F/O : 64

CHILTERN INTERNATIONAL FIRE LTD *(trading as BM TRADA)*

Fire Resistance Assessment

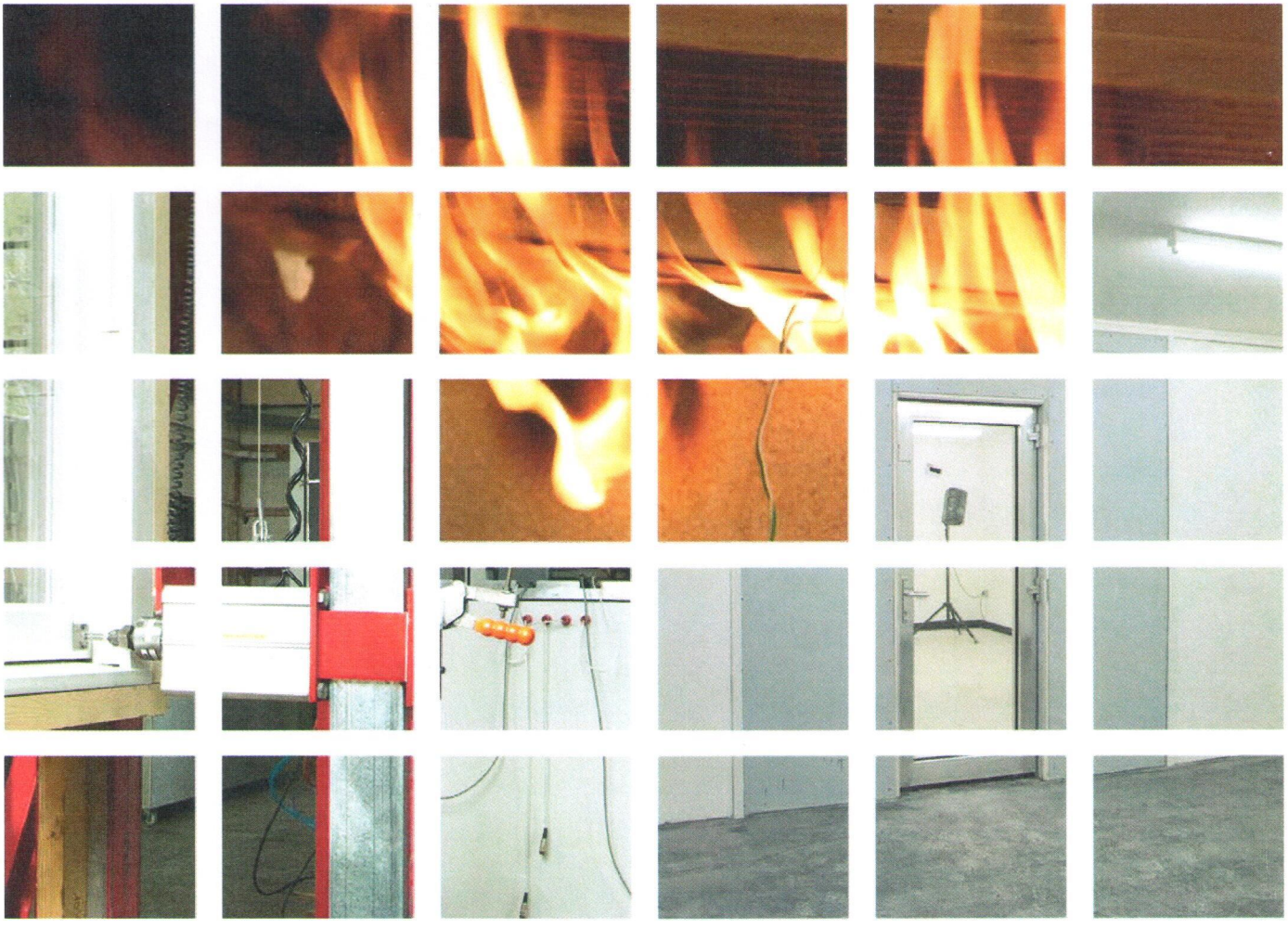
Prepared for:
Lorient Polyproducts Ltd
Fairfax Road
Heathfield Industrial Estate
Newton Abbott
Devon
TQ12 6UD

CONFIDENTIAL

Report: Chilt/A13252
Lorient LAS8001 and LAS8005
Auto Dropdown Threshold Seals

30 & 60 Minutes Fire Resistance

Valid From: 12 December 2013
Valid Until: 12 December 2018



BMTRADA

BM TRADA – the new name for Chiltern International Fire Ltd

From July 1st 2013, Chiltern International Fire Ltd commenced trading under the name of its parent company BM TRADA and at the same time adopted a brand new visual identity.

