



Fire resistance test report

Issuing laboratory: Warringtonfire Testing and Certification Limited

Test standard:BS 476-20:1987 and BS 476-22:1987 Clause 8Test sponsor:Wood International Agency LtdProduct:540199/RTest date:22 January 2024Version:2

This report supersedes the original report dated 2/09/2024

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









Quality management

Version	Date	Information about the report			
1	2	Description	Initial issue		
	September 2024		Prepared by	Authorised by	
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1	17 September 2024	Description	has notice Item 23 stated the PU. However it was shown to s has now been amended		
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Signed for and on behalf of Warringtonfire Testing and Certification Limited





Executive summary

This report documents the findings of the fire resistance test of doorsets in accordance with BS 476-20:1987 and BS 476-22:1987 Clause 8 determination of fire resistance of uninsulated doorsets and shutter assemblies with deviations as described in Table 3.

Warringtonfire Testing and Certification Limited (Warringtonfire) performed the test on 22 January 2024 at the request of Wood International Agency Ltd.

Table 1 provides a summary of the test specimen, Table 2 gives details of the supporting construction and Table 3 describes the summary of the test results.

Item	Detail	Opening direction
Doorset A	Full size glazed timber door	Towards the furnace
Doorset B	Designed timber door with glazing	Towards the furnace
Latching conditions	Disengaged unlatched unlocked	

Table 1 Test specimen

Table 2 Supporting construction

Item	Detail			
Supporting construction	150 mm thick low-density concrete wall with a low-density concrete lintel at the head.			
Dimensions	Width		3050 mm	
	Height		3050 mm	
	Thickness		150 mm	
Aperture dimensions	Width			Height
	Doorset A	1144 mm		2474 mm
	Doorset B	1029 mm		2272 mm
Restraint conditions	Restrained on all edges			





Table 3Summary of test results

Item	Criteria	Results
Doorset A	Integrity	30 minutes
	Radiation of 15 kW/m ²	Radiation intensity of 15 kW/m ² was not reached after 34 minutes
Doorset B	Integrity	33 Minutes
	Radiation of 15 kW/m ²	Radiation intensity of 15 kW/m ² was not reached after 34 minutes
Notes:		
The test results for the specimen only apply to the tested orientation. The test was discontinued after 34 minutes. '*' indicates failure due to integrity failure.		

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1. Introduction

This report documents the findings of the fire resistance test of doorsets in accordance with BS 476-20:1987 and BS 476-22:1987 Clause 8 determination of fire resistance of uninsulated doorsets and shutter assemblies.

Warringtonfire performed the test on 22 January 2024 at the request of the test sponsor listed in Table 4.

Table 4Test sponsor(s) details

Test sponsor(s)	Address
Wood International Agency Ltd	16 King Edward Road . Brentwood, Essex CM14 4HL United Kingdom

2. Test specimen and supporting construction

2.1 Drawings of test assembly

The description of the test specimen and supporting construction are detailed in Section 2.2 and illustrated in Figure 1 to Figure 21. All measurements are in millimetres – unless indicated otherwise.

The drawings were supplied by the test sponsor and verified by Warringtonfire (unless stated otherwise in Section 2.2).



















Figure 2 General Elevations of Doorset A







Figure 3 Horizontal Section Through Doorset A







Figure 4 Doorset A Horizontal Section Detail Views







Figure 5 Vertical Section Through Doorset A







DETAIL D

Figure 6 Doorset A Vertical Section Detail Views







Figure 7 General Elevations of Doorset B







Figure 8 Horizontal Section Through Doorset B







Figure 9 Doorset B Horizontal Section Detail Views







Figure 10 Vertical Section Through Doorset B

Test standard: BS 476-20:1987 and BS 476-22:1987 Clause 8 Job number: 540199/R Test sponsor: Wood International Agency Ltd







Figure 11 Doorset B Vertical Section Detail Views







Figure 12 Doorset A- Client Drawing – Page 1







Figure 13 Doorset A – Client Drawing 0 Page 2







Figure 14 Doorset B – Client Drawing – Page 1







Figure 15 Doorset B – Client Drawing – Page 2







Figure 16 Doorset B – Client Drawing – Page 3







NB - bright zinc finish variant has thickness of 3.1mm



Figure 17 Items 12 & 30 – JH603BUFR-M-BZP Hinge Drawing







Figure 18 Item 13 ZDC0024A-PN Closer Drawing







Figure 19 Item 15 – ZDL0060RSS lockset Drawing







Figure 20 Item 31 – ITS/11204 Closer Drawing







Figure 21 Item 33 -ZDL7260SS Lockset Drawing





2.2 Schedule of components

Table 5 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 5	Schedule	of	components
	Ochicaule		componenta

1. Door Frame	
Manufacturer	By Dezign Carpentry
Material	Redwood Head and Redwood Jambs
Density recorded at sampling visit	562 kg/m ³
Moisture content recorded at sampling visit	14%
Moisture content recorded at test lab	10.9%
Overall size	1111 mm wide x 2444 mm high (see figure 2)
Frame (Head)	70 mm wide x 30 mm thick (see figure 12)
Frame (Jambs)	70 mm wide x 30 mm thick (see figure 12)
Stop	20 mm wide x 12 mm deep (see figure 12)
Jamb to Head jointing method, fixing detail and location	10mm Trench cut into head to accommodate Jambs
Stop to Frame jointing method, fixing detail and location	Pinned to frame with 16g 30 mm brad nails spaced at nominally 300 mm centres no more than 100 mm away from corners (see figure 12)
Presence of Adhesives	No
Frame to supporting construction fixing method	
Manufacturer	Easydrive
Reference	TX Countersink Concrete Screws
Type & material	ZPYP Steel
Overall size	7.5 mm diameter x 100 mm long
Spacing	<200 mm from top corner of jamb, <200 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
Packing Material Dimension	30 mm x various x 100 mm (cut down)
Packing Material Location	As required/in line with fixings.





2. Intumescent to Frame Reveal		
Quantity	1	
Manufacturer	Sealed Tight Solutions	
Reference	STS 154FO	
Material	PVC Encased Graphite	
Overall section size	15 mm wide x 4 mm thick	
Application method	Self-Adhesive into groove	
Location (relative to the opening face of the door leaf)	15 mm back from front edge (central in reveal)	

Fire stopping

3. Frame to supporting construction fire stopping detail		
Manufacturer	Fire & Acoustic Seals	
Reference	FAS Fire Door Intumescent Acrylic Sealant	
Size	10 mm nominal	
Material	Polymer based sealant	
Colour	White	
Fixing method	Cartridge gunned around perimeter of the specimen	
4. Alkaline Earth Silicate Fibre Based Insulation		
Manufacturer	Rockwool	
Reference	RWA45	
Material	Stone mineral wool	
Thickness	75 mm (uncompressed)	
Density	45 kg/m ³ (stated)	
Fixing method	Friction fitted to the gap at the head and jambs of the specimen between the frame and the supporting construction	
Fixing method	Friction fitted to the gap at the head and jambs of the specimen between the frame and the supporting construction	

