



## CLASSIFICATION OF FIRE RESISTANCE IN ACCORDANCE WITH BS EN 13501-2:2023

**Sponsor:** Wood International Agency Limited  
Wood House,  
16 King Edward Road,  
Brentwood,  
Essex,  
CM14 4HL

**Prepared by:** Cambridge Fire Research  
Brewery Road  
Pampisford  
Cambridge  
CB22 3HG

**Product name:** Therman 44 Doorset System

**Classification report number:** CFR24C001

**Issue number:** 2

**Date of issue:** 25<sup>th</sup> September 2024

This classification report consists of twenty one pages and may only be used or reproduced in its entirety.

**This test report is only valid when presented in full.**

**Cambridge Fire Research Ltd** Brewery Road Pampisford Cambridge CB22 3HG  
**Tel.** +44 (0) 1223 834752 **Email.** testing@camfirelab.co.uk

Registered in England No. 5602112 Registered Office Brewery Road Pampisford Cambridge CB22 3HG



4319



**Key to symbols used throughout report:**

\* Nominal value

\*\* Declared value or detail, not verified by laboratory

\*\*\* Constructional details omitted at the request of the Sponsor. Full details are held on file by the laboratory

‡ Identified post-test from remains of specimen

All dimensions in mm unless stated otherwise.

Figures shown are not to scale.



## 1 INTRODUCTION

This classification report defines the resistance to fire classification assigned to element, Therman 44 Doorset System in accordance with the procedures given in BS EN 13501-2:2023.

## 2 DETAILS OF CLASSIFIED PRODUCT

### 2.1 General

The element, Therman 44 Doorset System, is defined as a non-loadbearing fire resisting hinged doorset which had been tested in accordance with BS EN 1634-1:2014+A1:2018.

### 2.2 Description

The element, Therman 44 Doorset System, is fully described in the test report(s) in support of classification listed in 3.1.

## 3 TEST REPORTS/EXTENDED APPLICATION REPORTS AND TEST RESULTS IN SUPPORT OF THE CLASSIFICATION

### 3.1 Test reports/extended application reports

Name of Laboratory	Name of sponsor	Report ref. no	Test method and date/ field of extended application rules & dates
Cambridge Fire Research	Wood International Agency Limited	CFR2307121 Revision 1	BS EN 1634-1:2014+A1:2018

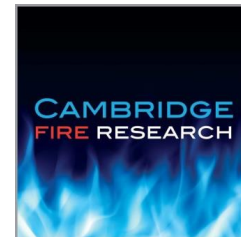
Summary of specimen, test report CFR2307121 Revision 1.

Report ref. no	Sampling Procedure	Conditioning	Pre-fire tests
CFR2307121 Revision 1	Sampled by BM TRADA on 21/02/2023.  See test report for details.	The specimens were received by Cambridge Fire Research on 24/07/2023. For the final 7 days that the specimens were on site the temperature and relative humidity were measured and recorded within the range of 16 to 26°C and 40 to 76% respectively. Ambient temperature at start of test 20°C.	Mechanical pre-test conditioning was carried out in accordance with BS EN 16034:2014. This included 25 pre-cycles, gap measurement, closer force measurement and final setting.  See test report for details.

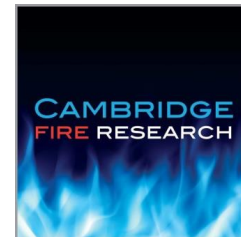


**Left hand specimen**

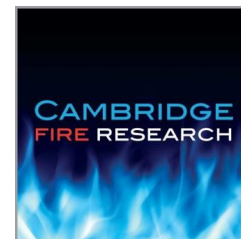
Item	Component	Information
1L	<p><b>Frame</b>            Manufacturer:            Description:</p> <p>Fixings to supporting construction:</p> <p>Density (kg/m<sup>3</sup>):            Overall size (h x w x d):            Cross section size (h x d):</p>	<p>By Dezign Carpentry**            A 3-sided rebated European Redwood** frame with 10h rebated joints and planted stops.            Corner joints affixed using 2No. Ø5 x 70 steel countersunk screws, set at 42 centres and adhered using Wurth D4 PVA adhesive**.</p> <p>Ø5 x 90 steel countersunk screws, set 140 to 180 from the internal corners and at 475 centres at the jambs.</p> <p>Nominally 510**            2223 x 998 x 70            30 x 70</p>
2L	<p><b>Stops</b>            Manufacturer:            Description:</p> <p>Density (kg/m<sup>3</sup>):            Overall size (w x d):</p>	<p>By Dezign Carpentry**            European Redwood** stops, affixed to frame using 16swg x 38 pneumatically fired steel pins, set nominally 100** from the internal corners and at 250 to 350 centres.            Nominally 510**            12 x 20</p>
3L	<p><b>Leaf</b>            Manufacturer:            Reference:            Description:</p> <p>Overall size (h x w x t):            Weight (kg):            Sub-components:            Core:              Manufacturer:              Reference:              Description:              Density (kg/m<sup>3</sup>):              Overall size (t):            Lippings:              Manufacturer:              Reference:              Description:</p> <p>Density (kg/m<sup>3</sup>):            Overall size (d x t):            Glazing Apertures:              Description:</p> <p>Aperture size (h x w):            Upper:</p>	<p>By Dezign Carpentry**            Therman 44**            An engineered solid timber** core with engineered lippings to all edges.            2182 x 932 x 44            31.2 including ironmongery</p> <p>Wood International Agency Ltd**            Therman 44**            An engineered solid timber** core.            291 to 305**            44</p> <p>Wood Internation Agency Ltd**            L4E Edgeman** Engineered Lippings            Engineered lippings adhered to all edges of the core using Wurth D4 PU adhesive**.            735 to 767**            44 x 8</p> <p>2No. glazing apertures, set 200± and 503±* above the base of the leaf and 100± from the closing stile.</p> <p>1500± x 250±</p>



Item	Component	Information
3L cont	Lower:	300± x 250±
4L	<b>Glazing</b> Manufacturer: Reference: Pane size (h x w x d): Upper: Lower: Sight size (h x w): Upper: Lower:	Pyroguard** Advance 7-1**  1494** x 244** x 7** 294** x 244** x 7**  1466 x 222 272 x 222
5L	<b>Glazing beads</b> Manufacturer: Reference: Description:  Density (kg/m <sup>3</sup> ): Overall size (h x w): Upper: Lower: Section size (h x w): Splay angle (°)	By Dezign Carpentry** CB1** Mitred beolcted Sapele** glazing beads, affixed to the leaf using 16swg± x 38± pneumatically fired steel pins, set at 25 to 30 from the internal corners and at 90 to 200 centres, adhered using Wurth Mitre Bond adhesive**. 640**  1508 x 258 308 x 258 17 x 18 10*
6L	<b>Hinges</b> Manufacturer: Reference: Description:  Overall size: Blade size (h x w x t): Knuckle size (Ø): Fixings to leaf: Fixings to frame:	Vier Precision Design Ltd ZHSS243RS** 3No. stainless steel butt hinges with bearings, set 149, 348 and 1903 from the top of the leaf to the top of the blade.  102 x 31 x 3 14 4No. Ø4.8 x 31 stainless steel countersunk screws. 4No. Ø4.8 x 31 stainless steel countersunk screws.
7L	<b>Latch/lock</b> Manufacturer: Reference: Description:  Overall size: Forend (h x d x t): Body (h x w x d): Strike (h x d x t): Dust box (h x w x d):	Vier Precision Design Ltd ZDL7260RSS** A mainly steel mortice latch with a stainless steel forend, strike and polymeric dust box, set with the centreline of the latch bolt 920 above the base of the leaf and affixed using 2No. Ø3.4 x 21 stainless steel countersunk screws. Strike affixed using 3No. Ø3.4 x 21 stainless steel countersunk screws.  234 x 22 x 3 166 x 88 x 14 180 x 40 x 1.2 including a 135h x 16d tongue 160 x 22 x 16



