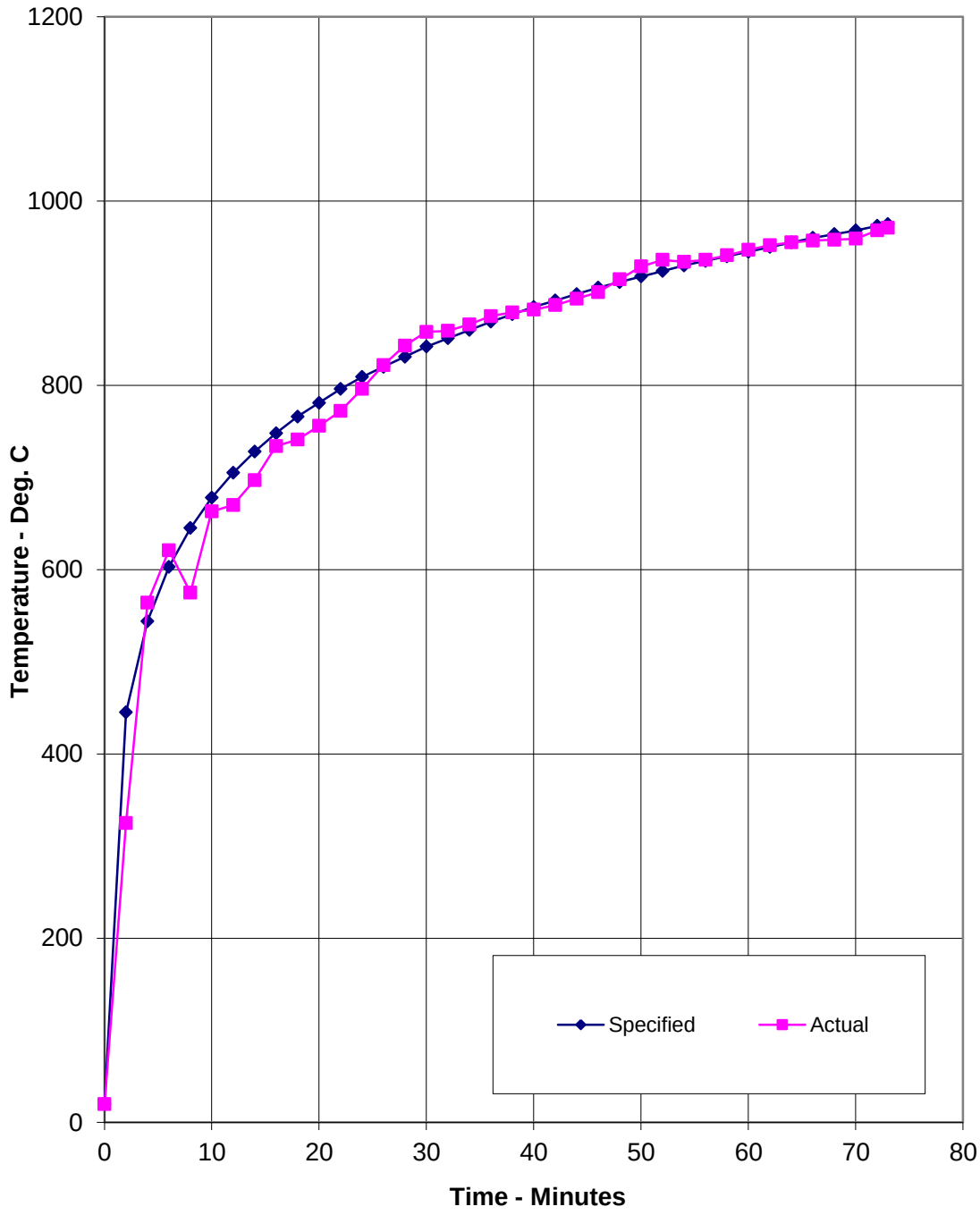
Recorded heat radiation intensity from Doorset B