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Door leaf

5. Door Leaf		
Manufacturer (blank)	Wood International Agency Limited	
Reference	Marksman 44 (Producing Factory W3)	
Quantity of leaves on doorset	1	
Glazing location relative to the head and closing edge	100 mm from the head of the leaf and 100 mm from the closing edge of the leaf	
Overall leaf size supplied for testing	1045 mm wide x 2405 mm high x 44 mm thick	
6. Core Element		
Manufacturer	Wood International Agency Limited	
Reference	Marksman 44 (Producing Factory W3)	
Material	Graduated Density Chipboard	
Density recorded at sampling visit	508 kg/m ³	
Moisture content recorded at test lab	10.6%	
Overall thickness and reduced thickness if door leaf incorporates fielded areas	44 mm thick (removed to 24mm where decorative grooves are present)	
7. Lippings		
Manufacturer	By Dezign Carpentry	
Reference	Std Lipping	
Material	Sapele	
Density recorded at sampling visit	642 kg/m ³	
Moisture content at sampling visit	14%	
Overall size	2405 mm long x 44 mm wide x 6 mm thick	
Fixing method	Adhered to all 4 sides of core	
Location	All 4 edges	
Adhesives		
Manufacturer	Wurth	
Туре	Rapid MCPU	
Reference	Rapid MCPU	
Curing method	Moisture	
Application method	Nozzle/spread and hand cramped	
Presence of Mechanical Fixings	No	





Glazing

8. Double glazed unit / Glass		
Manufacturer / Supplier	AGC/Fire Glass UK	
Reference (Declaration of Performance)	Pyrobelite 7	
Unit overall size	2199 mm high x 839 mm wide x 7 mm thick	
Aperture location relative to the head and closing edge of the leaf	100 mm from the head of the leaf and 100 mm from the closing edge of the leaf	
Aperture size (prior to any lining)	845 mm wide x 2105 mm high	
Sight size	815 mm wide x 2075 mm high	
Expansion allowance	3 mm all around	
Presence of Timber aperture lining	No	
9. Beading		
Manufacturer	By Dezign Carpentry	
Reference	Type CB1 Bolection Glazing Bead	
Material	Sapele	
Overall size	20.5 mm x 19.1 mm with a 15°splay, including a 4 mm x 4 mm bolection	
Fixing method, fixing material and sizes	Pneumatically fired steel pins, 16-gauge, 38 mm long	
Fixing distances from corners, centres and angle relative to the face of the glass	50 mm from corners, 200 mm centres and at 35° to the face of the glass	
10. Sealant Applied to Glass on the Intern	nal & External Face of the Leaf	
Manufacturer	Sealed Tight Solutions	
Reference	ST104SG	
Material	Graphite with Nitrile cap & carrier	
Overall size	5 mm x 16.5 mm	
Application method	Adhered to bead upstand	
11. Setting Blocks (Glazing)		
Material	Calcium Silicate	
Overall size	10 mm wide x 50-70 mm deep x 3 mm thick	
Location	50mm from corners on the horizontal edges, 50mm from corners on vertical edges	
Presence of Adhesives to seal unit	No	





Hardware

12. Hinges	
Supplier	Assa Abloy - Union
Reference	JH603BUFR-M-BZP
Quantity	3 No. per leaf
Primary material	Steel
Туре	Butt Hinge
Size	
knuckle	13Ø mm x 102 mm high
blades	100 mm high x 35 mm wide x 3 mm thick
Fixings	
type	Woodscrews
material	Stainless Steel
sizes	4.5Ø mm x 30 mm long
number off per blade	5
Position of each hinge relative to the head of the leaf	See figure 12
Details of intumescent protection	1mm STS Graphite
Interruptions to Intumescent within the frame reveal	Fully interrupted
13. Door Closer	
Manufacturer	Zoo
Reference	ZDC0024A-PN
Material	
Body	Cast Aluminium
Closer arm	Steel Polished Nickel Plate
Cover	Steel Polished Nickel Plate
Configuration	Projected arm
Overall size	
Body	84 mm high (inc workings) x248 mm wide x 52 mm deep
Cover	65 mm high x 250 mm wide x 53 mm deep
Fixing method	4 No. 31 mm x 5.1 mm woodscrews





14. Drop Down Seal	
Manufacturer	Fire & Acoustic Seals Limited
Reference	FAS45
Material	Satin anodised aluminium with EPDM gasket
Body	SAA
Seal	EPDM
Face plate	Plastic
Overall size	28 mm x 11.8 mm
Body	28 mm high x 11.8 mm wide
Face plate	46 mm high x 18 mm wide x 2.5 mm thick (meeting stile side) and 46 mm high x 34 mm wide x 3 mm thick (lock stile side)
Fixing method, type and locations	Fixed through face plate, 1 No. in smaller face plate, 3 No. in large face plate, 2.8 mm x 13 mm screws. 2 No. fixings through channel, 3 mm x 40 mm screws
Location within leaf	Centrally in bottom edge
Maximum operating drop	13 mm
15. Lockset / Latch	
Manufacturer	Zoo
Reference	ZDL0060RSS
Material	Stainless steel
Overall sizes	
Lockcase	165 mm high x 90 mm wide x 14.5 mm thick
Forend plate	235 mm high x 22 mm wide x 3 mm thick
Lock bolt	35 mm high x 9 mm wide x 20 mm projection
Fixing method	2 No. screws to lock forend, 20 mm x 3.5 mm
Operation of lock bolt	Disengaged
Details of intumescent protection	1mm STS Graphite encasing body and behind forend
Location of centre of the spindle relative to the bottom of the leaf	Centre of the spindle measures 900 mm from the bottom of the leaf
Manufacturer	Zoo
16. Strike Plate	
Manufacturer	Zoo
Reference	ZDL0060RSS
Material	Stainless steel
Centre Strike Plate	70 mm high x 24 mm wide x 1.5 mm thick
Fixing method	2 No. woodscrews 21 mm x 3.5 mm
Details of intumescent protection	1mm STS Graphite
Interruptions to Intumescent within the frame reveal	Fully interrupts frame seal





17. Cylinder with Thumbturn	
Manufacturer	Assa Abloy - Yale
Reference	KMT4030-NP Superior Euro Turn 45/35
Material	Nickel Plated Brass
Overall size	33 mm high x 17 mm wide x 80 mm long
Fixing method	1 No. M5 machine screw
18. Escutcheon	
Manufacturer	Zoo
Reference	ZPS001SS
Material	Stainless Steel
Overall size	50 mm high x 50 mm wide x 8 mm thick
Fixing method	Bolt through fixings
Details of intumescent protection	None
Interruptions to Intumescent within the frame reveal	None





Doorset B

Door frame

19. Door Frame	
Manufacturer	By Dezign Carpentry
Material	Redwood Head and Redwood Jambs
Density recorded at sampling visit	510 kg/m ³ (Nominal) 463 kg/m ³ (Measured)
Moisture content recorded at sampling visit	14%
Moisture content recorded at test lab	11.4%
Overall size	999 mm wide x 2239 mm high (see figure 14)
Frame (Head)	70 mm wide x 30 mm thick (see figure 14)
Frame (Jambs)	70 mm wide x 30 mm thick (see figure 15)
Stop	20 mm wide x 12 mm deep (see figure 15)
Jamb to Head jointing method, fixing detail and location	10mm Trench cut into head to accommodate Jambs (see figure 16)
Stop to Frame jointing method, fixing detail and location	Pinned to frame with 16g 30 mm brad nails spaced at nominally 300 mm centres no more than 100 mm away from corners
Presence of Adhesives	No
Frame to supporting construction fixing method	
Manufacturer	Easydrive
Reference	TX Countersink Concrete Screws
Type & material	ZPYP Steel
Overall size	7.5 mm diameter x 100 mm long
Spacing	<200 mm from top corner of jamb, <200 mm from bottom corner of jamb and at no more than 600 mm centres
Does the fixing penetrate intumescent seal within frame reveal	No (delete as appropriate and describe)
Packing Material	Plastic
Packing Material Dimension	30 mm x various x 100 mm (cut down)
Packing Material Location	As required/in line with fixings.