Historically, the group has delivered its services through a number of individual companies: BM TRADA Certification Ltd, TRADA Technology Ltd, Chiltern International Fire Ltd (including Chiltern Dynamics) and a network of international offices. Both BM TRADA Group and these individual companies will now trade under the same name - BM TRADA - and adopt the new visual identity.

To coincide with this change, our Technical Reports, Test Reports, Products Assessments, company stationery and marketing collateral have been re-designed to carry the new branding and visual identity.

The validity of all documents previously issued by the individual companies including certificates, test reports and product assessments is unaffected by this change and a letter to this effect will be available to download from our website www.bmtradagroup.com.

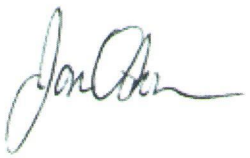
About BM TRADA.

With origins dating back to 1934, we have a deep history and services which are highly valued by our customers. We offer independent certification, testing, inspection, training and technical services around the world. In all these areas we continue to use industry-leading experts in their chosen fields to develop and deliver services – an ethos that has been at the heart of our approach since we began.

A recent review of our businesses and customers revealed that the individual identities sometimes make communications confusing, and that in an already complex business area, clarity and simplicity in communications is rare, but valued. It also revealed that a single identity and combined offer would help us strengthen our appeal.

With this in mind, we brought the companies together under the name BM TRADA and took the opportunity to create a fresh new visual identity.

We have modernised our image and combined our strengths. However, our values, our people and the integrity of our services remain the same. I hope you will welcome these changes and the improvements they will bring.



Jon Osborn
Chief Operating Officer

Contents

1 Introduction

This document constitutes a scope of application report relating to LAS8001 and LAS8005 drop down seals for use within 30 & 60 minute fire resisting doorsets, on behalf of Lorient Polyproducts Ltd.

The report uses established extrapolation and interpretation techniques in order to extend the scope of application by determining the limits for the LAS8001 and LAS8005 drop down seals, based on the tested constructions and performances obtained. The report is an evaluation of the potential fire resistance performance, if the elements were to be tested in accordance with BS EN 1634-1: 2008 and BS EN 1363-1: 1999.

The methodology adopted is for UK national application and other territories which recognise UK standards and assessment rules and should not be considered for European classification or CE marking purposes or for claiming compliance with regulations outside the aforementioned areas of jurisdiction.

2 Proposal

The proposal is to summarise the scope of application for LAS8001 and LAS8005 drop down seals when used within specified flush doorsets and timber joinery style fire resisting doorsets and will be based on the associated test and assessment data.

Technical details of the assessed seals are contained in appendix C.

3 Test Evidence

3.1 General

Evidence of fire resistance performance cited in support of this assessment is summarised below.

3.2 Fire Resistance Test Chilt/RF11170 AR1

The test was performed on an unlatched single acting double leaf, glazed timber based doorset, with leaves that measured 2135mm high x 915mm wide x 44mm thick. Both leaves were hung to open in towards the furnace. The leaf construction is held on file in confidence, but essentially comprised a particleboard construction, lipped on the vertical edges and the doorset was fitted with an overhead closer. The bottom edge of the left leaf only was fitted with a Lorient Polyproducts Ltd, IS8010 auto drop down threshold seal, measuring 22mm wide x 60mm high (end cover plate size).

When tested in accordance with the requirements of BS EN 1634-1: 2008 and BS EN 1363-1: 1999, the specimens achieved the following performance.

Criteria	Doorset
Integrity:	38 minutes(1)
Insulation:	38 minutes(1)

Note:

1. No failures of the test criteria had occurred before termination of the test at 38 minutes.

3.3 Fire Resistance Test Chilt/RF11171 Rev A - AR1

The test was performed on an unlatched single acting double leaf, glazed timber based doorset, with leaves that measured 2135mm high x 915mm wide x 54mm thick. Both leaves were hung to open in towards the furnace. The leaf construction is held on file in confidence, but essentially comprised a particleboard construction, lipped on the vertical edges and the doorset was fitted with an overhead closer. The bottom edge of the left leaf only was fitted with a Lorient Polyproducts Ltd, IS8010 auto drop down threshold seal, measuring 22mm wide x 60mm high (end cover plate size).

When tested in accordance with the requirements of BS EN 1634-1: 2008 and BS EN 1363-1: 1999, the specimens achieved the following performance.

Criteria	Doorset
Integrity:	60 minutes(1)
Insulation:	60 minutes(1)

Note:

1. Cotton pad failure occurred at the (disengaged) latch position at 60 minutes. No subsequent failures occurred before termination of the test at 63 minutes.