Time Minutes	Radiation Intensity DS B kW/m^2
0	0.000
2	*
4	*
6	*
8	*
10	0.025
12	0.027
14	0.049
16	0.040
18	0.041
20	0.057
22	0.056
24	0.079
26	0.066
28	0.085
30	0.082
32	0.089
34	0.088
36	0.100
38	0.118
40	0.127
42	0.133
44	0.144
46	0.155
48	0.198
50	0.213
52	0.240
54	0.269
56	0.291
58	0.329
60	0.391
62	0.409
64	0.424
66	0.491
68	0.560
70	0.562
72	0.637
73	**

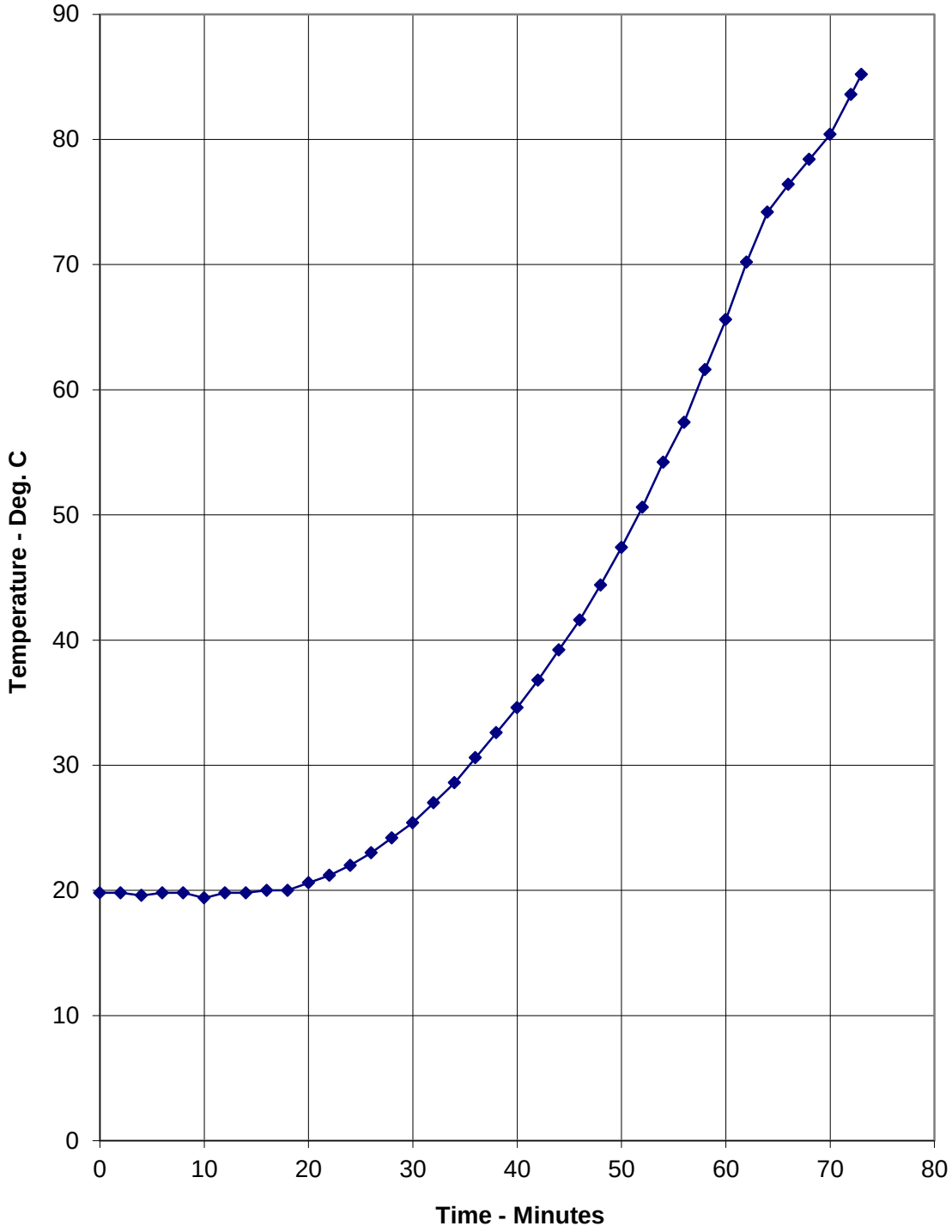
***Radiometer malfunction**

****Radiometer removed to allow access to sustained flaming**

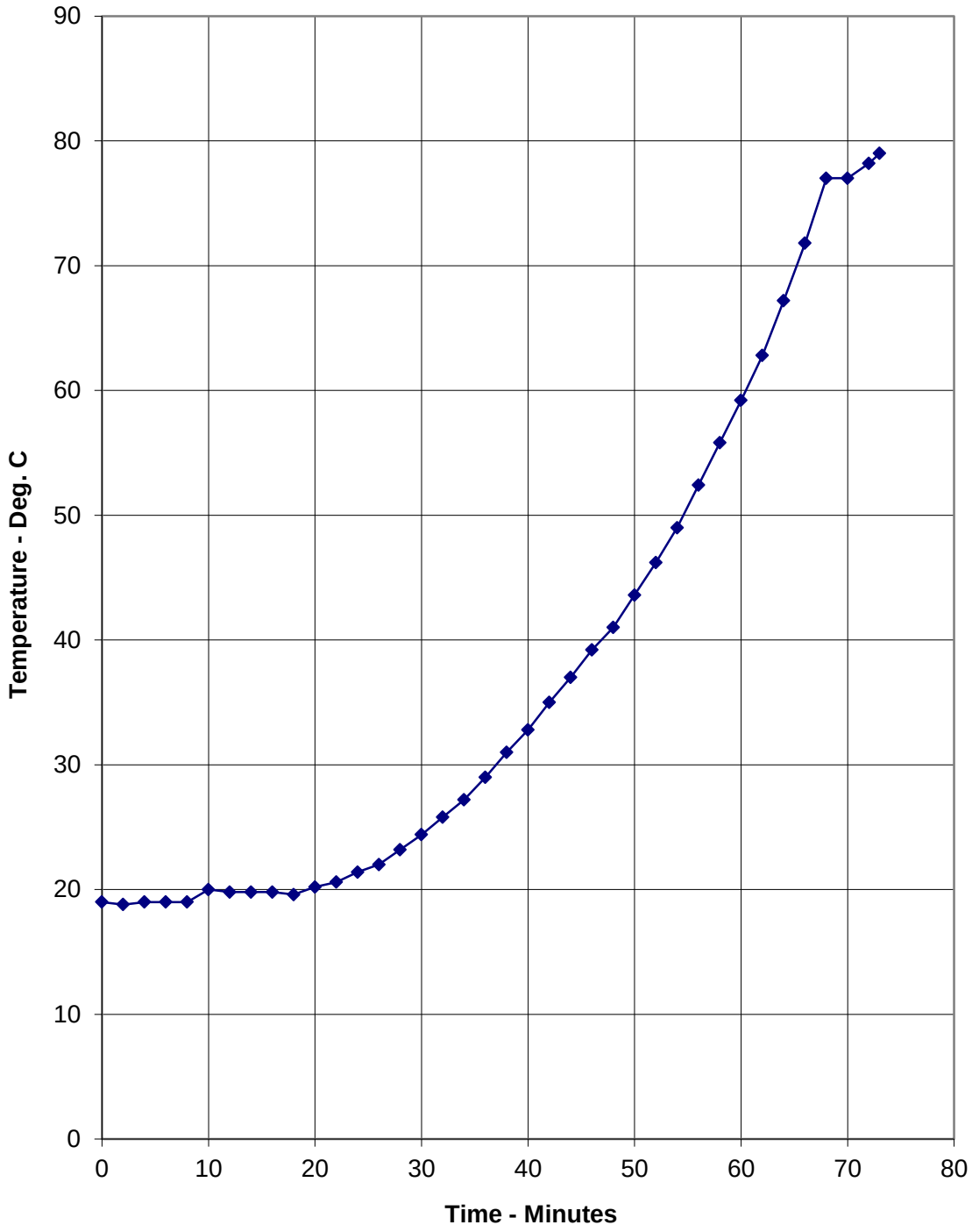
Graph showing mean furnace temperature, together with the temperature/time relationship specified in BS EN 1363-1: 2020



