

## **Fire Door Applications:**

Safety provisions in the event of fire are generally described by reference to National Regulations. In addition, requirements may be influenced by:

Local Bye Laws.
Client specifications.

NOTE: Client specifications may take into account the particular purpose of the building e.g. HTM58 for Hospitals or Building Bulletin 100 for Schools in the United Kingdom.

The applicable Regulation for England & Wales is:
Building Regulations (England & Wales) - Approved
Document 'B' - 2006 Edition incorporating 2010 &
2013 amendments.

NOTE: Similar regulations apply in Scotland, Northern Ireland and the Republic of Ireland.

Approved Document 'B' is in two parts:

Approved Document 'B1' applies to Dwellings.
Approved Document 'B2' applies to Public Buildings.

For dwellings, the door assembly designs are generally determined by the door / door set manufacturer and are normally available in 'standard' sizes (See BS4787 Pt.1) from Builders Merchant sources. The doors / door sets are generally manufactured for 'stock' with no particular final location in mind.

For public buildings, the design of the door assemblies may be determined by an Architect or Designer with each door assembly designed to suit a particular opening in a particular building. This may result in a wide variety of dimensional and feature requirements often with performance attributes in addition to the fire performance.

A standard (prescribed) product can be tested to the required performance standard and supplied on the basis of the base test evidence. For non standard or bespoke products it would be an impossible task to test every possible variant in size, configuration, glazing requirements and hardware variations. The method adopted in the United Kingdom is for bespoke door / door assembly suppliers to test constructions to provide for applications 'envelopes'.

NOTE: Similar methods apply in the United States of America, Commonwealth and ex Commonwealth countries and many other Middle Eastern and Far Eastern states. An 'applications envelope' is determined by way of 'expert opinion' based upon test evidence. The base test evidence sources include testing carried out by the door core manufacturer and other door component suppliers / manufacturers. e.g. intumescent seal, glass, hardware suppliers / manufacturers.etc.

The 'owners' of the base test data make their test evidence available to a 3rd. party fire consultancy (expert organisation). The independent 3rd. party fire consultancies create what is generally described as a 'Global Assessment' which sets out the parameters for fire door applications related to a particular construction.

As with any expert opinion, opinions may differ according to the experiences of the particular 3rd. fire consultancy provider. This manual sets out the parameters for the application of FLAMEBREAK™ based fire performance door assemblies under the 'Q-Mark' scheme that is owned and operated by Exova BM TRADA. To maintain the 'Q-Mark' certification the door assembly manufacturer using FLAMEBREAK™ must also be a member of the 'Q-Mark' certification scheme.

NOTE: Exova BM TRADA is the Exova Group's dedicated certification division incorporating former leading global certification body BMTRADA Certification Ltd.

For various reasons, users of FLAMEBREAK<sup>™</sup> may wish to be members of alternative 3rd. party certification schemes. A list of leading providers of 3rd party certification is shown in *Section 16* Appendix 4 of this manual together with brief details of facilities offered and contact details. Pacific Rim Wood Ltd. provide support for all of the listed 3rd. party certification providers by making base test evidence available for the purpose of assessment.

NOTE: The term 'assessment' in this context applies to product related expert opinions produced by a 3rd. party fire consultancy provider and should not be confused with the term 'assessment' used in Approved Document 'B' for the purpose of regulation. The assessment required by reference to regulations is determined by the 'authorities' responsible for the particular building, generally recognised as being the Designer, in consultation with Local Building Control, and (where applicable) the Local Fire Services. The authorities may accept the expert opinions provided by 3rd. party fire consultancy providers as guidance but they are under no obligation to accept such expert advice.



## Fire Door Applications contd.

The particular project authorities may require:

**a/** 3rd. party certification originating from a particular 3rd. party certification provider.

**b/** A 'project assessment' related to the particular design requirements for a particular building.

c/Further testing of particular designs or design detail. d/ Additional 3rd. party certification to cover particular requirements that are outside of the scope of the Global Assessment.

There is generally an additional cost where there is a demand for certification in addition to that provided by the 'Global Assessment'. The cost will be influenced by the work required and the extent of the which any resultant data is limited to the particular project or can be applied generally for future applications.

Pacific Rim Wood Ltd. will support users of FLAMEBREAK<sup>™</sup> by providing base test data owned by them for reference by 3rd. party certification bodies. Further, Pacific Rim Wood Ltd. may provide support for users of FLAMEBREAK<sup>™</sup> door cores who wish to carry out further testing by way technical support and the provision of core materials for testing purposes.

Project specifications will generally define the regulations to be applied to the particular building with a further definition of design requirements. It is generally the responsibility of the door assembly manufacturer to provide for the necessary documentation to the reasonable satisfaction of the project authorities. It is strongly recommended that considerations of this nature are dealt with in advance of manufacture of the door assemblies.

This section provides for general guidance for the application of FLAMEBREAK core doors for BS476 Pt.22:1987 related FD30 and FD60 performances. It is important to note that size envelopes may vary according to the size and type of intumescent seal used. Reference should be made to other sections in this manual to determine recommended intumescent seal locations and requirements for additional intumescent gaskets for use with hardware.

NOTE 1: The dimensional envelopes for the fire door application of FLAMEBREAK<sup>TM</sup> core doors will vary according to the size and type of intumescent seal selected for the particular project. To assist users, this Section identifies application dimensions related to intumescent seal type and size.

NOTE 2: More limited application dimensions apply to some intumescent seal types. This does not imply that the particular seal type is in anyway inferior but rather, this reflects the extent of testing carried out with the particular seal types at the time of publication of this manual. A continuing fire test programme is likely to result in variations to these published application dimensions and users should contact Pacific Rim Wood Ltd. for further advice for applications not covered by this manual.

WARNING: Various formulae are used in the manufacture of intumescent seals which may provide for different performance characteristics under fire conditions. The mixing of intumescent seal types for use in the same door assembly is not approved.

#### Q Door Gaps / Alignment:

The following describes the maximum / minimum approved gaps and door leaf positioning for fire door applications. This advice is related specifically to the achievement of design fire performances and should not be referred to as an authority to vary the requirements of BS 4787 Pt.1 for general applications.

	.\
Location	Dimension
Head & Stile edge gaps.	Approved minimum = 2mm Approved maximum = 4mm
*Threshold	Approved maximum = 10mm above finished floor level.
Alignment	Door leaves must not project beyond the face of the adjacent door / panel or the frame by more than 1mm

<sup>\*</sup> See Section 5 for Smoke sealed doors.

In addition to FLAMEBREAK<sup>TM</sup> Pacific Rim Wood Ltd. also supply SAFEGUARD<sup>TM</sup> door cores and other door assembly related components. These products are beyond the scope of this manual.

For further details in respect of other products available from Pacific Rim Wood Ltd. please contact:

#### Pacific Rim Wood Ltd.,

Ground Floor Suite, Block B, The Old Kelways, Somerton Road, Langport, Somerset TA10 9SJ

Tel: +44 (0) 1458 252 305 E-mail: enquiries@prwuk.com



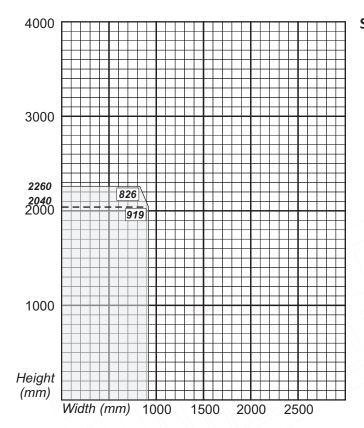


# Fire Door Applications FLAMEBREAK 430

## 2A.1

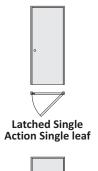
FD30 - BS476 Pt.22:1987

## 10x4mm PVC encased Pyroplex Rigid Box seal



#### **LATCHED DOORSETS**

Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2040	919
Single Door (LSASD)	То	2260	826
Latched Single Action	From	NOT ADDDOVED	NOT ADDDOVED
Double Door (LSADD)	То	NOT APPROVED	NOT APPROVED

Maximum Glazed Area	Single door doorset	2	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m <sup>-</sup>	Overpanel height	Single door doorset Double door doorset	N/A

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## Intumescent Seals 10x4mm PVC encapsulated Pyroplex Rigid Box

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 10x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 10x4mm exposed and centrally fitted to leaf or frame.

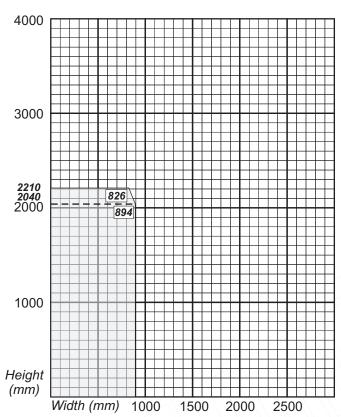
Q

#### **Fire Door Applications** 2A.2 **FLAMEBREAK 430**



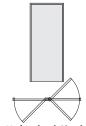
## FD30 - BS476 Pt.22:1987

## 10x4mm PVC encased Pyroplex Rigid Box seal

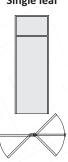


#### **UNLATCHED DOORSETS**

**Door Height Assemblies Storey Height Assemblies with Transom** 



**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2040	894
Single Door (ULSASD)	То	2210	826
Double Action	From	2040	894
Single Door (DASD)	То	2210	826
Unlatched Single Action	From	NOT APPROVED	NOT APPROVED
Double Door (ULSADD)	То	NOT APPROVED	NOTAPPROVED
Double Action	From	NOT APPROVED	NOT APPROVED
Double Door (DADD)	То	NOT APPROVED	NOT APPROVED

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	4.452	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	N/A

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m<sup>3</sup> MDF

**Intumescent Seals** 10x4mm PVC encapsulated

**Pyroplex Rigid Box** 

 $\textbf{Head:}\ 1 \text{No.}\ 10 \text{x} 4 \text{mm}\ \text{exposed}\ \text{and}\ \text{fitted}\ \text{centrally}\ \text{in}\ \text{the}\ \text{leaf}\ \text{or}\ \text{frame}\ \text{head}.$ 

See Section 4 - Intumescent Seals and

Section 8 - Hardware

Jambs & Overpanel: 1No. 10x4mm exposed and centrally fitted to leaf or frame.

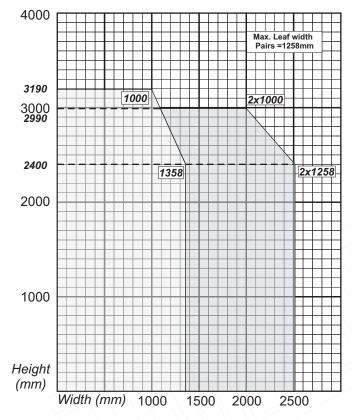


# Fire Door Applications FLAMEBREAK 430

2A.3

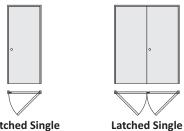
## FD30 - BS476 Pt.22:1987

# 2No.10x4mm PVC encased Pyroplex Rigid Box seal



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf



Latched Single Action Single leaf with transomed overpanel or fanlight

Latched Single

Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2400	1358
Single Door (LSASD)	То	3190	1000
Latched Single Action	From	2400	1258
Double Door (LSADD)	То	2990	1000

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

2No 10x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with 10mm separation. **Jambs & Overpanel:** 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with 10mm separation.

#### Meeting edges:

**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation. **Rebated:** *NOT APPROVED.* 

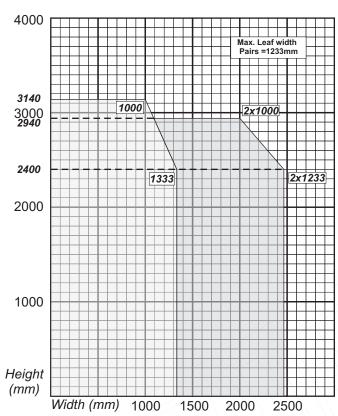


**Fire Door Applications FLAMEBREAK 430** 



## FD30 - BS476 Pt.22:1987

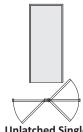
## 2No.10x4mm PVC encased Pyroplex Rigid Box seal



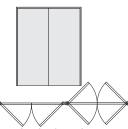
#### UNLATCHED DOORSETS

## **Door Height Assemblies** &

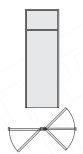
**Storey Height Assemblies with Transom** 



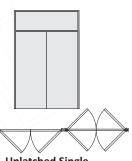
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single Action & Double Action** Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2400	1333
Single Door (ULSASD)	То	3140	1000
Double Action	From	2400	1333
Single Door (DASD)	То	3140	1000
Unlatched Single Action	From	2400	1233
Double Door (ULSADD)	То	2940	1000
Double Action	From	2400	1233
Double Door (DADD)	То	2940	1000

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	1500mm

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m3 MDF

**Intumescent Seals** 

2No 10x4mm PVC encapsulated **Pyroplex Rigid Box** 

Jambs & Overpanel: 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with 10mm separation. Meeting edges:

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation. Rebated: NOTAPPROVED.

 $\textbf{Head:}\ 2\text{No.}\ 10\text{x}4\text{mm}\ exposed\ and\ fitted\ centrally\ in\ the\ leaf\ or\ frame\ head\ with\ 10\text{mm}\ separation.$ 

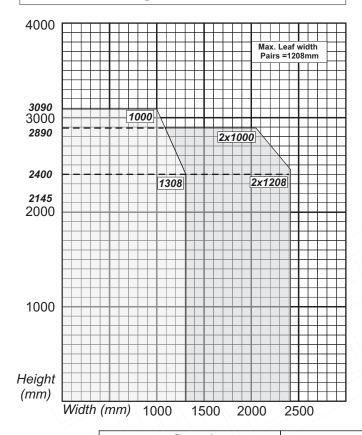


# Fire Door Applications FLAMEBREAK 430

2A.5

## FD30 - BS476 Pt.22:1987

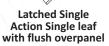
# 2No.10x4mm PVC encased Pyroplex Rigid Box seal



#### LATCHED DOORSETS

## Storey Height Assemblies with Flush Overpanel







Latched Single Action Double leaf with flush overpanel

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2400	1308
Single Door (LSASD)	То	3090	1000
Latched Single Action	From	2400	1208
Double Door (LSADD)	То	2890	1000

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification See Section 7 - Frames

Single leaf door assembly Double leaf door assembly

450kg/m³ Softwood or Hardwood

**Intumescent Seals** 

2No 10x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware Door / Overpanel: See Section 4 pages 4.11 & 4.13.

Square: 2No. 10x4mm exposed and fitted centrally in the top of the door leaf or bottom of overpanel with 10mm separation.

**Rebated:** 1 No. 10 x4 located centrally at the top of the door plus 1 No. 10 x4 located centrally in the rebate to the door leaf.

**Head / Jambs & Overpanel**: 2No. 10x4mm exposed and fitted centrally in the leaf or frame with 10mm separation, extended to vertical edges and top of overpanel.

Meeting edges - pairs of doors:

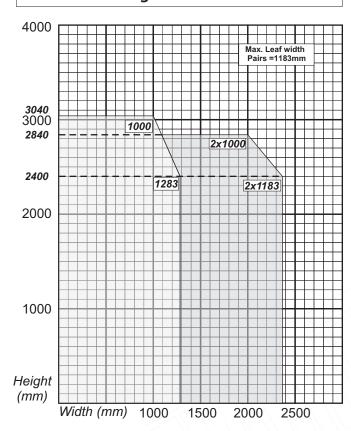
**Square:** 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with 10mm separation. **Rebated:** *NOT APPROVED.* 





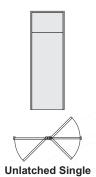
## FD30 - BS476 Pt.22:1987

# 2No.10x4mm PVC encased Pyroplex Rigid Box seal

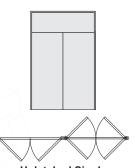


#### UNLATCHED DOORSETS

## Storey Height Assemblies with Flush Overpanel







Unlatched Single Action & Double Action Double leaf with flush overpanel

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2400	1283
Single Door (ULSASD)	То	3040	1000
Double Action	From	2400	1283
Single Door (DASD)	То	3040	1000
Unlatched Single Action	From	2400	1183
Double Door (ULSADD)	То	2840	1000
Double Action	From	2400	1183
Double Door (DADD)	То	2840	1000

Maximum Glazed Area	Single door doorset	1.15m <sup>2</sup>	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset		Overpanel height	Double door doorset	1500mm

Frame Specification See Section 7 - Frames

Single leaf door assembly Double leaf door assembly

450kg/m³ Softwood or Hardwood

**Intumescent Seals** 

2No 10x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware Door / Overpanel: See Section 4 pages 4.11 & 4.13.

