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Title

Supplementary Field of Application

For: Vistamatic VS Pyro 60 Vision Panel in fire resisting timber based doorsets

30 & 60 minutes fire resistance performance.

Report No.:

WF409531 Revision A

Issue Date:

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Prepared for:

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The version/revision stated on the front of this Field of Application supersedes all previous versions/revisions and must be used to manufacture doorsets from the stated validity date on this front cover. Previous revisions of the Field of Application cannot be used once an updated Field of Application has been issued under a new revision.

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Page No.

Contents

1 Foreword

This Supplementary Field of Application report (FoA) has been commissioned by Vistamatic Ltd and relates to the Vistamatic VS Pyro 60 vision panel system for 30 & 60 minutes fire resisting doorset installations. The report summarises the scope of application of the Vistamatic VS Pyro 60 vision panel when used to glaze timber based fire resisting doorsets and will be based on the associated test and assessment data.

The report is for national application and has been written in accordance with the general principles outlined in BS EN 15725.

This Supplementary Field of Application (scope) uses established empirical methods of extrapolation and experience of fire testing similar doorsets, in order to extend the scope of application by determining the limits for the designs based on the tested constructions and performances obtained. The scope is an evaluation of the potential fire resistance performance if the variations specified herein were to be tested in accordance with BS 476 Part22: 1987.

This scope document cannot be used as supporting documentation for either a UKCA or CE marking application, nor can the conclusion be used to establish a formal classification against EN13501-2.

This Supplementary Field of Application has been written using appropriate test evidence generated at UKAS accredited laboratories, to the relevant test standard. The supporting test evidence has been deemed appropriate to support the manufacturers stated door design and is summarised in section 3.

The scope presented in this report relates to the behaviour of the Vistamatic VS Pyro 60 multi-pane glazing unit design variation(s) under the particular conditions of the test; they are not intended to be the sole criterion for considering the potential fire hazard of the glazing unit installed within a doorset assembly in use.

This Supplementary Field of Application has been prepared and checked by product assessors with the necessary competence, who subscribe to the principles outlined in the Passive Fire Protection Forum (PFPF) ‘Guide to Undertaking Technical Assessments of the Fire Performance of Construction Products Based on Fire Test Evidence’. The aim of the PFPF guidelines is to give confidence to end-users that assessments that exist in the UK are of a satisfactory standard to be used for building control and other purposes.

Supporting documentation has been used to enhance the scope of application within this Supplementary Field of Application report. At the time of issue of this document, the relevant documentation has remaining validity. Where any supporting document is revalidated this Supplementary Field of Application may not continue to use the previous revision as suitable supporting data. This Supplementary Field of Application must be updated to introduce the newest iteration of the supporting document, during which update to the contents of the latest revision of the supporting document will be reviewed by Warringtonfire to ensure the scope herein remains unaltered by any changes to the supporting document. This Supplementary Field of Application will remain valid where door assemblies are manufactured based on other test and supporting data cited herein whilst the new revision of this Supplementary Field of Application is being prepared based on any revised supporting evidence. This Supplementary Field of Application will be issued with a new revision to reflect the update(s).

That is, were the Halspan Prima 60 Field of Application report cited in section 3.2.4 to be revalidated, it would not be permitted to produce doorsets under this Supplementary Field of Application until such time as the revised Halspan Prima 60 Field of Application is re-incorporated.

The drawings provided in this report are for guidance and illustrative purposes only. Please note that the written scope of application takes precedence.

2 Proposal

It is proposed to consider the fire resistance performance of the specified proprietary Vistamatic VS Pyro 60 vision panel system when fitted to timber based fire resisting doorsets for 30 & 60 minutes fire resistance integrity performance, if the doorset designs were to be tested to the requirements of BS 476 Part22: 1987, *Methods for determination of the fire resistance of non-loadbearing elements of* VS Pyro 60 *construction.*

The Supplementary Field of Application defined in this report is based on the fire resistance test evidence for the Vistamatic VS Pyro 60 vision panel system, which is summarised in section 3. Analysis of specific construction details that require assessment are given within this report against the relevant element of construction, as appropriate.

Whilst specific items are included within this Field of Application report that may be used to provide additional performance characteristics (such as acoustic or smoke control for example), it is beyond the remit of this Field of Application report to provide scope for performance characteristics other than fire resistance integrity and (where applicable) insulation performance. Any other performance requirement for the door designs contained herein is to be subject to a separate analysis.

2.1 Assumptions

- All densities referred to in this document are based upon an assumed moisture content of 12%.
- It is assumed that unless otherwise documented in the scope sections of this report, doorsets subject to this report will be constructed in accordance with the test evidence referred to herein.
- For components created using solid timber sections referred to in this assessment, it is assumed that, for all timbers, they will be of a quality deemed to meet or exceed class J30 as specified in BS EN 942: 2007, subject to adequate repairs, other than glazing beads which must meet a minimum class J10. Note that areas under intumescent seals/gaskets are not considered to be concealed faces and defects must be repaired.
- Where timber is referred to within this document it is assumed that the timber element is made from a continuous solid piece, unless specifically detailed otherwise.
- All dimensions detailed herein may be varied by ±2% except where minimum, maximum or a range of dimensions are given.
- Where morticed items of hardware are used (within the leaf or frame) it is assumed that the preparation for such items are tight to the item (and where applicable intumescent protection) as tested with no excessive gaps, unless stated otherwise within a particular section of this report.

3 Test Data

The test evidence summarised below has been generated to support the fire resistance performance of the Vistamatic VS PYRO 60 vision panel that is the subject of this Supplementary Field of Application. The summary details are considered to be the key aspects of the design tested.

Note:

- Dimensions are in mm unless otherwise stated.
- Abbreviations: (h) = height; (w) = width; (t) = thickness; (d) = deep: (l) = long.
- Latches fitted but disengaged for the test, are reported as 'unlatched'.

Some of the test evidence used in the evaluation is over 5 years old. In accordance with industry guidance, the evidence has been reviewed to consider its suitability. Warringtonfire are satisfied that there have been no significant revisions to the relevant test standards which would render the evidence irrelevant.

The test evidence within the supplementary test data has been generated to BS 476 Part 22: 1987 and EN 1634-1. The latter is known to be more onerous than the BS 476: Part 22: 1987 standard, primarily due to the use of plate thermocouples within the furnace to record the furnace temperature.

