

Field of Application Report

IFC Report PAR/24146/01

Fire Resistance Standard: BS476: Part 22: 1987



Prepared for:

Royde & Tucker Ltd

Assessed Product/System:

Royde & Tucker Emergency Release – H131 Range

Assessed Performance:

30 and 60 minutes fire resistance

Issue Date

June 2023

Expiry Date

June 2028

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International Fire Consultants Ltd

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Prepared on behalf of:	Royde & Tucker Ltd
Issue Date:	June 2023
Expiry Date:	June 2028
Ref ID:	#24146

Issue and Amendment Record

REV	DATE	AUTHOR	REVIEW	SECTION	AMENDMENTS
-	June 2023	WL	CPH		

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1. Introduction

This report has been prepared by International Fire Consultants Ltd (IFC), on the instruction of Royde & Tucker Ltd, to define the Field of Application for the H131 range of Emergency Release hardware for use with timber-based door assemblies, that are required to provide 30 or 60 minutes fire resistance performance, when adjudged against BS476: Part 22: 1987.

This assessment has been produced using the principles outlined in the [Passive Fire Protection Forum \(PFPF\): 'Guide to undertaking technical assessments of fire performance of construction products based on fire test evidence, 2021, Industry Standard Procedure'](#).

When establishing the variations in the construction that can achieve the required fire resistance performance, IFC complies with the principles found in the following documents:

- [BS ISO/TR 12470-2: 2017 'Fire resistance tests - Guidance on the application and extension of results from tests conducted on fire containment assemblies and products. Part 2: Non-load bearing elements'](#).
- [EN 15725: 2010: 'Extended application reports on the fire performance of construction products and building elements'](#).

It is proposed that the Emergency Release hardware, as described in the following sections, may be accommodated into door assemblies, without reducing their potential to achieve a 30 or 60 minute integrity rating, as applicable, if tested in accordance with the method and criteria of BS476: Part 22: 1987. The omission of information on any components or manufacturing methods does not imply a lack of approval of those details, but these would need to be the subject of a separate analysis. Only variations specifically mentioned are supported by this assessment document, all other aspects must otherwise be as proven in tests summarised herein.

It is more onerous to test timber door assemblies, hinged or pivoted, with the specimen installed with the leaf opening in towards the furnace. Testing in this orientation is therefore incorporated into Field of Application Reports to cover doors opening in the opposite direction. The principle is only applicable when the door construction, and any features within the door leaf, such as glazing or hardware, are symmetrical.

Unless stated otherwise, herein, this Field of Application considers the scope of approval for door assemblies that may be installed in either orientation, that being with either face exposed to fire conditions. See Section 3.6 regarding directionality of door assemblies when installed incorporating the Royde & Tucker Emergency Release.

2. Royde & Tucker Emergency Release

The following models and specifications of Royde & Tucker Emergency Release hardware are considered in the scope of approval detailed in this report.

2.1 H131-105

ELEMENT		SPECIFICATION
PRODUCT REFERENCE		H131-105
MATERIALS		Grade 304 Stainless steel with no parts manufactured from combustible materials or materials with a melting point lower than 800°C
DIMENSIONS	FACE PLATE	112mm high x 42mm wide x 3mm thick
	BODY	58mm high x 34mm wide x 20.5mm deep
FIRE RESISTANCE		For use in 30 or 60 minute timber door/timber frame assemblies
LOCATION		Single Doors: Head or Jamb Double Doors: Head only
ADDITIONAL PROTECTION		Configuration dependent – See Section 3.8
FIXINGS		4no. M5 x 30mm steel screws

2.2 H131-106

ELEMENT		SPECIFICATION
PRODUCT REFERENCE		H131-106
MATERIALS		Grade 304 Stainless steel with no parts manufactured from combustible materials or materials with a melting point lower than 800°C
DIMENSIONS	FACE PLATE	80mm high x 40mm wide x 3mm thick
	BODY	28.6mm diameter x 28mm deep
FIRE RESISTANCE		For use in 30 or 60 minute timber door/timber frame assemblies
LOCATION		Single Doors: Head or Jamb Double Doors: Head only
ADDITIONAL PROTECTION		Configuration dependent – See Section 3.8
FIXINGS		4no M5 x 30mm steel screws