**Square:** 2No. 10x4mm exposed and fitted centrally in the top of the door leaf or bottom of overpanel with 10mm separation.

**Rebated:** 1 No. 10 x4 located centrally at the top of the door plus 1 No. 10 x4 located centrally in the rebate to the door leaf.

**Head / Jambs & Overpanel:** 2No. 10x4mm exposed and fitted centrally in the leaf or frame with 10mm separation, extended to vertical edges and top of overpanel.

Meeting edges - pairs of doors:

**Square:** 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with 10mm separation.

Rebated: NOT APPROVED.

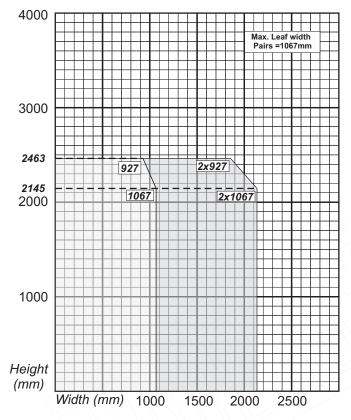


# Fire Door Applications FLAMEBREAK 430

2A.7

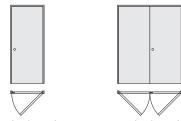
## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Pyroplex Rigid Box seal



#### LATCHED DOORSETS

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

Latched Single Action Double leaf



Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2145	1067
Single Door (LSASD)	То	2463	927
Latched Single Action	From	2145	1067
Double Door (LSADD)	То	2463	927

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

15x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 15x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 15x4mm exposed and fitted centrally in the leaf or frame.

Meeting edges:

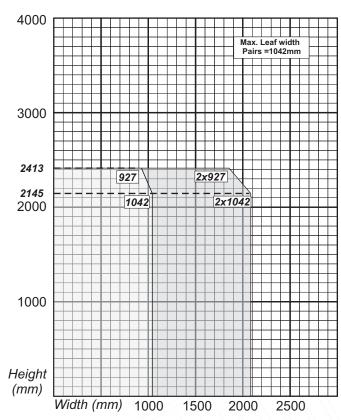
 $\textbf{Square: } 2 \text{No. } 10 \text{x} 4 \text{mm exposed and fitted centrally in one leaf only with } 10 \text{mm separation.} \\ \textbf{Rebated: } \textit{NOT APPROVED.} \\$ 





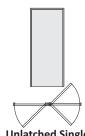
## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Pyroplex Rigid Box seal

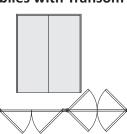


#### **UNLATCHED DOORSETS**

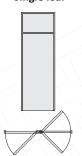
# Door Height Assemblies & Storey Height Assemblies with Transom



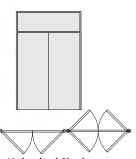
Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight



Unlatched Single Action & Double Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2145	1042
Single Door (ULSASD)	То	2413	927
Double Action	From	2145	1042
Single Door (DASD)	То	2413	927
Unlatched Single Action	From	2145	1042
Double Door (ULSADD)	То	2413	927
Double Action	From	2145	1042
Double Door (DADD)	То	2413	927

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

15x4mm PVC encapsulated **Pyroplex Rigid Box**  **Head:** 1No. 15x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 15x4mm exposed and fitted centrally in the leaf or frame.

Meeting edges:

**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation. **Rebated:** *NOT APPROVED.* 

See Section 4 - Intumescent Seals Rebated: NO

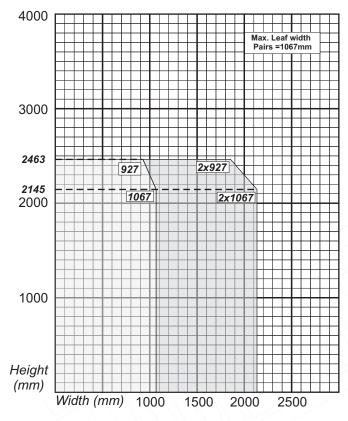
and Section 8 - Hardware



# Fire Door Applications 2A.9

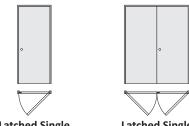
## FD30 - BS476 Pt.22:1987

## 20x4mm PVC encased Pyroplex Rigid Box seal



#### LATCHED DOORSETS

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

Latched Single Action Double leaf



Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2145	1067
Single Door (LSASD)	То	2463	927
Latched Single Action	From	2145	1067
Double Door (LSADD)	То	2463	927

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

20x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware Head: 1No. 20x4mm exposed and fitted centrally in the leaf or frame head.

 $\textbf{Jambs \& Overpanel: } 1 No.\,20 x 4 mm \ exposed \ and \ fitted \ centrally \ in \ the \ leaf \ or \ frame.$  Meeting edges:

 $\textbf{Square: } 2 \text{No. } 10 \text{x} 4 \text{mm exposed and fitted centrally in one leaf only with } 10 \text{mm separation.} \\ \textbf{Rebated: } \textit{NOT APPROVED.} \\$ 

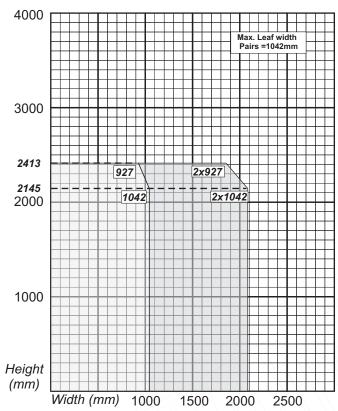


# 2A.10 Fire Door Applications



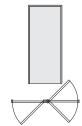
## FD30 - BS476 Pt.22:1987

## 20x4mm PVC encased Pyroplex Rigid Box seal

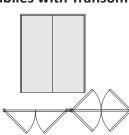


#### UNLATCHED DOORSETS

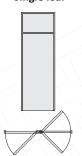
## **Door Height Assemblies** & **Storey Height Assemblies with Transom**



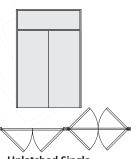
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single** Action & Double Action Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2145	1042
Single Door (ULSASD)	То	2413	927
Double Action	From	2145	1042
Single Door (DASD)	То	2413	927
Unlatched Single Action	From	2145	1042
Double Door (ULSADD)	То	2413	927
Double Action Double Door (DADD)	From	2145	1042
	То	2413	927

Maximum Glazed Area	Single door doorset	1 152	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height Single leaf door assembly **Double leaf door assembly** NOTE: Glazed fanlights approved 450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m3 MDF

door assemblies (without transoms) only.

for door assemblies with 640kg/m³ Hardwood frames only.

 $\textbf{Head:} \ 1 \text{No.} \ 20 \text{x} 4 \text{mm} \ \text{exposed} \ \text{and} \ \text{fitted} \ \text{centrally} \ \text{in} \ \text{the} \ \text{leaf} \ \text{or} \ \text{frame} \ \text{head}.$ 

**Intumescent Seals** 

20x4mm PVC encapsulated **Pyroplex Rigid Box** 

Meeting edges:

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation. Rebated: NOT APPROVED.

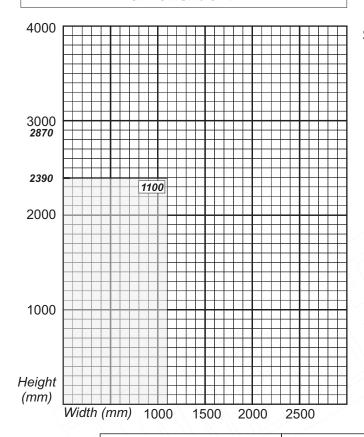
Jambs & Overpanel: 1No. 20x4mm exposed and fitted centrally in the leaf or frame.



# Fire Door Applications **2A.11**

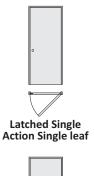
## FD30 - BS476 Pt.22 :1987

# 15x4mm PVC encased Palusol 100 or Lorient 617



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)	
Latched Single Action	From	2390	1100	
Single Door (LSASD)	ngle Door (LSASD) To		1100	
Latched Single Action	From	NOT APPROVED	NOT APPROVED	
Double Door (LSADD)	То	NOT APPROVED	NOT APPROVED	

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	4.45 2	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	N/A

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

15x4mm PVC encapsulated

Palusol 100 or Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware Head: 1No. 15x4mm exposed and fitted centrally in the leaf or frame head.

Jambs & Overpanel: 1No. 15x4mm exposed and fitted centrally in the leaf or frame.

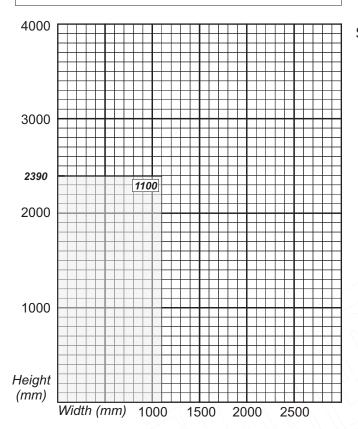
Q

# **2A.12** Fire Door Applications FLAMEBREAK 430



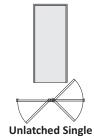
## FD30 - BS476 Pt.22:1987

# 15x4mm PVC encased Palusol 100 or Lorient 617

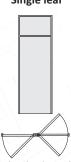


#### UNLATCHED DOORSETS

Door Height Assemblies &
Storey Height Assemblies with Transom



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From To	2390	1100
Double Action Single Door (DASD)	From To	2390	1100
Unlatched Single Action Double Door (ULSADD)	From To	NOT APPROVED	NOT APPROVED
Double Action Double Door (DADD)	From To	NOT APPROVED	NOT APPROVED

Maximum Glazed Area	Single door doorset	1 152	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	N/A

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

15x4mm PVC encapsulated

Palusol 100 or Lorient 617

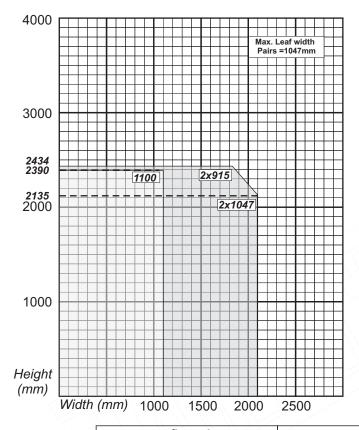
See Section 4 - Intumescent Seals and Section 8 - Hardware  $\textbf{Head:} 1 No.\, 15 x 4 mm \ exposed \ and \ fitted \ centrally in the leaf \ or \ frame \ head. \\ \textbf{Jambs \& Overpanel:} 1 No.\, 15 x 4 mm \ exposed \ and \ fitted \ centrally in the leaf \ or \ frame. \\$ 



# Fire Door Applications 2A.13

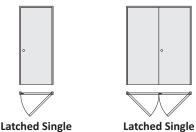
## FD30 - BS476 Pt.22:1987

# 20x4mm PVC encased Palusol 100 or Lorient 617



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

Action Double leaf

Latched Single Action Single leaf with transomed overpanel or fanlight

Latched Single
Action Double leaf
with transomed
overpanel or fanlight

Configuration		Height (mm)	Width (mm)	
Latched Single Action	From	2390	1100	
Single Door (LSASD)	То	2590	1100	
<b>Latched Single Action</b>	From	2135	1047	
Double Door (LSADD)	То	2434	915	

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

20x4mm PVC encapsulated

Palusol 100 or Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware  $\label{lem:head:1} \textbf{Head:1} No.\,20x4mm \, \text{exposed and fitted centrally in the leaf or frame head.} \\ \textbf{Jambs \& Overpanel:1} No.\,20x4mm \, \text{exposed and fitted centrally in the leaf or frame.} \\$ 

Meeting edges:

 $\textbf{Square:}\ 1 \text{No.}\ 20 \text{x4} \text{mm}\ \text{exposed}\ \text{and}\ \text{fitted}\ \text{centrally}\ \text{in}\ \text{one}\ \text{leaf}\ \text{only}.$ 

 $\textbf{Rebated:}\ 1 \text{No.}\ 10 \text{x} 4 \text{mm}\ \text{exposed and fitted centrally in the rebate of both leaf edges}.$ 

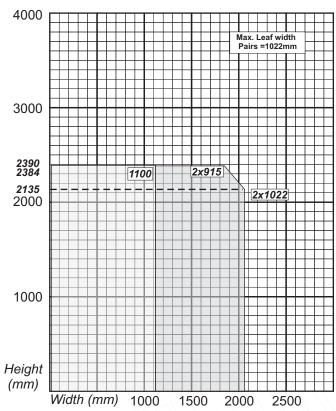
Q

# **2A.14** Fire Door Applications FLAMEBREAK 430



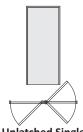
## FD30 - BS476 Pt.22:1987

# 20x4mm PVC encased Palusol 100 or Lorient 617

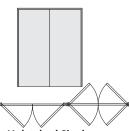


#### UNLATCHED DOORSETS

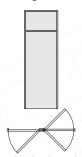
## Door Height Assemblies & Storey Height Assemblies with Transom



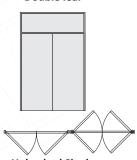
Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight



Unlatched Single Action & Double Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From To	2390	1100
Double Action Single Door (DASD)	From To	2390	1100
Unlatched Single Action	From	2135	1022
Double Door (ULSADD)	То	2384	915
Double Action	From	2135	1022
Double Door (DADD)	То	2384	915

Maximum Glazed Area	Single door doorset	1 152	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

20x4mm PVC encapsulated

 $\textbf{Head:} 1 No.\, 20x4mm \ exposed \ and \ fitted \ centrally in the leaf \ or \ frame \ head. \\ \textbf{Jambs \& Overpanel:} 1 No.\, 20x4mm \ exposed \ and \ fitted \ centrally in the leaf \ or \ frame. \\$ 

Meeting edges:

Palusol 100 or Lorient 617 Square: 1No. 20x4mm exposed and fitted centrally in one leaf only.

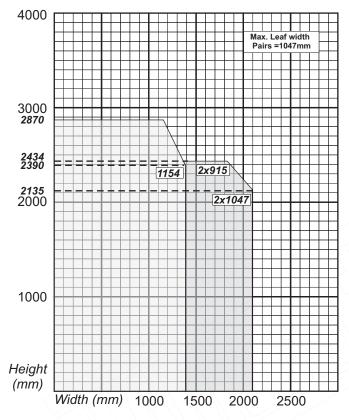
See Section 4 - Intumescent Seals and Section 8 - Hardware Rebated: 1No. 10x4mm exposed and fitted centrally in the rebate of both leaf edges.



# Fire Door Applications 2A.15

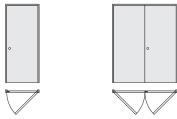
## FD30 - BS476 Pt.22:1987

# 25x4mm PVC encased Palusol 100 or Lorient 617



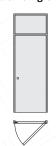
#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

Latched Single Action Double leaf



Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2390	1387
Single Door (LSASD)	То	2870	1154
Latched Single Action	From	2135	1047
Double Door (LSADD)	То	2434	915

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

25x4mm PVC encapsulated

Palusol 100 or Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 25x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 25x4mm exposed and fitted centrally in the leaf or frame.

Jamos & Overpaner: 1No. 25x4mm exposed and fitted centrally in the leaf of fram Meeting edges:

 $\textbf{Square:}\ 1 \text{No.}\ 20 \text{x4} \text{mm}\ \text{exposed}\ \text{and}\ \text{fitted}\ \text{centrally}\ \text{in}\ \text{one}\ \text{leaf}\ \text{only}.$ 

 $\textbf{Rebated: } 1 \text{No.}\, 10 \text{x} 4 \text{mm exposed and fitted centrally in the rebate of both leaf edges}.$ 

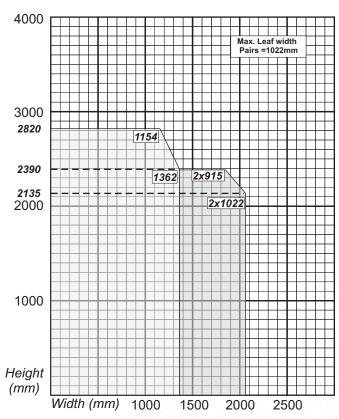
Q

# 2A.16 Fire Door Applications



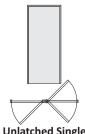
## FD30 - BS476 Pt.22:1987

## 25x4mm PVC encased Palusol 100 or Lorient 617

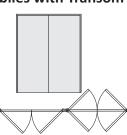


#### UNLATCHED DOORSETS

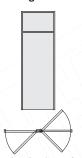
## **Door Height Assemblies** & **Storey Height Assemblies with Transom**



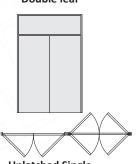
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single** Action & Double Action Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2390	1362
Single Door (ULSASD)	То	2820	1154
Double Action	From	2390	1362
Single Door (DASD)	То	2820	1154
Unlatched Single Action	From	2135	1022
Double Door (ULSADD)	То	2384	915
Double Action	From	2135	1022
Double Door (DADD)	То	2384	915

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	4.452	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m3 MDF

#### **Intumescent Seals**

25x4mm PVC encapsulated

Head: 1No. 25x4mm exposed and fitted centrally in the leaf or frame head.