The same time temperature curve is used to control the temperature within the furnace for both test methods (the heating curve given within ISO 834-1). However, the plate thermocouple used to record the temperature within the furnace for the EN test method, requires a longer thermal exposure to read the same temperature as the probe thermocouple that is used for the BS 476: Part 22: 1987 test, particularly during the early stages of the test. Furthermore, the neutral pressure regime is positioned lower relative to the specimen height in a European fire door test, therefore resulting in greater relative positive pressure conditions than those expected in a BS 476-22: 1987 test, which has the potential to increase hot gases and flaming on the unexposed side. These factors result in more onerous test conditions for doorsets tested to the BS EN 1634-1 test standard compared with the BS 476: Part 22: 1987 test standard, which has been demonstrated by testing the same products to both standards.

It is therefore the opinion of Warringtonfire that the evidence citied in the following section, tested to both named standards referenced above can be utilised in this assessment which will conclude in terms of the fire resistance performance of the VS PYRO 60 vision panel assembly if tested in accordance with BS 476 Part 22:1987.

3.1 Primary Test Evidence

The following summaries are provided to give the key details relevant to the tested specimen. Throughout this assessment report, relevant sections will reference the tests where they have been used to provide the scope of application.

3.1.1 Test report Chilt/IF13037

The referenced test report, the essential details of which are summarised below, is primary data for the VS Pyro 60 vision panel designs being considered for assessment in this report.

Date of test	4th April 2013
Identification of test body	Chiltern International Fire Ltd. now trading as Warringtonfire Testing and Certification Ltd
Sponsor	Vistamatic Ltd
Tested Product	A single leaf, single acting, timber based, flush door leaf fitted with Vistamatic VS secure vision panels
Summary of test specimen	A graduated density particleboard core leaf with the vertical edges lipped with 6mm thick sapele of nominal density 640kg/m^3. The leaf was 1250mm (h) x 1230mm (w) x 54mm (t) and hung in a sapele hardwood frame using 2No. lift off type steel hinges. No closer or latch was fitted. The leaf incorporated two 800mm high x 400mm wide VS Pyro 60 vision panels comprising 19mm thick Pyro-EX toughened glass to the exposed face, 6mm Pyro-EX toughened glass to the unexposed face, and 4mm thick annealed glass between the outer glass panes in the top half of the right panel. One panel utilised profiled stainless steel beading, one utilised sapele hardwood beading of nominal density 640kg/m^3. Both panels were fitted with an actuator lever. 2No. 15 x 4 Pyroplex Rigid Box seal perimeter intumescents were fitted in the frame reveal of the head and jambs. Hinges were protected with graphite intumescent gaskets. The vision panels were protected with 54 x 2mm Norsound Vision 60 perimeter aperture liners. Sealmaster Fireglaze compound was fitted between the glass and sapele glazing beads on both faces; autostic adhesive was fitted between the glass and the steel glazing beads on both faces. The door was oriented to open in towards the furnace of the test.
Test Standard	Temperature and pressure conditions of BS 476: Parts 20 and 22: 1987
Performance	Integrity: - 65 minutes - timber glazing beads. Integrity: - 72 minutes* - steel glazing beads (*no failure when test terminated at 72 minutes)

3.2 Supplementary test evidence

3.2.1 Test report IF12021

The referenced test report, the essential details of which are summarised below, is the supplementary data for the use of the Vistamatic VS PYRO 60 vision panel and is presented as supporting test data for use of the VS Pyro 60 in 54mm thick timber leaves for 30 minute applications with alternative glass options from those tested in IF13037 above and as detailed in section 5.4.

Date of test	3rd April 2012
Testing body	Chiltern International Fire, now trading as Warringtonfire Testing and Certification Ltd. (UKAS No 1762)
Sponsor	Vistamatic Ltd
Tested Product	Latched, single leaf, single acting, timber doorsets with vision panel.
Tested Orientation	Opening into the furnace
Summary of test specimen (mm)	Leaf: Leaf dimensions: 1005 (h) x 928 (w) x 44 (t) Core: Halspan graduated density particleboard core 44 (t). Lipping: 6 (t) Sapele Lippings on vertical edges only. Frame: Frame: 70 (d) x 32 (w) European Redwood Doorstop: 20 (w) x 12 (t) planted stop. Intumescent: Head & Jambs: 15 x 4 Lorient Polyproducts Ltd Type 617 centrally in the frame reveals. Hardware: Hinges: 2No Royde & Tucker H101 lift type hinges Closer: none fitted Latch: none fitted Glazing Glass 1 (outer – unexposed side): 6 (t) toughened glass Glass 2 (inner): 4 (t) annealed glass Glass 3 (outer – exposed side): 10 (t) toughened glass Aperture size: 406 (w) x 806 (h) Vision panel size: 400 (w) x 800 (h) Expansion allowance 3mm all round Beading: Sapele, 19 (h) x 17 (w) including 9x9 bolection return and 15 degrees chamfer. Bead fixing: 40 (l) steel pins, at 50mm from corners, 150mm centres and 45 degrees to the face of the glass. Glazing system (between glass & bead): 10x4 (t) Mann McGowan Pyroglaze 30 fitted between glass and bead. Glazing system (around perimeter of glass): 3 (t) Norseal intumescent mastic fitted around the perimeter of the glass
Test Standard	BS EN 1634-1: 2008
Performance	Integrity: 44 minutes Insulation: N/A

3.2.2 Field of Application report Chilt/A02067 Revision M – Strebord 54

The referenced field of application contains the test evidence used to support the fire resistance of the Strebord 54 doorset design. Construction of these proprietary fire resisting doorsets must be in accordance with the requirements of the field of application report, other than as specified for the Vistamatic VS Pyro 60 vision panel detailed within this report.

Validity period	From:	3rd May 2024
	To:	3rd May 2029
Identification of assessing body	Warringtonfire Testing & Certification Ltd	
Assessment Sponsor	Falcon Timber Limited, The Enterprise Building, Port of Tilbury, Tilbury, Essex, RM18 7HL	
Summary of assessment	Graduated density particleboard core doorsets for 60 minute fire resisting applications. The assessment extends the scope of application of the tested design based on a series of full scale fire resisting tests and covers: • Permitted configurations • Maximum leaf sizes • Intumescent specifications • Frame • Hardware	
Test Standard	BS 476 Part 22: 1987	

3.2.3 Field of Application – Chilt/A02066 Revision O– Strebord 44

The referenced field of application report, the essential details of which are summarised below, contains primary test data for the Strebord 44 proprietary door design covered by the field of application report.