2.3 H131-107

ELEMENT		SPECIFICATION
PRODUCT REFERENCE		H131-107
MATERIALS		Grade 304 Stainless steel with no parts manufactured from combustible materials or materials with a melting point lower than 800°C
DIMENSIONS	FACE PLATE	112mm high x 42mm wide x 3mm thick
	BODY	58mm high x 34mm wide x 20.5mm deep
FIRE RESISTANCE		For use in 30 or 60 minute timber door/timber frame assemblies
LOCATION		Single Doors: Head or Jamb Double Doors: Head only
ADDITIONAL PROTECTION		Configuration dependent – See Section 3.8
FIXINGS		4no M5 x 30mm steel screws

2.4 H131-300

ELEMENT		SPECIFICATION
PRODUCT REFERENCE		H131-300
MATERIALS		Grade 304 Stainless steel with no parts manufactured from combustible materials or materials with a melting point lower than 800°C
DIMENSIONS	FACE PLATE	80mm high x 40mm wide x 3mm thick
	BODY	28.6mm diameter x 28mm deep
FIRE RESISTANCE		For use in 30 or 60 minute timber door/timber frame assemblies
LOCATION		Single Doors: Head or Jamb Double Doors: Head only
ADDITIONAL PROTECTION		Configuration dependent – See Section 3.8
FIXINGS		4no M5 x 30mm steel screws

3. Scope of Approval

3.1 Approved Door Assemblies - Test Evidence and Supporting Documentation

The following conditions must be met when selecting a 44mm thick FD30 or 54mm thick FD60 door assembly into which the Royde & Tucker Emergency Release hardware is to be fitted.

- The door core being considered for use must have:
 - Test evidence to BS476: Part 22: 1987 or BS EN 1634-1, which has been generated at a UKAS accredited test laboratory. The test evidence must demonstrate that the door design is capable of a minimum of 30 or 60 minutes fire resistance in a single or double leaf configuration, as appropriate for the end use application. Other than the inclusion of the Royde & Tucker Emergency Release hardware, in accordance with the requirements of this report, no other changes to the tested specimen are covered by this assessment (e.g. door leaf sizes, glazing, leaf size adjustments etc).
 - Been included in a valid Assessment Report prepared by IFC that approves the door for use in double acting configurations
- Use of this Field of Application Report with a certificated door design does not automatically maintain the chain of certification of the door. It is strongly recommended that the door manufacturer and/or the certification provider are contacted to understand the limitations of using this assessment in conjunction with a specific Third Party Certified door design. Any identifying certification labels or markings must be removed from the door design, unless instructed otherwise by the certification provider.
- The specifications included herein must be met as a minimum, but other than the inclusion of the emergency release hardware items referenced above, the minimum requirements of the supporting documentation for the particular door assemblies should also be met.

3.2 Door Assembly Modifications

The following modifications to the door assembly are required for the installation of the Royde & Tucker Emergency Release hardware.

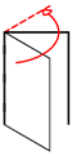
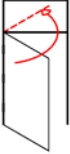
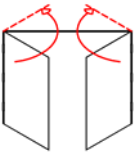
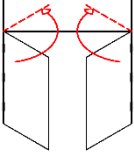
- A rebate in the door frame, into which the Emergency Release hardware is installed. This shall be sized to accommodate the body of the chosen product and required intumescent jacket (for FD60 applications), such that there are no gaps around the installed product.
- Additional rebates in the frame/leaf edge as required in Section 3.8 of this report, for the accommodation of intumescent protection.

3.3 Door Assembly Configurations

The Royde and Tucker Emergency Release may be used in conjunction with the following door leaf configurations, where the requirements of Section 3.1 can be met for each. Limitations apply on the use of the H131 range of Emergency Release hardware, detailed in the following sections.

The contents of this report are based on the following typical door thicknesses being used for each fire resistance period.