4 Analysis

4.1 LAS8001 and LAS8005 Drop Down Seals

Tests Chilt/RF11170AR1 and Chilt/RF11171 RevA - AR1 demonstrate that Lorient IS8010 auto drop down threshold seals were fitted to fire resisting doorsets, and no failures were associated with the seal locations before the tests were terminated at 38 and 63 minutes, respectively. It is therefore reasonable to use the margin of over performance and the characteristics of the product exhibited during test to extend the scope of application.

The Lorient LAS8001 and LAS8005 drop down seals are assessed on the basis of data from Chilt/RF11170AR1 and Chilt/RF11171 RevA - AR1, which successfully demonstrated the performance of the IS8010 version of the seal. Assessment is justified based on the following factors:

1. The LAS8001 and LAS8005 are of the same dimensions as the tested IS8010 seal and therefore no more onerous since the mass of metal and the size of the mortice required in the leaf threshold are identical
2. The construction materials of the seals are identical.

Except where defined in the following sections, all other aspects of construction must comply with the scope of test and assessment performance data, for the doorset design in which LAS8001 and LAS8005 drop down seals are fitted.

4.1.1 Installation

For 60 minute integrity performance both the LAS8001 and LAS8005 must have 1mm thick MAP material fitted around the seal and under the end cover plate. The LAS8001 and LAS8005 drop down seals may, where they are fitted, partially interrupt any leaf edge intumescent seal(s) required by the specified doorsets' supporting global assessment.

4.2 Proprietary fire resisting doors

This report will only consider the installation of seals within each doorset design. For all other details, the full construction requirements in the assessment documentation relevant to the chosen doorset must be referred to.

Manufacturer	Product	Integrity Rating	General Description
Falcon Panel Products	Strebord 35+, 38+, 44, Superpan	30	Graduated density particle board
	Strebord 54	60	
Halspan	30 Prima	30	Tri layer particle board
	60 Prima	60	
	30 Optima	30	
	60 Optima	60	
Pacific Rim Wood	Flamebreak 30	30	Lamella core door with various facing coverings
	Flamebreak 60	60	
Blankfort	Blankfort 30	30	Lamella core door with various facing options
	Blankfort 60	60	
Egger (UK) Ltd	Eurospan	30	Graduated density chipboard
	Eurospan	60	
Moralt AG	Laminesse	30	Lamella core door with various facing options
	Laminesse	60	

All of the above designs have been extensively tested and proven to BS 476: Part 22: 1987 and/or BS EN 1634-1: 2000 or 2008. The global assessment documentation relevant to each door type is referenced within the data sheet for each proprietary door type - contained in section 5 below.

4.3 Timber based fire resisting doors

It has been proposed to assess the use of LAS8001 and LAS8005 drop down seals within the following, generic, timber based fire resisting doorset types.

The fire resisting door blank must have been previously tested at a UKAS accredited laboratory or assessed by BMTRADA to provide 30 minutes integrity in terms of performance to BS 476: Part 22: 1987 and/or BS EN 1634-1: 2000 or 2008 for the required doorset configuration and leaf dimensions.. The seals must be installed as described in sections 4.1.1.

For all other details the full construction requirements in the relevant door blank manufacturer's test evidence or assessment documentation must be complied with.

The following timber based door types can be considered for use with LAS8001 and LAS8005 drop down seals (subject to the provisos above):

1. Graduated density chipboard and three layered particleboard door blanks
2. Softwood or hardwood laminated door constructions with tested or assessed cellulosic facings
3. Stile and rail constructions with flax, chipboard or timber based cores
4. Stile and rail constructions with non-combustible sub-facings
5. Traditional timber joinery.

5 Data Sheets – Proprietary Fire Resisting Doors

5.1 General

The global assessment report references given below are current at the time of issue of this report; the manufacturer of the specified doorset should be contacted to ensure the most up to date revision of each global assessment is used. Subsequent revisions to the reports below will supersede them, provisions within may change and must be complied with.

5.2 Proprietary 30 Minute fire resisting doors

5.2.1 Falcon Panel Products – Strebord 35+, 38+, 44, Superpan

Door manufacturer:	Falcon Panel Products Ltd
Door core reference:	Strebord 35+, 38+, 44, Superpan
Global assessment report reference:	Chilt/A02066 Revision L
Description:	Graduated density chipboard blank
Fire resistance period:	30 minutes fire resistance

5.2.2 Halspan Ltd – Prima 30

Door manufacturer:	Halspan Ltd
Door core reference:	30 Prima
Global assessment report reference:	FEA/F97174 Revision G
Description:	Tri-layer particle board
Fire resistance period:	30 minutes fire resistance