Validity	From:	1st October 2021
	To:	1st October 2026
Certification body	Warringtonfire Testing and Certification Ltd.	
Sponsor	Falcon Timber Limited, The Enterprise Building, Port of Tilbury, Tilbury, Essex, RM18 7HL	
Product	Latched and unlatched, single and double acting, single and double leaf, timber based, flush doorsets.	
Orientation to fire risk	Based on the testing conducted, doorsets to this design may be hung to open either away from or towards the fire risk side of the doorset.	
Construction	Leaves comprise 44mm graduated density particleboard core (density held on file by Warringtonfire). All leaf edges are lipped with 6-19 (t) hardwood of minimum density 530kg/m^3. The testing conducted covers several types of perimeter intumescent seals and intumescent gaskets for hardware protection. Leaves may be glazed to a maximum area of 1.90m^2 utilising a range of glazing systems and non-insulating and insulating glass types. The testing conducted for the Strebord 44 design includes the use of a range of hardware including hinges, pivots, overhead surface mounted closers, single and multipoint latches and locks and a range of door furniture. Doorsets may include transomed solid overpanels and fanlights.	
Test Standard	BS 476 Part 22:1987	

3.2.4 Field of Application report WF377027 Revision A– Stredor 54

The referenced field of application contains the test evidence used to support the fire resistance of the Stredor 54 doorset design. Construction of these proprietary fire resisting doorsets must be in accordance with the requirements of the field of application report, other than as specified for the Vistamatic VS Pyro 60 vision panel detailed within this report.

Validity period	From:	6th July 2020
	To:	6th July 2025
Identification of assessing body	Warringtonfire Testing & Certification Ltd	
Assessment Sponsor	Falcon Timber Limited, The Enterprise Building, Port of Tilbury, Tilbury, Essex, RM18 7HL	
Summary of assessment	Door leaves comprise a tri-layer lamel core with plywood or MDF faces for 60 minute fire resisting applications. The assessment extends the scope of application of the tested design based on a series of full scale fire resisting tests and covers: • Permitted configurations • Maximum leaf sizes • Intumescent specifications • Frame • Hardware	
Test Standard	BS 476 Part 22: 1987	

3.2.5 Field of Application report BMT/CNA/F15159 Revision F– Stredor 44

The referenced field of application contains the test evidence used to support the fire resistance of the Stredor 44 doorset design. Construction of these proprietary fire resisting doorsets must be in accordance with the requirements of the field of application report, other than as specified for the Vistamatic VS Pyro 60 vision panel detailed within this report.

Validity period	From:	1st July 2022
	To:	1st July 2027
Identification of assessing body	Warringtonfire Testing & Certification Ltd	
Assessment Sponsor	Falcon Timber Limited, The Enterprise Building, Port of Tilbury, Tilbury, Essex, RM18 7HL	
Summary of assessment	Door leaves comprise a tri-layer lamel core with plywood or MDF faces for 30 minute fire resisting applications. The assessment extends the scope of application of the tested design based on a series of full scale fire resisting tests and covers: • Permitted configurations • Maximum leaf sizes • Intumescent specifications • Frame • Hardware	
Test Standard	BS 476 Part 22: 1987	

3.2.6 Field of Application report FEA/F96103 Part 1 Revision P – Prima 60

The referenced field of application contains the test evidence used to support the fire resistance of the Halspan **Prima** 60 doorset design with timber frames. Construction of these proprietary fire resisting doorsets must be in accordance with the requirements of the field of application report, other than as specified for the Vistamatic VS PYRO 60 vision panel detailed within this report.

Validity period	From:	30th April 2024
	To:	30th April 2029
Identification of assessing body	Warringtonfire Testing & Certification Ltd	
Assessment Sponsor	Halspan Ltd, Regent House, Regent Centre, West Lothian, EH49 7HU	
Summary of assessment	Solid particleboard core doorsets for 60 minute fire resisting applications. The assessment extends the scope of application of the tested design based on a series of full scale fire resisting tests and covers: • Permitted configurations • Maximum leaf sizes • Intumescent specifications • Frame • Hardware	
Test Standard	BS 476 Part 22: 1987	

3.2.7 Field of Application – Halspan Prima 30 Doorsets - FEA/F97174 Rev J Part 1

The referenced field of application report, the essential details of which are summarised below, contains primary test data for the Halspan **Prima** 30 proprietary door design covered by the field of application report.

Validity	From: 1st April 2022 to 18th March 2027
Certification body	Warringtonfire Testing and Certification Ltd.
Sponsor	Halspan Ltd, Regent House, Regent Centre, West Lothian, EH49 7HU
Product	Latched and unlatched, single and double acting, single and double leaf, timber based, flush doorsets.
Orientation to fire risk	Based on the testing conducted, doorsets to this design may be hung to open either away from or towards the fire risk side of the doorset.
Construction	Leaves comprise 3 layered particleboard of nominal density 630kg/m^3 +/- 10%. Only the vertical edges must be lipped but where required all edges may be lipped. Leaf edges are lipped with 6-18 (t) hardwood of nominal density 640kg/m^3. The testing conducted covers several types of perimeter intumescent seals and intumescent gaskets for hardware protection. Leaves may be glazed to a maximum area of 1.75m^2 utilising a range of glazing systems and non-insulating and insulating glass types. The testing conducted for the Halspan **Prima** 30 design includes the use of a range of hardware including hinges, pivots, overhead surface mounted closers, single and multipoint latches and locks and a range of door furniture. Doorsets may include transomed solid overpanels and fanlights.
Test Standard	BS 476 Part 22:1987

3.2.8 Field of Application report FEA/F01205 Revision I – Optima 60

The referenced field of application contains the test evidence used to support the fire resistance of the Halspan **Optima** 60 doorset design with timber frames. Construction of these proprietary fire resisting doorsets must be in accordance with the requirements of the field of application report, other than as specified for the Vistamatic VS Pyro 60 vision panel detailed within this report.