- 30 minutes fire resistance: 44mm thick timber-based door leaves
- 60 minutes fire resistance: 54mm thick timber-based door leaves

CONFIGURATION		
		<ul style="list-style-type: none"> • Latched/Unlatched • Double Acting • Single Door • With or Without Overpanel^{Note 1}
		<ul style="list-style-type: none"> • Latched/Unlatched • Double Acting • Double Doors • With or Without Overpanel^{Note 1}

Note 1 When the Emergency Stop is installed at the head of the door *and* an overpanel is incorporated into the design of the door assembly, the leaf and overpanel must be separated by a transom. The transom shall be a minimum of 44mm thick, or as per that required for the particular door leaf supporting documentation, whichever is greater.

3.4 Timber Frames

Timber frames, to the minimum specifications given below, are required when installing the Royde & Tucker Emergency Release.

Should the supporting documentation for the door type require frames of an enhanced specification to that listed below, then they should take precedence. Conversely, should the specifications below exceed the requirements of the supporting documentation, then those detailed herein shall take precedence.

3.4.1 30 minutes Fire Resistance

MATERIAL	MINIMUM DENSITY	MINIMUM FACE WIDTH	MINIMUM FRAME DEPTH
		Double Acting	Note 3
Soft or hardwood	450kg/m ³ Note 2	Door frame: 38mm Note 4 Transoms: 44mm Note 5	As required by the test data or supporting report for the door assemblies, but shall be a minimum of 10mm past the rebate of the Emergency Release hardware

Note 2 Timber must have a minimum measured density at 15% moisture content. The timber must be straight grained and of appropriate quality in accordance with BS EN 942: 2007. The moisture content shall be 11 ± 2% for UK market, (or to suit internal joinery moisture content specification of export countries).

Note 3 These dimensions assume that the rear of the frame is protected by the adjacent wall, (and firestopping), and that the frame does not project out from the wall.

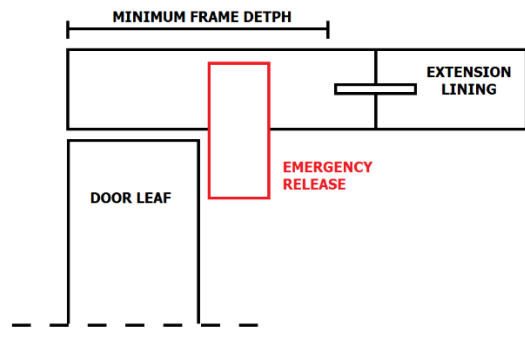
Projecting frames, feature rebates and shadow gaps are not permitted for use with the Royde & Tucker Emergency Release hardware.

Note 4 Frames for double acting doors must have the stated minimum frame thickness at the scalloped edge which is to suit the radius of the pivot stile of the door and to facilitate the fitment of the top pivot.

Note 5 A transom between the leaf and overpanel shall be a minimum of 44mm thick, or as per that required for the particular door leaf supporting documentation, whichever is greater.

The overall frame depth may be increased by the use of extension linings, but the joint between the main frame and the extension lining must not intrude any closer than 10mm from the rebate of the Royde & Tucker Emergency release, as per the requirements of the minimum frame depth above.

No joints permitted within the minimum frame depth section outlined within this report.



Other than the specifications above, the frame construction, including head/jamb joints, architraves and transom members shall be either as tested or as detailed in the supporting documentation for the door assemblies.

3.4.2 60 minutes Fire Resistance

MATERIAL	MINIMUM DENSITY	MINIMUM FACE WIDTH	MINIMUM FRAME DEPTH Note 7
		Double Acting	
Hardwood	640kg/m ³ Note 6	Door frame: 38mm Note 8 Transoms: 44mm Note 9	As required by the test data or supporting report for the door assemblies, but shall be a minimum of 10mm past the rebate of the Emergency Release hardware

Note 6 Timber must have a minimum measured density at 15% moisture content. The timber must be straight grained and of appropriate quality in accordance with BS EN 942: 2007. The moisture content shall be 11 ± 2% for UK market, (or to suit internal joinery moisture content specification of export countries).