Item	Component	Information
8L	<b>Euro cylinder</b> Manufacturer: Reference: Description: Overall size:	Vier Precision Design Ltd V5EP70DSCE, 70mm 35/35** A mainly brass keyed eurocylinder. 35/35
9L	<b>Escutcheon</b> Manufacturer: Reference: Description:  Overall size: Body (Ø x d x t): Cover (Ø x d x t):	Zoo Hardware Ltd** ZCS001SS** A steel escutcheon and stainless steel cover plate affixed to the leaf using 2No. Ø3.8 x 20 steel countersunk screws.  50 x 7 x 1.2 52 x 8 x 0.7
10L	<b>Handleset</b> Manufacturer: Reference: Description:  Overall size: Rose (Ø x d x t): Cover (Ø x d x t): Handle (Ø x w):	Zoo Hardware Ltd** ZCS2030SS** A mainly stainless steel lever on rose handleset comprising stainless steel handle, rose cover and steel rose, affixed to the leaf using 2No. Ø4 x 20 steel countersunk screws per rose.  50 x 7 x 1.2 52 x 8 x 0.7 19 x 140
11L	<b>Closer</b> Manufacturer: Reference: Description:  Overall size: Body size (h x w x d): Cover size (h x w x d x t):	Zoo Hardware Ltd ZDC0024A-SN A cast alloy closer with steel sub components, cover and arm, set 76 from the hanging stile and 17 below the head of the leaf, affixed using 4No. Ø5.7 x 32 steel countersunk screws. Arm affixed using 2No. Ø4.6 x 24 steel countersunk screws.  43 x 247 x 53 68 x 253 x 55 x 1.0
12L	<b>Intumescent – Frame</b> Manufacturer: Reference: Description:  Overall size (w x d):	Intumescent Seals Ltd Therm-A-Seal** 2No. graphite based intumescent strips in PVC holders with self adhesive on one side, set 8 from the exposed face, fully interrupted at the hinges and strike and 27 from the exposed face, partially interrupted at the hinges with nominally 70% remaining and at the strike with nominally 58% remaining.  10 x 4



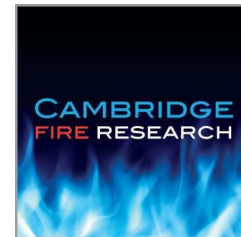
Item	Component	Information
13L	<b>Intumescent – Glazing seal</b> Manufacturer: Reference: Description:  Overall size (w x d):	Sealmaster Ltd** Intumescent Foam Tape** An open cell foam** seal with self-adhesive on one side, adhered at the interface of the glazing and beads. 15** x 5**
14L	<b>Intumescent – Hinges</b> Manufacturer: Reference: Description:  Overall size (t):	Dixon International Group Ltd** Therm-A-Strip** An ammonium phosphate based intumescent pad with self-adhesive on one side, set beneath all blades. 1
15L	<b>Intumescent – Latch/lock 1</b> Manufacturer: Reference: Description:  Overall size (t):	Dixon International Group Ltd** Therm-A-Strip** An ammonium phosphate based intumescent pad with self-adhesive on one side, encasing the latch body. 1
16L	<b>Intumescent – Latch/lock 2</b> Manufacturer: Reference: Description:  Overall size (t):	Dixon International Group Ltd** Therm-A-Flex** A graphite based intumescent pad with self-adhesive on one side, set beneath the latch forend. 1
17L	<b>Intumescent – Strike</b> Manufacturer: Reference: Description:  Overall size (t):	Dixon International Group Ltd** Therm-A-Flex** A graphite based intumescent with self-adhesive on one side, set beneath the strike. 1
18L	<b>Intumescent – Dust boxes</b> Manufacturer: Reference: Description:  Overall size (t):	Dixon International Group Ltd** Therm-A-Strip** An ammonium phosphate based intumescent pad with self-adhesive on one side, encasing both dust boxes. 1
19L	<b>Fire stopping detail</b> Description:	Gaps between the frame and the supporting construction were filled with Unifrax Insulfrax LTX mineral wool blanket and capped with Firewise Intumescent & Acoustic Acrylic Sealant.



### Right hand specimen

Item	Component	Information
1R	<p><b>Frame</b>            Manufacturer:            Description:</p> <p>Fixings to supporting construction:</p> <p>Density (kg/m<sup>3</sup>):            Overall size (h x w x d):            Cross section size (h x d):</p>	<p>By Deziign Carpentry**            A 3-sided rebated European Redwood** frame with 10h rebated joints and planted stops.            Corner joints affixed using 2No. Ø5 x 70 steel countersunk screws , set at 42 centres and adhered using Wurth D4 PVA adhesive**.</p> <p>Ø5 x 90 steel countersunk screws, set 140 to 180 from the internal corners and at 475 centres at the jambs.</p> <p>510**            2222 x 999 x 70            30 x 70</p>
2R	<p><b>Stops</b>            Manufacturer:            Description:</p> <p>Density (kg/m<sup>3</sup>):            Overall size (w x d):</p>	<p>By Deziign Carpentry**            European Redwood** stops, affixed to frame using 16swg# x 38 pneumatically fired steel pins set at 250 to 320 centres.</p> <p>510**            12 x 20</p>
3R	<p><b>Leaf</b>            Manufacturer:            Reference:            Description:</p> <p>Overall size (h x w x t):            Weight (kg):            Sub-components:            Core:              Manufacturer:              Reference:              Description:              Density (kg/m<sup>3</sup>):</p> <p>Overall size (t):            Lippings:              Manufacturer:              Reference:              Description:</p> <p>Density (kg/m<sup>3</sup>):            Overall size (d x t):            Glazing Apertures:              Description:</p> <p>Aperture size (h x w):</p>	<p>By Deziign Carpentry**            Therman 44**            An engineered solid timber** core with engineered Plywood lippings to all edges.            2182 x 932 x 44            32.0 Including ironmongery</p> <p>Wood International Agency Ltd**            Therman 44**            An engineered solid timber** core.            Nominally 300**            (Measured by Wood international Agency Ltd**:            Sample Ref C1 = 291**, Sample Ref C2 = 305**).            44</p> <p>Wood International Agency Ltd**            L4E Edgeman** Engineered Plywood Lippings            Engineered lippings adhered to all edges of the core using Wurth D4 PU adhesive**.</p> <p>600**            44 x 8</p> <p>2No. glazing apertures, set 200# and 503#* above the base of the leaf and 100# from the closing stile.</p>





Item	Component	Information
3R cont	Upper: Lower:	1500± x 250± 300± x 250±
4R	<b>Glazing</b> Manufacturer: Reference: Pane size (h x w x d): Upper: Lower: Sight size (h x w): Upper: Lower:	Pyroguard** Advance 7-1**  1494** x 244** x 7** 294** x 244** x 7**  1466 x 222 272 x 222
5R	<b>Glazing beads</b> Manufacturer: Reference: Description:  Density (kg/m <sup>3</sup> ): Overall size (h x w): Upper: Lower: Section size (h x w): Splay angle (°)	By Deziign Carpentry** CB1** Mitred bolected Sapele** glazing beads, affixed to the leaf using 16swg± x 38± pneumatically fired steel pins set 50** from the internal corners and 150 to 200** centres, adhered using Wurth Mitre Bond adhesive**. 640**  1508 x 258 308 x 258 17 x 18 10*
6R	<b>Hinges</b> Manufacturer: Reference: Description:  Overall size: Blade size (h x w x t): Knuckle size (Ø): Fixings to leaf: Fixings to frame:	Vier Precision Design Ltd ZHSS243RS** 3No. stainless steel butt hinges with bearings, set 150, 348 and 1902 from the top of the leaf to the top of the blade.  102 x 31 x 3 14 4No. Ø4.8 x 31 stainless steel countersunk screws. 4No. Ø4.8 x 31 stainless steel countersunk screws.
7R	<b>Latch/lock</b> Manufacturer: Reference: Description:  Overall size: Forend (h x w x t): Body (h x w x d): Strike (h x d x t): Dust box (h x w x d):	Vier Precision Design Ltd ZDL7260RSS** A mainly steel mortice latch comprising stainless steel forend, strike and polymeric dust box, set with the vertical centreline of the latch bolt 920 above the base of the leaf, affixed using 2No. Ø3.4 x 21 steel countersunk screws and strike affixed using 3No. Ø3.5 x 21 steel countersunk screws.  234 x 22 x 3 166 x 88 x 14 180 x 40 x 1.2 Including 135h x 16d tongue 160 x 22 x 16