20. Intumescent to Frame Reveal		
Quantity	1	
Manufacturer	Pyroplex	
Reference	8700	
Material	PVC Encased Graphite	
Overall section size	15 mm wide x 4 mm thick	
Application method	Self-Adhesive into groove	
Location (relative to the opening face of the door leaf)	15 mm back from front edge (central in reveal)	

Fire stopping

21. Frame to supporting construction fire stopping detail	
Manufacturer	Fire & Acoustic Seals
Reference	FAS Fire Door Intumescent Acrylic Sealant
Size	10 mm nominal
Material	Polymer based sealant
Colour	White
Fixing method	Cartridge gunned around perimeter of the specimen
22. Alkaline Earth Silicate Fibre Based Insulation	
Manufacturer	Rockwool
Reference	RWA45
Material	Stone mineral wool
Thickness	75 mm (uncompressed)
Density	45 kg/m ³ (stated)
Fixing method	Friction fitted to the gap at the head and jambs of the specimen between the frame and the supporting construction

Door leaf

23. Door Leaf	
Manufacturer (blank)	Wood International Agency Limited
Reference	Marksman 44 (Producing Factory W3)
Quantity of leaves on doorset	1
Glazing location relative to the head and closing edge	100 mm from the head of the leaf and 100 mm from the closing edge of the leaf
Overall leaf size supplied for testing	933 mm wide x 2200 mm high x 44 mm thick
Grooves	
Layout	See Figures 14 & 15
Size & fixing	Sapele inlays into 18mm wide x 10 mm deep grooves, adhered with PVA glue. Sapele inlays then grooved 10 mm wide x 7 mm deep.




24. Core Element	
Manufacturer	Wood International Agency Limited
Reference	Marksman 44 (Producing factory W3)
Material	Graduated Density Chipboard
Density recorded at sampling visit	535 kg/m ³ (Nominal) 547 kg/m ³ (Measured) See SC24009T
Moisture content recorded at test lab	11.4%
Overall thickness and reduced thickness if door leaf incorporates fielded areas	44 mm thick
25. Lippings	
Manufacturer	By Dezign Carpentry
Reference	Std Lipping
Material	Sapele
Density recorded at sampling visit	640 kg/m ³ (Nominal) 651 kg/m ³ (Measured)
Moisture content at sampling visit	14%
Overall size	2200 mm long x 44 mm wide x 6 mm thick
Fixing method	Adhered to all 4 sides of core
Location	All 4 edges
Adhesives	
Manufacturer	Wurth
Туре	Rapid MCPU
Reference	Rapid MCPU
Curing method	Moisture
Application method	Nozzle/spread and hand cramped
Presence of Mechanical Fixings	No





Glazing

26. Double glazed unit / Glass	
Manufacturer / Supplier	Pyroguard
Reference (Declaration of Performance)	Pyroguard 2 EW30/7-1
Unit overall size	
Upper panel	1494 mm high x 244 mm wide x 7 mm thick
Lower panel	394 mm high x 244 mm wide x 7 mm thick
Aperture location relative to the head and closing edge of the leaf	
Upper panel	150 mm from the head of the leaf and 150 mm from the closing edge of the leaf
Lower panel	170 mm from the base of the leaf and 150 mm from the closing edge of the leaf
Aperture size (prior to any lining)	
Upper panel	1500 mm high x 250 mm wide
Lower panel	394 mm high x 244 mm wide
Sight size	
Upper panel	1470 mm high x 220 mm wide
Lower panel	270 mm high x 220 mm wide
Expansion allowance	3 mm all around
Presence of Timber aperture lining	No
27. Beading	
Manufacturer	By Dezign Carpentry
Reference	Type CB1 Bolection Glazing Bead
Material	Sapele
Overall size	19.5 mm x 18.9 mm with a 15°splay, including a 4 mm x 4 mm bolection
Fixing method, fixing material and sizes	Pneumatically fired steel pins, 16-gauge, 38 mm long
Fixing distances from corners, centres and angle relative to the face of the glass	50 mm from corners, 200 mm centres and at 35° to the face of the glass
28. Sealant Applied to Glass on the Intern	nal & External Face of the Leaf
Manufacturer	DIG
Reference	15 mm x 5 mm Intumescent Foam Glazing Tape
Material	Foam Tape
Overall size	15 mm x 5 mm
Application method	Adhered to bead





29. Setting Blocks (Glazing)	
Material	Calcium Silicate
Overall size	10 mm wide x 50-70 mm deep x 3 mm thick
Location	50mm from corners on the horizontal edges, 50mm from corners on vertical edges
Presence of Adhesives to seal unit	No

Hardware

30. Hinges	
Supplier	Assa Abloy - Union
Reference	JH603BUFR-M-BZP
Quantity	3 No. per leaf
Primary material	Steel
Туре	Butt Hinge
Size	
knuckle	13Ø mm x 102 mm high
blades	100 mm high x 35 mm wide x 3 mm thick
Fixings	
type	Woodscrews
material	Stainless Steel
sizes	4.5Ø mm x 30 mm long
number off per blade	5
Position of each hinge relative to the head of the leaf	See figure 14
Details of intumescent protection	1mm Flexifire from Fire And Acoustic Seals
Interruptions to Intumescent within the frame reveal	Fully interrupted





31. Door Closer	
Manufacturer	Rutland
Reference	ITS.11204
Material	
Body	Cast Aluminium
Closer arm	Steel Polished Nickel Plate
Side arm channel	Aluminium
Configuration	Concealed cam action overhead closer
Overall size	
Body	243 mm long x 57 mm wide x 32 mm deep
Side arm channel	460 mm long x 29 mm wide x 19 mm deep
Fixing method	4 No. 5.8 mm x 32 mm countersunk steel wood screws & 1 No. steel pinion bolt
Details of intumescent protection	Rutland IP.144 2 mm Graphite Intumescent Kit fitted around slide arm channel in frame and across top of closer unit in door leaf
32. Drop Down Seal	
Manufacturer	Fire & Acoustic Seals Limited
Reference	FAS45
Material	Satin anodised aluminium with EPDM gasket
Body	SAA
Seal	EPDM
Face plate	Plastic
Overall size	28 mm x 11.8 mm
Body	28 mm high x 11.8 mm wide
Face plate	46 mm high x 18 mm wide x 2.5 mm thick (meeting stile side) and 46 mm high x 34 mm wide x 3 mm thick (lock stile side)
Fixing method, type and locations	Fixed through face plate, 1 No. in smaller face plate, 3 No. in large face plate, 2.8 mm x 13 mm screws. 2 No. fixings through channel, 3 mm x 40 mm screws.
Location within leaf	Centrally in bottom edge
Maximum operating drop	13 mm