Note 7 These dimensions assume that the rear of the frame is protected by the adjacent wall, (and firestopping), and that the frame does not project out from the wall.

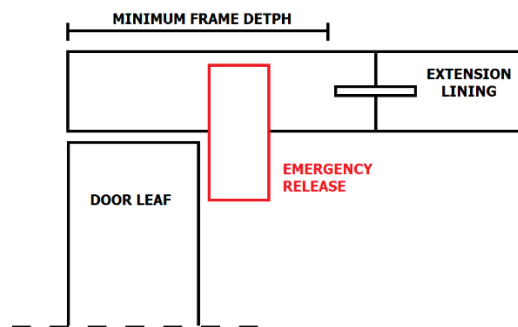
Projecting frames, feature rebates and shadow gaps are not permitted for use with the Royde & Tucker Emergency Release hardware.

Note 8 Frames for double acting doors must have the stated minimum frame thickness at the scalloped edge which is to suit the radius of the pivot stile of the door and to facilitate the fitment of the top pivot.

Note 9 A transom between the leaf and overpanel shall be a minimum of 44mm thick, or as per that required for the particular door leaf supporting documentation, whichever is greater.

The overall frame depth may be increased by the use of extension linings, but the joint between the main frame and the extension lining must not intrude any closer than 10mm from the rebate of the Royde & Tucker Emergency release, as per the requirements of the minimum frame depth above..

No joints permitted within the minimum frame depth section outlined within this report.



Other than the specifications above, the frame construction, including head/jamb joints, architraves and transom members shall be either as tested or as detailed in the supporting documentation for the door assemblies.

3.5 Installation Location

The H131 range of Royde & Tucker Emergency Release hardware may be installed at the following locations of door assemblies:

- Leading edge of single FD30 and FD60 door assemblies
 - Maximum height of the Emergency release shall be equal to that permitted for the top hinge at the hanging edge of the assembly
 - The H131 range of Emergency release hardware shall be a minimum of 150mm from all other hardware installed in the leading edge of the leaf
 - Maximum 3no. stops per leading edge
- Head of double leaf FD30 or FD60 door assemblies
 - 1no. stop per leaf head and minimum 100mm from leading leaf edge and 150mm from any other item of hardware

3.6 Directionality

The installation of the Royde & Tucker H131 range of Emergency Release hardware will not have an impact on the approved direction of exposure of the door assemblies into which they are installed. Therefore, the Royde & Tucker H131 range of Emergency Release hardware may be installed at the exposed or unexposed face of a timber door assembly.

3.7 Installation, Supporting Construction and Door Edge Gaps

This report only applies to scenarios where the frame is fully aligned within the plane of the fire-resisting wall/partition. The approval in this report does not apply where the wall/partition includes decorative 'cladding' on the face of the fire-resisting construction, (e.g. timber panelling on battens, or plasterboard on studs/dabs), such that any part of the frame is aligned within the plane of this decorative cladding. This detail is likely to adversely affect the fire resistance of the door assembly, and IFC should be consulted for specific advice, to determine upgrading measures that will be required in such cases.

The gap sealing between the supporting construction and timber frames should follow the recommendations given in Section 9.4 of [BS8214: 2016, 'Timber-based fire door assemblies – Code of practice'](#), using a product proven in such timber applications.

The Emergency Release hardware may be used in leaves that are fitted centrally to the frame depth or offset, when approved by the supporting documentation for the door assemblies ^{Note 10}.

Note 10 In some instances the leaves may appear offset due to the additional frame material required for the installation of the Emergency Release hardware, whilst still being fitted centrally to the minimum frame depth required by the supporting documentation for the door assembly.

The face of leaves in double door assemblies shall be flush with each other at meeting stiles, when closed.