5.2.3 Halspan Ltd – Optima 30

Door manufacturer:	Halspan Ltd
Door core reference:	30 Optima
Global assessment report reference:	Chilt/A01204 Revision D
Description:	Tri-layer particle board
Fire resistance period:	30 minutes fire resistance

5.2.4 Pacific Rim Wood Ltd – Flamebreak 30

Door manufacturer:	Pacific Rim Wood Ltd
Door core reference:	Flamebreak 30
Global assessment report reference:	FEA/F98164 Revision J
Description:	Lamella core door with various facing coverings
Fire resistance period:	30 minutes fire resistance

5.2.5 Blankfort Inc – Blankfort 30 & 30+

Door manufacturer:	Blankfort Inc
Door core reference:	Blankfort 30 & 30+
Global assessment report reference:	Chilt/A12151 Revision A
Description:	Lamella core door with various facing coverings
Fire resistance period:	30 minutes fire resistance

5.2.6 Egger (UK) Ltd – Eurospan 30

Door manufacturer:	Egger (UK) Ltd
Door core reference:	Eurospan
Global assessment report reference:	Chilt/A013085
Description:	Graduated density chipboard blank
Fire resistance period:	30 minutes fire resistance

5.2.7 Moralt AG – Laminesse 30

Door manufacturer:	Moralt Tischlerplatten Gmbh
Door core reference:	Lamincore
Global assessment report reference:	Chilt/A13058
Description:	Lamella core door with various facing coverings
Fire resistance period:	30 minutes fire resistance

5.3 Proprietary 60 Minute fire resisting doors

5.3.1 Falcon Panel Products – Strebord 54

Door manufacturer:	Falcon Panel Products Ltd
Door core reference:	Strebord 54
Global assessment report reference:	Chilt/A02067 Revision E
Description:	Graduated density chipboard blank
Fire resistance period:	60 minutes fire resistance

5.3.2 Halspan Ltd – Prima 60

Door manufacturer:	Halspan Ltd
Door core reference:	60 Prima
Global assessment report reference:	FEA/F96103 Revision L
Description:	Tri-layer particle board
Fire resistance period:	60 minutes fire resistance

5.3.3 Halspan Ltd – Optima 60

Door manufacturer:	Halspan Ltd
Door core reference:	60 Optima
Global assessment report reference:	Chilt/A01205 Revision D
Description:	Tri-layer particle board
Fire resistance period:	60 minutes fire resistance

5.3.4 Pacific Rim Wood Ltd – Flamebreak 60

Door manufacturer:	Pacific Rim Wood Ltd
Door core reference:	Flamebreak 60
Global assessment report reference:	Chilt/A02141 Revision G
Description:	Lamella core door with various facing coverings
Fire resistance period:	60 minutes fire resistance

5.3.5 Blankfort Inc – Blankfort 60

Door manufacturer:	Blankfort Inc
Door core reference:	Blankfort 60 & 60+
Global assessment report reference:	Chilt/A12152 Revision A
Description:	Lamella core door with various facing coverings
Fire resistance period:	60 minutes fire resistance

5.3.6 Egger (UK) Ltd – Eurospan 60

Door manufacturer:	Egger (UK) Ltd
Door core reference:	Eurospan
Global assessment report reference:	Chilt/A10187
Description:	Graduated density chipboard blank
Fire resistance period:	60 minutes fire resistance

5.3.7 Moralt AG – Laminesse 60

Door manufacturer:	Moralt AG
Door core reference:	Laminesse
Global assessment report reference:	Chilt/A13059
Description:	Lamella core door with various facing coverings
Fire resistance period:	60 minutes fire resistance

5.4 Timber based fire resisting doors

The scope of coverage for LAS8001 and LAS8005 drop down seals for use in timber based door designs (not specifically mentioned in the tables in sections 5.1 – 5.3 above) is subject to the general provisions within this document; the seals have been successfully subjected to testing for 30 and 60 minutes fire resistance to BS EN 1634-1: 2008 and BS EN 1363-1: 1999 and are approved for use with different types of timber door construction subject to the provisos contained in sections 4.1.1 and 4.3 detailing installation and doorset design respectively.

6 Structural Opening

The supporting construction must be capable of staying in place and intact for the full period of fire resistance required from the doorset.