Validity Period	From:	22nd June 2022
	To:	15th February 2023*
Identification Of Assessing Body	Warringtonfire Testing & Certification Ltd	
Assessment Sponsor	Halspan Ltd, Regent House, Regent Centre, West Lothian, EH49 7HU	
Summary Of Assessment	Solid particleboard core doorsets for 60 minute fire resisting applications. the assessment extends the scope of application of the tested design based on a series of full scale fire resisting tests and covers: • Permitted Configurations • Maximum Leaf Sizes • Intumescent Specifications • Frame • Hardware	
Test Standard	BS 476 Part 22: 1987	

An extension letter has been issued by Warringtonfire extending the validity period until 30th September 2024, by which time a revised report is intended to have been issued.

3.2.9 Field of Application – Halspan Optima 30 Doorsets - FEA/F01204 Rev H Part 1

The referenced field of application report, the essential details of which are summarised below, contains primary test data for the Halspan **Optima** 30 proprietary door leaf design covered by this field of application report.

Validity	From: 15th November 2023 to 08th October 2025
Certification body	Warringtonfire Testing and Certification Ltd.
Sponsor	Halspan Ltd, Regent House, Regent Centre, West Lothian, EH49 7HU
Product	Latched and unlatched, single and double acting, single and double leaf, timber based, flush doorsets.
Orientation to fire risk	Based on the testing conducted, doorsets to this design may be hung to open either away from or towards the fire risk side of the doorset.
Construction	Leaves comprise 3 layered particleboard of nominal density 620kg/m^3 +/- 10%. Only the vertical edges must be lipped but where required all edges may be lipped. Leaf edges are lipped with 6-18 (t) hardwood of nominal density 640kg/m^3. The testing conducted covers several types of perimeter intumescent seals and intumescent gaskets for hardware protection. Leaves may be glazed to a maximum area of 1.75m^2 utilising a range of glazing systems and non-insulating and insulating glass types. The testing conducted for the Halspan **Optima** 30 design includes the use of a range of hardware including hinges, pivots, overhead surface mounted closers, single and multipoint latches and locks and a range of door furniture. Doorsets may include transomed solid overpanels and fanlights.
Test Standard	BS 476 Part 22:1987

3.2.10 Field of Application report FEA/F02141 Revision M

Flamebreak 660 Ply faced and FF660 MDF faced.

The referenced field of application contains the test evidence used to support the fire resistance of the Flamebreak 60 doorset design. Construction of these proprietary fire resisting doorsets must be in accordance with the requirements of the field of application report, other than as specified for the Vistamatic VS PYRO 60 vision panel detailed within this report.

Validity period	From:	30th April 2024
	To:	9th February 2028
Identification of assessing body	Warringtonfire Testing & Certification Ltd	
Assessment Sponsor	Pacific Rim Wood Ltd, Ground Floor Suite, Block B, Old Kelways, Somerton Road, Langport, Somerset TA10 9SJ	
Summary of assessment	Lamella core doorsets for 60 minute fire resisting applications. The assessment extends the scope of application of the tested design based on a series of full scale fire resisting tests and covers: • Permitted configurations • Maximum leaf sizes • Intumescent specifications • Frame • Hardware	
Test Standard	BS 476 Part 22: 1987	

3.2.11 Field of Application report FEA/98164 Revision O

The referenced field of application contains the test evidence used to support the fire resistance of the Flamebreak 30 doorset design. Construction of these proprietary fire resisting doorsets must be in accordance with the requirements of the field of application report, other than as specified for the Vistamatic VS PYRO 60 vision panel detailed within this report.

Validity period	From:	2nd August 2021
	To:	22nd December 2025
Identification of assessing body	Warringtonfire Testing & Certification Ltd	
Assessment Sponsor	Pacific Rim Wood Ltd, Ground Floor Suite, Block B, Old Kelways, Somerton Road, Langport, Somerset TA10 9SJ	
Summary of assessment	Lamella core doorsets for 30 minute fire resisting applications. The assessment extends the scope of application of the tested design based on a series of full scale fire resisting tests and covers: • Permitted configurations • Maximum leaf sizes • Intumescent specifications • Frame • Hardware	
Test Standard	BS 476 Part 22: 1987	

4 Technical Specification

4.1 General

The technical specification for the proposed use of the Vistamatic VS Pyro 60 glazing unit within specified timber door leaves is given in the following sections and is based on the test evidence for the door designs, summarised in section 3.

4.2 Intended Use

The intended use of the proposed final door assembly is summarised below:

A pedestrian doorset including any frame, door leaf or leaves which is provided to give a fire resisting capability when used for the closing of permanent openings in fire resisting separating elements, which together with the building hardware and any seals (whether provided for the purpose of fire resistance or smoke control or for other purposes such as draught or acoustics) form the assembly.

4.3 Scope of Application

It is proposed to extend the scope of application for the proprietary door designs listed in section 4.4, to allow use of the Vistamatic VS Pyro 60 glazing unit, for 30 or 60 minutes fire resistance performance.

4.4 Door Leaf Types

Based on the performances obtained, as summarised in section 3, assessment is made that the cited proprietary doorset designs in section 3.2, but only these leaf types, may be utilised with the Vistamatic VS PYRO 60 glazing unit, as specified and detailed in this field of application report, for 30 and 60 minutes fire resistance performance, as applicable.

Specific sections within this assessment must be referred to for design limitations and construction requirements which detail limitations based on the leaf type specified.

This report only considers the effect of fitting the Vistamatic VS Pyro 60 vision panel to each doorset design. For all other details including permitted aperture size, the full construction requirements in the supporting Field of Application relevant to the chosen doorset must be referred to.

Each of the cited doorset designs have been tested and proven to BS 476 Part22 1987 and/or BS EN 1634-1. Each of the Field of Applications cited in section 3.2 concludes to BS 476 Part22: 1987.

A number of the supporting Field of Application reports cited in section 3.2 detail the use of 54mm thick door leaf blanks for 30 minute applications, where doorsets include the Vistamatic VS Pyro 60 vision panel, the door leaf thickness must be a minimum of 54mm for both 30 and 60 minute applications.