33. Lockset / Latch	
Manufacturer	Zoo
Reference	ZDL7260SS
Material	Stainless steel
Overall sizes	
Lockcase	165 mm high x 90 mm wide x 14.5 mm thick
Forend plate	235 mm high x 22 mm wide x 3 mm thick
Latch bolt	30 mm high x 12 mm wide x 12 mm projection
Lock bolt	35 mm high x 9 mm wide x 20 mm projection
Fixing method	2 No. 21 mm x 3.5 mm woodscrews
Operation of latch bolt	Disengaged
Operation of lock bolt	Disengaged
Details of intumescent protection	1mm Interdens Monoammonium Phosphate
Location of centre of the spindle relative to the bottom of the leaf	Centre of the spindle measures 900 mm from the bottom of the leaf
34. Strike Plate	
Manufacturer	Zoo
Reference	ZDL7660SS
Material	Stainless steel
Centre Strike Plate	180 mm high x 24 mm wide x 1.5 mm thick with a 135 mm x 16 mm strike extension
Fixing method	3 No. 21mm x 3.5mm woodscrews
Details of intumescent protection	1mm Interdens Monoammonium Phosphate
Interruptions to Intumescent within the frame reveal	Fully interrupts frame seal
35. Cylinder with Thumbturn	
Manufacturer	Assa Abloy - Yale
Reference	KMT3030-NP Superior 70 mm
Material	Nickel plated brass
Overall size	33 mm high x 17 mm wide x 70 mm (30:10:30) long
Fixing method	1 No. M5 Machine screw
36. Escutcheon	
Manufacturer	Zoo
Reference	ZPS001SS
Material	Stainless Steel
Overall size	50 mm high x 50 mm wide x 8 mm thick
Fixing method	Bolt through fixings
Details of intumescent protection	None
Interruptions to Intumescent within the frame reveal	None





Supporting Construction

AAC Concrete Lintel	
Туре	Steel reinforced concrete lintel
Material	Steel reinforced autoclaved aerated concrete
Density	670 kg/m3
Thickness	150 mm
Overall size	Steel reinforced concrete lintel
Size 1	150 mm wide x 250 mm high x 3000 mm long
Lightweight Blockwork	
Manufacturer	THERMALITE
Reference	THERMALITE Shield
Material	Lightweight concrete blocks
Thickness	150 mm wide x 215 mm high x 440 mm long
Density	946 ~ 960 kg/m3 (measured)
Fixing method	Ordinary sand/cement mortar, mix 3:1
Alkaline Earth Silicate Fibre Based Insulat	ion
Manufacturer	Morgan Advanced Materials
Reference	Superwool Plus
Material	High temperature insulation wool
Thickness	25 mm, uncompressed
Density	96 kg/m3 (stated)





2.3 Supporting construction

Table 6 details the supporting construction used for this fire resistance test.

Table 6 Supporting construction				
Item	Detail			
Supporting construction	150 mm thick low-density concrete wall with a low-density concrete lintel at the head as described in section 7.2 of EN 1363-1: 2020.			
Dimensions	Width 30		3050 mm	
	Height		3050 mm	
	Thickness		150 mm	
Aperture dimensions		Width		Height
	Doorset A	1144 mr	n	2474 mm
	Doorset B	1029 mr	n	2272 mm
Restraint conditions	Restrained on all edges			





3. Test procedure

Table 7 details the test procedure for this fire resistance test.

Table 7Test procedure

Item	Detail		
Test standard	The test was performed in accordance with BS 476-20:1987 and BS 476-22:1987 Clause 8 determination of fire resistance of uninsulated doorsets and shutter assemblies.		
Fire Test Study Group (FTSG) resolutions	Certain aspects of some fire test specifications are open to different interpretations. FTSG have identified a number of these areas and have agreed on resolutions which define a common agreement of interpretations between fire test laboratories that are members of the group. If such resolutions apply to this test, they have been followed.		
Deviations from test method	None		
Instrumentation and equipment	The instrumentation was provided in accordance with BS 476-20 BS 476-22:1987 as follows:		accordance with BS 476-20:1987 and
	 The specimen temperature was measured by nine mineral insulated metal sheathed (MIMS) Type K thermocouples – with wire diameters not greater than 0.5 mm, an overall diameter of 1.5 mm, and the measuring junction insulated from the sheath. The thermocouples protruded a minimum of 25 mm from steel supporting tubes. The unexposed side specimen temperatures were measured by Type K thermocouples with wire diameters less than 0.5 mm soldered to 12 mm diameter × 0.2 mm thick copper discs covered by 30 mm × 30 mm × 2.0 mm thick inorganic insulating pads. 		
Pre-test conditioning	The specimen's storage, construction, and test preparation took place in the test laboratory over a total, combined time of 4 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 9.5°C to 20.5°C and 37% to 64% respectively.		
Pre-test measurements		Doorset A	
	Opening force	29.7 Nm	
	Closing force	16.4 Nm	
	Distance from hinge	1000 mm	
		Doorset B	
	Opening force	31.6 Nm	
	Closing force	17.0 Nm	
	Distance from hinge	1000 mm	
Installation details	Delivery date of the test specimen		
	Start date for construction of supporting construction		15 January 2024
	Completion date for construction of supporting construction		18 January 2024
	Start date for installa specimen	ation of test	19 January 2024
	Completion date for installation of		19 January 2024





Item	Detail				
	test specimen				
	Supporting construction constructed by		Represent	Representatives of the test sponsor	
	Doorset installed by		Representa	atives of the test sponsor	
Symmetry	 Asymmetrical: Doorset A opened into the furnace. Doorset B opened into the furnace. The direction of exposure was decided by the test sponsor. 				
Ambient laboratory temperature	Start of the test 16.0 °C		16.0 °C		
	Minimum temperature		15.0 °C		
	Maximum temperature		16.0 °C		
Sampling / specimen selection	Appendix E includes the sampling report. A representative of BM Trada sampled and selected the following components of the tested specimen:				
	Component	sampling d	ate	sampling report reference	
	WIAD-MMN44-ITT- 787-Z15-P1 Rev B	07/06/2024		SC24010T	
	WIAD- MMN44-ITT- 779-GR2	12/07/2024		SC24009T	





4. Test measurements and results

Table 8 summarises the results achieved by the test specimen against the performance criteria listed in BS 476-20:1987 and BS 476-22:1987 Clause 8 determination of fire resistance of uninsulated doorsets and shutter assemblies for the following parameters:

- Integrity It is required that there is no collapse of the specimen, no sustained flaming on the unexposed surface and no loss of impermeability.
- Insulation The mean temperature rise of the unexposed surface must not be greater than 140°C and the maximum temperature rise must not be greater than 180°C. Insulation failure also occurs simultaneously with integrity failure.
- Radiation –Two water-cooled foil heat flux meters were used to record the heat radiation from the doorset, the heat flux meters were positioned at a distance of 2360 mm from Doorset A and 2159 mm from Doorset B, so that the angle of view circumscribed the diagonal of the doorset.

Appendix A includes observations of any significant behaviour of the specimen and details of the occurrence of the relevant performance criteria.

Appendix B details the location of the instrumentation used during the test.