7 Fixings

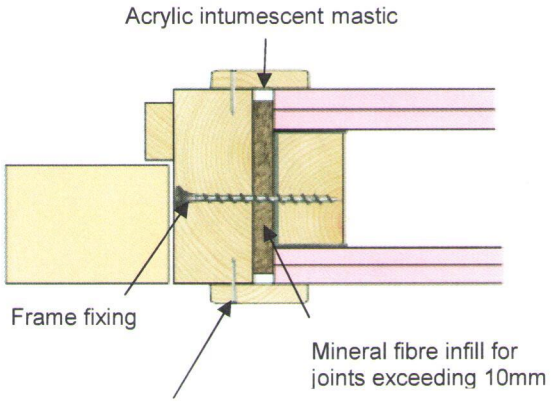
Doorset frame jambs are to be fixed to the supporting construction using steel fixings as specified in the supporting documentation for the specified doorset. The fixings must be of the appropriate type for the supporting construction. It is not necessary to fix the frame head, although packers must be inserted.

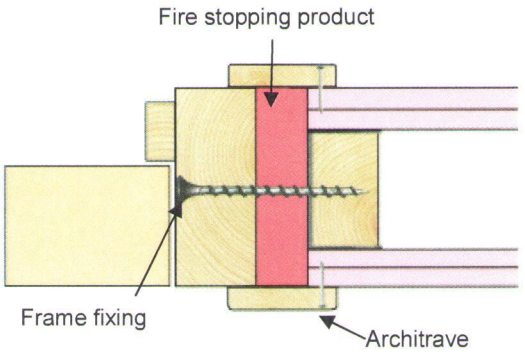
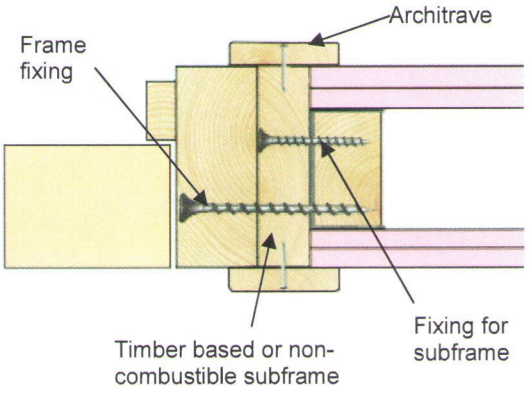
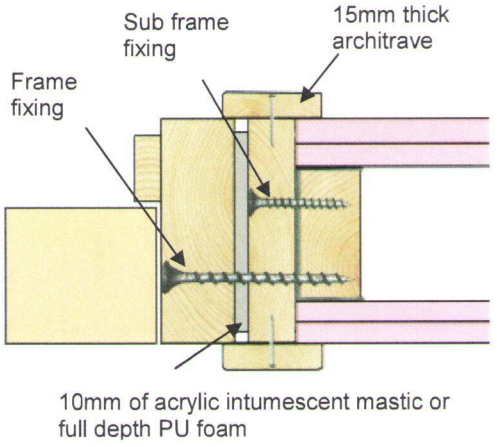
8 Sealing to Structural Opening

The door frame to structural opening gap must be protected using one of the following methods.

1. Gaps up to 10mm must be sealed on both sides with a 10mm depth of acrylic intumescent mastic, fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1: 2000 or 2008. Joint must be fitted with 15mm thick architraves overlapping at least 15mm each side.

2. Gaps between 10mm and 20mm must be tightly packed with mineral fibre capped on both sides with a 10mm depth of acrylic intumescent mastic, fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1: 2000 or 2008. Architraves are optional.



3. Gaps up to 20mm filled with proprietary fire stopping product (e.g. expanding PU foam or preformed compressible intumescent foam). Products must be tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1: 2000 or 2008. Joint must be fitted with 15mm thick architraves overlapping at least 15mm each side.	
4. Timber based or non-combustible subframe up to 50mm thick, with no gaps between the components. Joint must be fitted with 15mm thick architraves overlapping at least 15mm each side.	
5. Timber based or non-combustible subframe up to 50mm thick, with gaps up to 10mm between the components filled on both sides with 10mm depth of acrylic intumescent mastic or full depth expanding PU foam, fire tested for this application to BS 476: Part 22: 1987 or BS EN 1634-1: 2000 or 2008. Joint must be fitted with 15mm thick architraves overlapping at least 15mm each side.	

Guidance for various methods of sealing the frame to structural opening gap is also given in BS 8214: 2008, "Code of practice for fire door assemblies", which may be referred to where appropriate.

Note: Drawings are representative of doorset installation only, actual installations must be as the text within this document specifies.

9 Smoke Control

9.1 General

If the doorset design is required to provide a smoke control function to comply with Building Regulations, the doorset must meet one of the following criteria (unless pressurization techniques complying with BS EN 1201-6 are used);

(a) have a leakage rate not exceeding $3m^3/m/hour$ (head and jambs only) when tested at 25Pa under BS 476 *Fire tests on building materials and structures*, Section 31.1 - *Methods for measuring smoke penetration through doorsets and shutter assemblies, Method of measurement under ambient temperature conditions*; or

(b) meet the additional classification requirement of Sa when tested to BS EN 1634-3: 2004 - *Fire resistance tests for door and shutter assemblies*, Part 3 – *Smoke control doors*.