 $\textbf{Jambs \& Overpanel:} \ 1 \text{No. } 20 \text{x4} \text{mm exposed and fitted centrally in the leaf or frame}.$ 

Meeting edges: Palusol 100 or Lorient 617

Square: 1No. 25x4mm exposed and fitted centrally in one leaf only.

See Section 4 - Intumescent Seals and Section 8 - Hardware

Rebated: 1No. 10x4mm exposed and fitted centrally in the rebate of both leaf edges.

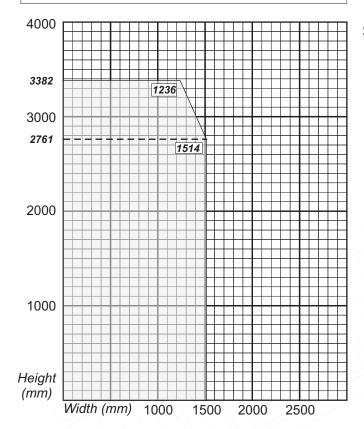


## **Fire Door Applications** FLAMEBREAK 430 **2A.17** Excluding core internal

perimeter framing

## FD30 - BS476 Pt.22:1987

#### 25x4mm PVC encased Lorient 617



#### **LATCHED DOORSETS**

**Door Height Assemblies Storey Height Assemblies with Transom** 



**Action Single leaf** 



**Latched Single Action Single leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2761	1514
Single Door (LSASD)	То	3382	1236
Latched Single Action	From	NOT ADDROVED	NOT ADDDOVED
Double Door (LSADD)	То	NOT APPROVED	NOT APPROVED

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	N/A

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m<sup>3</sup> MDF

#### **Intumescent Seals**

25x4mm PVC encapsulated Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware

NOTE: This product is supplied without any perimeter framing to the core construction - Doors must be hardwood lipped.

**Head:** 1No. 25x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 25x4mm exposed and fitted centrally in the leaf or frame.

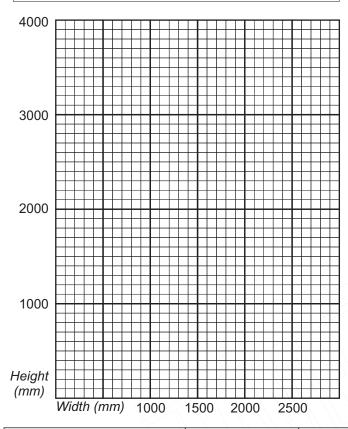


# **2A.18** Fire Door Applications FLAMEBREAK 430 Excluding core internal perimeter framing



## FD30 - BS476 Pt.22:1987

## 25x4mm PVC encased Lorient 617



#### **UNLATCHED DOORSETS**

#### NOTE:

This door blank construction is approved for single leaf, single swing, latched door only.

This construction is **not** approved for the following applications:

- Unlatched Single Action Single Door.
- Double Action Single Door.
- Latched Single Action Double Door.
- Unlatched Single Action Double Door.
- Double Action Double Door.

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From To	NOT APPROVED	NOT APPROVED
Double Action Single Door (DASD)	From To	NOT APPROVED	NOT APPROVED
Unlatched Single Action Double Door (ULSADD)	From To	NOT APPROVED	NOT APPROVED
Double Action Double Door (DADD)	From To	NOT APPROVED	NOT APPROVED

Maximum Glazed Area	Single door doorset		Single door doorset	
See Section 6 - Glazing	Double door doorset	Overpanel height	Double door doorset	

Frame Specification
See Section 7 - Frames

NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood

OR

700kg/m³ MDF

#### **Intumescent Seals**

25x4mm PVC encapsulated

Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware

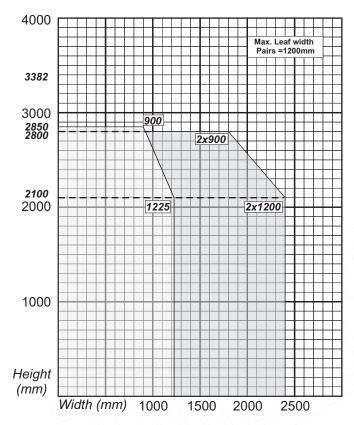


Fire Door Applications
FLAMEBREAK 430
With Acrovyn Door Edge
Protectors

Protectors

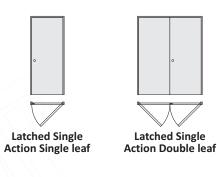
FD30 - BS476 Pt.22 :1987

## 15x4mm PVC encased Lorient 617 + Intregral CS Acrovyn intumescent



#### **LATCHED DOORSETS**

## **Door Height Assemblies**



Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2100	1225
Single Door (LSASD)	То	2850	900
Latched Single Action	From	2100	1200
Double Door (LSADD)	То	2800	900

Maximum Glazed Area	Single door doorset	1 1 5 2	Maximum	Single door doorset	NOT	
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	APPROVED	

Frame Specification
See Section 7 - Frames
Single leaf door assembly
Double leaf door assembly
OR
700kg/m³ Softwood
Or Hardwood
OR
700kg/m³ MDF

## **Intumescent Seals**

15x4mm PVC encapsulated Lorient 617 + Intregral CS Acrovyn Intumescent

See Section 4 - Intumescent Seals and Section 8 - Hardware  $\textbf{Head:}\ 1 \text{No.}\ 15 \text{x4} \text{mm}\ \text{exposed}\ \text{and}\ \text{fitted}\ \text{centrally}\ \text{in}\ \text{the}\ \text{frame}\ \text{head}.$ 

Jambs: 1No. 15x4mm exposed and fitted centrally in the leaf in addition to CS Acrovyn edge protectors with integral intumescents fitted on the leaf edges.

**Meeting Stiles :** 1No. 15x4mm exposed and fitted centrally in the CS Acrovyn edge protectors to both door leaf edges.

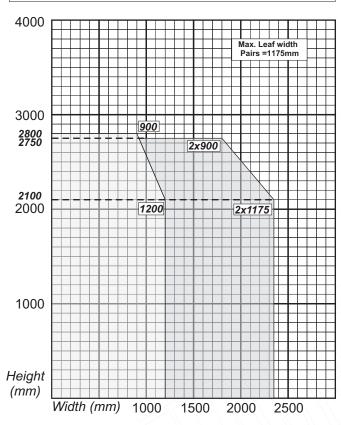


# Fire Door Applications FLAMEBREAK 430 With Acrovyn Door Edge Protectors



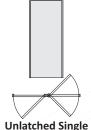
## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Lorient 617 + Intregral CS Acrovyn intumescent

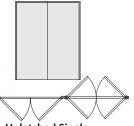


#### UNLATCHED DOORSETS

## **Door Height Assemblies**



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2100	1200
Single Door (ULSASD)	То	2800	900
Double Action	From	2100	1200
Single Door (DASD)	То	2800	900
Unlatched Single Action	From	2100	1175
Double Door (ULSADD)	То	2750	900
Double Action	From	2100	1175
Double Door (DADD)	То	2750	900

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	NOT
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	APPROVED

Frame Specification See Section 7 - Frames Single leaf door assembly Double leaf door assembly 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

15x4mm PVC encapsulated Lorient 617 + Intregral CS Acrovyn Intumescent

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 15x4mm exposed and fitted centrally in the frame head.

**Jambs :** 1No. 15x4mm exposed and fitted centrally in the leaf in addition to CS Acrovyn edge protectors with integral intumescents fitted on the leaf edges.

**Meeting Stiles :** 1No. 15x4mm exposed and fitted centrally in the CS Acrovyn edge protectors to both door leaf edges.

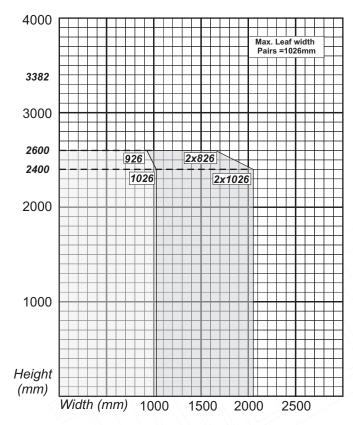


## **Fire Door Applications**

FLAMEBREAK 430 With Yeoman Shield Door Edge 2A.21 **Protectors** 

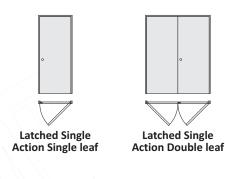
## FD30 - BS476 Pt.22:1987

## 15x4 + 20x4mm PVC encased Lorient 617 +Yeoman Shield Door Edge Protector



#### **LATCHED DOORSETS**

## **Door Height Assemblies**



Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2400	1026
Single Door (LSASD)	То	2600	926
Latched Single Action	From	2400	1026
Double Door (LSADD)	То	2600	826

V						_
Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	NOT	]
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	APPROVED	

450kg/m<sup>3</sup> Softwood Single leaf door assembly or Hardwood **Frame Specification** See Section 7 - Frames **Double leaf door assembly** OR 700kg/m<sup>3</sup> MDF

## **Intumescent Seals**

15x4 + 20x4mm PVC encapsulated Lorient 617 +Yeoman Shield Door Edge Protector

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 1No. 20x4mm exposed and fitted centrally in the frame head.

Jambs: 1No. 15x4mm fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector. Meeting Stiles: 1No. 15x4mm exposed and fitted centrally in the Yeoman Shield / Lorient edge protectors to both door leaf edges.

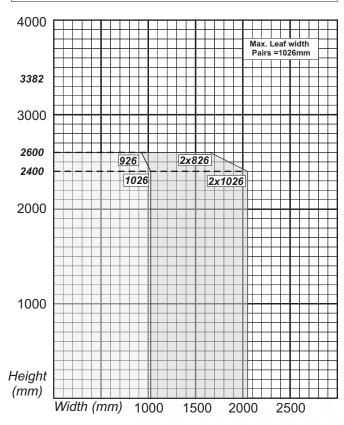


# Fire Door Applications PLAMEBREAK 430 With Yeoman Shield Door Edge Protectors



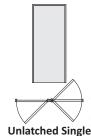
## FD30 - BS476 Pt.22:1987

## 15x4 + 20x4mm PVC encased Lorient 617 +Yeoman Shield Door Edge Protector

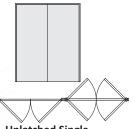


#### **UNLATCHED DOORSETS**

## **Door Height Assemblies**



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2400	1026
Single Door (ULSASD)	То	2600	926
Double Action	From	2400	1026
Single Door (DASD)	То	2600	926
Unlatched Single Action	From	2400	1026
Double Door (ULSADD)	То	2600	826
Double Action	From	2400	1026
Double Door (DADD)	То	2600	826

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	NOT
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	APPROVED

Frame Specification See Section 7 - Frames

Single leaf door assembly Double leaf door assembly 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

15x4 + 20x4mm PVC

encapsulated Lorient 617

+Yeoman Shield Door Edge Protector

See Section 4 - Intumescent Seals and

Section 8 - Hardware

**Head:** 1No. 20x4mm exposed and fitted centrally in the frame head.

Jambs: 1No. 15x4mm fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.

Meeting Stiles: 1No. 15x4mm exposed and fitted centrally in the Yeoman Shield / Lorient edge

protectors to both door leaf edges.



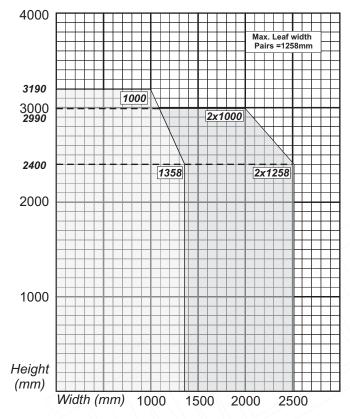


# Fire Door Applications FLAMEBREAK 630

2B.1

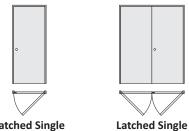
## FD30 - BS476 Pt.22:1987

# 2No.10x4mm PVC encased Pyroplex Rigid Box seal

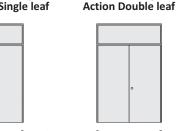


#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf



Latched Single Action Single leaf with transomed overpanel or fanlight

Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2400	1358
Single Door (LSASD)	То	3190	1000
Latched Single Action	From	2400	1258
Double Door (LSADD)	То	2990	1000

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	4.452	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

2No 10x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with 10mm separation. **Jambs & Overpanel:** 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with 10mm separation.

#### Meeting edges:

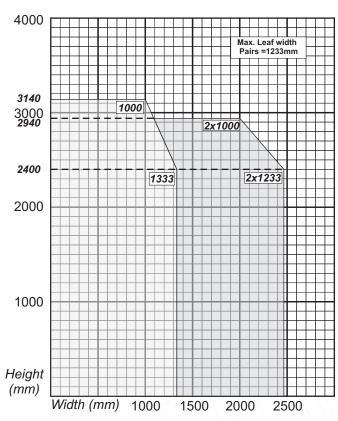
**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation. **Rebated:** *NOT APPROVED.* 





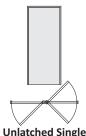
## FD30 - BS476 Pt.22:1987

## 2No.10x4mm PVC encased Pyroplex Rigid Box seal

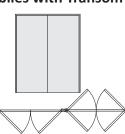


#### UNLATCHED DOORSETS

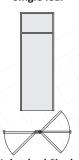
## **Door Height Assemblies** & **Storey Height Assemblies with Transom**



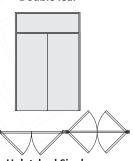
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single Action & Double Action** Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2400	1333
Single Door (ULSASD)	То	3140	1000
Double Action	From	2400	1333
Single Door (DASD)	То	3140	1000
Unlatched Single Action	From	2400	1233
Double Door (ULSADD)	То	2940	1000
Double Action	From	2400	1233
Double Door (DADD)	То	2940	1000

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	1500mm

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m3 MDF

door assemblies (without transoms) only.

**Intumescent Seals** 2No 10x4mm PVC encapsulated **Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware

 $\textbf{Head:}\ 2\text{No.}\ 10\text{x}4\text{mm}\ exposed\ and\ fitted\ centrally\ in\ the\ leaf\ or\ frame\ head\ with\ 10\text{mm}\ separation.$ Jambs & Overpanel: 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with 10mm separation.

Meeting edges:

**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation. Rebated: NOTAPPROVED.

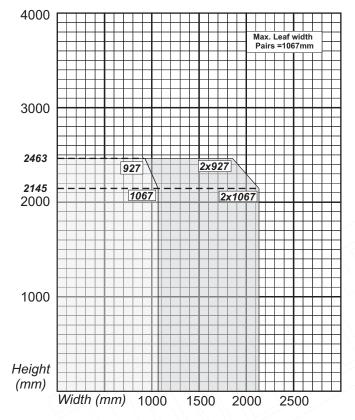


# Fire Door Applications FLAMEBREAK 630

2B.3

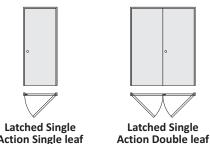
## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Pyroplex Rigid Box seal



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Action Single leaf

Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2145	1067
Single Door (LSASD)	То	2463	927
Latched Single Action	From	2145	1067
Double Door (LSADD)	То	2463	927

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

15x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware Head: 1No. 15x4mm exposed and fitted centrally in the leaf or frame head.