3.8 Intumescent Protection

Intumescent seals shall be installed in the leaf edge or frame reveal, as required by the supporting test report or assessment report for the door type, but as a minimum, shall be as follows;

- 1no. 15x4mm seal centred on the leaf thickness, in FD30 assemblies
- 2no. 15x4mm seals centred on the leaf thickness, spaced 7-8mm apart in FD60 assemblies
- Meeting stiles of FD30 and FD60 double doors to be as per relevant supporting documentation

The following section details additional intumescent protection that is required in any door assembly that has been installed with the Royde & Tucker Emergency Release hardware.

It is recommended that the intumescent seals are manufactured or supplied by members of the Intumescent Fire Seals Association (IFSA) or that the product is included in a Third Party Certification scheme, such as that provided by IFC Certification, to ensure product quality and consistency.

See Appendix A for table of intumescent locations.

3.8.1 Single FD30 Door Assemblies – Jamb Mounted

When any of the H131 range of Emergency Release hardware, as detailed herein, is installed in a 44mm thick single FD30 door assembly with a single 15mm wide intumescent seal, there will be no interruption of the seal by the Emergency Release hardware. This is true whether the seal is installed in the frame reveal or leaf edge. On this basis, the intumescent seal may be installed in either the leaf edge or the frame reveal, when also permitted by the supporting documentation for the door assembly.

No additional intumescent protection is required around the body of the Emergency Release hardware.

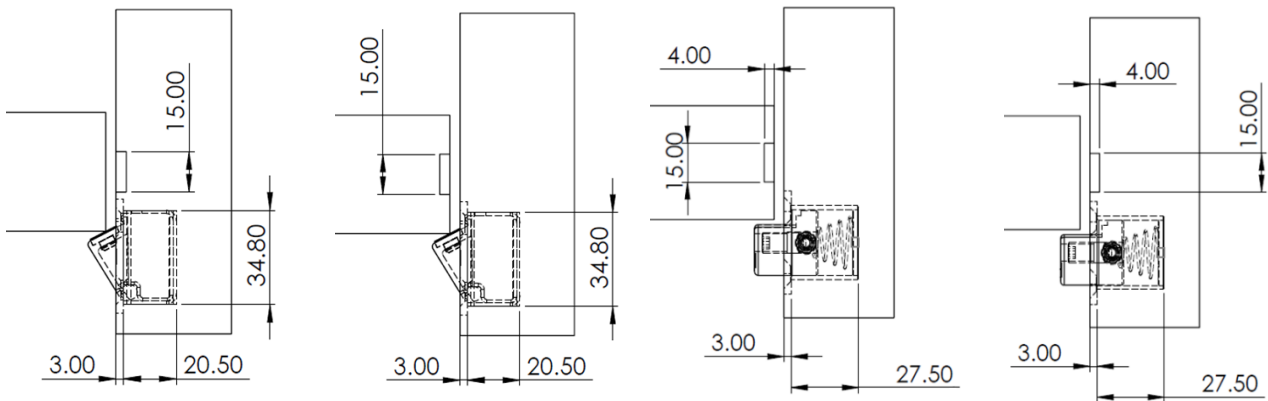


Figure 1 - Interface with Emergency Release and FD30 typical intumescent seals

3.8.2 Single FD30 Door Assemblies – Head Mounted

When any of the H131 range of Emergency Release hardware, as detailed herein, is installed in a 44mm thick single FD30 door assembly with a single 15mm wide intumescent seal, there will be no interruption of the seal by the hardware. On this basis, the intumescent seal may be installed in either the leaf edge or the frame reveal, when also permitted by the supporting documentation for the door assembly. However, when the seal is installed in the frame reveal an additional 10 x 4mm intumescent seal shall be installed in the leaf head in the vicinity of the stop, which shall extend a minimum 25mm beyond either end of the emergency release. Alternatively, the additional seal may be installed for the full width of the door leaf.

No additional intumescent protection is required around the body of the hardware.

3.8.3 Double FD30 Door Assemblies – Head Mounted

When the seal is installed in the frame reveal an additional 10 x 4mm intumescent seal shall be installed in the leaf head in the vicinity of the stop, which shall extend a minimum 25mm beyond either end of the emergency release. Alternatively, the additional seal may be installed for the full width of the door leaf.

No additional intumescent protection is required around the body of the hardware.