Smoke seals or combined intumescent/smoke seals that are fitted to the door to achieve the performance requirements specified above must have been tested in accordance with the associated test method. Providing the smoke seals, any interruptions, door gaps, and the type/configuration of the doorset are consistent with the detail tested, the doorset will comply with current smoke control legislation under approved document B; and a suffix 'S' or 'Sa', as appropriate, may be added to the designation. Any other components installed where smoke leakage may occur must also be taken into account.

Note: The incorrect specification and fitting of smoke seals may impair the operation of a doorset and therefore compromise the fire resistance performance. Advice should be sought from the seal manufacturers regarding the correct specification and installation of smoke seals or combined smoke and intumescent seals.

9.2 Further Considerations

Note that there is other guidance available, including BS EN 9999-2008 - *Code of practice for fire safety in the design, management and use of buildings,* which may impose different or additional requirements, such as consideration of the gap between door leaf and threshold.

It is the responsibility of the relevant parties to agree the precise smoke control specification, prior to commencing manufacture and/or installation.

10 Conclusion

If Lorient Polyproducts Ltd LAS8001 and LAS8005 drop down seals were utilised in flush or joinery doorsets, constructed in accordance with the specifications documented in this global assessment, and were tested in accordance with BS EN 1634-1: 2008 and BS EN 1363-1: 1999, it is our opinion that the doorset assemblies would achieve a minimum of 30 or 60 minutes integrity performance, as appropriate.

11 Declaration by the Applicant

1) We the undersigned confirm that we have read and comply with obligations placed on us by FTSG Resolution No 82: 2001.
2) We confirm that the component or element of structure, which is the subject of this assessment, has not to our knowledge been subjected to a fire test to the Standard against which this assessment is being made.
3) We agree to withdraw this assessment from circulation should the component or element of structure be the subject of a fire test to the Standard against which this assessment is being made.
4) We are not aware of any information that could adversely affect the conclusions of this assessment.
5) If we subsequently become aware of any such information we agree to ask the assessing authority to withdraw the assessment.

Signed:

Name:

For and on behalf of Lorient Polyproducts Ltd.

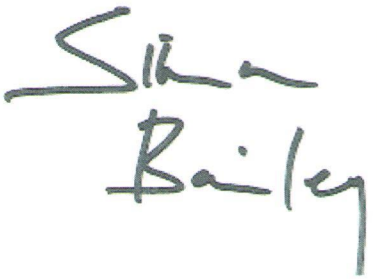
12 Limitations

The following limitations apply to this assessment:

1) This assessment addresses itself solely to the elements and subjects discussed and does not cover any other criteria. All other details not specifically referred to should remain as tested or assessed.
2) This assessment is issued on the basis of test data and information to hand at the time of issue. If contradictory evidence becomes available, BMTRADA reserves the right to withdraw the assessment unconditionally but not retrospectively.
3) This assessment has been carried out in accordance with Fire Test Study Group Resolution No 82: 2001.
4) Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
5) This assessment relates only to those aspects of design, materials and construction that influence the performance of the element(s) under fire resistance test conditions. 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 assessment, the element is suitable for its intended purpose.

13 Validity

1) The assessment is initially valid for five years after which time it must be submitted to BMTRADA for technical review.
2) This assessment report is not valid unless it incorporates the declaration given in Section 11 duly signed by the applicant.

Signature:		
Name:	**A M Winning**	**S. Bailey**
Title:	Senior Product Assessor	Product Assessor

Appendix A

Performance Data

Supporting Data

Proprietary doorsets

Report No	Configuration	Leaf Size (mm)	Test Standard	Performance (mins)
Chilt/A02066 Revision L – Falcon Panel Products: Strebord 35+, 38+, 44, Superpan	Various	Various	BS 476: Part 22: 1987	30
Chilt/A02067 Revision E – Falcon Panel Products: Strebord 54	Various	Various		60
FEA/F97174 Revision G – Halspan: 30 Prima	Various	Various	BS 476: Part 22: 1987	30
Chilt/A01204 Revision D – Halspan: 30 Optima	Various	Various		30
FEA/F96103 Revision L – Halspan: 60 Prima	Various	Various		60
Chilt/A01205 Revision D – Halspan: 60 Optima	Various	Various		60
FEA/F98164 Revision J – Pacific Rim Wood: Flamebreak 30	Various	Various	BS 476: Part 22: 1987	30
Chilt/A02141 Revision G – Pacific Rim Wood: Flamebreak 60	Various	Various		60
Chilt/A12151 - Revision A Blankfort Inc: Blankfort 30 & 30+	Various	Various	BS 476: Part 22: 1987	30
Chilt/A12152 – Revision A Blankfort Inc: Blankfort 60 & 60+	Various	Various		60
Chilt/A13085 Egger (UK): Eurospan 30	Various	Various	BS 476: Part 22: 1987	30
Chilt/A12083 - Egger (UK): Eurospan 60	Various	Various		60
Chilt/A13058 – Moralt AG: Laminesse 30	Various	Various	BS 476: Part 22: 1987	30
Chilt/A13059 – Moralt AG: Laminesse 60	Various	Various		60