 $\textbf{Jambs \& Overpanel: } 1 \text{No.}\, 15 \text{x4mm exposed and fitted centrally in the leaf or frame.} \\ \textbf{Meeting edges:}$ 

 $\textbf{Square: } 2 \text{No. } 10 \text{x} 4 \text{mm exposed and fitted centrally in one leaf only with } 10 \text{mm separation.} \\ \textbf{Rebated: } \textit{NOT APPROVED.} \\$ 

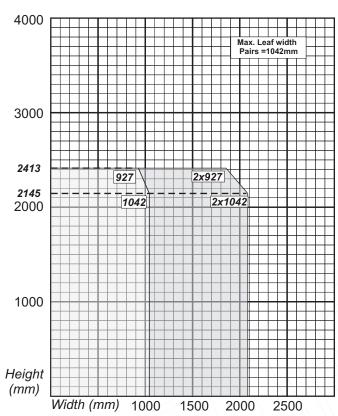
Q

**Fire Door Applications FLAMEBREAK 630** 



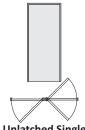
## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Pyroplex Rigid Box seal

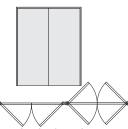


#### UNLATCHED DOORSETS

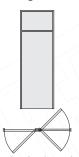
## **Door Height Assemblies** & **Storey Height Assemblies with Transom**



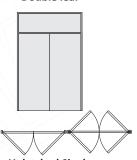
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single** Action & Double Action Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2145	1042
Single Door (ULSASD)	То	2413	927
Double Action	From	2145	1042
Single Door (DASD)	То	2413	927
Unlatched Single Action	From	2145	1042
Double Door (ULSADD)	То	2413	927
Double Action	From	2145	1042
Double Door (DADD)	То	2413	927

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	1500mm

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height Single leaf door assembly **Double leaf door assembly** NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m3 MDF

door assemblies (without transoms) only.

Head: 1No. 15x4mm exposed and fitted centrally in the leaf or frame head.

Jambs & Overpanel: 1No. 15x4mm exposed and fitted centrally in the leaf or frame.

Meeting edges:

**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation.

**Pyroplex Rigid Box** Rebated: NOT APPROVED.

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Intumescent Seals** 

15x4mm PVC

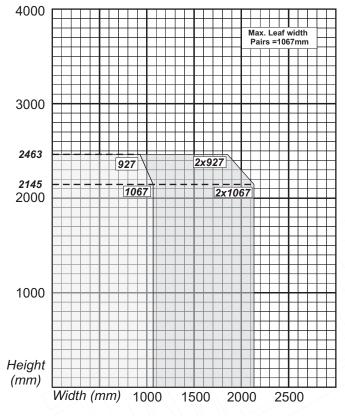
encapsulated



# Fire Door Applications 2B.5

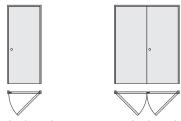
## FD30 - BS476 Pt.22:1987

## 20x4mm PVC encased Pyroplex Rigid Box seal



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

Latched Single Action Double leaf



Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2145	1067
Single Door (LSASD)	То	2463	927
Latched Single Action	From	2145	1067
Double Door (LSADD)	То	2463	927

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## **Intumescent Seals**

20x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 20x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 20x4mm exposed and fitted centrally in the leaf or frame.

Meeting edges:

 $\textbf{Square:}\ 2\text{No.}\ 10\text{x}4\text{mm}\ \text{exposed}\ \text{and}\ \text{fitted}\ \text{centrally}\ \text{in}\ \text{one}\ \text{leaf}\ \text{only}\ \text{with}\ 10\text{mm}\ \text{separation}.$ 

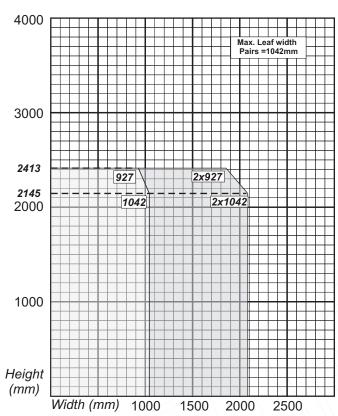
Rebated: NOTAPPROVED.





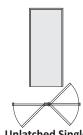
## FD30 - BS476 Pt.22:1987

## 20x4mm PVC encased Pyroplex Rigid Box seal

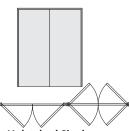


#### UNLATCHED DOORSETS

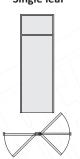
## **Door Height Assemblies** & **Storey Height Assemblies with Transom**



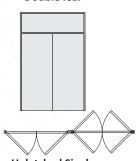
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single** Action & Double Action Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2145	1042
Single Door (ULSASD)	То	2413	927
Double Action	From	2145	1042
Single Door (DASD)	То	2413	927
Unlatched Single Action	From	2145	1042
Double Door (ULSADD)	То	2413	927
Double Action	From	2145	1042
Double Door (DADD)	То	2413	927

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly **Double leaf door assembly** NOTE: Glazed fanlights approved

640kg/m³ Hardwood frames only.

for door assemblies with

450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m3 MDF

**Intumescent Seals** 

20x4mm PVC encapsulated

 $\textbf{Head:} \ 1 \text{No.} \ 20 \text{x} 4 \text{mm} \ \text{exposed} \ \text{and} \ \text{fitted} \ \text{centrally} \ \text{in} \ \text{the} \ \text{leaf} \ \text{or} \ \text{frame} \ \text{head}.$ 

Jambs & Overpanel: 1No. 20x4mm exposed and fitted centrally in the leaf or frame.

Meeting edges: **Pyroplex Rigid Box Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation.

See Section 4 - Intumescent Seals and Section 8 - Hardware

Exova Warrington fire Report Ref: FEA/F98164 Rev. M Valid until 23rd. February 2023

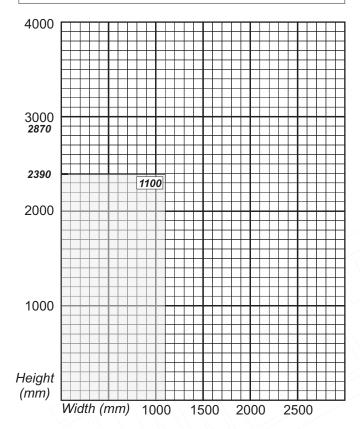
Rebated: NOT APPROVED.



# Fire Door Applications 2B.7

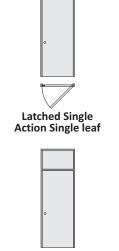
## FD30 - BS476 Pt.22:1987

# 15x4mm PVC encased Palusol 100 or Lorient 617



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action Single Door (LSASD)	From To	2390	1100
Latched Single Action Double Door (LSADD)	From To	NOT APPROVED	NOT APPROVED

Maximum Glazed Area	Single door doorset	4.45 2	Maximum	Single door doorset	2000mm
Maximum Glazed Area See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	N/A

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single NOTE
NOTE: MDF frames are approved for door height 640kg

Single leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

15x4mm PVC encapsulated

Palusol 100 or Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware Head: 1No. 15x4mm exposed and fitted centrally in the leaf or frame head.

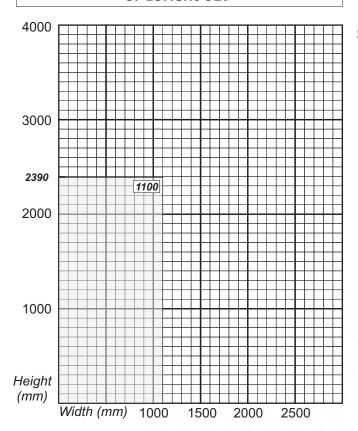
Jambs & Overpanel: 1No. 15x4mm exposed and fitted centrally in the leaf or frame.





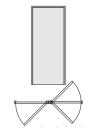
## FD30 - BS476 Pt.22:1987

# 15x4mm PVC encased Palusol 100 or Lorient 617

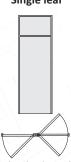


#### **UNLATCHED DOORSETS**

Door Height Assemblies &
Storey Height Assemblies with Transom



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)	
Unlatched Single Action Single Door (ULSASD)	From To	2390	1100	
Double Action Single Door (DASD)	From To	_ 2390		
Unlatched Single Action Double Door (ULSADD)	From To	NOT APPROVED	NOT APPROVED	
Double Action Double Door (DADD)	From To	NOT APPROVED	NOT APPROVED	

ſ	Maximum Glazed Area	Single door doorset	1.15m <sup>2</sup>	15m² Maximum Overpanel height	Single door doorset	2000mm
	See Section 6 - Glazing	Double door doorset			Double door doorset	N/A

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

15x4mm PVC encapsulated

Palusol 100 or Lorient 617

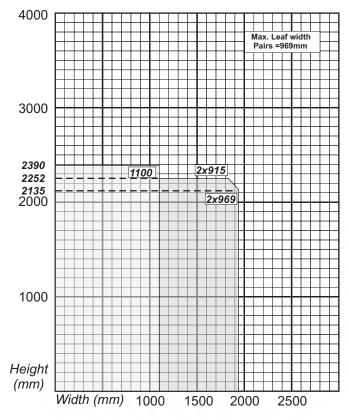
See Section 4 - Intumescent Seals and Section 8 - Hardware  $\textbf{Head:} 1 No.\, 15 x 4 mm \ exposed \ and \ fitted \ centrally in the leaf \ or \ frame \ head. \\ \textbf{Jambs \& Overpanel:} 1 No.\, 15 x 4 mm \ exposed \ and \ fitted \ centrally in the leaf \ or \ frame. \\$ 



# Fire Door Applications 2B.9

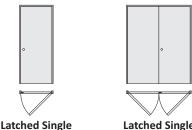
## FD30 - BS476 Pt.22:1987

## 20x4mm PVC encased Palusol 100 or Lorient 617



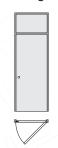
#### LATCHED DOORSETS

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

Latched Single Action Double leaf



Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action Single Door (LSASD)	From To	2390	1100
Latched Single Action	From	2135	969
Double Door (LSADD)	То	2252	915

<b>Maximum Glazed Area</b>	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

20x4mm PVC encapsulated

Palusol 100 or Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 20x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 20x4mm exposed and fitted centrally in the leaf or frame. **Meeting edges:** 

**Square:** 1No. 20x4mm exposed and fitted centrally in one leaf only.

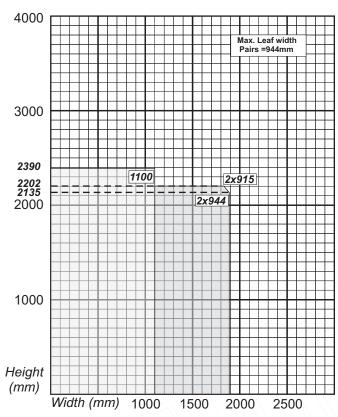
**Rebated:** 1No. 10x4mm exposed and fitted centrally in the rebate of both leaf edges.

# 2B.10 Fire Door Applications FLAMEBREAK 630



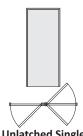
## FD30 - BS476 Pt.22:1987

## 20x4mm PVC encased Palusol 100 or Lorient 617

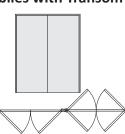


#### UNLATCHED DOORSETS

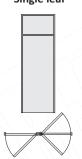
### Door Height Assemblies & Storey Height Assemblies with Transom



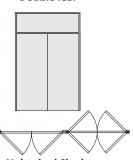
Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight



Unlatched Single Action & Double Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From To	2390	1100
Double Action Single Door (DASD)	From To	2390	1100
Unlatched Single Action	From	2135	944
Double Door (ULSADD)	То	2202	915
Double Action	From	2135	944
Double Door (DADD)	То	2202	915

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	4.452	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

20x4mm PVC encapsulated

 $\textbf{Head:} 1 No.\, 20x4mm \ exposed \ and \ fitted \ centrally in the leaf \ or \ frame \ head. \\ \textbf{Jambs \& Overpanel:} 1 No.\, 20x4mm \ exposed \ and \ fitted \ centrally in the leaf \ or \ frame. \\$ 

Meeting edges:

Palusol 100 or Lorient 617 Square: 1No. 20x4mm exposed and fitted centrally in one leaf only.

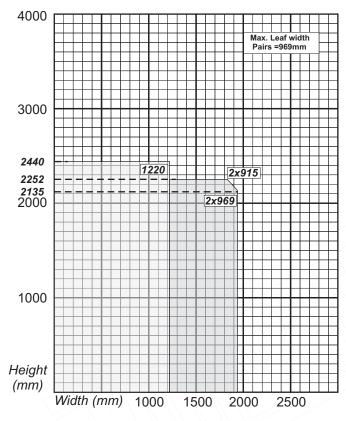
See Section 4 - Intumescent Seals and Section 8 - Hardware Rebated: 1No. 10x4mm exposed and fitted centrally in the rebate of both leaf edges.



# Fire Door Applications 2B.11

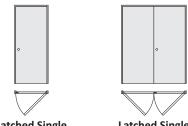
## FD30 - BS476 Pt.22:1987

## 25x4mm PVC encased Palusol 100 or Lorient 617



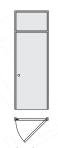
#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

Latched Single Action Double leaf



Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action Single Door (LSASD)	From To	2440	1220
Latched Single Action	From	2135	969
Double Door (LSADD)	То	2252	915

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

25x4mm PVC encapsulated

Palusol 100 or Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 25x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 25x4mm exposed and fitted centrally in the leaf or frame.

Jambs & Overpanel: 1No. 25x4mm exposed and fitted centrally in the leaf o Meeting edges:

 $\textbf{Square:}\ 1 \text{No.}\ 20 \text{x4} \text{mm}\ \text{exposed}\ \text{and}\ \text{fitted}\ \text{centrally}\ \text{in}\ \text{one}\ \text{leaf}\ \text{only}.$ 

 $\textbf{Rebated: } 1 \text{No.}\, 10 \text{x} 4 \text{mm exposed and fitted centrally in the rebate of both leaf edges}.$ 

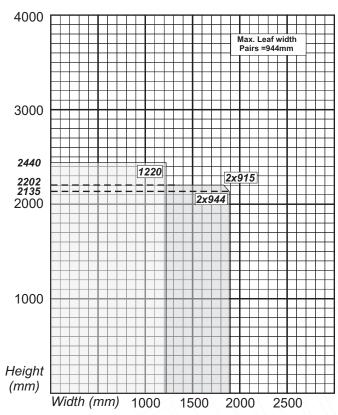
Q

# 2B.12 Fire Door Applications FLAMEBREAK 630



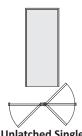
## FD30 - BS476 Pt.22:1987

## 25x4mm PVC encased Palusol 100 or Lorient 617

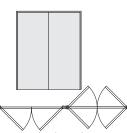


#### UNLATCHED DOORSETS

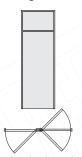
# Door Height Assemblies & Storey Height Assemblies with Transom



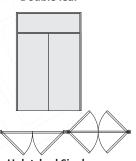
Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight



Unlatched Single Action & Double Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From To	2440	1220
Double Action Single Door (DASD)	From To	2440	1220
Unlatched Single Action	From	2135	944
Double Door (ULSADD)	То	2202	915
Double Action	From	2135	944
Double Door (DADD)	То	2202	915

Maximum Glazed Area	Single door doorset	1 152	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

25x4mm PVC encapsulated

**Head:** 1No. 25x4mm exposed and fitted centrally in the leaf or frame head.

**Jambs & Overpanel:** 1No. 20x4mm exposed and fitted centrally in the leaf or frame.

Palusol 100 or Lorient 617

Meeting edges:
Square: 1No. 25

See Section 4 - Intumescent Seals and Section 8 - Hardware **Square:** 1No. 25x4mm exposed and fitted centrally in one leaf only.

Rebated: 1No. 10x4mm exposed and fitted centrally in the rebate of both leaf edges.

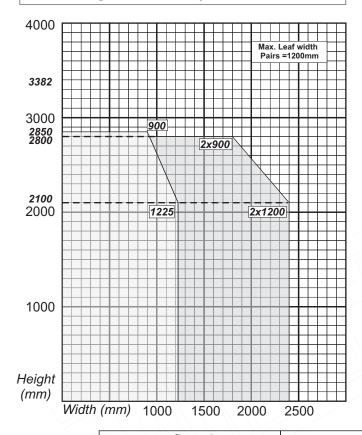


Fire Door Applications
FLAMEBREAK 630
With Acrovyn Door Edge
Protectors

FlameBreak 630
With Acrovyn Door Edge

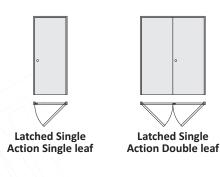
## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Lorient 617 + Intregral CS Acrovyn intumescent



#### **LATCHED DOORSETS**

### **Door Height Assemblies**



Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2100	1225
Single Door (LSASD)	То	2850	900
Latched Single Action	From	2100	1200
Double Door (LSADD)	То	2800	900

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	4.452	Maximum	Single door doorset	NOT
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	APPROVED

Frame Specification
See Section 7 - Frames
Single leaf door assembly
Double leaf door assembly
OR
700kg/m³ Softwood
or Hardwood
OR
700kg/m³ MDF

### **Intumescent Seals**

15x4mm PVC encapsulated Lorient 617 + Intregral CS Acrovyn Intumescent

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 15x4mm exposed and fitted centrally in the frame head.