Item	Component	Information
8R	<b>Euro cylinder</b> Manufacturer: Reference: Description: Overall size:	Vier Precision Design Ltd V5EP70DSCE, 70mm 35/35** A mainly brass keyed eurocylinder. 35/35
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10R	<b>Handleset</b> Manufacturer: Reference: Description:  Overall size: Rose (Ø x d x t): Cover (Ø x d x t): Handle (Ø x w):	Zoo Hardware Ltd** ZCS2030SS** A mainly stainless steel lever on rose handleset comprising steel rose, stainless steel handle and rose cover, affixed using 4No. Ø4 x 20 stainless steel countersunk screws per rose.  50 x 7 x 1.2 52 x 8 x 0.7 19 x 140
11R	<b>Closer</b> Manufacturer: Reference: Description:  Overall size: Body (h x w x d): Cover (h x w x d x t):	Zoo Hardware Ltd ZDC0024-A-SN** A mainly cast alloy closer with steel cover, set 77 from the hanging stile and 17 below the head of the leaf, affixed using 4No. Ø5.7 x 32 steel countersunk screws. Arm affixed using 2No. Ø4.6 x 24 steel countersunk screws.  43 x 247 x 53 68 x 253 x 55 x 1.0
12R	<b>Intumescent – Frame</b> Manufacturer: Reference: Description:  Overall size (w x d):	Intumescent Seals Ltd Therm-A-Seal** 2No. graphite based intumescent strips in PVC holders with self adhesive on one side, set 8 from the unexposed face, fully interrupted at the hinges and strike and set 27 from the unexposed face, partially interrupted at the hinges with nominally 71% remaining and at the strike with nominally 58% remaining.  10 x 4



Item	Component	Information
13R	<b>Intumescent – Glazing seal</b> Manufacturer: Reference: Description:  Overall size (w x d):	Sealmaster Ltd** Intumescent Foam Tape** An open cell foam** seal with self-adhesive on one side, adhered at the interface of the glazing and beads. 15** x 5**
14R	<b>Intumescent – Hinges</b> Manufacturer: Reference: Description:  Overall size (t):	Dixon International Group Ltd** Therm-A-Strip** An ammonium phosphate based intumescent pad with self-adhesive on one side, set beneath all blades. 1
15R	<b>Intumescent – Latch/lock 1</b> Manufacturer: Reference: Description:  Overall size (t):	Dixon International Group Ltd** Therm-A-Strip** An ammonium phosphate based intumescent pad with a self-adhesive on one side, encasing the latch body. 1
16R	<b>Intumescent – Latch/lock 2</b> Manufacturer: Reference: Description:  Overall size (t):	Dixon International Group Ltd** Therm-A-Flex** A graphite based intumescent pad with self-adhesive on one side, set beneath the latch forend. 1
17R	<b>Intumescent – Strike</b> Manufacturer: Reference: Description:  Overall size (t):	Dixon International Group Ltd** Therm-A-Flex** A graphite based intumescent with self-adhesive on one side, set beneath the strike. 1
18R	<b>Intumescent – Dust boxes</b> Manufacturer: Reference: Description:  Overall size (t):	Dixon International Group Ltd** Therm-A-Strip** An ammonium phosphate based intumescent pad with a self-adhesive on one side, encasing both dust boxes. 1
19R	<b>Fire stopping detail</b> Description:	Gaps between the frame and the supporting construction were filled with Unifrax Insulfrax LTX mineral wool blanket and capped with Firewise Intumescent & Acoustic Acrylic Sealant.

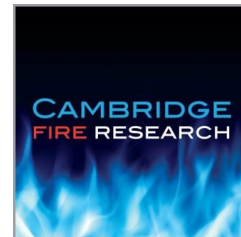
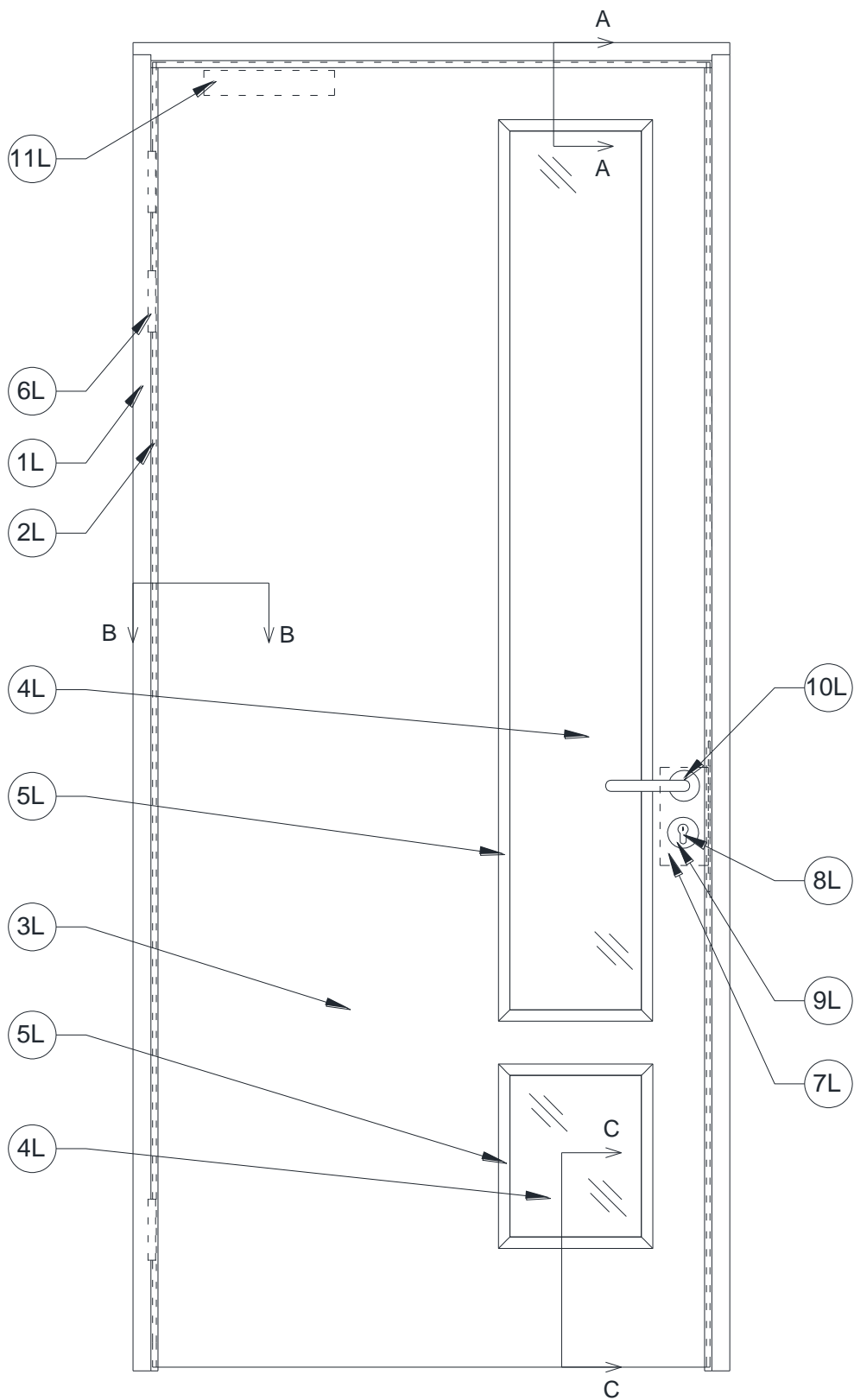


Figure 1 – Left hand specimen elevation (unexposed face view) incl. hidden detail