Appendix C includes details of the measurements taken during the test, including the radiation measurements.

Appendix D includes photographs of the test specimen before, during and after the test.

Appendix E includes the sampling report.





Table 8Detailed test results

Criteria		Doorset A	Doorset B	
Integrity		30 minutes	33 integrity failure	
Sustained flaming		30 minutes	33 Minutes	
Failure with gap gauge		33 Minutes	33 Minutes	
Cotton pad failure		33 Minutes	33 Minutes	
Radiation				
Radiation intensity 15 kW/m ²		Radiation intensity of 15 kW/m ² was not reached after 34 minutes	Radiation intensity of 15 kW/m ² was not reached after 34 minutes	
Notes:				
The test results for the specimen only apply to the tested orientation. The test was discontinued after 34 minutes. '*' indicates failure due to integrity failure.				





5. Application of test results

5.1 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) stated in Section 3 of this report. 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.

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 476-20: 1987 and BS 476-22: 1987.

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

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

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

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

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

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5.2 Uncertainty of measurement

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.





Appendix A Test observations

Table 9 shows the observations of any significant behaviour of the specimen during the test.

Table 9 Test observations				
Min	Sec	System	Observation	
00	00	Doorset A & B	Commencement of test	
03	00	Doorset B	Doorset B glazing is reacting and turning opaque	
05	00	Doorset A & B	Doorsets Unrestrained	
06	00	Doorset A & B	All glazing is now opaque across both doorsets	
08	30	Doorset B	brown discolouration in the closer position of Doorset B and up the hinge edge	
10	30	Doorset A	Seal falling out of the head of the glazing panel on Doorset A	
15	00	Doorset A	Leading edge on Doorset A deflecting towards the furnace	
17	30	Doorset A	Seal coming away fown the left edge of glazing on Doorset B	
26	00	Doorset A & B	Browing discolouration around the perimeter of both leaves	
30	46	Doorset A	Sustained flaming at the head of the glazing on A. This means integrity failure is deemed to have occurred	
33	40	Doorset B	Sustained flaming on glass B . This means integrity failure is deemed to have occurred	
34	00	Doorset A & B	End of test	





Appendix B Instrumentation locations

Figure 5 shows the instrumentation locations for this fire resistance test.





HORIZONTAL SECTION THROUGH TEST CONSTRUCTION

Figure 5 Instrumentation locations





Appendix C Test data

C.1 Furnace temperature and deviation



Figure 6

Furnace thermocouple temperature vs time



Figure 7 Percentage deviation of exposure severity vs time





C.2 Furnace pressure



The furnace pressure was taken at 2200 mm above the sill of the test specimen.





C.3 Specimen temperatures

 Table 10
 Individual And Mean Temperatures Recorded On The Unexposed Surface Of Doorset A

Time (mins)	Tc 004 (°C)	Tc 005 (°C)	Tc 006 (°C)	Tc 007 (°C)	Tc 008 (°C)	Average (°C)
0	27.0	27.0	26.0	26.0	28.0	26.8
1	31.0	30.0	29.0	28.0	30.0	29.6
2	41.0	41.0	37.0	36.0	38.0	38.6
3	55.0	56.0	53.0	52.0	55.0	54.2
4	78.0	78.0	75.0	75.0	79.0	77.0
5	105.0	105.0	102.0	103.0	108.0	104.6
6	127.0	121.0	131.0	130.0	131.0	128.0
7	129.0	127.0	131.0	130.0	132.0	129.8
8	131.0	135.0	131.0	135.0	137.0	133.8
9	137.0	141.0	134.0	141.0	145.0	139.6
10	146.0	145.0	139.0	146.0	152.0	145.6
11	153.0	149.0	146.0	152.0	156.0	151.2
12	155.0	153.0	152.0	158.0	159.0	155.4
13	161.0	157.0	159.0	165.0	164.0	161.2
14	169.0	163.0	167.0	173.0	172.0	168.8
15	180.0	173.0	178.0	186.0	184.0	180.2
16	194.0	186.0	192.0	200.0	197.0	193.8
17	208.0	201.0	207.0	215.0	212.0	208.6
18	223.0	218.0	224.0	230.0	228.0	224.6
19	238.0	236.0	242.0	247.0	245.0	241.6
20	254.0	254.0	259.0	262.0	262.0	258.2
21	267.0	270.0	272.0	275.0	276.0	272.0
22	280.0	287.0	287.0	287.0	289.0	286.0
23	293.0	303.0	300.0	299.0	302.0	299.4
24	305.0	318.0	312.0	311.0	314.0	312.0
25	315.0	331.0	323.0	323.0	325.0	323.4
26	324.0	344.0	332.0	334.0	336.0	334.0
27	332.0	356.0	342.0	343.0	346.0	343.8
29	349.0	379.0	364.0	364.0	364.0	364.0
30	358.0	388.0	375.0	373.0	373.0	373.4
31	367.0	393.0	385.0	379.0	380.0	380.8
32	376.0	396.0	390.0	384.0	386.0	386.4
33	383.0	399.0	394.0	388.0	390.0	390.8
34	389.0	401.0	397.0	391.0	393.0	394.2







Figure 9 Individual And Mean Temperatures Recorded On The Unexposed Surface Of Doorset A





Table 11 Individual And Mean Temperatures Recorded On The Unexposed Surface Of Doorset B

Time (mins)	Tc 009 (°C)	Tc 010 (°C)	Tc 011 (°C)	Tc 012 (°C)	Tc 013 (°C)	Average (°C)
0	25.0	26.0	25.0	25.0 24.0		25.0
1	27.0	26.0	26.0	24.0	25.0	25.6
2	26.0	26.0	26.0	24.0	25.0	25.4
3	29.0	26.0	25.0	24.0	25.0	25.8
4	31.0	26.0	25.0	24.0	25.0	26.2
5	30.0	26.0	25.0	24.0	25.0	26.0
6	29.0	26.0	25.0	24.0	25.0	25.8
7	28.0	26.0	25.0	24.0	25.0	25.6
8	28.0	26.0	25.0	24.0	25.0	25.6
9	28.0	26.0	25.0	24.0	25.0	25.6
10	29.0	27.0	25.0	25.0	25.0	26.2
11	32.0	28.0	27.0	27.0	26.0	28.0
12	38.0	30.0	29.0	31.0	28.0	31.2
13	44.0	34.0	33.0	35.0	31.0	35.4
14	49.0	37.0	38.0	41.0	34.0	39.8
15	54.0	41.0	42.0	45.0	37.0	43.8
16	59.0	45.0	46.0	49.0	41.0	48.0
17	62.0	49.0	50.0	53.0	45.0	51.8
18	65.0	53.0	53.0	56.0	48.0	55.0
19	68.0	57.0	56.0	59.0	51.0	58.2
20	70.0	60.0	59.0	61.0	54.0	60.8
21	72.0	62.0	62.0	63.0	56.0	63.0
22	74.0	65.0	64.0	64.0	58.0	65.0
23	75.0	67.0	66.0	66.0	60.0	66.8
24	76.0	69.0	68.0	67.0	63.0	68.6
25	77.0	71.0	69.0	68.0	64.0	69.8
26	78.0	73.0	71.0	69.0	66.0	71.4
27	79.0	75.0	72.0	70.0	68.0	72.8
28	80.0	76.0	73.0	71.0	69.0	73.8
29	80.0	77.0	74.0	72.0	71.0	74.8
30	81.0	78.0	75.0	73.0	72.0	75.8
31	81.0	80.0	75.0	73.0	73.0	76.4
32	82.0	81.0	76.0	74.0	74.0	77.4
33	82.0	83.0	77.0	75.0	75.0	78.4
34	83.0	85.0	77.0	75.0	76.0	79.2