Appendix B

Revisions

Revision	BMTRADA Reference	Date	Description

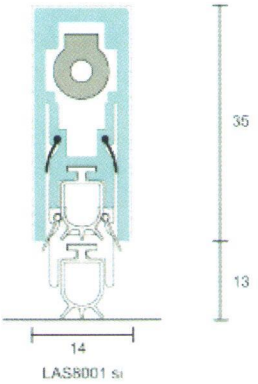
Appendix C

Assessed Product Drawings

LAS8001 si Drop Seal
Medium Duty

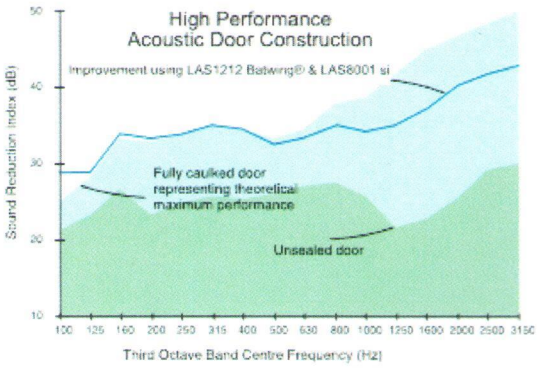
An aluminium-based drop seal with a high efficiency mechanism which lifts the seal clear of the floor as soon as the door is opened by a few millimetres. It requires no power connection.

Tested for reliability, the seal completed 1,000,000 cycles without failure. Also tested under the conditions of BS EN 1634-1: 2008. Tested for acoustic performance in accordance with BS EN ISO 10140-2: 2010.



LAS8001 si

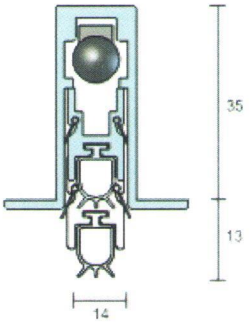
- **Location**
  Single swing doors.
  For use on both right and left handed doors.
- **Use with**
  Any perimeter seal.
- **Min/max gap size**
  1mm/13mm.
- **Seal material**
  Grey or black silicone rubber.
- **Acoustic performance**
  Weighted Sound Reduction Index up to (Rw): 37dB.



- **Standard lengths**
  335mm, 435mm, 535mm, 635mm, 735mm, 835mm, 935mm, 1035mm and 1135mm.
  Sizes above 1135mm are available on request.
  Note: Each length can be cut to the next size down. The 335mm can be cut back to 255mm.
- **Fixing**
  Fixing screws are supplied. Striker button which locates in the door jamb, is supplied. This seal is mortised. Pre-drilled radiused end plates are supplied (measuring 21mm x 57mm) which also hold the product in place.
- **Adjustment**
  Self-levelling on uneven surfaces. Can be adjusted independently of the fixing screws.
- **Finishes**
  Silver anodised aluminium with silver end plates, and grey silicone rubber gasket.
  Silver anodised aluminium with bronze end plates, and black silicone rubber gasket.

LAS8005 si Drop Seal
Medium Duty

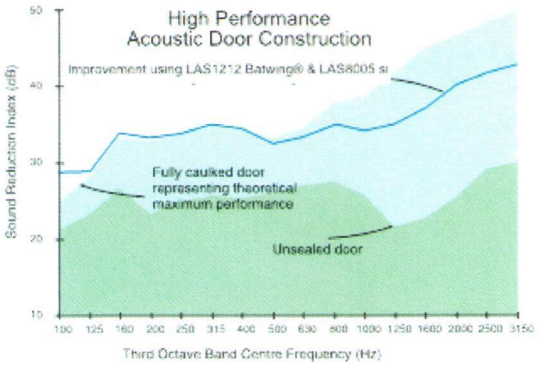
A slim-line, concealed drop seal featuring a high efficiency mechanism. The seal is lifted clear of the floor as soon as the door is opened by a few millimetres – resulting in exceptionally low door operating forces. It requires no power connection.