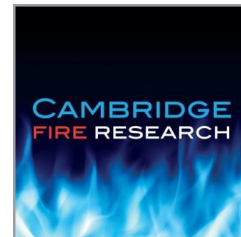


Figure 2 – Section A – A

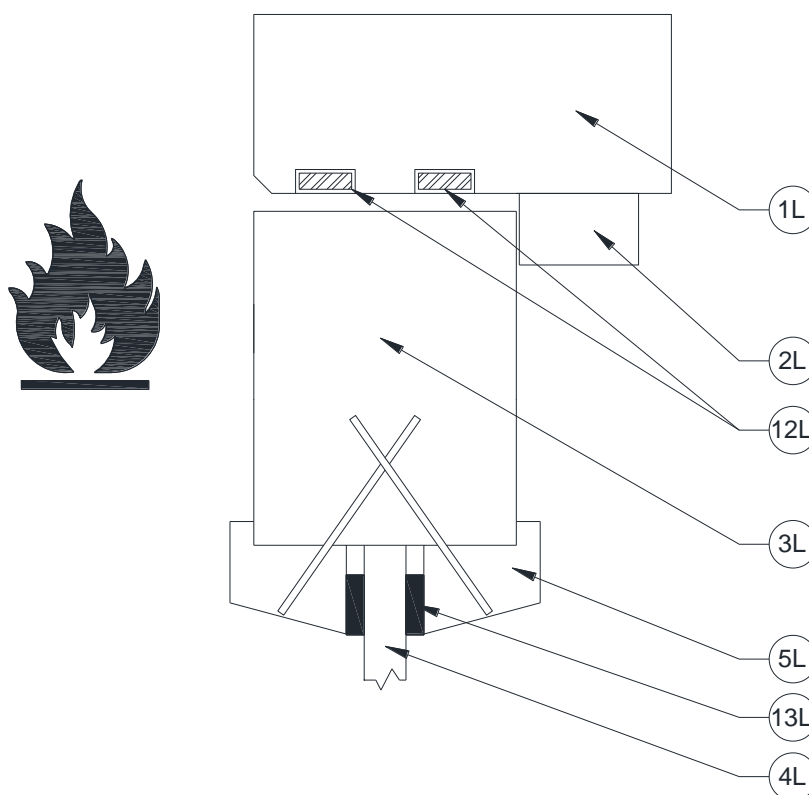
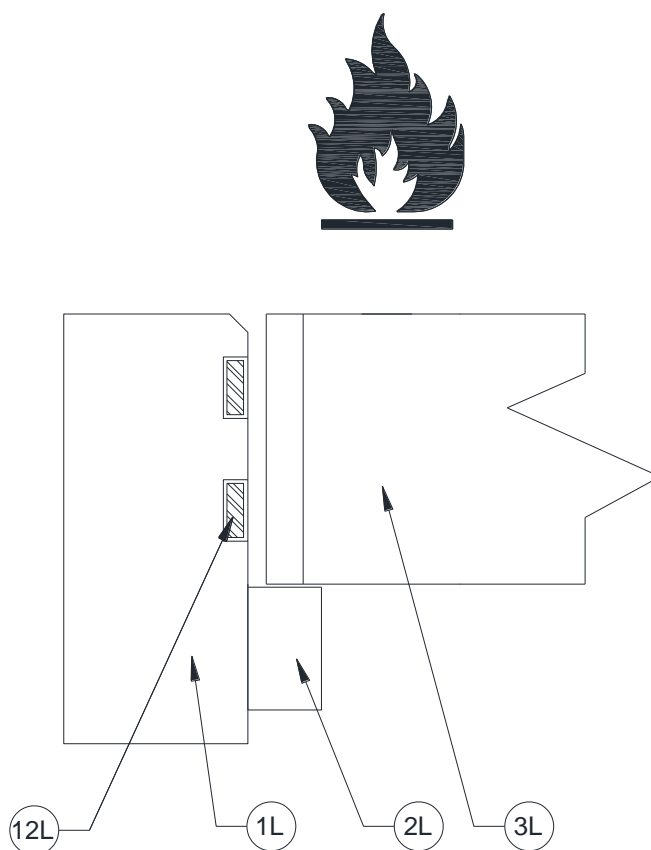
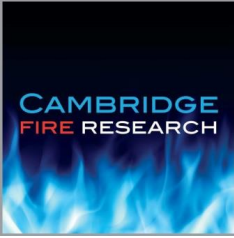
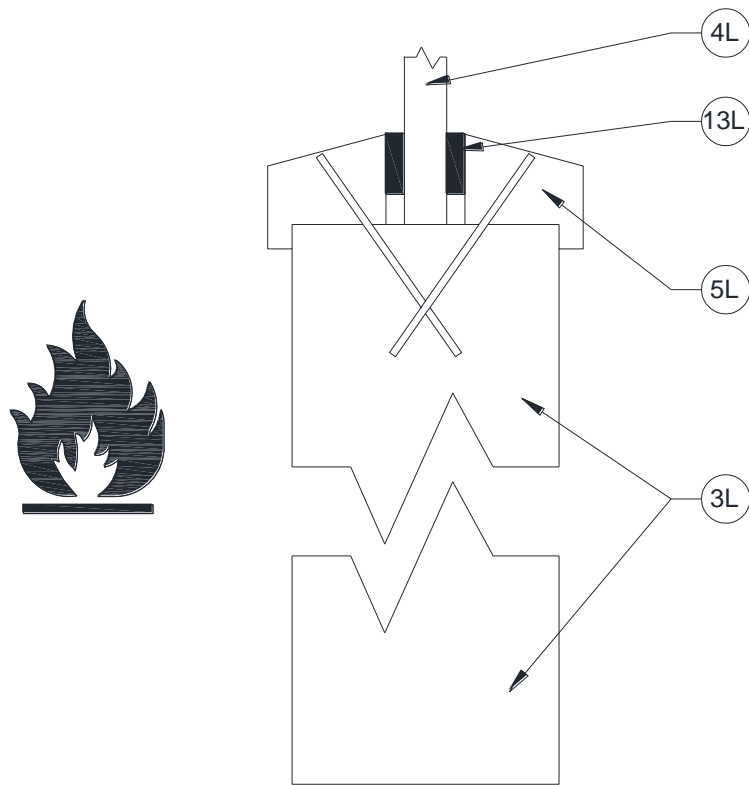