5 Description of the Vistamatic VS Pyro 60 vision panel

5.1 Vistamatic VS Pyro 60 vision panel aperture dimensions

Maximum Single aperture area permitted is for the VS Pyro 60 unit is 0.32m^{2,} multiple apertures may be utilised in a leaf provided the relevant supporting documentation for the specified door leaf type supports multiple apertures.

Maximum unit height is 800mm and maximum width is 400mm, these dimensions may not be increased if one or the other is decreased.

The maximum permitted area for the VS Pyro 60 unit may not be increased irrespective of the single aperture dimensions permitted in the relevant supporting documentation for the specified door leaf type, equally where the permitted aperture area the relevant supporting documentation for the specified door leaf type is smaller than 0.32m^2, that dimension must take precedence.

5.2 Vistamatic VS Pyro 60 vision panel DGU Details – 60 minute applications

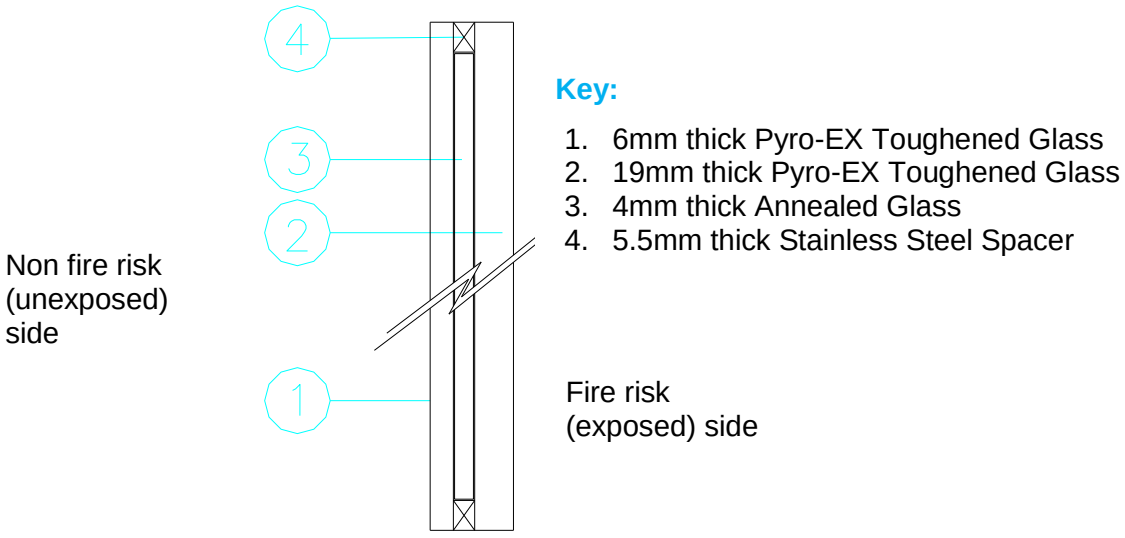
The tested Vistamatic VS Pyro 60 vision panel comprises of two outer panes of toughened glass which may be from 6 – 10mm thick on either or both faces, a stainless steel spacer between the two panes and a moveable middle layer of annealed glass for privacy.

The table below gives a summary of the tested VS Pyro 60 glazing panel assembly.

Element	Specification	Location
Outer glass panes	19mm thick Pyro-EX toughened glass – from Express Toughening	Fitted on the fire side of door assemblies
	6mm thick[2] Pyro-EX toughened glass – from Express Toughening	Fitted on the non-fire side of door assemblies
Middle glass layer (moveable)	4mm thick annealed glass – from Express Toughening	Fitted between the outer glass layers (see note below)
Stainless steel spacer bar – DGS (Product ref: SS/BT05.5)	5.5mm wide	Fitted between the outer glass layers
Operating lever	80mm long, Double lever, chrome plated zinc alloy	Fitted in the mid width of panel, 43mm up from the base.
Seal/Adhesive	Glass layers and spacer are sealed together as a single unit using Bostik hotmelt adhesive	-

Note:

1. Moveable middle layer of glass may be fitted at full height of the vision panel or fitted at the top half of the vision panel only, whilst the bottom half remains fixed.
2. The 6mm thick toughened glass may be replaced with 10mm thick toughened glass based on the results of IF12021.
3. When specifying panels, the required orientation of the operating handle for the central pane must be considered in relation to the fire risk side.



Note that operating lever and middle glass layer is not shown in the above drawing

The vision panel is retained within the door leaf with either timber or steel beads, which must meet the specifications detailed in the following sections.

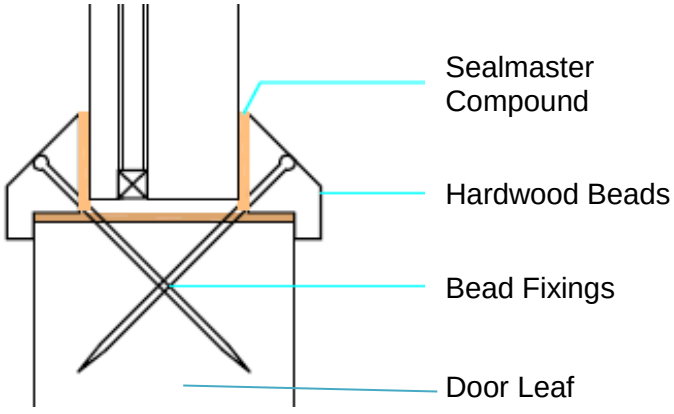
5.3 Vistamatic VS Pyro 60 vision panel – with timber beads

Based on the test evidence within IF13037, the specifications for the VS Pyro 60 vision panel assembly with timber beads detailed in the following table must be complied with.

Element	Specification	Location
Bead material	Hardwood timber (with minimum density of 640kg/m^{3,} excluding beech (*Fagus sylvatica* and related species)	-
Bead size	A minimum of 25mm high x 13mm wide[2] including a bolection return a minimum of 8mm x 5mm wide. Bead to be chamfered 45^{o}.	-
Bead fixings	50mm long no. 6-8 steel screws or 50mm long x 2mm diameter steel pins. Fixings must locate into the door core to a depth of approximately 20 – 25mm.	Located at minimum 100mm centres and 50mm from each corner. Fixings must be inserted at 45^{o} to the vertical.
Glazing system	4mm thick Sealmaster Fireglaze compound	Fitted between the glass and bead on both faces.
Glazing aperture liner	54 x 2mm thick Norsound Ltd Vision 60 or ISL Therm-A-Line aperture liner	Fitted lining the glazing aperture.
Assembly Brackets (Not shown in diagram below)	6No.1.2mm thick x 52mm wide x 11.2mm high steel glazing clips (brackets).	Fitted 174mm from each corner and at 452mm centres, with 2No. M8 x 40mm long steel screws. See appendix B.
Intumescent around centre glass actuator spindle	5mm thick overall, comprised of 2No Norseal Ltd graphite strip ref: 2.5-390 x 10/SA	Fitted around the spindle lining the aperture in the outer glass layers
Expansion allowance	Non-combustible or hardwood setting blocks, 3 - 4mm thick	At bottom edge of the glazing unit.