Jambs: 1No. 15x4mm exposed and fitted centrally in the leaf in addition to CS Acrovyn edge protectors with integral intumescents fitted on the leaf edges.

**Meeting Stiles :** 1No. 15x4mm exposed and fitted centrally in the CS Acrovyn edge protectors to both door leaf edges.

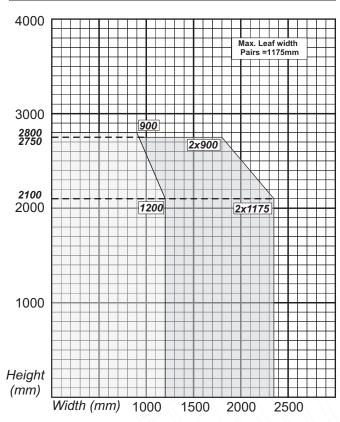


2B.14 Fire Door Applications
FLAMEBREAK 630
With Acrovyn Door Edge
Protectors



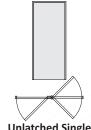
## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Lorient 617 + Intregral CS Acrovyn intumescent

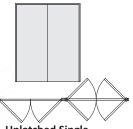


#### UNLATCHED DOORSETS

### **Door Height Assemblies**



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2100	1200
Single Door (ULSASD)	То	2800	900
Double Action	From	2100	1200
Single Door (DASD)	То	2800	900
Unlatched Single Action	From	2100	1175
Double Door (ULSADD)	То	2750	900
Double Action	From	2100	1175
Double Door (DADD)	То	2750	900

 Maximum Glazed Area<br/>See Section 6 - Glazing
 Single door doorset<br/>Double door doorset
 1.15m²
 Maximum<br/>Overpanel height
 Single door doorset<br/>Double door doorset
 NOT<br/>APPROVED

Frame Specification See Section 7 - Frames Single leaf door assembly Double leaf door assembly 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

## Intumescent Seals

15x4mm PVC encapsulated Lorient 617 + Intregral CS Acrovyn Intumescent

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 15x4mm exposed and fitted centrally in the frame head.

Jambs: 1No. 15x4mm exposed and fitted centrally in the leaf in addition to CS Acrovyn edge protectors with integral intumescents fitted on the leaf edges.

**Meeting Stiles :** 1No. 15x4mm exposed and fitted centrally in the CS Acrovyn edge protectors to both door leaf edges.

Exova Warrington fire Report Ref: FEA/F98164 Rev. M Valid until 23rd. February 2023

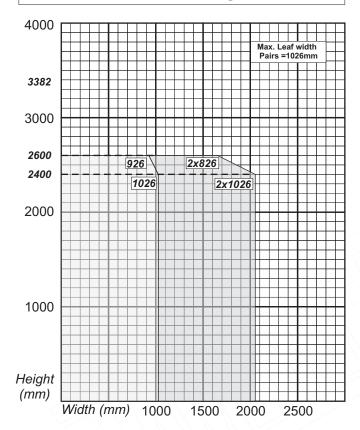
Rev. E - Issue Date: April 2018



Fire Door Applications
FLAMEBREAK 630
With Yeoman Shield Door Edge 2B.15 **Protectors** 

## FD30 - BS476 Pt.22:1987

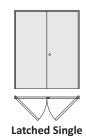
## 15x4 + 20x4mm PVC encased Lorient 617 +Yeoman Shield Door Edge Protector



#### **LATCHED DOORSETS**

### **Door Height Assemblies**





**Action Double leaf** 

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2400	1026
Single Door (LSASD)	То	2600	926
Latched Single Action	From	2400	1026
Double Door (LSADD)	То	2600	826

Maximum Glazed Area	Single door doorset	1 1 5 2	Maximum	Single door doorset	NOT	
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	APPROVED	

Frame Specification See Section 7 - Frames	Single leaf door assembly Double leaf door assembly	450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF
See Section 7 - Frames	Bouble lear door assembly	700kg/m³ MDF

#### **Intumescent Seals**

15x4 + 20x4mm PVC encapsulated Lorient 617 +Yeoman Shield Door Edge Protector

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 1No. 20x4mm exposed and fitted centrally in the frame head.

Jambs: 1No. 15x4mm fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector. Meeting Stiles: 1No. 15x4mm exposed and fitted centrally in the Yeoman Shield / Lorient edge protectors to both door leaf edges.

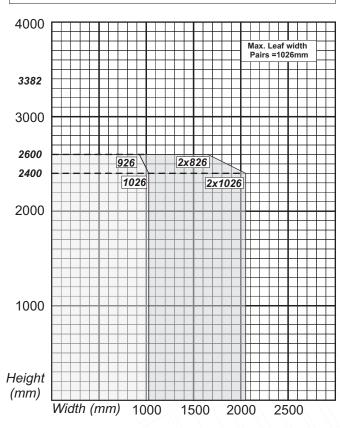


# Fire Door Applications FLAMEBREAK 630 With Yeoman Shield Door Edge Protectors



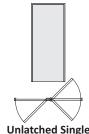
## FD30 - BS476 Pt.22:1987

## 15x4 + 20x4mm PVC encased Lorient 617 +Yeoman Shield Door Edge Protector

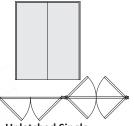


#### UNLATCHED DOORSETS

### **Door Height Assemblies**



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2400	1026
Single Door (ULSASD)	То	2600	926
Double Action	From	2400	1026
Single Door (DASD)	То	2600	926
Unlatched Single Action	From	2400	1026
Double Door (ULSADD)	То	2600	826
Double Action	From	2400	1026
Double Door (DADD)	То	2600	826

Maximum Glazed Area	Single door doorset	1 152	Maximum	Single door doorset  Double door doorset	NOT
See Section 6 - Glazing	Double door doorset	1.15M	Overpanel height	Double door doorset	APPROVED

Frame Specification See Section 7 - Frames

Single leaf door assembly Double leaf door assembly 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

### **Intumescent Seals**

15x4 + 20x4mm PVC

encapsulated Lorient 617

+Yeoman Shield Door Edge Protector

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 20x4mm exposed and fitted centrally in the frame head.

Jambs: 1No. 15x4mm fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.

Meeting Stiles: 1No. 15x4mm exposed and fitted centrally in the Yeoman Shield / Lorient edge

protectors to both door leaf edges.



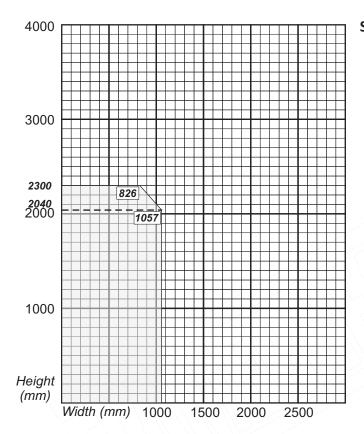


**Fire Door Applications FLAMEBREAK FF630** 

2C.1

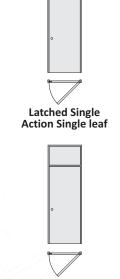
## FD30 - BS476 Pt.22:1987

## 10x4mm PVC encased Pyroplex Rigid Box seal



#### **LATCHED DOORSETS**

## **Door Height Assemblies Storey Height Assemblies with Transom**



**Latched Single Action Single leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2040	1057
Single Door (LSASD)	То	2300	826
Latched Single Action	From	NOT ADDROVED	NOT ADDROVED
Double Door (LSADD)	То	NOT APPROVED	NOT APPROVED

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	4.45 2	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	N/A

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m<sup>3</sup> MDF

### **Intumescent Seals** 10x4mm PVC encapsulated **Pyroplex Rigid Box**

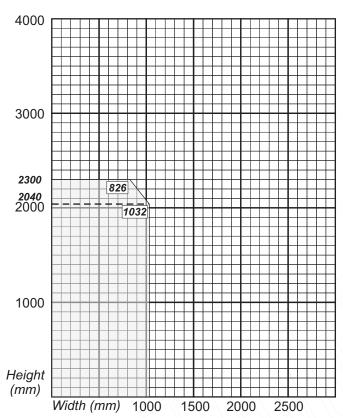
See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 1No. 10x4mm exposed and fitted centrally in the leaf or frame head. Jambs & Overpanel: 1No. 10x4mm exposed and centrally fitted to leaf or frame.



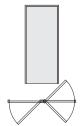
## FD30 - BS476 Pt.22:1987

## 10x4mm PVC encased Pyroplex Rigid Box seal

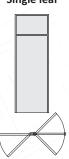


#### UNLATCHED DOORSETS

**Door Height Assemblies Storey Height Assemblies with Transom** 



**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)	
Unlatched Single Action	From	2040	1032	
Single Door (ULSASD)	То	2300	826	
Double Action	From	2040	1032	
Single Door (DASD)	То	2300	826	
Unlatched Single Action	From	NOT APPROVED	NOT APPROVED	
Double Door (ULSADD)	То	NOT APPROVED	NOT APPROVED	
Double Action	From	NOT APPROVED	NOT APPROVED	
Double Door (DADD)	То	NOT APPROVED	NOT APPROVED	

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	4.452	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	N/A

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m<sup>3</sup> MDF

#### **Intumescent Seals** 10x4mm PVC encapsulated

**Pyroplex Rigid Box** 

 $\textbf{Head:} \ 1 \text{No.} \ 10 \text{x} 4 \text{mm} \ \text{exposed} \ \text{and} \ \text{fitted} \ \text{centrally} \ \text{in} \ \text{the} \ \text{leaf} \ \text{or} \ \text{frame} \ \text{head}.$ 

See Section 4 - Intumescent Seals and Section 8 - Hardware

Jambs & Overpanel: 1No. 10x4mm exposed and centrally fitted to leaf or frame.

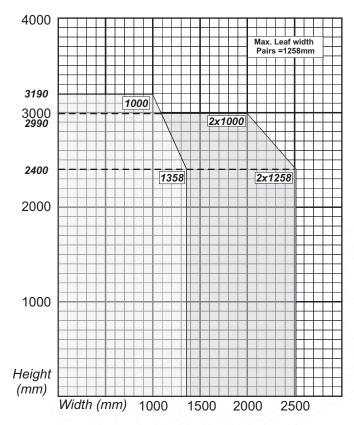


### **Fire Door Applications FLAMEBREAK FF630**

2C.3

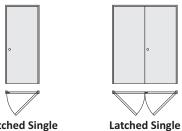
## FD30 - BS476 Pt.22 :1987

## 2No.10x4mm PVC encased Pyroplex Rigid Box seal



#### **LATCHED DOORSETS**

### **Door Height Assemblies** & **Storey Height Assemblies with Transom**



**Latched Single Action Single leaf** 

**Action Double leaf** 



**Latched Single Action Single leaf** with transomed overpanel or fanlight



**Latched Single Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2400	1358
Single Door (LSASD)	То	3190	1000
Latched Single Action	From	2400	1258
Double Door (LSADD)	То	2990	1000

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m3 MDF

#### **Intumescent Seals**

2No 10x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with 10mm separation. Jambs & Overpanel: 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with

#### Meeting edges:

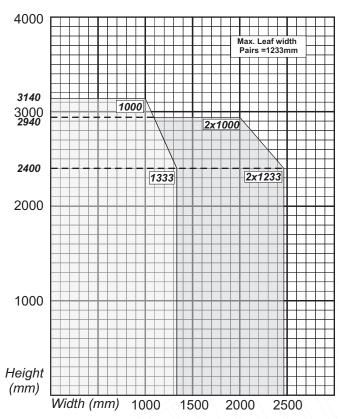
**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation. Rebated: NOTAPPROVED.





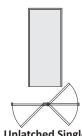
## FD30 - BS476 Pt.22:1987

## 2No.10x4mm PVC encased Pyroplex Rigid Box seal

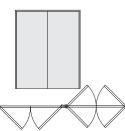


#### UNLATCHED DOORSETS

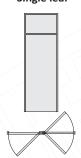
### **Door Height Assemblies** & **Storey Height Assemblies with Transom**



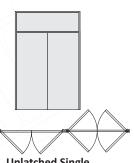
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single Action & Double Action** Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2400	1333
Single Door (ULSASD)	То	3140	1000
Double Action	From	2400	1333
Single Door (DASD)	То	3140	1000
Unlatched Single Action	From	2400	1233
Double Door (ULSADD)	То	2940	1000
Double Action	From	2400	1233
Double Door (DADD)	То	2940	1000

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	1500mm

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly **Double leaf door assembly** NOTE: Glazed fanlights approved

450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m3 MDF

for door assemblies with 640kg/m³ Hardwood frames only.

**Intumescent Seals** 2No 10x4mm PVC encapsulated

**Pyroplex Rigid Box** See Section 4 - Intumescent Seals and

Section 8 - Hardware

 $\textbf{Head:}\ 2\text{No.}\ 10\text{x}4\text{mm}\ exposed\ and\ fitted\ centrally\ in\ the\ leaf\ or\ frame\ head\ with\ 10\text{mm}\ separation.$ Jambs & Overpanel: 2No. 10x4mm exposed and fitted centrally in the leaf or frame head with 10mm separation.

Meeting edges:

**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation. Rebated: NOTAPPROVED.

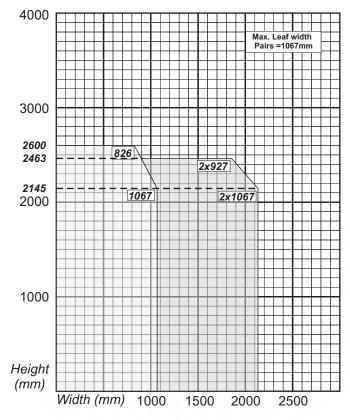


## Fire Door Applications FLAMEBREAK FF630

2C.5

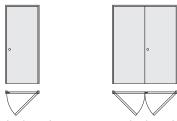
## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Pyroplex Rigid Box seal



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

Latched Single Action Double leaf



Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2145	1067
Single Door (LSASD)	То	2600	826
Latched Single Action	From	2145	1067
Double Door (LSADD)	То	2463	927

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	4.452	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

15x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 15x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 15x4mm exposed and fitted centrally in the leaf or frame.

Meeting edges:

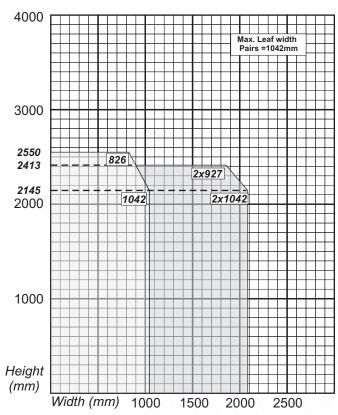
 $\textbf{Square: } 2 \text{No. } 10 \text{x} 4 \text{mm exposed and fitted centrally in one leaf only with } 10 \text{mm separation.} \\ \textbf{Rebated: } \textit{NOT APPROVED.} \\$ 





## FD30 - BS476 Pt.22:1987

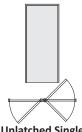
## 15x4mm PVC encased Pyroplex Rigid Box seal



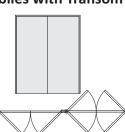
#### UNLATCHED DOORSETS

## **Door Height Assemblies** &

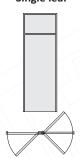
**Storey Height Assemblies with Transom** 



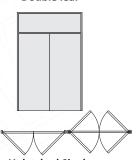
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single** Action & Double Action Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2145	1042
Single Door (ULSASD)	То	2550	826
Double Action	From	2145	1042
Single Door (DASD)	То	2550	826
Unlatched Single Action	From	2145	1042
Double Door (ULSADD)	То	2413	927
Double Action	From	2145	1042
Double Door (DADD)	То	2413	927

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	1500mm

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly **Double leaf door assembly** NOTE: Glazed fanlights approved

450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m3 MDF

for door assemblies with 640kg/m³ Hardwood frames only.

## **Intumescent Seals**

15x4mm PVC encapsulated **Pyroplex Rigid Box**  Head: 1No. 15x4mm exposed and fitted centrally in the leaf or frame head. Jambs & Overpanel: 1No. 15x4mm exposed and fitted centrally in the leaf or frame.