Figure 10 Individual And Mean Temperatures Recorded On The Unexposed Surface Of Doorset B





 Table 12
 Individual Temperatures Recorded On The Unexposed Surface Of The Frame On Doorset A

Time (mins)	Tc 014 (°C)	Tc 015 (°C)	Tc 016 (°C)
0	24.0	24.0	24.0
1	24.0	25.0	24.0
2	24.0	24.0	24.0
3	24.0	25.0	24.0
4	24.0	26.0	24.0
5	26.0	28.0	26.0
6	26.0	29.0	25.0
7	26.0	31.0	25.0
8	25.0	32.0	25.0
9	25.0	33.0	24.0
10	25.0	34.0	25.0
11	26.0	35.0	25.0
12	26.0	35.0	25.0
13	26.0	36.0	25.0
14	27.0	36.0	25.0
15	28.0	38.0	26.0
16	29.0	39.0	26.0
17	30.0	40.0	26.0
18	31.0	42.0	27.0
19	33.0	44.0	28.0
20	35.0	46.0	28.0
21	37.0	47.0	29.0
22	38.0	49.0	29.0
23	41.0	52.0	30.0
24	43.0	53.0	31.0
25	44.0	55.0	32.0
26	46.0	58.0	32.0
27	48.0	59.0	33.0
28	50.0	62.0	34.0
29	51.0	64.0	35.0
30	53.0	66.0	35.0
31	54.0	73.0	36.0
32	56.0	91.0	37.0
33	57.0	107.0	38.0
34	59.0	142.0	39.0







Figure 11 Individual Temperatures Recorded On The Unexposed Surface Of The Frame On Doorset A





 Table 13
 Individual Temperatures Recorded On The Unexposed Surface Of The Frame On Doorset B

Time (mins)	Tc 017 (°C)	Tc 018 (°C)	Tc 019 (°C)
0	22.0	24.0	23.0
1	22.0	27.0	23.0
2	22.0	26.0	23.0
3	22.0	31.0	23.0
4	22.0	36.0	23.0
5	22.0	39.0	23.0
6	23.0	39.0	24.0
7	23.0	39.0	24.0
8	22.0	39.0	24.0
9	22.0	39.0	24.0
10	22.0	39.0	24.0
11	23.0	40.0	24.0
12	23.0	42.0	24.0
13	23.0	43.0	25.0
14	23.0	45.0	25.0
15	24.0	47.0	25.0
16	24.0	49.0	26.0
17	24.0	52.0	26.0
18	25.0	54.0	27.0
19	26.0	57.0	27.0
20	26.0	59.0	28.0
21	27.0	61.0	28.0
22	28.0	63.0	29.0
23	28.0	65.0	30.0
24	29.0	66.0	31.0
25	30.0	67.0	31.0
26	31.0	69.0	32.0
27	32.0	70.0	33.0
28	33.0	71.0	34.0
29	34.0	72.0	35.0
30	36.0	74.0	36.0
31	37.0	75.0	37.0
32	38.0	76.0	38.0
33	40.0	79.0	39.0
34	41.0	80.0	40.0







Figure 12 Individual Temperatures Recorded On The Unexposed Surface Of The Frame On Doorset B





 Table 14
 Individual Temperatures Recorded On The Unexposed Surface Of The Glazing On Doorset B

Time (mins)	Tc 020 (°C)	Tc 021 (°C)	Tc 022 (°C)	Tc 023 (°C)
0	29.0	28.0	23.0	22.0
1	37.0	36.0	28.0	25.0
2	55.0	53.0	42.0	31.0
3	85.0	83.0	68.0	44.0
4	102.0	102.0	97.0	69.0
5	104.0	105.0	100.0	90.0
6	110.0	113.0	104.0	94.0
7	128.0	133.0	119.0	99.0
8	148.0	153.0	137.0	109.0
9	161.0	168.0	154.0	123.0
10	174.0	184.0	165.0	139.0
11	191.0	209.0	181.0	152.0
12	216.0	234.0	199.0	163.0
13	240.0	259.0	221.0	175.0
14	261.0	279.0	239.0	190.0
15	282.0	299.0	259.0	209.0
16	298.0	315.0	277.0	227.0
17	312.0	329.0	293.0	245.0
18	324.0	342.0	309.0	261.0
19	334.0	354.0	322.0	278.0
20	342.0	364.0	332.0	290.0
21	347.0	371.0	337.0	299.0
22	353.0	378.0	345.0	308.0
23	361.0	386.0	354.0	316.0
24	369.0	392.0	363.0	323.0
25	376.0	397.0	372.0	330.0
26	384.0	400.0	379.0	337.0
27	390.0	404.0	384.0	344.0
28	396.0	407.0	386.0	351.0
29	401.0	411.0	387.0	358.0
30	407.0	415.0	389.0	365.0
31	414.0	419.0	390.0	374.0
32	423.0	424.0	392.0	383.0
33	436.0	428.0	394.0	391.0
34	470.0	438.0	396.0	400.0







Figure 13 Individual Temperatures Recorded On The Unexposed Surface Of The Glazing On Doorset B





C.4 Specimen deflections

Table 15 and Table 16 detail the deflection measurements of the test specimen at locations given in Figure 14.

Negative measurements show movement of the test specimen away from the furnace. Positive measurements show movement of the test specimen towards the furnace.



Positions of deflection measurements

Table 15 Deflections – Doorset	Α
--------------------------------	---

	Deflections (mm)											
Time (mins)	А	В	С	D	E	F	G	н	I	J	K	L
0	0	0	0	0	0	0	0	0	0	0	0	0
5	-2	-9	4	7	17	7	16	-4	-9	2	11	15
10	-9	-4	2	7	9	5	37	0	-5	7	14	26
15	-6	-12	-3	16	18	3	63	-3	-1	2	15	22
20	4	-9	-4	14	11	3	70	1	-4	4	15	24
25	-13	-7	-6	4	3	3	57	-6	-1	1	15	23
30	5	-6	0	6	8	0	80	-3	-1	5	13	23
Max	-13	-12	-6	16	18	7	80	-6	-9	7	15	26





Table 16 Deflections – Doorset B

	Deflections (mm)											
Time (mins)	Α	В	С	D	Е	F	G	н	1	J	K	L
0	0	0	0	0	0	0	0	0	0	0	0	0
5	3	-17	-5	4	0	11	4	5	4	-2	2	-23
10	-7	-4	-10	-1	-4	11	5	5	1	1	2	-2
15	-8	-4	0	-1	-3	7	8	1	2	3	-1	2
20	2	-8	-14	-2	2	-3	-6	0	2	91	3	6
25	-2	-6	-14	0	-5	-7	-30	-5	5	7	1	-1
30	-7	-6	-16	-10	5	-4	-26	4	0	6	-3	10
Max	-8	-17	-16	-10	-5	11	-30	-5	5	91	-3	-23





C.5 Heat flux measurements

The heat flux was measured 2360 A 2159 B mm away from the specimen and is based on the maximum levels.