Figure 3 – Section B – B





**Figure 4 – Section C – C**





**Figure 5 – Right hand specimen elevation (unexposed face view) incl. hidden detail**

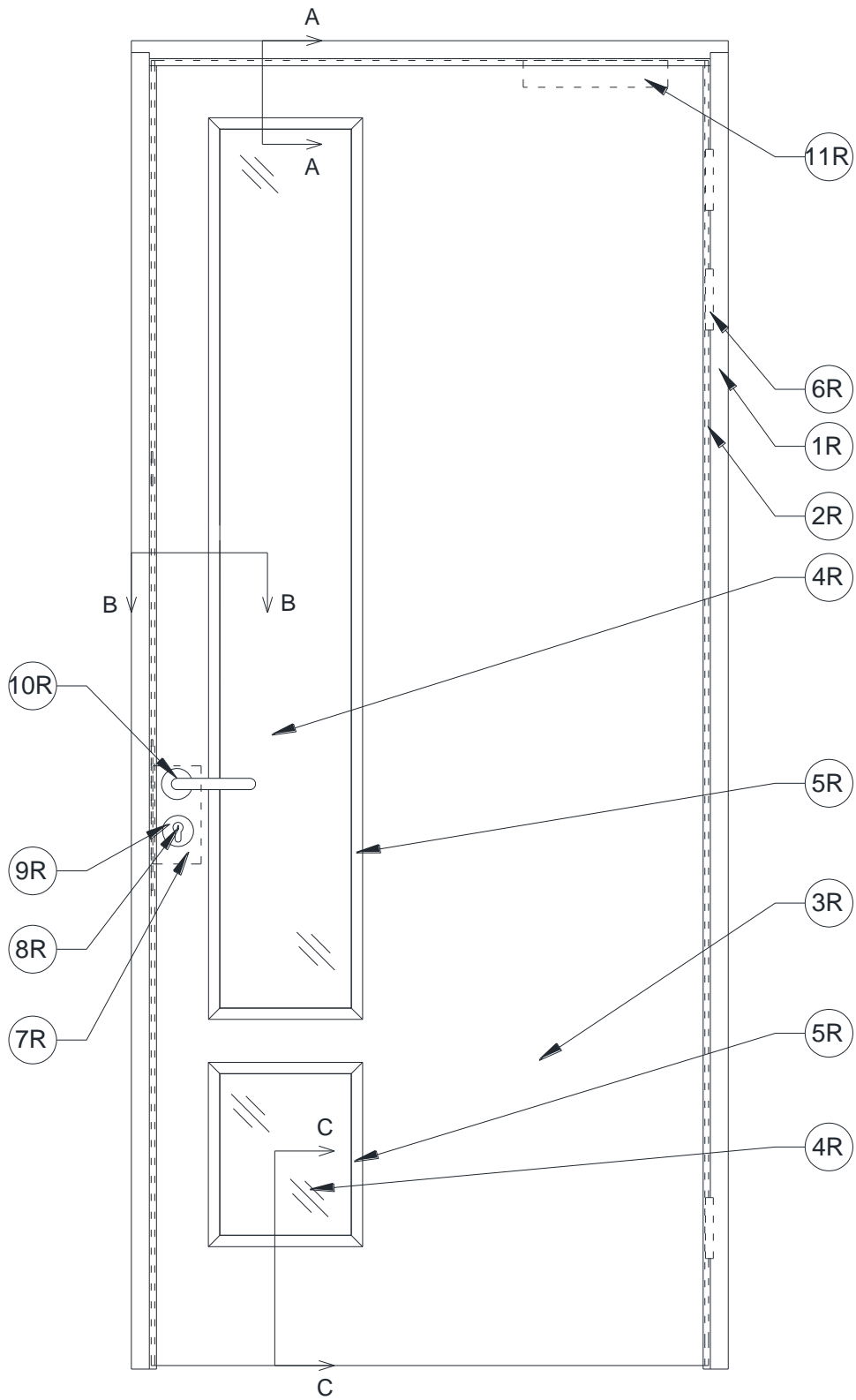




Figure 6 – Section A – A

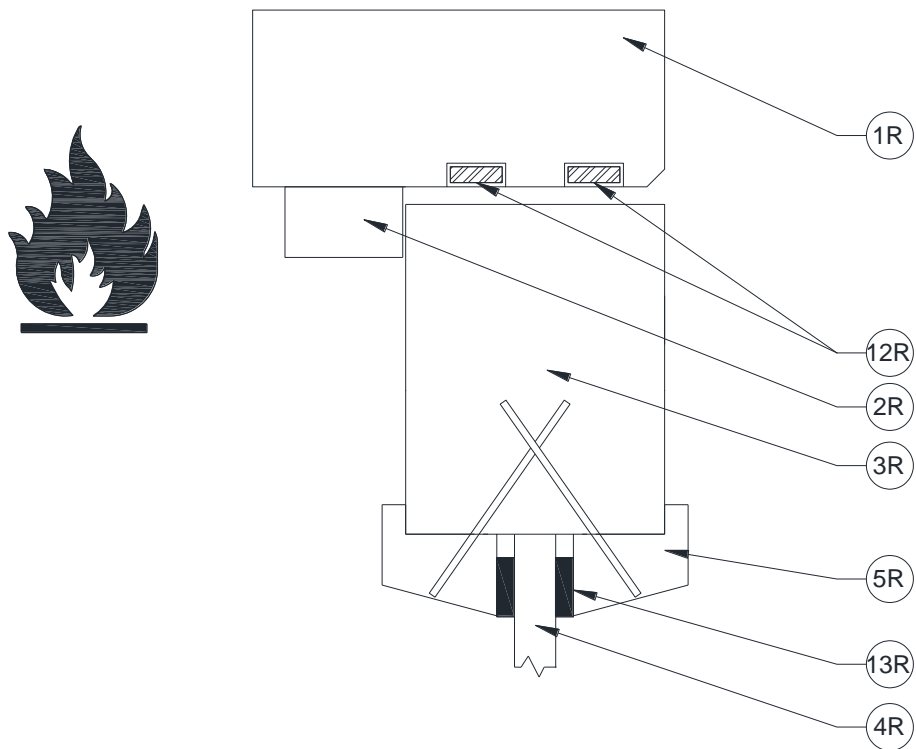


Figure 7 – Section B – B

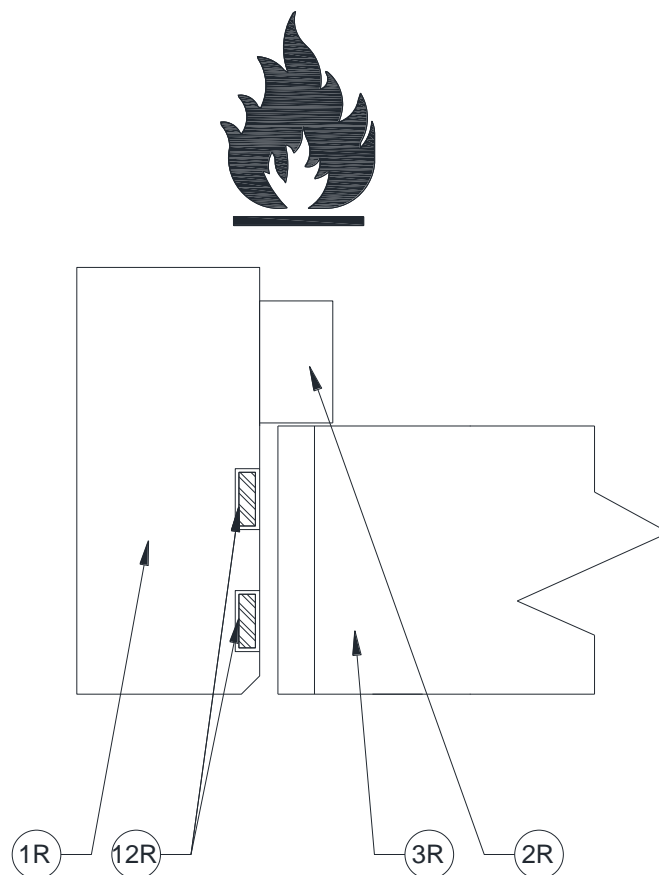
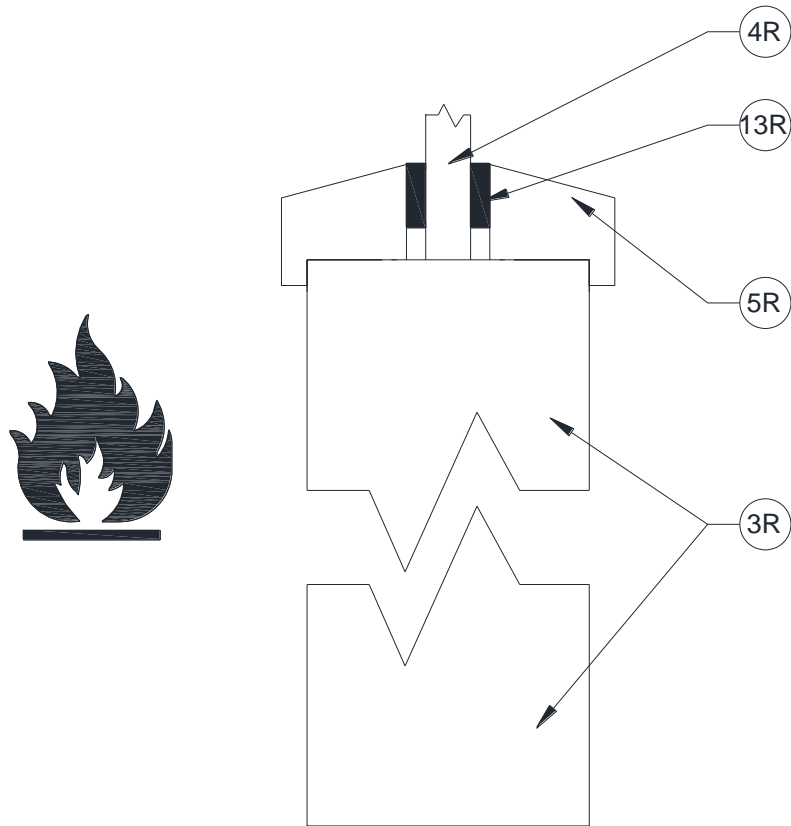