Meeting edges:

**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation. Rebated: NOT APPROVED.

See Section 4 - Intumescent Seals and

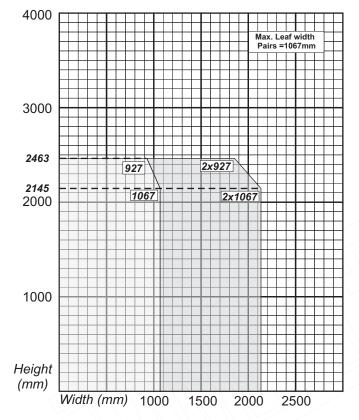
Section 8 - Hardware



## FIRE Door Applications 2C.7

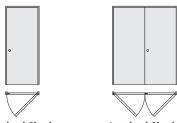
## FD30 - BS476 Pt.22:1987

## 20x4mm PVC encased Pyroplex Rigid Box seal



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

Latched Single Action Double leaf



Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2145	1067
Single Door (LSASD)	То	2463	927
Latched Single Action	From	2145	1067
Double Door (LSADD)	То	2463	927

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

20x4mm PVC encapsulated

**Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 20x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 20x4mm exposed and fitted centrally in the leaf or frame.

Meeting edges:

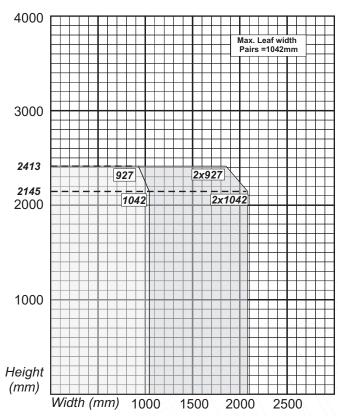
 $\textbf{Square: } 2 \text{No. } 10 \text{x} 4 \text{mm exposed and fitted centrally in one leaf only with } 10 \text{mm separation.} \\ \textbf{Rebated: } \textit{NOT APPROVED.} \\$ 





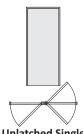
## FD30 - BS476 Pt.22:1987

## 20x4mm PVC encased Pyroplex Rigid Box seal

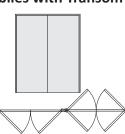


#### UNLATCHED DOORSETS

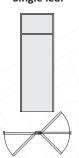
### **Door Height Assemblies** & **Storey Height Assemblies with Transom**



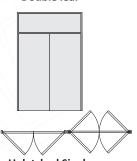
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single** Action & Double Action Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2145	1042
Single Door (ULSASD)	То	2413	927
Double Action	From	2145	1042
Single Door (DASD)	То	2413	927
Unlatched Single Action	From	2145	1042
Double Door (ULSADD)	То	2413	927
Double Action	From	2145	1042
Double Door (DADD)	То	2413	927

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	1500mm

**Frame Specification** See Section 7 - Frames NOTE: MDF frames are approved for door height Single leaf door assembly **Double leaf door assembly** NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m3 MDF

Rev. E - Issue Date: April 2018

door assemblies (without transoms) only.

**Intumescent Seals** 20x4mm PVC encapsulated **Pyroplex Rigid Box** 

 $\textbf{Head:} \ 1 \text{No.} \ 20 \text{x4mm} \ \text{exposed and fitted centrally in the leaf or frame head.}$ Jambs & Overpanel: 1No. 20x4mm exposed and fitted centrally in the leaf or frame.

Meeting edges:

**Square:** 2No. 10x4mm exposed and fitted centrally in one leaf only with 10mm separation. Rebated: NOT APPROVED.

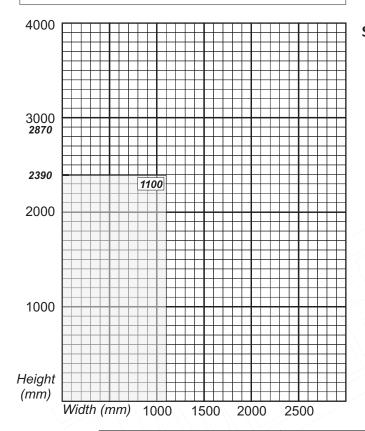
See Section 4 - Intumescent Seals and Section 8 - Hardware



# Fire Door Applications 2C.9

## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Palusol 100 or Lorient 617



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Configuration		Height (mm)	Width (mm)
Latched Single Action Single Door (LSASD)	From To	2390	1100
Latched Single Action Double Door (LSADD)	From To	NOT APPROVED	NOT APPROVED

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	N/A

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height door assemblies (without transoms) only.

Single leaf door assembly
NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m³ Softwood
OR
700kg/m³ MDF

#### **Intumescent Seals**

15x4mm PVC encapsulated

Palusol 100 or Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 15x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 15x4mm exposed and fitted centrally in the leaf or frame.

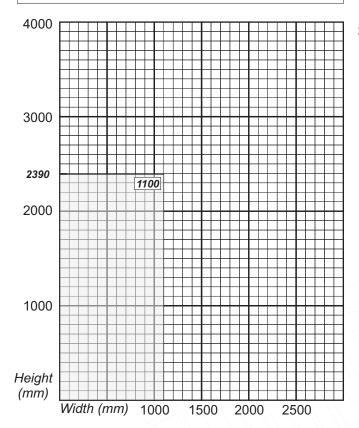
Q

# 2C.10 Fire Door Applications FLAMEBREAK FF630



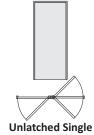
## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Palusol 100 or Lorient 617

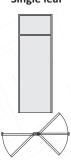


#### UNLATCHED DOORSETS

Door Height Assemblies &
Storey Height Assemblies with Transom



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From To	2390	1100
Double Action Single Door (DASD)	From To	2390	1100
Unlatched Single Action Double Door (ULSADD)	From To	NOT APPROVED	NOT APPROVED
Double Action Double Door (DADD)	From To	NOT APPROVED	NOT APPROVED

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	N/A

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

15x4mm PVC encapsulated

Palusol 100 or Lorient 617

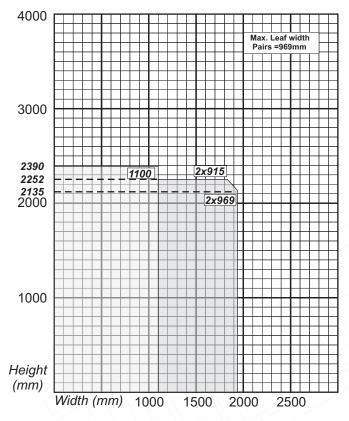
See Section 4 - Intumescent Seals and Section 8 - Hardware  $\textbf{Head:} 1 No.\, 15 x 4 mm \ exposed \ and \ fitted \ centrally in the leaf \ or \ frame \ head. \\ \textbf{Jambs \& Overpanel:} 1 No.\, 15 x 4 mm \ exposed \ and \ fitted \ centrally in the leaf \ or \ frame. \\$ 



## FIRE Door Applications 2C.11

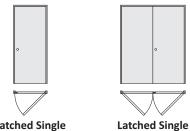
## FD30 - BS476 Pt.22:1987

## 20x4mm PVC encased Palusol 100 or Lorient 617



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

ction Single Id

Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action Single Door (LSASD)	From To	2390	1100
Latched Single Action	From	2135	969
Double Door (LSADD)	То	2252	915

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

20x4mm PVC encapsulated

Palusol 100 or Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 20x4mm exposed and fitted centrally in the leaf or frame head. **Jambs & Overpanel:** 1No. 20x4mm exposed and fitted centrally in the leaf or frame.

Meeting edges:

**Square:** 1No. 20x4mm exposed and fitted centrally in one leaf only.

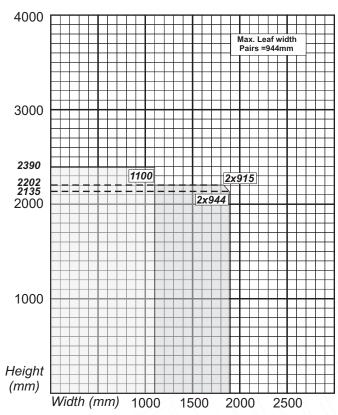
 $\textbf{Rebated: } 1 \text{No.}\, 10 \text{x} 4 \text{mm exposed and fitted centrally in the rebate of both leaf edges}.$ 

# 2C.12 Fire Door Applications FLAMEBREAK FF630



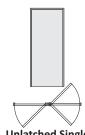
## FD30 - BS476 Pt.22:1987

## 20x4mm PVC encased Palusol 100 or Lorient 617

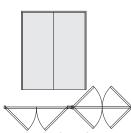


#### UNLATCHED DOORSETS

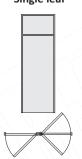
### Door Height Assemblies & Storey Height Assemblies with Transom



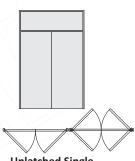
Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight



Unlatched Single Action & Double Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From To	2390	1100
Double Action Single Door (DASD)	From To	2390	1100
Unlatched Single Action	From	2135	944
Double Door (ULSADD)	То	2202	915
Double Action	From	2135	944
Double Door (DADD)	То	2202	915

Maximum Glazed Area	Single door doorset	1 152	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

20x4mm PVC encapsulated

 $\textbf{Head:}\ 1 No.\ 20 x 4 mm\ exposed\ and\ fitted\ centrally\ in\ the\ leaf\ or\ frame\ head.$ 

 $\textbf{Jambs \& Overpanel:} \ 1 \text{No. } 20 \text{x} 4 \text{mm exposed and fitted centrally in the leaf or frame.}$ 

Meeting edges:

Palusol 100 or Lorient 617 Square: 1No. 20x4mm exposed and fitted centrally in one leaf only.

See Section 4 - Intumescent Seals Rebated: 1No. 10x4mm exposed and fitted centrally in the rebate of both leaf edges.

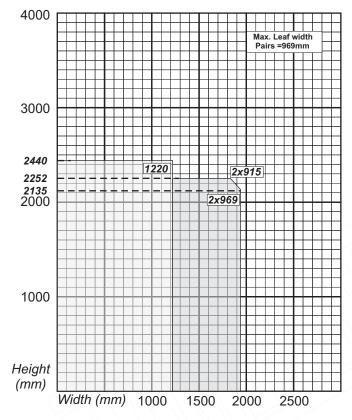
and Section 8 - Hardware



## FIRE Door Applications 2C.13

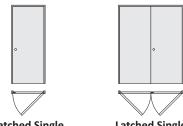
## FD30 - BS476 Pt.22:1987

## 25x4mm PVC encased Palusol 100 or Lorient 617



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf

Latched Single Action Double leaf



Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action Single Door (LSASD)	From To	2440	1220
Latched Single Action	From	2135	969
Double Door (LSADD)	То	2252	915

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

25x4mm PVC encapsulated

Palusol 100 or Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware  $\textbf{Head: 1} No.\,25x4mm \ exposed \ and \ fitted \ centrally in the leaf or frame head. \\ \textbf{Jambs \& Overpanel: 1} No.\,25x4mm \ exposed \ and \ fitted \ centrally in the leaf or frame. \\ \textbf{Meeting edges:}$ 

**Square:** 1No. 20x4mm exposed and fitted centrally in one leaf only.

**Rebated:** 1No. 10x4mm exposed and fitted centrally in the rebate of both leaf edges.

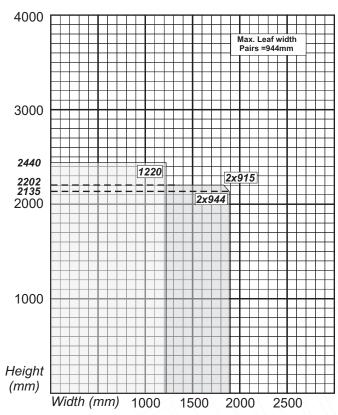


# 2C.14 Fire Door Applications FLAMEBREAK FF630



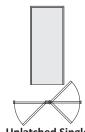
## FD30 - BS476 Pt.22:1987

## 25x4mm PVC encased Palusol 100 or Lorient 617

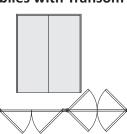


#### UNLATCHED DOORSETS

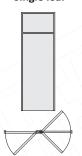
### Door Height Assemblies & Storey Height Assemblies with Transom



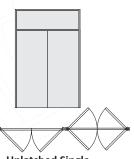
Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight



Unlatched Single
Action & Double Action
Double leaf
with transomed
overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From To	2440	1220
Double Action Single Door (DASD)	From To	2440	1220
Unlatched Single Action	From	2135	944
Double Door (ULSADD)	То	2202	915
Double Action	From	2135	944
Double Door (DADD)	То	2202	915

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	1500mm

Frame Specification
See Section 7 - Frames
NOTE: MDF frames are approved for door height
door assemblies (without transoms) only.

Single leaf door assembly Double leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

#### **Intumescent Seals**

25x4mm PVC encapsulated

**Head:** 1No. 25x4mm exposed and fitted centrally in the leaf or frame head.

 $\textbf{Jambs \& Overpanel:} \ 1 \text{No. } 20 \text{x} 4 \text{mm exposed and fitted centrally in the leaf or frame}.$ 

Meeting edges:

Palusol 100 or Lorient 617 Square: 1No. 25x4mm exposed and fitted centrally in one leaf only.

See Section 4 - Intumescent Seals Rebated: 1No. 10x4mm exposed and fitted centrally in the rebate of both leaf edges.

Section 8 - Hardware

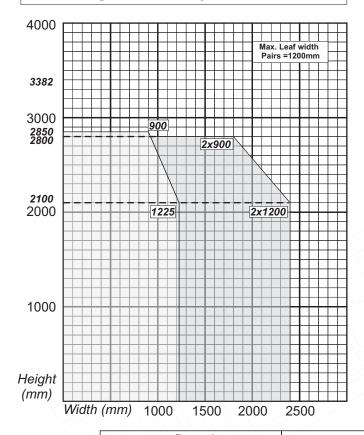


Fire Door Applications
FLAMEBREAK FF630
With Acrovyn Door Edge
Protectors

Protectors

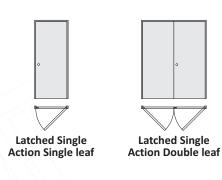
FD30 - BS476 Pt.22 :1987

## 15x4mm PVC encased Lorient 617 + Intregral CS Acrovyn intumescent



#### LATCHED DOORSETS

### **Door Height Assemblies**



Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2100	1225
Single Door (LSASD)	То	2850	900
Latched Single Action	From	2100	1200
Double Door (LSADD)	То	2800	900

V						_
Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	NOT	]
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	<b>Double door doorset</b>	APPROVED	

Frame Specification
Single leaf door assembly
See Section 7 - Frames
Single leaf door assembly
Double leaf door assembly
OR
700kg/m³ MDF

#### **Intumescent Seals**

15x4mm PVC encapsulated Lorient 617 + Intregral CS Acrovyn Intumescent

See Section 4 - Intumescent Seals and Section 8 - Hardware  $\textbf{Head:} \ 1 \text{No.} \ 15 \text{x4} \text{mm} \ \text{exposed and fitted centrally in the} \ \ \text{frame head}.$ 

 ${\bf Jambs: 1No.\ 15x4mm\ exposed\ and\ fitted\ centrally\ in\ the\ leaf\ in\ addition\ to\ CS\ Acrovyn\ edge\ protectors\ with\ integral\ intumescents\ fitted\ on\ the\ leaf\ edges.}$ 

**Meeting Stiles :** 1No. 15x4mm exposed and fitted centrally in the CS Acrovyn edge protectors to both door leaf edges.

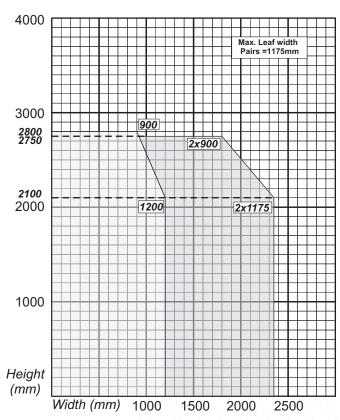


**2C.16** Fire Door Applications FLAMEBREAK FF630 With Acrovyn Door Edge Protectors



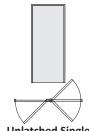
## FD30 - BS476 Pt.22:1987

## 15x4mm PVC encased Lorient 617 + Intregral CS Acrovyn intumescent

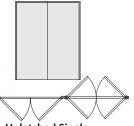


#### UNLATCHED DOORSETS

### **Door Height Assemblies**



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From	2100	1200
	То	2800	900
Double Action	From	2100	1200
Single Door (DASD)	То	2800	900
Unlatched Single Action	From	2100	1175
Double Door (ULSADD)	То	2750	900
Double Action	From	2100	1175
Double Door (DADD)	То	2750	900

Maximum Glazed Area	Single door doorset	1 152	Maximum	Single door doorset  Double door doorset	NOT
See Section 6 - Glazing	Double door doorset	1.15m <sup>-</sup>	Overpanel height	Double door doorset	APPROVED

Frame Specification See Section 7 - Frames Single leaf door assembly Double leaf door assembly 450kg/m³ Softwood or Hardwood OR 700kg/m³ MDF

### Intumescent Seals

15x4mm PVC encapsulated Lorient 617 + Intregral CS Acrovyn Intumescent

See Section 4 - Intumescent Seals and Section 8 - Hardware  $\textbf{Head:} \ 1 \text{No.} \ 15 \text{x4mm} \ \text{exposed and fitted centrally in the} \ \ \text{frame head}.$ 

**Jambs :** 1No. 15x4mm exposed and fitted centrally in the leaf in addition to CS Acrovyn edge protectors with integral intumescents fitted on the leaf edges.