3.8.4 Single FD60 Door Assemblies – Jamb Mounted

The body of the emergency release should be encased with 1mm Interdens or 0.8mm Flexifire intumescent material, this refers to any face set within the rebate in the door frame.

2mm thick Interdens intumescent material shall be fitted beneath the forend of the emergency release.

Perimeter seals for use in conjunction with FD60 assemblies should be graphite or Lorient 617 based.

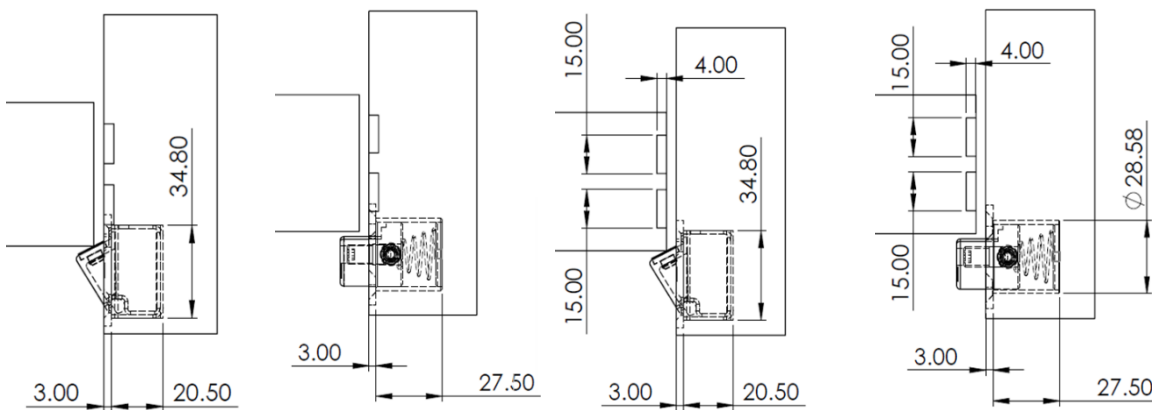


Figure 2 - Interface with Emergency Release and FD60 typical intumescent seals

3.8.5 Single FD60 Door Assemblies – Head Mounted

The body of the emergency release should be encased with 1mm Interdens or 0.8mm Flexifire intumescent material, this refers to any face set within the rebate in the door frame.

2mm thick Interdens intumescent material shall be fitted beneath the forend of the emergency release.

Seals for use in conjunction with FD60 assemblies should be graphite or Lorient 617 based.

When the seal is installed in the frame reveal an additional 10 x 4mm intumescent seal shall be installed in the leaf head in the vicinity of the stop which shall extend a minimum 25mm beyond either end of the emergency release. Alternatively, the additional seal may be installed for the full width of the door leaf.

3.8.6 Double FD60 Door Assemblies – Head Mounted

The body of the emergency release should be encased with 1mm Interdens or 0.8mm Flexifire intumescent material, this refers to any face set within the rebate in the door frame.

2mm thick Interdens intumescent material shall be fitted beneath the forend of the emergency release.

Seals for use in conjunction with FD60 assemblies should be graphite or Lorient 617 based.

When the seal is installed in the frame reveal an additional 10 x 4mm intumescent seal shall be installed in the leaf head in the vicinity of the stop which shall extend a minimum 25mm beyond either end of the emergency release. Alternatively, the additional seal may be installed for the full width of the door leaf.

4. Conclusion

Based upon the analysis performed by International Fire Consultants Ltd, if door assemblies utilising timber-based door leaves installed in timber frames were manufactured and installed within the limitations of their respective test data, or supporting documentation, and fitted with one of the Royde & Tucker H131 range of Emergency Release stops, and tested for fire resistance, they would satisfy the integrity criteria of BS476: Part 22: 1987 for 30 or 60 minutes, as applicable.