Figure 8 – Section C – C





### 3.2 TEST RESULTS

Test method, number and date	Parameter(s)	Result(s)
BS EN 1634-1:2014+A1:2018 Report no. CFR2307121 Revision 1	Supporting construction	Flexible standard supporting construction (intended fire resistance EI30, Group A) in accordance with EN1363-1:2020.
	Left hand specimen Integrity Cotton pad Gap gauge Sustained flaming Thermal insulation I <sub>2</sub> Radiation  Right hand specimen Integrity Cotton pad Gap gauge Sustained flaming Thermal insulation I <sub>2</sub> Radiation	37 minutes 37 minutes 31 minutes 5 minutes Did not exceed 15kW/m <sup>2</sup> at 37 minutes  30 minutes 37 minutes 34 minutes 6 minutes Did not exceed 15kW/m <sup>2</sup> at 37 minutes

### 4 CLASSIFICATION AND FIELD OF APPLICATION

#### 4.1 Reference of classification

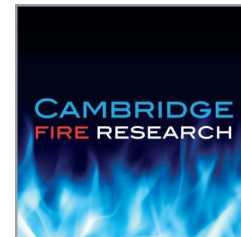
This classification has been carried out in accordance with Clause 7 of BS EN 13501-2:2023.

#### 4.2 Classification

The element, Therman 44 Doorset System, is classified according to the following combinations of performance parameters and classes as appropriate.

R	E	I	W		t	t	-	M	S	C	IncSlow	sn	ef	r	G	K
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**Fire resistance classification:**  
**EW15-C / EW20-C / EW30-C**  
**E 15-C / E 20-C / E 30-C**



### 4.3 Field of application

This classification is valid for the following end use applications of doorsets of the design tested for fire resistance, from the fire risk direction tested, with the following variations permitted by clause 13 of BS EN 1634-1:2014+A1:2018, the field of direct application of test results:

- Unless otherwise stated in the following text, the materials and construction of the doorset or openable window shall be the same as that tested. The number of leaves and the mode of operation (e.g. sliding, single action or double action) shall not be changed.
  - The thickness of the door panel(s) shall not be reduced but may be increased.
  - The door panel thickness and/or density may be increased provided the total increase in weight is not greater than 25 %.
  - The composition of the door panel (e.g. type of resin) shall not be changed from that tested. The density shall not be reduced but may be increased.
  - The cross-sectional dimensions and/or the density of the timber frames (including rebates) shall not be reduced but may be increased.
  - The type of glass and the edge fixing technique, including type and number of fixings per metre of perimeter, shall not be changed from those tested.
  - The number of glazed apertures and each of the dimensions (width and height) of glass in each pane may be decreased in proportion with size reductions.
- OR
- For All classifications, the number of glazed apertures and each of the dimensions (width and height) of glass in each pane may be decreased by a maximum of 25 %.
  - The number of glazed apertures and each of the dimensions (width and height) of glass in each pane shall not be increased.
  - The distance between the edge of glazing and the perimeter of the door leaf, or the distance between glazed apertures shall not be reduced. Other positioning within the door can only be modified if this does not involve the removal or re-positioning of structural members relative to the glazing.
  - Where it is not expected to contribute to the fire resistance of the door, a paint finish may be added to door leaves or frames. Where the paint finish contributes to the fire resistance of the door (e.g. intumescent paints) then no change shall be permitted.
  - For All classifications, decorative laminates and timber veneers shall not be added to the faces or edges of doors.
  - The number of fixings per unit length used to attach the doorset to supporting constructions may be increased but shall not be decreased and the distance between fixings may be reduced but shall not be increased.
  - The number of hinges may be increased but shall not be decreased.
  - No other building hardware changes may be made.
  - For All classifications, unlimited size reductions from the tested specimen are permitted, provided that the relative positioning of movement restrictors (e.g. hinges and latches) remains the same as tested, or that any change to the distance between them is limited to the same percentage reduction as the decrease of test specimen size.
  - For E 30 / EW30 classifications, no size increase of the doorset is allowed.
  - For E 15 / E 20 / EW15 / EW20 classifications, size increase of the doorset is permitted, up to a maximum height of 2556mm, a maximum width of 1148mm, and a maximum area of 2662265mm<sup>2</sup>. This is subject to size increase of the door leaf up to a maximum height of 2509mm, a maximum width of 1072mm, and a maximum area of 2440349mm<sup>2</sup>.
  - For larger doorset sizes, the height of the latch above floor level shall be equal to or greater than the tested height, and such increase in height shall be at least proportional to the increase in door height.



- For larger doorset sizes, the following shall apply: The distance from the top hinge to the top of the door leaf shall be equal to or less than tested. The distance from the bottom hinge to the bottom of the door leaf shall be equal to or less than tested. The distance from the centre hinge to the bottom of the door leaf shall be equal to or greater than tested.
- The number, size, location and orientation of any joints in the timber framing shall not be changed.

Primary gap region	Gap width (mm)
Head	5.5
Hanging stile	5.0
Closing stile	5.5
Threshold	6.0

- The minimum size of the primary gaps may be reduced, as long as where gaps are smaller, they shall not impair the ability of the leaf to close.
- The permitted gap size may be different for different parts of the door.
- The results of the test are applicable to doorsets where the fire exposure is from the other direction than that tested.
- The fire resistance of the doorset is applicable to a doorset mounted in the same manner in a wall or partition constructed of studs of either metal or timber covered with board, providing the partition has a fire resistance (which has been established by separate test) equal to or greater than the partition in which the doorset was tested.
- The test results are applicable to a doorset mounted in a rigid construction, provided appropriate fixings are used for that type of construction.
- Any variations not specifically listed are not permitted.



## 5 LIMITATIONS

This classification document does not represent type approval or certification of the product.

**Classification Report prepared by:**

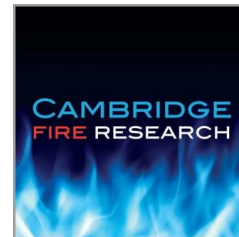
A handwritten signature in black ink, appearing to read "Tom Smith".

**Tom Smith**  
**Senior Test Engineer**

**Report checked by:**

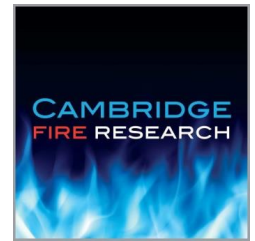
A handwritten signature in black ink, appearing to read "Stuart Plummer".