Notes:

1. Timber for glazing beads must be straight grained joinery quality hardwood, free from knots, splits and checks.
2. Beads may be reduced to 11mm thick if 10mm thick toughened glass is used as detailed in section 5.2.
3. The figure below shows a cross sectional drawing of the tested VS PYRO 60 vision panel assembly with timber beads.



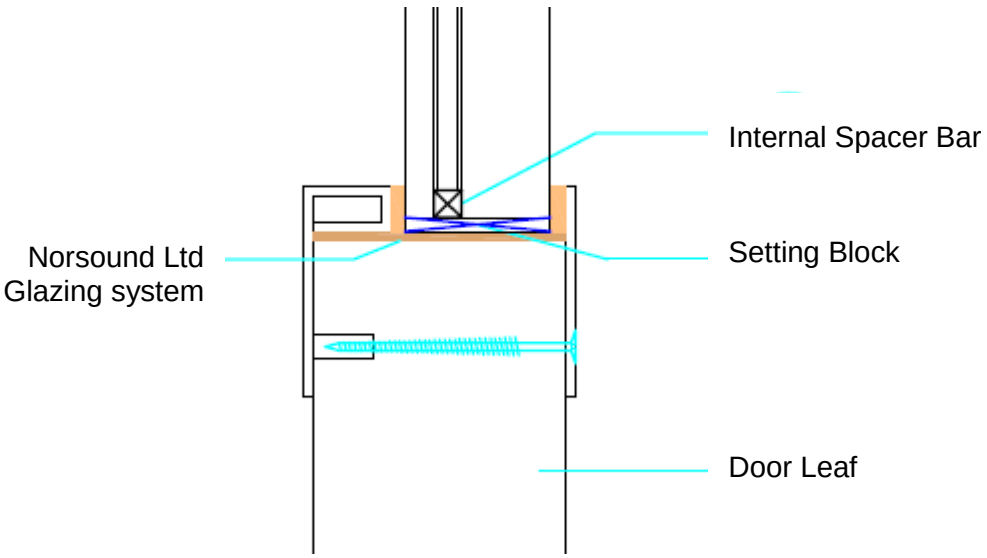
5.4 Vistamatic VS PYRO 60 vision panel – with steel beads

Based on the test evidence within IF13037, the specifications for the VS Pyro 60 vision panel assembly with steel beads detailed in the following table must be complied with.

Element		Specification	Location
Bead material		2mm thick stainless steel profile	-
Bead Profile	Exposed Face	54mm high x 2mm thick	Fitted around the glazing aperture on the exposed face
	Unexposed Face	54mm high x 22 mm deep[1] x 2mm thick	Fitted on the unexposed face
Bead fixings		M6 x 40mm long machine steel screws fixed from the exposed face to the threaded studs on the unexposed face	Fitted at minimum 30mm from corners and at 200mm centres.
		M6 x 12mm long threaded studs	Welded to the unexposed face bead
Glazing system		1mm thick Autostic adhesive	Fitted between the glass and beads on both faces
Glazing aperture liner		54 x 2mm thick Norsound Ltd Vision 60 or ISL Therm-A-Line aperture liner	Fitted lining the glazing aperture
Intumescent around centre glass actuator spindle		5mm thick overall, comprised of 2No Norseal Ltd graphite strip ref: 2.5-390 x 10/SA	Fitted around the spindle lining the aperture in the outer glass layers
Expansion allowance		4mm thick non-combustible or hardwood setting blocks	At bottom edge of the glazing unit.

Notes:

1. Bead may be reduced to 18mm deep if 10mm thick toughened glass is used as detailed in section 5.2.
2. The figure below shows cross sectional drawing of the tested VS Pyro 60 vision panel assembly with steel beads.



5.5 Vistamatic VS Pyro 60 vision panel – 30 Minute applications

Based on the integrity performance achieved in test Chilt/IF12021 which utilised 10mm Pyro-Ex on the exposed face of the tested specimen, the options below are assessed as acceptable

These applications may only be utilised with 54mm thick door leaf types, as specified in section 5, and the resulting doorsets may only claim a maximum of 30 minutes integrity performance.

Glass Thickness Combination (mm)	**Integrity Performance** (minutes)	**Permitted Bead Type**	
		Timber (section 5.3)	**Steel** (section 5.4)
Fire risk from either side Pyro-EX Toughened Glass only 10 thick – one side 19 thick – opposite side	30	✓	✓

Notes:

1. For 60 minutes integrity performance all components must remain as stated in section 5.2
2. The bead profiles shown as item 2 in sections 5.3 and 5.4 may be adjusted in depth only, to suit the specified glazing thickness.
   - The heights of the steel glazing beads must remain as tested
   - The heights of the timber glazing beads must be 19mm as tested in IF12021.
3. Other than the glass thickness all installation provisions must remain as shown in sections 5.3, 5.4 and appendix B. In particular, the edge cover of the toughened fire rated glass must remain as tested.
4. When utilising 10mm thick glass combined with 19mm thick glass a wider steel glazing bracket must be used, designed to accommodate the 35mm thick vision panel. This bracket must be secured using No. 8 screws positioned such that the centre line of each screw remains 6mm from the door leaf edge, as tested.

6 Scope of application for Vistamatic VS Pyro 60 vision panel

Based on the test evidence for the Vistamatic VS Pyro 60 vision panel summarised in section 3, the scope detailed in the following sections may be utilised without detracting from the fire resistance performance of the particular doorset design.