5. Declaration by the Applicant

Kiwa IFC Engineering Assessment Report	PAR/24146/01
Client	Royde & Tucker Ltd
<p>We the undersigned confirm that we have read and complied with the obligations placed on us by the</p>	
<p>Passive Fire Protection Forum (PFPF) - Industry Standard Procedure 2021 ‘Guide to Undertaking Technical Assessments of Fire Performance of Construction Products Based on Fire Test Evidence’</p>	
<ul style="list-style-type: none"> We agree to withdraw this assessment from circulation should the component or element of structure, or any of its component parts be the subject of a failed fire resistance test to the standard against which this assessment is being made. We understand that this assessment is based on test evidence and will be withdrawn should evidence become available that causes the conclusion to be questioned. In that case, we accept that new test evidence may be required. We are not aware of any information that could affect the conclusions of this assessment. If we subsequently become aware of any such information, we agree to ask the assessing authority to withdraw the assessment. 	
Signature	
Name	
Position	
Company Name	Royde & Tucker Ltd
Date	

6. Limitations

This report addresses itself solely to the ability of the proposed assemblies described to satisfy the criteria of the fire resistance test and does not imply any suitability for use with respect to other unspecified criteria.

It is the responsibility of others to establish whether the proposed product meets any other relevant requirements, including any other requirements for fire performance and life safety, as defined in documents such as the Building Regulations, and the Fire Strategy/Risk Assessment for the project.

This document only considers the door assemblies described, herein, and assumes that the surrounding construction will provide no less restraint than the tested assembly and that it will remain in place and be substantially intact for the full fire resistance period.

This assessment is issued on the basis of test data and information to hand at the time of issue. If contradictory evidence becomes available to International Fire Consultants Ltd (IFC) the assessment will be unconditionally withdrawn and the applicant will be notified in writing. Similarly, the assessment evaluation is invalidated if the assessed construction is subsequently tested since actual test data is deemed to take precedence.

As per the guidance outlined in the [Passive Fire Protection Forum \(PFPF\): 'Guide to undertaking technical assessments of fire performance of construction products based on fire test evidence, 2021, Industry Standard Procedure'](#), appropriate action has been taken to mitigate the risk of a conflict of interest arising during the preparation of this report. All individuals involved in the production, or subsequent review, of this assessment have declared any perceived conflicts of interest, with regards to the sponsor or subject(s) of this report, prior to working on this project.

The assessor and reviewer have been deemed suitable for involvement in the production of this assessment in accordance with the guidance outlined in the [Passive Fire Protection Forum \(PFPF\): 'Guide to undertaking technical assessments of fire performance of construction products based on fire test evidence, 2021, Industry Standard Procedure'](#).

Where the constructional information in this report is taken from details provided to International Fire Consultants Ltd (IFC) and/or from fire resistance test reports referenced herein, it is, therefore, limited to the information given in those documents. It is necessarily dependent upon the accuracy and completeness of that information. Where constructional or manufacturing details are not specified, or discussed, herein, it should not, therefore, be taken to infer approval of variation in such details from those tested or otherwise approved.

The analysis and conclusions within this report are based upon the likely fire resisting performance of a complete door assembly that is manufactured and installed in accordance with this document, and offered for fire resistance testing in 'perfect' condition. In practice, management procedures must be in place in any building where the door assemblies are installed, to ensure that no parts of the assembly are damaged or faulty. Further, the doors must open and close without the use of undue force. The edge gaps/alignment of door leaves must be in accordance with the tolerances defined, herein, when the doors are closed. Any such shortfalls in respect to the condition of the assemblies will invalidate the approval by IFC, and may seriously affect the ability of the assemblies to provide the required level of fire resistance performance. Determination of what constitutes wear or damage, and any corrective actions in order to return assemblies to the required condition, should only be carried out following consultation with the manufacturer and IFC.

This report is not intended to be a complete specification for the proposed products and it is the responsibility of others to ensure that the products are suitable for the intended purpose; whilst incorporating the requirements of this report. Further, the products must be manufactured/installed by experienced/trained personnel using appropriate and established working practices/techniques.

Where the assessed constructions have not been subject to an on-site audit by International Fire Consultants Ltd, it is the responsibility of anyone using this report to confirm that all aspects of the assemblies fully comply with the descriptions and limitations, herein.