**Stuart Plummer**  
**Chief Test Engineer**

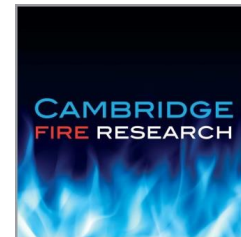


## 6 INDEPENDENT REPORT

 Proud to be part of	<b>SAMPLING VISIT REPORT</b>		Company Name	Wood International Agency Ltd
			Establishment No.	047/21200. CO
			BM TRADA Notified Body ID: 1224	
<b>Company Head Office Address</b>	<b>Wood International Agency Ltd</b> Woods House 16 King Edward Road Brentwood Essex CM5 0RQ		<b>Contact Name</b> Neil Harrison	
			<b>Telephone</b> +44 (0) 1277 232991	
			<b>Email Address</b> doors@woodia.co.uk	
<b>Location where sampling was conducted if different from Head Office Address</b>			<b>Visit Date</b> 22/07/2023	<b>BMT Representative</b> Michael Chorlton
By Deziign Carpentry, Unit 11B ERW Las, Colomendy Ind Est, Denbigh LL16 5TA				
<b>Requirement</b>		<b>Evidence / Comments</b>		
Opening Meeting (names of those present)		Neil Harrison / Shaun Harrison		
Contract Reference		SC23181		
Technical Specification document / FoA reference Photographs to be taken of all critical areas highlighted in the Technical Specification		Technical Drawing: WIA-THN44-ITT-344-Z05. Technical Specification: Therman Test 1 sampling form. Marked up technical drawing and specification made by the sampler and must be read in conjunction with this sampling report.		
Description of product(s) sampled		Single leaf glazed doorset incorporating WIAL Therman 44 core, Lipped on four edges with engineered timber and hung in softwood frame on 3No. Butt hinges. Operated by surface mounted overhead closer and secured with DIN Sashlock operated by handle and Eurocylinder.		
Product identification / reference numbers / codes		N/A		
Batch number(s)		N/A		
Date of manufacture		In stages between: 03/07/23 and 22/07/23		
Quantity of stock and size of sample(s) taken		2No. doorsets at 999mm wide x 2222mmm high		
Traceability of material records ie Purchase Orders and delivery notes		Areas with traceability: Door blank / core. Hinges. Glazing intumescent. Bead fixings. Cylinder. Lipping fixing. Door frame & stop material, density and MC. Frame intumescent seals. Lipping density & MC. Hinge fixings and intumescent. Lockset and keep traceability, fixings and intumescent. Lever handle traceability. Escutcheon traceability. Glazing bead details, density & MC. Areas with limited or not traceability: Stop fixings. Lipping material traceability. Glass traceability.		
Example of sampler's markings applied to the product(s) (contract reference, signature of client, date of manufacture)				
Confirmation of minimum mandatory video/live checks undertaken		<input checked="" type="checkbox"/> Glazing assembly (where applicable) <input checked="" type="checkbox"/> Finished doorset with markings <input type="checkbox"/> Hardware prep and fitting (where applicable) <input checked="" type="checkbox"/> Sampling pack discussion		
Details of any further FPC processes witnessed during the visit.		By Deziign do not have a formalised FPC in place. All manufacture made against the technical specification utilising traditional joinery tools and methods. Dimensional checks made throughout manufacture.		
Determine the essential characteristics of the product and confirm the details of in-process checks conducted on the sample to ensure conformity.		Door core selection, trimming and lipping application. Hardware selection, preparation, intumescent protection and fixings. Glazing selection, preparation, intumescent protection and bead fixings.		
State any items from the Technical Specification / FoA that were not witnessed and require further lab sampling		<input type="checkbox"/> Side screen / overpanel <input checked="" type="checkbox"/> Door closer	<input type="checkbox"/> Handles <input type="checkbox"/> Frame re-assembly	<input checked="" type="checkbox"/> Other (see tech spec marked with 'not seen')
Confirm any clauses within the Technical Specification that were found to be different on the sampled product/s. <b>Non-conformances may be raised for pre-cert and audit test sampling</b>		Refer to marked up technical specification. Areas in <b>Green</b> = verified during sampling Areas in <b>Blue</b> = Additional sampler notes Areas in <b>Yellow</b> = Areas without verification or where additional evidence may be required.		
Closing Meeting (names of those present)		No formalised closing meeting possible. Marked up TST and draft sampling report sent for approval and signing.		
<b>Declaration</b>		I declare that the product/s witnessed during this sampling visit are representative of normal production.		
<b>Company Representative Name (Print)</b>			<b>Company Representative Position</b>	
Neil Harrison			Director	
<b>BM TRADA Representative Signature</b>			<b>Company Representative Signature</b>	
This sampling report remains the property of BM TRADA. BM TRADA shall keep confidential all information relating to the sampling process and your organisation and shall not disclose such information to any third party except as required by law or by BM TRADA's Accreditation Bodies. This sampling report will be shared with others within Warringtonfire Testing and Certification Ltd.				



 Proud to be part of		<b>SAMPLING VISIT REPORT</b>		Company Name <b>Wood International Agency Ltd</b>
				Establishment No. <b>047/21200. CO</b>
				BM TRADA Notified Body ID: <b>1224</b>
Company Head Office Address	Wood International Agency Ltd Woods House 16 King Edward Road Brentwood Essex CM5 0RQ		Contact Name <b>Neil Harrison</b>	
			Telephone <b>+44 (0) 1277 232991</b>	
			Email Address <b>doors@woodia.co.uk</b>	
Location where sampling was conducted if different from Head Office Address			Visit Date <b>21/02/2023</b>	BMT Rep <b>Michael Chorlton</b>
PT Bahana Bhumi Persada, Jl. Raya Semarang-Pekalongan Km. 59, Batang Jawa Tengah, Indonesia, 51281				
<b>Requirement</b>		<b>Evidence / Comments</b>		
Opening Meeting (names of those present)		Mr Jacob Goss, Mr Juni Harjono		
Contract Reference		SC23077-1 (Linked with SC23077-2, also manufacture with SC23076 and SC23078)		
Technical Specification document / FoA reference. Photographs to be taken of all critical areas highlighted in the Technical Specification		Drawing / Specification: WIAD-THN44-SPA-001-A1-P1 Rev A. A marked up copy on file which must be read in conjunction with this report.		
Description of product(s) sampled		Timber based door blank constructed from: Albasia Falcata rotary peeled veneers and Albasia Falcata engineered lamel blockboards, laminated with E1 MUF adhesive, cold pressed then hot pressed prior to calibration, veneering and trimming to size.		
Product identification / reference numbers / codes		Mill reference "Duocore", WIAL reference "Therman 44".		
Batch number(s)		Works batch: 21023130 (21 march 23, shift 1 lot 30) & 21023131 (21 march 23, shift 1 lot 31)		
Date of manufacture		21/02/2023 for Barecore inspection, assembly and cold/hot pressing. 03/03/2023 for calibration sanding & veneering, 06/03/2023 for trimming.		
Quantity of stock and size of sample(s) taken		14No. Blanks (Lot 30) and 15No. (Lot 31) Blanks 1220mm wide x 2440mm high x 44mm thick.		
Traceability of material records ie Purchase Orders and delivery notes		PT BBP have fully traceable materials, processes and inspection records via SAP system. Record sheets for inspections available at all stages.		
Example of sampler's markings applied to the product(s) (contract reference, signature of client, date of manufacture)  See essential characteristics for images.		1 <sup>st</sup> stage: Barecore production including inspection records and batch control. 2 <sup>nd</sup> stage: Layout and bonding of Ply's, cold pressing, hot pressing. Raw edges of board contains batch code, signature, size and number (Images retained for traceability). 3 <sup>rd</sup> stage: Sanding & veneering. Face of each board marked with batch code, signature & size. 4 <sup>th</sup> stage: After final trimming SC23077 applied to edge of each blank with date and signature.		
Confirmation of minimum mandatory video/live checks undertaken		<input type="checkbox"/> Glazing assembly (where applicable) <input type="checkbox"/> Finished doorset with markings <input checked="" type="checkbox"/> Hardware prep and fitting (where applicable) <input checked="" type="checkbox"/> Sampling pack discussion		
Details of any further FPC processes witnessed during the visit.		Sampling is part of initial assessment of this mill for WIAL. This mill has an audited FPC in place which will be assessed under BM Trada 047 scheme certification.		
Determine the essential characteristics of the product and confirm the details of in-process checks conducted on the sample to ensure conformity.  Build: Layer 1: 0.9mm Long Grain Veneer Layer 2: 2.0mm Cross Grain Veneer Layer 3: 18.5mm blockboard (Vertical lamels). Layer 4: 2.0mm Cross Grain Veneer Layer 5: 18.5mm blockboard (Vertical lamels). Layer 6: 2.0mm Cross Grain Veneer Layer 7: 0.9mm Long Grain Veneer		Timber selection (Albasia Falcata logs for rotary peeling and sawn pieces), grading (Raw timber and lamel blockboards: A Grade with no bark or wane, insect damage, rot, splits etc), density range (280-335 kg/m <sup>3</sup> range with values seen 293-308) & moisture content (Dried to approx. 6-8%). Note that after manufacture, the complete blank will reach nominally 12%. Lamel cutting and sanding to 18.5mm thick x 52mm (Widths can be 35-52mm) wide prior to glue application and continuous forming on dedicated line. Small voids (between lamels) filled with own recipe putty (Recipe on file) noting that lamels are butt jointed excluding long edges (which are finger jointed without adhesive). Veneers rotary peeled to 2.0mm nominal, density range (280-335 kg/m <sup>3</sup> range with values seen 284-319). Glue recipe (In house mixed MUF, recipe held on file), in process tests, application quantity for lamels (4.5 kg/m <sup>2</sup> of wood used) and ply's (30g +/-3g per square foot). Laying up correct materials (As text left), cold pressing (40 mins at 14.1 MPa for 8'x4' board), hot pressing (25 mins at 90°C +/- 5° at 79 kg/m <sup>2</sup> ) and sanding. Seasoning nominally 2 days. Blow detection via ultrasound cavity detector. Calibration sanding to 42.30mm +1.0mm / -0.0mm Albasia Falcata long grain veneer 0.9mm applied with MUF glue (32g +/-3g per square foot). Cold pressing and hot pressing. Trimming to desired height x width (prior to palletisation for shipment).		
State items from Technical Specification / FoA that were not witnessed & require further lab sampling		<input type="checkbox"/> Side screen / overpanel <input type="checkbox"/> Handles <input type="checkbox"/> Other (see tech spec marked with 'not seen') <input type="checkbox"/> Door closer <input type="checkbox"/> Frame re-assembly		
Confirm any clauses within the Technical Specification that were found to be different on the sampled product/s. <b>Non-conformances may be raised for pre-cert and audit test sampling</b>		Mark up of the specification document made. Specification above must be agreed by the Mill and the specification updating accordingly prior to being formalised as the contractual specification.		
Closing Meeting (names of those present)		Remote sampling. No formalised closing meeting, report sent for review and approval.		
Declaration		I declare that the product/s witnessed during this sampling visit are representative of normal production.		
Company Representative Name (Print)		Company Representative Position		
JACOB GOSS		DIRECTOR		
BM TRADA Representative Signature		Company Representative Signature		
		Sent to PT BBP for approval after initial comment & change.		
* This sampling report remains the property of BM TRADA. BM TRADA shall keep confidential all information relating to the sampling process and your organisation and shall not disclose such information to any third party except as required by law or by BM TRADA's Accreditation Bodies. This sampling report will be shared with others within Warringtonfire Testing and Certification Ltd.				