6.1 The use of the Vistamatic VS PYRO 60 vision panel in proprietary fire resisting doors

When using the VS PYRO 60 vision panel on any of the permitted proprietary fire resisting doorsets referenced in section 3.2.3 to 3.2.12 above, the following must be adhered to:

1. The maximum dimensions for the VS Pyro 60 vision panel specified in section 5., must not exceed the maximum glazing dimensions for the proprietary doorset as specified in the supporting Field of Application report.
2. Other than the installation specification of the VS Pyro 60 vision panel given in section 5, all other installation requirements (e.g., distance from leaf edges, acceptability of multiple glazed apertures, proximity to other elements of door construction, etc) must be in accordance with the specification given in the supporting Field of Application report for the proprietary doorset being used.

7 Conclusion

If the Vistamatic VS Pyro 60 vision panels were to be used for glazing the specified fire resisting timber doorset designs with a minimum leaf thickness of 54mm, in accordance with the specifications documented within this supplementary field of application report and were to be tested in the appropriate configuration in accordance with BS476 Part 22:1987, it is the opinion of Warringtonfire that the glazing installation would achieve a minimum of 30 or 60 minutes fire resistance integrity, as appropriate.

8 Declaration by the Applicant

1) We the undersigned confirm that we have read and comply with obligations placed on us by the Passive Fire Protection Forum (PFPF) Guide to undertaking technical assessments and engineering evaluations based on fire test evidence 2021 Industry Standard Procedure
2) We confirm that any changes to a component or element of structure which are the subject of this assessment have not to our knowledge been tested to the standard against which this assessment has been made.
3) 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.
4) 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.
5) 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.

(In accordance with the principles of FTSG Resolution No. 82: 2001)

Signed: DocuSigned by: Mark Nash F3D41B4FC1AE4A2...

Name: Mark Nash

Position: Director

Date: 09-Jul-2024

For and on behalf of: **Vistamatic Ltd**

9 Limitations

The following limitations apply to this assessment:

1) This supplementary field of application addresses itself solely to the elements and subjects discussed and do not cover any other criteria or modifications. All other details not specifically referred to should remain as tested or assessed.
2) This supplementary field of application report is issued on the basis of test data and information to hand at the time of issue. If contradictory evidence becomes available to Warringtonfire, 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.
3) This supplementary field of application has been carried out in accordance with Fire Test Study Group Resolution No. 82: 2001.
4) Opinions and interpretation expressed herein are outside the scope of UKAS accreditation.
5) This supplementary field of application relates only to those aspects of design, materials and construction that influence the performance of the element(s) under fire resistance test conditions, against the ISO 834 time/temperature curve that is stipulated in the standard this assessment concludes to. It does not purport to be a complete specification ensuring fitness for purpose and long-term serviceability. It is the responsibility of the client to ensure that the element conforms to recognised good practice in all other respects and that, with the incorporation of the guidance given in this supplementary field of application, the element is suitable for its intended purpose.
6) This supplementary field of application report represents our opinion as to the performance likely to be demonstrated on a test in accordance with BS476 Part 22: 1987, on the basis of the test evidence referred to in this report. We express no opinion as to whether that evidence, and/or this supplementary field of application would be regarded by any Building Control authorities or any other third parties as sufficient for that or any other purpose.
7) This report may only be reproduced in full. Extracts or abridgements of reports shall not be published without permission of Warringtonfire. All work and services carried out by Warringtonfire Testing and Certification Limited are subject to, and conducted in accordance with, the Standard Terms and Conditions of Warringtonfire Testing and Certification Limited, which are available at https://www.element.com/terms/terms-and-conditions or upon request.
8) The version/revision stated on the front of this Supplementary Field of Application supersedes all previous versions/revisions and must be used to manufacture doorsets from the stated validity date on this front cover. Previous revisions of the Field of Application cannot be used once an updated Field of Application has been issued under a new revision.

10 Validity

1) The assessment is initially valid for five years after which time it is recommended to be submitted to Warringtonfire for re-appraisal.
2) This assessment report is not valid unless it incorporates the declaration given in Section 8 duly signed by the applicant.

Position:	Assessor	Reviewer
Signature:	DocuSigned by: DE15B987D373423...	DocuSigned by: 3A9C822F3E7F487...
Name:	*A M Winning	*C Newton
Title:	Senior Product Assessor	Product Assessor