Any materials specified in this report have been selected and judged primarily on their fire performance. IFC do not claim expertise in areas other than fire safety. Whilst observing all possible care in the specification of solutions, we would draw the reader's attention to the fact that during the construction and procurement process, the materials used should be subjected to more general examination regarding the wider Health and Safety, and CoSHH Regulations. Designers, manufacturers and installers are reminded of their responsibilities under the CDM Regulations; but particularly with regard to installation and maintenance of heavy or inaccessible items.

This assessment considers the fire resistance performance of the door assemblies when tested with the leaves in the closed position, within the frame reveal; either retained by the latch, or self-closing device, or locked shut, as applicable. The door assemblies will only provide the assessed fire performance when in a similar configuration; and it is the responsibility of the building occupants/owner to ensure that this is the case.

This Report is provided to the sponsor on the basis that it is a professional independent engineering evaluation as to what the fire performance of the construction/system would be should it to be tested to the named standard. It is IFC's experience that such an evaluation is normally acceptable in support of an application for building approvals, certainly throughout the UK and in many parts of Europe and the rest of the world.

However, unless IFC have been commissioned to liaise with the Authorities that have jurisdiction for the building in question for the purpose of obtaining the necessary approvals, IFC cannot assure that the document will satisfy the requirements of the particular building regulations for any building being constructed.

It is, therefore, the responsibility of the sponsor to establish whether this evidence is appropriate for the application for which it is being supplied and IFC cannot take responsibility for any costs incurred as a result of any rejection of the document for reasons outside of our control. Early submittal of the Report to the Authorities will minimise any risks in this respect.

7. Validity

This Field of Application Report has been prepared based on International Fire Consultants Ltd's present knowledge of the products described, the stated testing regime and the submitted test evidence.

The assessment is valid initially for a period of five years after which time it is recommended that it be submitted to International Fire Consultants Ltd for re-evaluation. For this reason, anyone using this document after June 2028 should confirm its ongoing validity.

This assessment report is not valid unless it incorporates the declaration, in Section 5, duly signed by the applicant.

Prepared by:



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Reviewed by:



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Appendix A

Intumescent Seal Specifications

A.1 30 minutes Fire Resistance

DOOR CONFIGURATION	POSITION OF EMERGENCY RELEASE HARDWARE	LOCATION OF DOOR ASSEMBLY INTUMESCENT SEALS	REQUIRED INTUMESCENT SEALS WITH INSTALLATION OF EMERGENCY HARDWARE
Single	Head	Frame reveal	An additional 10 x 4mm seal in leaf head, for the full width of leaf, fitted centrally
		Leaf edge	No additional seals required
	Jamb	Frame reveal	No additional seals required
		Leaf edge	No additional seals required
Double	Head	Frame reveal	An additional 10 x 4mm seal in leaf head, for the full width of leaf, fitted centrally and 2mm under forend and 0.8mm or 1mm graphite around body of stop
		Leaf edge	No additional seals required

A.2 60 minutes Fire Resistance

DOOR CONFIGURATION	POSITION OF EMERGENCY RELEASE HARDWARE	LOCATION OF DOOR ASSEMBLY INTUEMSCENT SEALS	REQUIRED INTUMESCENT SEALS WITH INSTALLATION OF EMERGENCY HARDWARE
Single	Head	Frame reveal	An additional 10 x 4mm seal in leaf head, for the full width of leaf, fitted centrally and 2mm under forend and 0.8mm or 1mm graphite around body of stop
		Leaf edge	2mm under forend and 0.8mm or 1mm graphite around body of stop
	Jamb	Frame reveal	2mm under forend and 0.8mm or 1mm graphite around body of stop
		Leaf edge	2mm under forend and 0.8mm or 1mm graphite around body of stop
Double	Head	Frame reveal	An additional 10 x 4mm seal in leaf head, for the full width of leaf, fitted centrally and 2mm under forend and 0.8mm or 1mm graphite around body of stop
		Leaf edge	2mm under forend and 0.8mm or 1mm graphite around body of stop