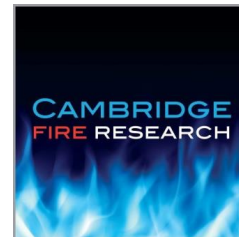


## Sample Report

This report provides a record of the information relating to samples taken by Warringtonfire Testing and Certification Limited trading, or its agent, for certification of the products detailed below.

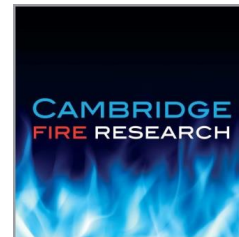
Job No.	FM450144
Manufacturer	Dixon International Group Ltd
Manufacturing site	Place of Sampling - Unit 3, The Old Brewery, Pampisford, Cambridge, CB22 3HG  CF5387 produced by Vita Cellular Foams UK Ltd CF5645 produced by Profile Techniques Ltd
Place of sampling	Packaging Section – Picked from Stock
Traceability information	Date/time of production: Sampled 15/12/21 Production unit/line: Packaging section Batch number: Orders V92554, V92357. Shift: Day
Product Number/ Description	<b>Produced by Vita cellular Foams UK Ltd – CF5387</b> Sealmaster Intumescent Foam - 15mm x 5mm black – 20 No Coils X 20m – WO V92554; Sealmaster Intumescent Foam – 10mm x 5mm black – 30 No. Coils x 20m – WO V9357; Sealmaster Intumescent Foam – 20mm x 5mm black – 15 No. Coils x 20m – WO V92357;  <b>Produced by Profile Techniques – CF5645</b> Sealmaster Intumescent Closed Cell Foam Tape – 10mm x 3mm black – 200 mts – WO 33108; Sealmaster Intumescent Closed Cell Foam Tape – 15mm x 3mm black – 200mts – WO 33694  Thermablade 15 X4mm White – 20 No. Thermaseal 20 x 4mm White – 20 no. Thermaseal 15 x 4mm White – 30 No. Thermaseal 10 x 4mm White – 20 No.
Marking of the product by the manufacturer e.g. label, batch number and date of manufacture	FM450144 / 1121 / Gavin Gunn / 15-12-21
Marking of the samples by Warringtonfire Testing and Certification Limited	Job No: FM450144 Date: 15 <sup>th</sup> December 2021 Signature or initials: Gavin Gunn
Stock/batch quantity from which samples selected and sample quantity	Picked from received stock.
Results of tests and/or inspections during manufacture	N/A – Refer to manufacturers audit reports
Essential Characteristics to be tested ie. Test reference	Various – Required for audit test purposes
Samples to be dispatched by manufacturer to *** within *** weeks/month(s)	To be consumed when required.
Date of sampling	15 <sup>TH</sup> DECEMBER 2021
Warringtonfire Testing and Certification Limited notified body number	1121







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Signed:  (for and on behalf of Manufacturer)	Signed:   (for and on behalf of Warringtonfire Testing and Certification Limited)
Print: BOB SETTLE	Print: GAVIN GUNN
Date: 15 <sup>TH</sup> DECEMBER 2021	Date: 15 <sup>TH</sup> DECEMBER 2021



**Sample Report**

This report provides a record of the information relating to samples taken by Warringtonfire Testing and Certification Limited trading, or its agent, for certification of the products detailed below.

Job No.	FM524113
Manufacturer	Pyroguard UK Ltd
Manufacturing site	Pyroguard UK LTD, International house, Millfield Lane Haydock WA11 9GA
Place of sampling	As above
Traceability information	Date/time of production: 24 <sup>th</sup> October 2022 Production unit/line: Main Factory Batch number: Production Run 51 Shift: Day
Product Number/ Description	Ref: Pyroguard Advanced
Marking of the product by the manufacturer e.g. label, batch number and date of manufacture	23No. Stock sheets of Pyroguard 2 EW30/7-1 glass
Marking of the samples by Warringtonfire Testing and Certification Limited	Job No: FM524113      Notified Body 1121 Date: 24 <sup>th</sup> October 2022 Signature or initials: AJC
Stock/batch quantity from which samples selected and sample quantity	Samples production witnessed and inspected during manufacture
Results of tests and/or inspections during manufacture	Manufactured to BS EN14449, BS EN1279
Essential Characteristics to be tested ie. Test reference	BS EN 1363-1 Part 1
Samples to be dispatched by manufacturer to *** within *** weeks/month(s)	Dispatch to: Pyroguard UK Ltd - H1 Stock International House Millfield Lane Haydock Lane Merseyside, WA11 9GA
Date of sampling	24 <sup>th</sup> October 2022
Warringtonfire Testing and Certification Limited notified body number	1121
Signed:   (for and on behalf of Manufacturer)	Signed:   (for and on behalf of Warringtonfire Testing and Certification Limited)
Print: Vince Crook	Print: Andrew Cape
Date: 24 <sup>th</sup> October 2022	Date: 24 <sup>th</sup> October 2022

Warringtonfire Testing and Certification Limited  
 Registered Office: 10 Lower Grosvenor Place, London, United Kingdom, SW1W 0EN.  
 Company Registration No.11371436



## 7 REVISION HISTORY

Issue	Identification of changed information and reasons	Prepared by	Checked by
1	Original issue	Tom Smith	S Plummer
2	UKAS logo added as per technical bulletin.	Tom Smith	S Plummer