**Meeting Stiles :** 1No. 15x4mm exposed and fitted centrally in the CS Acrovyn edge protectors to both door leaf edges.

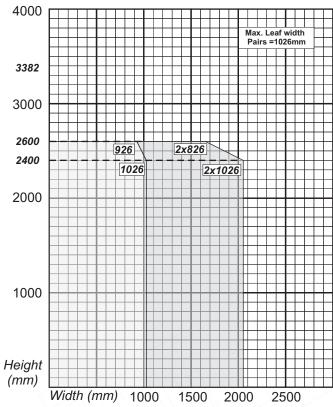


**Fire Door Applications** FLAMEBREAK FF630 With Yeoman Shield Door Edge 2C.17

**Protectors** 

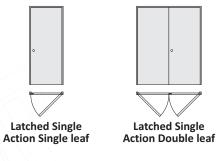
## FD30 - BS476 Pt.22:1987

## 15x4 + 20x4mm PVC encased Lorient 617 +Yeoman Shield Door Edge Protector



#### LATCHED DOORSETS

### **Door Height Assemblies**





Configuration Width (mm) Height (mm) 2400 1026 **Latched Single Action** From Single Door (LSASD) То 2600 926 From 2400 1026 **Latched Single Action Double Door (LSADD)** To 2600 826

Maximum Glazed Area	Single door doorset	4.452	Maximum	Single door doorset Double door doorset	NOT
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	APPROVED

**Frame Specification** See Section 7 - Frames

Single leaf door assembly **Double leaf door assembly**  450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m<sup>3</sup> MDF

### **Intumescent Seals**

15x4 + 20x4mm PVC encapsulated Lorient 617 +Yeoman Shield Door Edge Protector

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 1No. 20x4mm exposed and fitted centrally in the frame head.

Jambs: 1No. 15x4mm fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector. Meeting Stiles: 1No. 15x4mm exposed and fitted centrally in the Yeoman Shield / Lorient edge protectors to both door leaf edges.

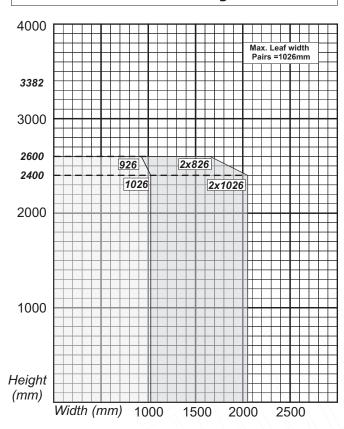


## Fire Door Applications FLAMEBREAK FF630 With Yeoman Shield Door Edge Protectors



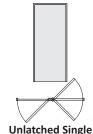
## FD30 - BS476 Pt.22:1987

## 15x4 + 20x4mm PVC encased Lorient 617 +Yeoman Shield Door Edge Protector

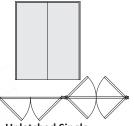


#### UNLATCHED DOORSETS

### **Door Height Assemblies**



**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single** Action & Double Action **Double leaf** 

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From	2400	1026
	То	2600	926
Double Action	From	2400	1026
Single Door (DASD)	То	2600	926
Unlatched Single Action	From	2400	1026
Double Door (ULSADD)	То	2600	826
Double Action	From	2400	1026
Double Door (DADD)	То	2600	826

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	1 152	Maximum	Single door doorset	NOT
See Section 6 - Glazing	Double door doorset	1.15m	Overpanel height	Double door doorset	APPROVED

**Frame Specification** See Section 7 - Frames Single leaf door assembly **Double leaf door assembly**  450kg/m<sup>3</sup> Softwood or Hardwood OR 700kg/m<sup>3</sup> MDF

### **Intumescent Seals**

15x4 + 20x4mm PVC

encapsulated Lorient 617

+Yeoman Shield Door Edge Protector

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 1No. 20x4mm exposed and fitted centrally in the frame head.

**Jambs:** 1No. 15x4mm fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector. Meeting Stiles: 1No. 15x4mm exposed and fitted centrally in the Yeoman Shield / Lorient edge

protectors to both door leaf edges.



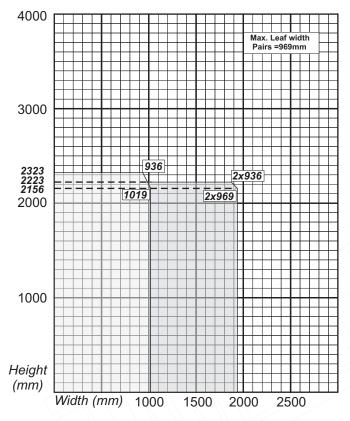


## Fire Door Applications FLAMEBREAK 660

2D.1

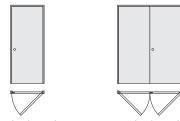
## FD60 - BS476 Pt.22:1987

## 2x15x4mm PVC encased Pyroplex Rigid Box seal - 5mm separation



#### LATCHED DOORSETS

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf





Latched Single Action Single leaf with transomed overpanel or fanlight



Latched Single Action Double leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2156	1019
Single Door (LSASD)	То	2323	936
Latched Single Action	From	2156	969
Double Door (LSADD)	То	2223	936

Maximum Glazed Area	Single door doorset	0.722	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	1500mm

Frame Specification See Section 7 - Frames Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

#### **Intumescent Seals**

2x15x4mm PVC encapsulated with 5mm separation Pyroplex Rigid Box

See Section 4 - Intumescent Seals and

Section 8 - Hardware

**Head:** 2No.15x4mm exposed and fitted centrally in the frame head with 5mm separation. **Jambs & Overpanel:** 2No.15x4mm exposed and fitted centrally in the frame with 5mm separation. **Meeting edges:** 

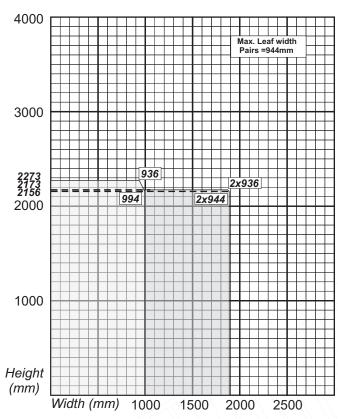
**Square:** 2No. 15x4mm exposed and fitted centrally in one leaf only with 5mm separation. **Rebated:** *NOTAPPROVED.* 





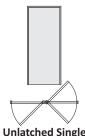
## FD60 - BS476 Pt.22:1987

## 2x15x4mm PVC encased Pyroplex Rigid Box seal - 5mm separation

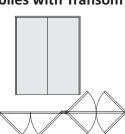


#### UNLATCHED DOORSETS

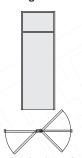
### **Door Height Assemblies** & **Storey Height Assemblies with Transom**



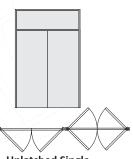
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single Action & Double Action** Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2156	994
Single Door (ULSASD)	То	2273	936
Double Action	From	2156	994
Single Door (DASD)	То	2273	936
Unlatched Single Action	From	2156	944
Double Door (ULSADD)	То	2173	936
Double Action	From	2156	944
Double Door (DADD)	То	2173	936

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	0.70 2	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	1500mm

**Frame Specification** 

Single leaf door assembly **Double leaf door assembly** NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

See Section 7 - Frames

**Intumescent Seals** 2x15x4mm PVC encapsulated with 5mm separation **Pyroplex Rigid Box** 

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 2No. 15x4mm exposed and fitted centrally in the frame head with 5 mm separation. **Jambs & Overpanel:** 2No. 15x4mm exposed and fitted centrally in the frame with 5 mm separation. Meeting edges:

 $\textbf{Square:}\ 2\text{No.}\ 15\text{x4}\text{mm}\ exposed\ and\ fitted\ centrally\ in\ one\ leaf\ only\ with\ 5\text{mm}\ separation.$ Rebated: NOTAPPROVED.

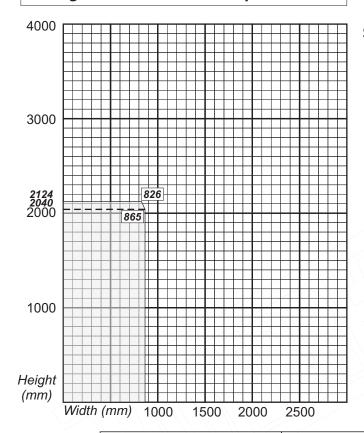


## Fire Door Applications FLAMEBREAK 660

2D.3

## FD60 - BS476 Pt.22:1987

## 2x15x4mm PVC encased Pyroplex Rigid Box seal - 10mm separation



#### **LATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Latched Single Action Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)	
Latched Single Action	From	2040	865	
Single Door (LSASD)	То	2124	826	
Latched Single Action	From	NOT APPROVED	NOT APPROVED	
Double Door (LSADD)	То	NOI APPROVED	NOI APPROVED	

<b>Maximum Glazed Area</b>	Single door doorset	0.722	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	N/A

Frame Specification See Section 7 - Frames

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

#### **Intumescent Seals**

2x15x4mm PVC encapsulated with 10mm separation

Pyroplex Rigid Box
See Section 4 - Intumescent Seals

and Section 8 - Hardware **Head:** 2No. 15x4mm exposed and fitted centrally in the frame head with 10 mm separation. **Jambs & Overpanel:** 2No. 15x4mm exposed and fitted centrally in the frame with 10 mm separation.

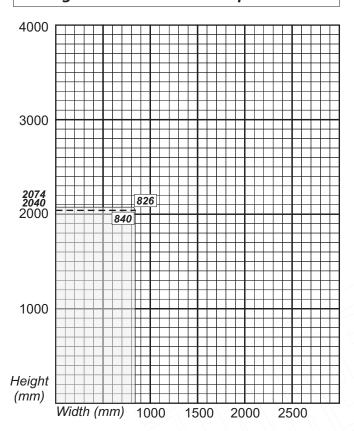
Q

## Fire Door Applications FLAMEBREAK 660



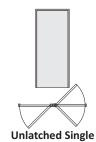
## FD60 - BS476 Pt.22 :1987

## 2x15x4mm PVC encased Pyroplex Rigid Box seal - 10mm separation

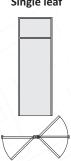


#### **UNLATCHED DOORSETS**

# Door Height Assemblies & Storey Height Assemblies with Transom



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2040	840
Single Door (ULSASD)	То	2074	826
Double Action	From	2040	840
Single Door (DASD)	То	2074	826
<b>Unlatched Single Action</b>	From	NOT APPROVED	NOT APPROVED
Double Door (ULSADD)	То	NOTAPPROVED	NOTAPPROVED
Double Action	From	NOT APPROVED	NOT APPROVED
Double Door (DADD)	То	NOTAPROVED	NOT APPROVED

Maximum Glazed Area	Single door doorset	0.72m <sup>2</sup> Maximum Overpanel height	Maximun	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset		Double door doorset	N/A		

Frame Specification See Section 7 - Frames

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 640kg/m³ Hardwood (Excluding Beech)

### **Intumescent Seals**

2x15x4mm PVC encapsulated with 10mm separation

Pyroplex Rigid Box
See Section 4 - Intumescent Seals
and
Section 8 - Hardware

 $\label{lem:head:2No.15x4mm} \textbf{Head:} \ 2\text{No.} \ 15\text{x4mm} \ \text{exposed} \ \text{and fitted centrally in the frame head with } 10 \ \text{mm} \ \text{separation}.$   $\textbf{Jambs \& Overpanel:} \ 2\text{No.} \ 15\text{x4mm} \ \text{exposed} \ \text{and} \ \text{fitted centrally in the frame with} \ 10 \ \text{mm} \ \text{separation}.$ 

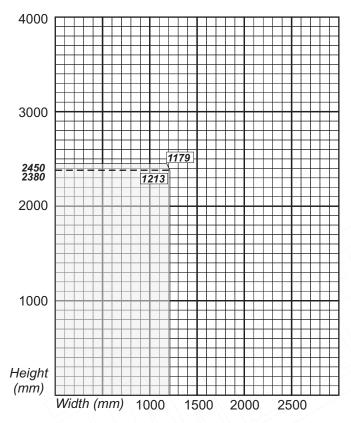


### **Fire Door Applications FLAMEBREAK 660**

2D.5

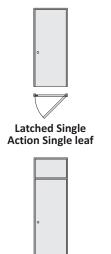
## FD60 - BS476 Pt.22:1987

## 2x15x4mm PVC encased Mann McGowan Pyrostrip 500P - 10mm separation



#### LATCHED DOORSETS

## **Door Height Assemblies Storey Height Assemblies with Transom**



**Latched Single Action Single leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2380	1213
Single Door (LSASD)	То	2450	1179
Latched Single Action	From	NOT APPROVED	NOT APPROVED
Double Door (LSADD)	То	NOI APPROVED	NOT APPROVED

<b>Maximum Glazed Area</b>	Single door doorset	0.722	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	N/A

**Frame Specification** See Section 7 - Frames

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

#### **Intumescent Seals**

2x15x4mm PVC encapsulated with 10mm separation

Mann McGowan Pyrostrip 500P See Section 4 - Intumescent Seals and

Section 8 - Hardware

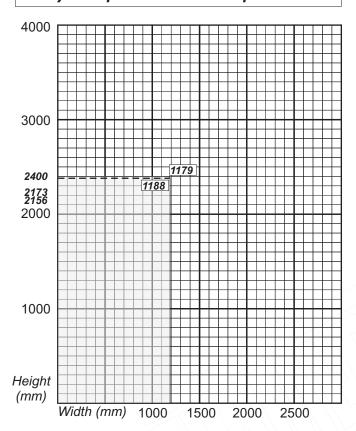
**Head:** 2No. 15x4mm exposed and fitted centrally in the leaf frame head with 10 mm separation. Jambs & Overpanel: 2No. 15x4mm exposed and fitted centrally in the frame with 10 mm separation.





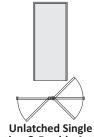
## FD60 - BS476 Pt.22:1987

## 2x15x4mm PVC encased Mann McGowan Pyrostrip 500P - 10mm separation

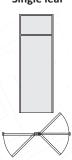


#### **UNLATCHED DOORSETS**

Door Height Assemblies &
Storey Height Assemblies with Transom



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2380	1188
Single Door (ULSASD)	То	2400	1179
Double Action	From	2380	1188
Single Door (DASD)	То	2400	1179
Unlatched Single Action	From	NOT APPROVED	NOT APPROVED
Double Door (ULSADD)	То	NOTAPPROVED	NOT APPROVED
Double Action	From	NOT APPROVED	NOT APPROVED
Double Door (DADD)	То	NOTAPPROVED	NOT APPROVED

Max	imum Glazed Area	Single door doorset	0.722	Maximum	Single door doorset	2000mm
Se	e Section 6 - Glazing	Double door doorset	0.72m	0.72m <sup>2</sup> Maximum Overpanel height	Double door doorset	N/A

Frame Specification See Section 7 - Frames

Single leaf door assembly Double leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 640kg/m³ Hardwood (Excluding Beech)

**Intumescent Seals** 

2x15x4mm PVC encapsulated with 10mm separation

Mann McGowan Pyrostrip 500P See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 2No. 15x4mm exposed and fitted centrally in the frame head with 10 mm separation. **Jambs & Overpanel:** 2No. 15x4mm exposed and fitted centrally in the frame with 10 mm separation.

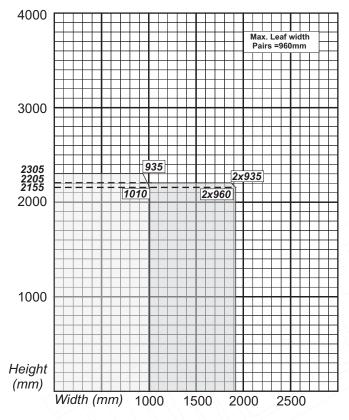


#### **Fire Door Applications FLAMEBREAK 660**

2D.7

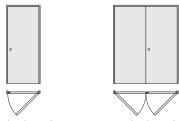
## FD60 - BS476 Pt.22:1987

#### 2x15x4mm PVC encased Mann McGowan Pyrostrip 500P - 10mm separation + 30x4



#### **LATCHED DOORSETS**

#### **Door Height Assemblies** & **Storey Height Assemblies with Transom**



**Latched Single Action Single leaf** 





**Latched Single Action Single leaf** with transomed overpanel or fanlight



**Latched Single Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2155	1010
Single Door (LSASD)	То	2305	935
Latched Single Action	From	2155	960
Double Door (LSADD)	То	2205	935

Maximum Glazed Area	Single door doorset	0.722	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	1500mm

**Frame Specification** See Section 7 - Frames

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved

for door assemblies with 640kg/m³ Hardwood frames only. 640kg/m³ Hardwood (Excluding Beech)

#### **Intumescent Seals**

2x15x4mm PVC encapsulated with 10mm separation + 30x4 at head only.