Figure 15 Heat flux measurements of the test specimen vs time





Table 17 Heat flux measurements of the test specimen vs time

Time (mins)	Doorset A (kW/m²)	Doorset B (kW/m²)
0	-0.356	-0.165
1	-0.203	-0.138
2	-0.076	-0.138
3	-0.381	-0.165
4	-0.076	-0.165
5	-0.026	-0.082
6	-0.279	-0.193
7	-0.33	-0.193
8	-0.229	-0.055
9	0.025	-0.165
10	-0.229	-0.193
11	-0.026	-0.165
12	-0.279	-0.193
13	0	-0.193
14	0.076	-0.193
15	0	-0.193
16	0	-0.193
17	-0.178	-0.193
18	0.152	-0.193
19	0.203	-0.193
20	0.203	-0.193
21	0.051	-0.11
22	0	0.277
23	0.051	-0.193
24	0.254	0.056
25	0.381	-0.138
26	0.381	-0.193
27	0.406	0.277
28	0.254	-0.193
29	0.33	-0.11
30	0.508	-0.193
31	0.406	-0.193
32	0.559	0.083
33	0.508	0.083
34	0.533	-0.193





Table 18 Heat flux thresholds vs time

Radiation intensity	Doorset A	Doorset B
5 kW/m²	Radiation intensity not reached	Radiation intensity not reached
10 kW/m ²	Radiation intensity not reached	Radiation intensity not reached
15 kW/m²	Radiation intensity not reached	Radiation intensity not reached
20 kW/m ²	Radiation intensity not reached	Radiation intensity not reached
25 kW/m²	Radiation intensity not reached	Radiation intensity not reached





C.6 Gap measurements



Figure 16 Gap measurements, Doorset A and B (unexposed side shown)





Doorset A (mm)					
Hinge side	Primary	Leaf to stop	Leading edge	Primary	Leaf to stop
H1	3.7	1.9	L1	2.8	4.0
H2	3.5	2.2	L2	2.7	2.0
H3	3.0	3.0	L3	2.9	3.4
H4	3.0	3.5	L4	3.2	4.9
Mean	3.3		Mean	2.9	
Мах	3.7		Мах	3.2	
Min	3.0		Min	2.7	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	3.3	1.0	B1	6.6	
T2	3.5	0.3	B2	6.0	
Т3	3.8	0.2	B3	6.7	
Mean	3.6		Mean	6.4	
Мах	3.8		Мах	6.7	
Min	3.3		Min	6.0	

Table 19 Measured and calculated gap sizes for Doorset A

Table 20 Measured and calculated gap sizes for Doorset B

Doorset B (mm)					
Hinge side	Primary	Leaf to stop	Leading edge	Primary	Leaf to stop
H1	3.4	1.8	L1	2.1	0.8
H2	3.5	1.9	L2	2.3	2.2
Н3	3.4	3.2	L3	2.1	3.3
H4	3.1	2.9	L4	2.6	3.6
Mean	3.3		Mean	2.3	
Мах	3.5		Мах	2.6	
Min	3.1		Min	2.1	
Top edge	Primary	Leaf to stop	Threshold	Primary	
T1	3.1	2.5	B1	5.0	
T2	3.8	1.5	B2	4.6	
Т3	3.7	0.4	B3	4.1	
Mean	3.5		Mean	4.6	
Мах	3.8		Max	5.0	
Min	3.1		Min	4.1	





Appendix D Photographs



Figure 17 Unexposed face of the specimen before the start of the test



Figure 18 Exposed face of the specimen before the start of the test







Figure 19 Unexposed face of the specimen at 10 minutes of testing



Figure 20 Unexposed face of the specimen at 20 minutes of testing







Figure 21 Unexposed face of the specimen at 30 minutes of testing



Figure 22 Unexposed face of the specimen at 30 minutes and 40 seconds of testing showing sustained flaming at the head of Doorset A glazing panel






Figure 23 Unexposed face of the specimen at 33 minutes of testing showing sustained flaming up the edge of the glazing panel on Doorset B