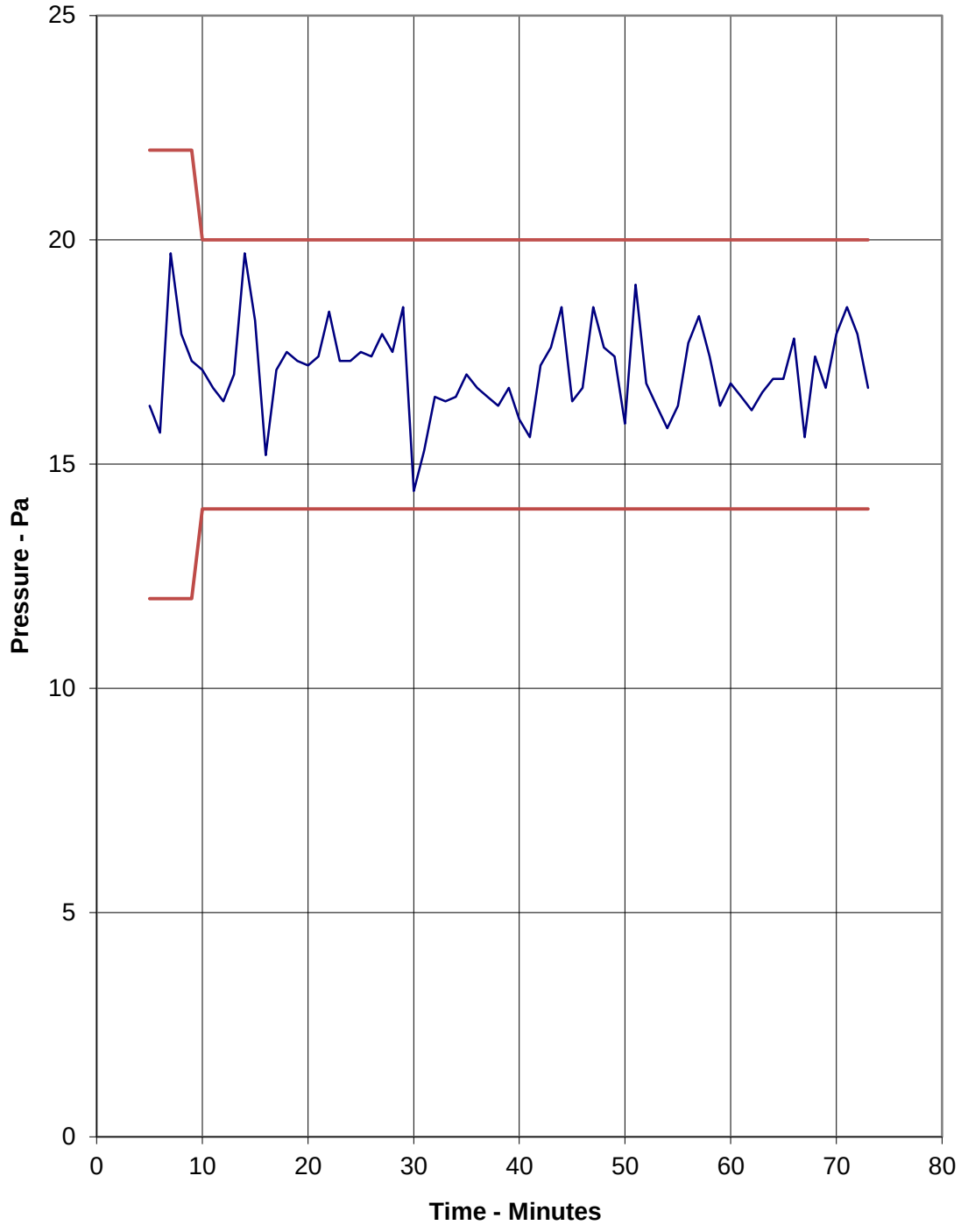
Graph showing mean temperature recorded on the unexposed surface of Doorset A



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



Graph showing recorded furnace pressure at 2500 mm above the threshold of doorset



On-going Implications

Validity

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

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

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

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

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

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

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

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

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

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

022-2018 - Discrete areas statement of insulation criteria

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

034-2018 - Opening/closing of doors before test

062-2022 V2 - Reporting test results

Revision history

N/A

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

Sample Report

Not attached - Copies of sampling reports available on request.

warringtonfire
Proud to be part of element

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