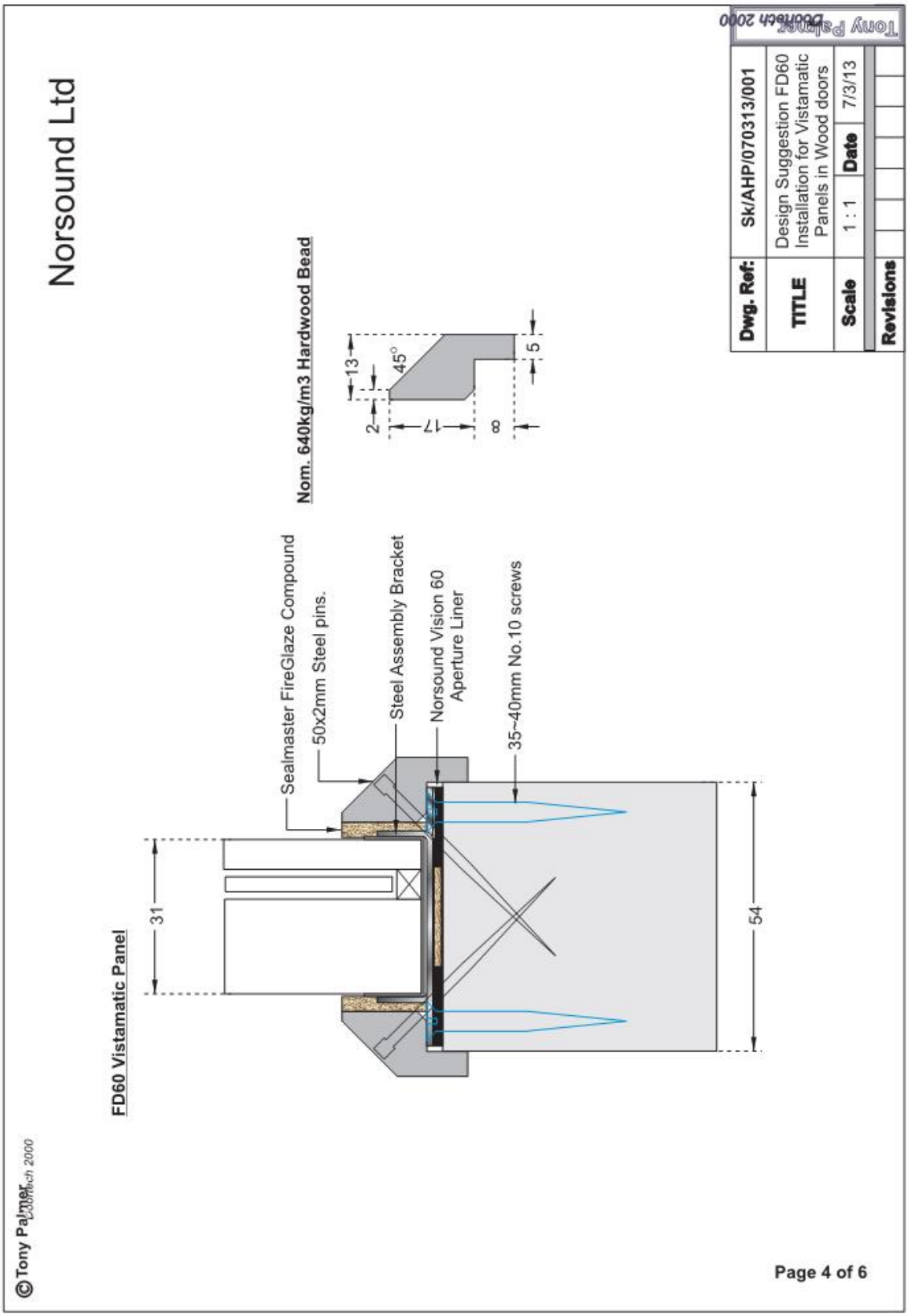
* For and on behalf of Warringtonfire

Appendix A: Revisions

Revision	Warringtonfire Reference	Date	Description
A	WF533744	20.06.2024	Additional permitted core types added by addition of further supporting documentation in section 3.2

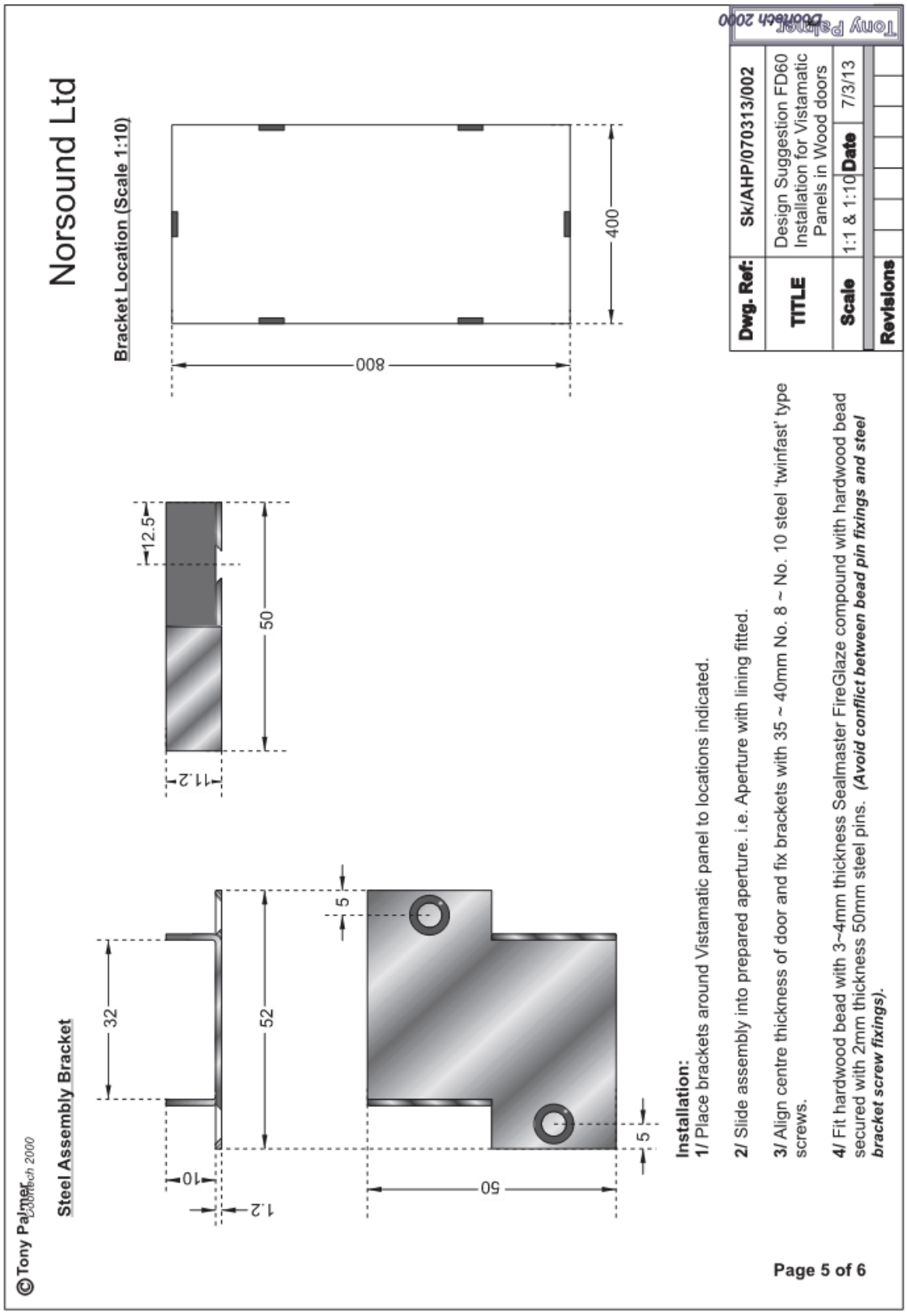
Appendix B Client Installation Diagrams

1. Installation with Timber Glazing Beads



2. Steel Glazing Brackets (timber glazing beads)

Note: when using 19mm thick glass combined with 10mm thick glass, a modified wider bracket design will be required.



3. Installation with Steel Glazing Beads

Note: when using 19mm thick glass combined with 10mm thick glass, a narrower profile steel glazing bead will be required on the 19mm glass face.