Figure 24 Exposed face of the specimen at the end of the test





Appendix E Sampling report

Proud to		SAN	IPLING V REPORT	ISIT	Compa Establis BM TR	ny Name shment No. ADA Approve	Wood Interr 047/E00376 ed Body ID: 12	national Agency Ltd 0 224	
	Wood International Ag	gency Ltd		Contact	Name	Neil Harri	son		
Company	Woods House 16 King Edward Road			Tolopho		+44 (0) 42	77 222004		
Head Office	Brentwood			Telepho	ne	+44 (0) 12	11 232331		
nuuress	CM5 0RQ	CM5 0RQ			Email Address doors@w			oodia.co.uk	
Location where	e sampling was conduct	ted if differ	ent from H	lead Offic	e Addres	is	Visit Date	BMT Representativ	
By Dezign Carper	ntry, Unit 11B ERW Las, Cold	omendy Ind B	Est, Denbigh	LL16 5TA	ante		07/06/2024	Michael Choriton	
Opening Meeting	(names of those present)		Mr Nell Ha	arrison / Mr :	Shaun Har	rison			
Contract Referen	0e		SC240101 Technical	r Drawing: W		W-ITT-787-71	5-D1 Rov B		
Technical Specification document / FoA reference Photographs to be taken of all critical areas highlighted In the Technical Specification			Technical	Specificatio	n: WIAD- I	MN44-ITT-78	37-Z15-P1		
			Marked up with this s) technical s ampling rep	pecificatio ort.	n made by the	sampler and m	ust be read in conjunctio	
	Single act	ing single do	orset Inco	rporating Mari	ksman 44 door o	core, lppd on 4 edges an			
Description of product(s) sampled			nung on 3 cloaser an	NO DULT hing d secured v	es in softw with DIN de	adlock operat	o operated with ed with cylinder	overnead face fixed and turn and finished wi	
			pattern 10	pattern 10 glazing.					
Batch number(s)	N/A								
Date of manufact	January 2	024		0405					
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			core. Fran	ne intumesc	ents. Lippi	ng adhesive. (Glazing. Glazing	bead dimensions. Glazi	
Traceability of ma	Traceability of material records le			n. ninges. n.	Glober, DN	ip seal and fix	angs. Lockset af	ia keep. Cyinaer.	
Purchase Orders and delivery notes			Items with	limited or n	o traceabli	ity: Frame to s	supporting const	ruction fixings and	
			blocks and	l positions.	Lockset, ke	ep and hinge	Intumescent sh	eet.	
(contract reference, signature of client, date of manufacture)			De-CAR Desarra						
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Proud to be port of element REPORT Establishment No. 047/E003760 BM TRADA Aassessment Body ID: 1224 BM TRADA Aassessment Body ID: 1224 BM TRADA Aassessment Body ID: 1224 Company Head Office Address Wood International Agency Ltd Woods House 16 King Edward Road Brentwood Essex CM5 0RQ Contact Name Head Office Address Neil Harrison Location where sampling was conducted if different from Head Office Address Visit Date More BMT BMT By Dezign Carpentry, Unit 11B ERW Las, Colomendy Ind Est, Denbigh LL16 STA 12/07/2024 M Requirement Evidence / Comments 12/07/2024 M Opening Meeting (names of those present) Mr Neil Harrison / Mr Shaun Harrison SC24009T Technical Specification document / FoA reference Photographs to be taken of all critical areas highlighted In the Technical Specification Technical Specification With this sampling report. Description of product(s) sampled Single acting, single leaf doorset incorporating WIA markisman 44 doo four edges and hung on 3No. but hinges in softwood frame and opera concealed closers and secured with DIN Sasthick operated by handle and finished with drop seal, 2 vertical vision panels and latice of time	1 Representat lichael Choriton					
Wood international Agency Ltd Contact Name Neil Harrison Company Head Office Address 16 King Edward Road Brentwood Essex CM5 0RQ Contact Name Neil Harrison Location where sampling was conducted if different from Head Office Address doors@woodia.co.uk By Dezign Carpentry, Unit 11B ERW Las, Colomendy Ind Est, Denbigh LL16 STA 12/07/2024 M Requirement Evidence / Comments 0 Opening Meeting (names of those present) Mr Neil Harrison / Mr Shaun Harrison Sc24009T Technical Specification document / FoA reference Sc24009T Technical Specification document / FoA reference Photographs to be taken of all critical areas highlighted In the Technical Specification Technical specification made by the sampler and must be re with this sampling report. Description of product(s) sampled Single acting, single leaf doorset incorporating WIA marksman 44 doo rour edges and hung on 3No. but hinges in softwood frame and opera concealed closers and secured with DIN Sasthick operated by handle and finished with drop seal, 2 vertical vision panels and latice of time	f Representat lichael Choriton					
Company Head Office Address Wood International Agency Ltd Woods House 16 King Edward Road Brentwood Essex CM5 0RQ Contact Name Neil Harrison Location where sampling was conducted if different from Head Office Address telephone +44 (0) 1277 232991 Location where sampling was conducted if different from Head Office Address Visit Date BMT By Dezign Carpentry, Unit 11B ERW Las, Colomendy Ind Est, Denbigh LL16 STA 12/07/2024 M Requirement Evidence / Comments 0 Opening Meeting (names of those present) Mr Neil Harrison / Mr Shaun Harrison 0 Contract Reference SC24009T Sc24009T Technical Specification document / FoA reference Photographs to be taken of all critical areas highlighted In the Technical Specification Technical Specification made by the sampler and must be re with this sampling report. Description of product(s) sampled Single acting, single leaf doorset incorporating WIA marksman 44 doo rour edges and hung on 3No. but hinges in softwood frame and opera concealed closers and secured with DIN Sasthock operated by handle and finished with drop seal, 2 vertical vision panels and latice of time	Representat lichael Choriton					
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Bender i Marillan i Andreas anno bender de	Single acting, single leaf doorset incorporating WIA marksman 44 door leaves lipped of four edges and hung on 3No. but hinges in softwood frame and operated by overhead concealed closers and secured with DIN Sashlock operated by handle and eurocylind and finished with drins seal 2 vertical vision panels and initiate of timber inflied ornove					
Product identification / reference numbers / codes N/A	N/A					
Baton number(s) N/A Date of manufacture In states between 18/01/2024 and 24/06/2024 with final review 12/07/	/2024					
Quantity of stock and size of sample(s) taken 1No. Doorset						
Diank sampled SC23282B. Hinges and intumescent. Door closer, intur fixings. Lockset & keep and fixings. Cylinder. Escutcheon. Glazing uni fixings. Lockset & keep and fixings. Cylinder. Escutcheon. Glazing uni Intumescent seals. Frame intumescent seals. Lockset and keep intum Hems with limited or no traceability. Door stop fixings. Frame to suppor fixing type and spacing. Fire stopping and sealing material and extents blocks. Hinge fixings. Lever handle manuf and type. Please send Sampling Pack to High Wycombe Laboratory FOA Co	<u>Internetworkstanting</u> , realine, npping, bead and obor brain interear, bellay & MC. DU blank sampled SC3282B. Hinges and Intumescent. Door closer, Intumescent and intumescent seals. Lockset & keep and fixings. Cylinder. Escutcheon. Glazing units. Glazing intumescent seals. Frame intumescent seals. Lockset and keep intumescent. <u>Items with limited or no traceability</u> . Door stop fixings. Frame to supporting construction fixing type and spacing. Fire stopping and sealing material and extents. Glazing setting blocks. Hinge fixings. Lever handle manuf and type. Please send Sampling Pack to High Wycombe Laboratory FOA Connor Pavne.					
Example of sampler's markings applied to the product(s) (contract reference, signature of client, date of manufacture)	All STARST MONTON OF					
Confirmation of minimum mandatory video/live checks / Glazing assembly (where applicable) / Finished doors/	✓ Glazing assembly (where applicable) ✓ Finished doorset with markings					
Details of any further FPC processes witnessed during the visit. Dimensional checks made throughout manufacture.	By Dezign do not have a formalised FPC in place. All manufacture made against the technical specification utilising traditional jonery tools and methods. Dimensional checks made throughout manufacture.					
Determine the essential characteristics of the product Door leaf specification. Hardware selection, preparation, intumescent	Door leaf specification. Hardware selection, preparation, intumescent protection and					
and commit the details of in-process checks conducted in things. Glazing selection, preparation, intumescent protection and bea on the sample to ensure conformity.	Tixings. Glazing selection, preparation, intumescent protection and bead fixings. Timber Infill proving and infill application					
State any items from the Technical Specification / FoA	her (see tech sp					
that were not witnessed and require further lab sampling Door closer Frame re-assembly	ed with 'not seen					
Confirm any clauses within the Technical Specification Refer to marked up technical specification. that were found to be different on the sampled product/s. Areas in Green – verified during sampling	Refer to marked up technical specification. Areas in Green – verified during sampling Areas in Blue – Additional sampler notes Areas in yellow with Asterisk * – Will be reported "As stated by customer"					
Non-conformances may be raised for pre-cert and audit test sampling Areas in Blue - Additional sampler notes Areas in vellow with Asterisk * - Will be recorded *As stated by custom	mpling report ser					
Non-conformances may be raised for pre-cert and audit test sampling Areas in Blue = Additional sampler notes Closing Meeting (names of those present) No formalised closing meeting possible. Marked up TST and draft sam for approval and signing.						
Non-conformances may be raised for pre-cert and audit test sampling Areas in such Additional sampler notes Areas in yellow with Asterisk * – Will be reported "As stated by custom No formalised closing meeting possible. Marked up TST and draft sam for approval and signing. No formalised closing meeting possible. Marked up TST and draft sam Declaration I declare that the product/s witnessed during this sampling visit are representative of normal	al production.					
Non-conformances may be raised for pre-cert and audit test sampling Areas in Bue - Additional sampler notes Areas in yellow with Asterisk * - Will be reported *As stated by custom Areas in yellow with Asterisk * - Will be reported *As stated by custom Closing Meeting (names of those present) No formalised closing meeting possible. Marked up TST and draft sam for approval and signing. Declaration I declare that the product/s witnessed during this sampling visit are representative of normal Company Representative Name (Print) Company Representative Position Company Representative Position	al production.					
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