LAS8005 si

- **Key Benefits**
  Tested for acoustic performance in accordance with BS EN ISO 10140-2: 2010.
  Meets the smoke leakage performance requirements of BS 9999 when tested in accordance with BS 476: Pt.31.1:1983.
  Tested for up to 60 minutes under the conditions of BS476: Pt.20/22: 1987 without compromising fire performance.
  Highly durable – has achieved over 1,000,000 cycles on a full size door assembly.
  Can be fitted to aluminium doors by door fabricators.
- **Location**
  Single swing doors.
  For use on both right and left handed doors.
- **Use with**
  Any perimeter seal.
- **Min/max gap size**
  1mm/13mm.
- **Seal material**
  Grey silicone rubber.
- **Lengths**
  335mm, 435mm, 535mm, 635mm, 735mm, 835mm, 935mm, 1035mm and 1135mm.
  Note: Each length can be cut to the next size down. The 335mm can be cut back to 255mm.
- **Fixing**
  This seal is mortised, and screw fixed. Fixing screws are supplied; fixing holes are pre-drilled and countersunk.
- **Adjustment**
  Self-levelling on uneven surfaces. Seal height can be adjusted independently of the fixing screws.
- **Finishes**
  Silver anodised aluminium, with grey or black plastic end plates. Grey silicone rubber.

- **Acoustic Performance**
  Weighted Sound Reduction Index (Rw): 31dB.



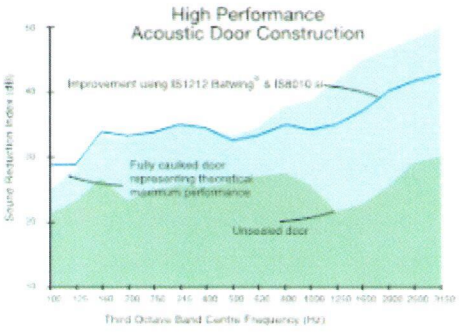
Appendix D

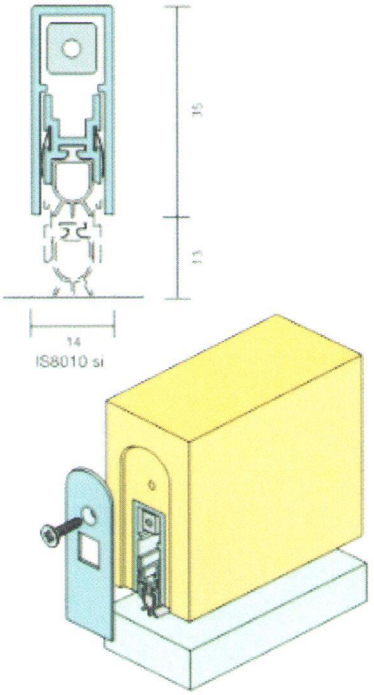
Seal as Tested

IS8010 si Automatic Threshold (Door Bottom) Seal
Medium Duty

An automatic threshold (door bottom) seal with a high efficiency mechanism which lifts the seal clear of the floor as soon as the door is opened by a few millimetres. It requires no power connection. Tested for reliability, the seal completed 1,000,000 cycles without failure. Tested for up to 60 minutes under the conditions of BS 476: Pt.20/22: 1987 without compromising fire resistance. Also tested under the conditions of BS EN 1634-1: 2000. It also meets the smoke leakage performance requirements of BS 5588 when tested in accordance with BS 476 Pt 31.1 and AS 1530.7. Tested for acoustic performance in accordance with BS EN ISO 140-3: 1995. See Acoustic Sealing Systems for Door Assemblies manual for details.

- **Location**
  Single swing doors.
- **Use with**
  Any perimeter seal (6000 or 7000 series).
- **Min/max gap size**
  1mm/13mm.
- **Seal material**
  Black or grey silicone rubber.
- **Acoustic performance**
  Weighted Sound Reduction Index (Rw): 37dB.
  Sound Transmission Class (STC): 37dB.





- **Standard lengths**
  335mm, 435mm, 535mm, 635mm, 735mm, 835mm, 935mm, 1035mm and 1135mm.
  Note: Each length can be cut to the next size down. The 335mm can be cut back to 255mm.
- **Fixing**
  Fixing screws are supplied. Striker button which locates in the door jamb, is supplied. This seal is mortised. Pre-drilled radiused end plates are supplied (measuring 21mm x 61mm) which also hold the product in place.
- **Adjustment**
  Self-levelling on uneven surfaces. Can be adjusted independently of the fixing screws.
- **Finishes**
  Silver anodised aluminium with silver end plates, and grey silicone rubber gasket.
  Bronze anodised aluminium with bronze end plates, and black silicone rubber gasket.

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