Mann McGowan Pyrostrip 500P See Section 4 - Intumescent Seals and

Section 8 - Hardware

**Head:** 1No. 30x4mm exposed and fitted centrally in the frame head.

Jambs & Overpanel: 2No. 15x4mm exposed and fitted centrally in the frame with 10mm separation.

#### Meeting edges:

**Square:** 2No. 15x4mm exposed and fitted centrally in one leaf only with 8mm separation.

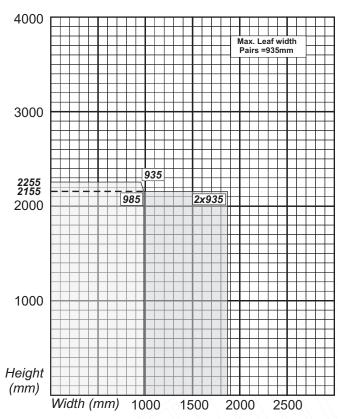
Rebated: NOTAPPROVED.





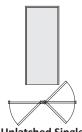
## FD60 - BS476 Pt.22:1987

### 2x15x4mm PVC encased Mann McGowan Pyrostrip 500P - 10mm separation + 30x4

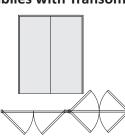


#### UNLATCHED DOORSETS

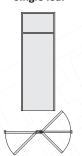
#### **Door Height Assemblies** & **Storey Height Assemblies with Transom**



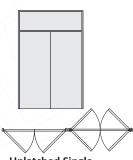
**Unlatched Single Action & Double Action** Single leaf



**Unlatched Single Action & Double Action** Double leaf



**Unlatched Single Action & Double Action** Single leaf with transomed overpanel or fanlight



**Unlatched Single Action & Double Action Double leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2155	985
Single Door (ULSASD)	То	2255	935
Double Action	From	2155	985
Single Door (DASD)	То	2255	935
Unlatched Single Action	From	2155	935
Double Door (ULSADD)	То	2155	955
Double Action	From	2155	935
Double Door (DADD)	То	2155	333

Maximum Glazed Area	Single door doorset	0.722	Maximum	Single door doorset  Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	1500mm

**Frame Specification** See Section 7 - Frames Single leaf door assembly Double leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 640kg/m³ Hardwood (Excluding Beech)

Rev. E - Issue Date: April 2018

#### **Intumescent Seals**

2x15x4mm PVC encapsulated with 10mm separation + 30x4

at head only. Mann McGowan Pyrostrip 500P

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 1No. 30x4mm exposed and fitted centrally in the frame head.

Jambs & Overpanel: 2No. 15x4mm exposed and fitted centrally in the frame with 10mm separation.

#### Meeting edges:

Square: 2No. 15x4mm exposed and fitted centrally in one leaf only with 8mm separation. Rebated: NOTAPPROVED.



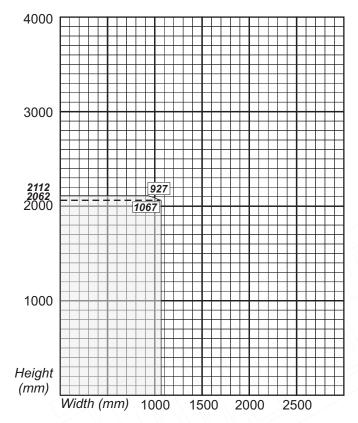


#### **Fire Door Applications FLAMEBREAK 660**

2D.9

FD60 - BS476 Pt.22:1987

2x15x4mm PVC encased Lorient 617 - 10mm separation + 30x4



#### LATCHED DOORSETS

**Door Height Assemblies Storey Height Assemblies with Transom** 



**Latched Single Action Single leaf** 



**Latched Single Action Single leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2062	1067
Single Door (LSASD)	То	2112	927
Latched Single Action	From	NOT APPROVED	NOT APPROVED
Double Door (LSADD)	То	NOT APPROVED	NOT APPROVED

Maximum Glazed Area	Single door doorset	0.722	Maximum	Single door doorset Double door doorset	2000mm
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	N/A

**Frame Specification** See Section 7 - Frames

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

#### **Intumescent Seals**

2x15x4mm PVC encapsulated with 10mm separation + 30x4 at head only.

Lorient 617

See Section 4 - Intumescent Seals and

Section 8 - Hardware

**Head:** 1No. 30x4mm exposed and fitted centrally in the frame head.

Jambs & Overpanel: 2No. 15x4mm exposed and fitted centrally in the frame with 10mm separation.

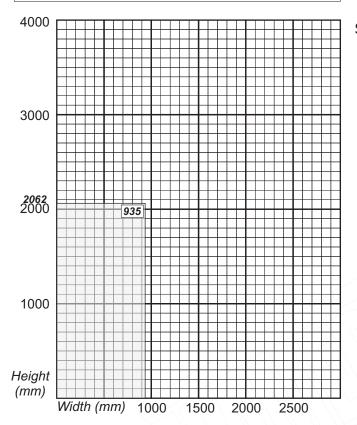


## 2D.10 Fire Door Applications FLAMEBREAK 660



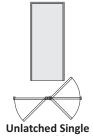
## FD60 - BS476 Pt.22:1987

### 2x15x4mm PVC encased Lorient 617 - 10mm separation + 30x4

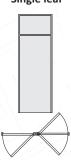


#### **UNLATCHED DOORSETS**

Door Height Assemblies &
Storey Height Assemblies with Transom



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Single leaf with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)	From To	2062	935
Double Action Single Door (DASD)	From To	2062	935
Unlatched Single Action Double Door (ULSADD)	From To	NOT APPROVED	NOT APPROVED
Double Action Double Door (DADD)	From To	NOT APPROVED	NOT APPROVED

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	0.722	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	N/A

Frame Specification See Section 7 - Frames Single leaf door assembly Double leaf door assembly

NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only. 640kg/m³ Hardwood (Excluding Beech)

#### Intumescent Seals

2x15x4mm PVC encapsulated with 10mm separation + 30x4 at head only.

Lorient 617

See Section 4 - Intumescent Seals and Section 8 - Hardware **Head:** 1No. 30x4mm exposed and fitted centrally in the frame head.

 $\mbox{{\bf Jambs~\&~Overpanel:}}\ 2\mbox{No.}\ 15\mbox{{\bf x4mm}}\ \mbox{exposed}\ \mbox{and}\ \mbox{fitted}\ \mbox{centrally}\ \mbox{in}\ \mbox{the}\ \mbox{frame}\ \mbox{with}\ \ 10\mbox{mm}\ \mbox{separation.}$ 

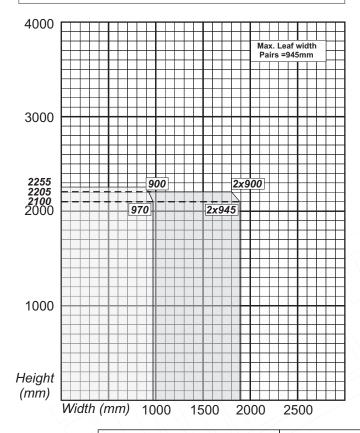


**Fire Door Applications** 

With Acrovyn Door Edge **Protectors** 

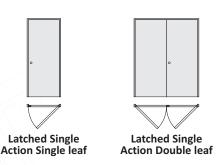
## FD60 - BS476 Pt.22:1987

#### 2x15x4mm PVC encased Lorient 617 + Intregral CS Acrovyn intumescent



#### LATCHED DOORSETS

#### **Door Height Assemblies**



Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2100	970
Single Door (LSASD)	То	2255	900
Latched Single Action	From	2100	945
Double Door (LSADD)	То	2205	900

Maximum Glazed Area	Single door doorset	0.722	Maximum	Single door doorset Double door doorset	NOT
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	APPROVED

**Frame Specification** See Section 7 - Frames

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

#### **Intumescent Seals**

2x15x4mm PVC encapsulated Lorient 617 + Intregral **CS Acrovyn Intumescent** 

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 2No. 15x4mm exposed and fitted centrally in the frame head with 10mm separation. Jambs: 2No. 15x4mm exposed and fitted centrally in the frame with 10mm separation in addition to the integral intumescents in the CS Acrovyn edge protectors.

#### Meeting edges:

Square: 1No. 15x4mm exposed and fitted centrally in the CS Acrovyn edge protector to both door leaves.

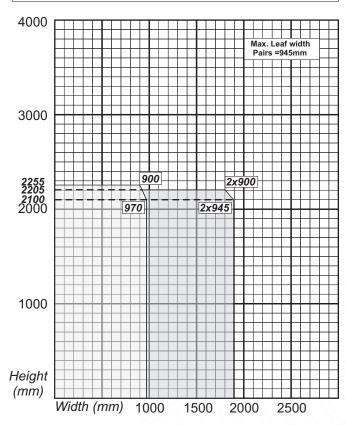


# **2D.12** Fire Door Applications FLAMEBREAK 660 With Acrovyn Door Edge Protectors



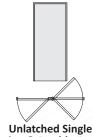
## FD60 - BS476 Pt.22:1987

#### 2x15x4mm PVC encased Lorient 617 + Intregral CS Acrovyn intumescent

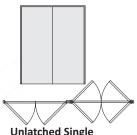


#### UNLATCHED DOORSETS

#### **Door Height Assemblies**



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf

Configuration		Height (mm)	Width (mm)
Unlatched Single Action Single Door (ULSASD)  Double Action	From	2100	970
	То	2255	900
	From	2100	970
Single Door (DASD)	То	2255	900
Unlatched Single Action	From	2100	945
Double Door (ULSADD)  Double Action	То	2205	900
	From	2100	945
Double Door (DADD)	То	2205	900

 Maximum Glazed Area<br/>See Section 6 - Glazing
 Single door doorset<br/>Double door doorset
 0.72m²
 Maximum<br/>Overpanel height
 Single door doorset<br/>Double door doorset
 NOT<br/>APPROVED

Frame Specification See Section 7 - Frames

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

Intumescent Seals
2x15x4mm PVC encapsulated
Lorient 617 + Intregral
CS Acrovyn Intumescent

 $\textbf{Head:}\ 2\text{No.}\ 15\text{x4mm}\ exposed\ and\ fitted\ centrally\ in\ the\ frame\ head\ with\ 10\text{mm}\ separation.}$   $\textbf{Jambs\ \&\ Overpanel:}\ 2\text{No.}\ 15\text{x4mm}\ exposed\ and\ fitted\ centrally\ in\ the\ frame\ with\ 10\text{mm}\ separation\ in\ addition\ to\ the\ integral\ intumescents\ in\ the\ CS\ Acrovyn\ edge\ protectors.}$ 

ent Meeting edges:

See Section 4 - Intumescent Seals and Section 8 - Hardware Square: 1No. 15x4mm exposed and fitted centrally in one the CS Acrovyn edge protector in both door leaves.





## **Fire Door Applications**

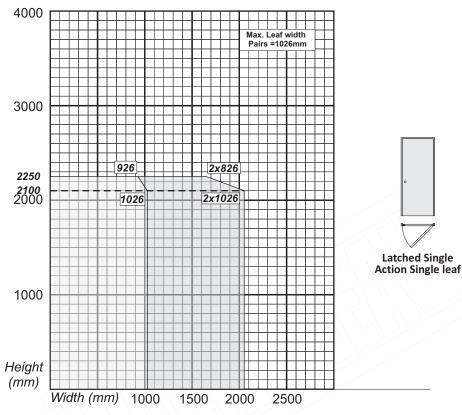
FLAMEBREAK 660
With Yeoman Shield Door Edge 2D.13 **Protectors** 

FD60 - BS476 Pt.22:1987

#### 2x15x4mm PVC encased Lorient 617 +Yeoman Shield Door Edge Protector

#### LATCHED DOORSETS

#### **Door Height Assemblies**



Configuration **Latched Single Action** 

Single Door (LSASD)

**Latched Single Action Double Door (LSADD)** 

Height (mm)	Width (mm)
2100	1026
2250	926

2100

2250

**Latched Single** 

**Action Double leaf** 

1026

826

Maximum Glazed Area	Single door doorset	0.722	Maximum	Single door doorset Double door doorset	NOT
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	APPROVED

Single leaf door assembly Double leaf door assembly 640kg/m³ Hardwood **Frame Specification** NOTE: Glazed fanlights approved See Section 7 - Frames (Excluding Beech) for door assemblies with 640kg/m³ Hardwood frames only.

From

To From

To

#### **Intumescent Seals**

2x15x4 + 20x4mm PVC encapsulated Lorient 617 +Yeoman Shield Door Edge Protector

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 2No. 15x4mm exposed and fitted centrally in the frame head with 10mm separation. Jambs: 1No. 20x4mm fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector. Meeting edges:

**Square:** 1No. 20x4mm exposed and fitted centrally in the Yeoman Shield / Lorient edge protectors to both door leaf edges.

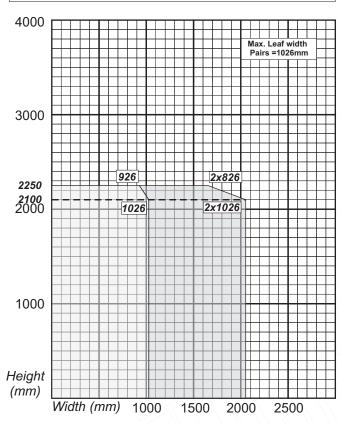


## Fire Door Applications PLAMEBREAK 660 With Yeoman Shield Door Edge Protectors



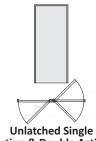
## FD60 - BS476 Pt.22:1987

#### 2x15x4mm PVC encased Lorient 617 +Yeoman Shield Door Edge Protector

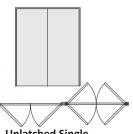


#### UNLATCHED DOORSETS

#### **Door Height Assemblies**



Unlatched Single Action & Double Action Single leaf



Unlatched Single Action & Double Action Double leaf

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2100	1026
Single Door (ULSASD)	То	2250	926
Double Action	From	2100	1026
Single Door (DASD)	То	2250	926
Unlatched Single Action	From	2100	1026
Double Door (ULSADD)	То	2250	826
Double Action	From	2100	1026
Double Door (DADD)	То	2250	826

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	0.72m <sup>2</sup>	Maximum	Single door doorset	NOT
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	APPROVED

Frame Specification See Section 7 - Frames

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

Intumescent Seals

2x15x4 + 20x4mm PVC encapsulated **Lorient 617** +Yeoman Shield Door Edge Protector

See Section 4 - Intumescent Seals and Section 8 - Hardware  $\label{lem:head:2No.15x4mm} \textbf{ exposed and fitted centrally in the frame head with 10mm separation.} \\ \textbf{ Jambs:1} \textbf{ No. 20x4mm fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted central fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector.} \\ \textbf{ logical fitted central fitted$ 

Meeting edges:

**Square:** 1No. 20x4mm exposed and fitted centrally in the Yeoman Shield / Lorient edge protectors to both door leaf edges.



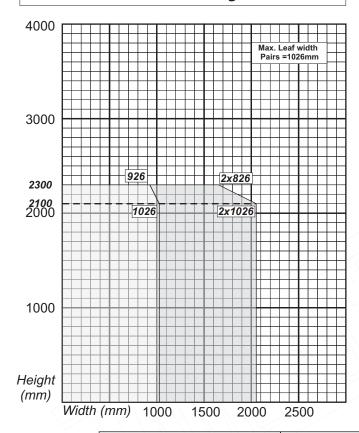


## **Fire Door Applications** FLAMEBREAK 660 With Yeoman Shield Door Edge 2D.15

**Protectors** 

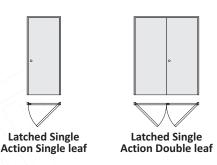
FD60 - BS476 Pt.22:1987

#### 2x20x4mm PVC encased Lorient 617 +Yeoman Shield Door Edge Protector



#### LATCHED DOORSETS

#### **Door Height Assemblies**



Configuration		Height (mm)	Width (mm)
Latched Single Action	From	2100	1026
Single Door (LSASD)	То	2300	926
Latched Single Action	From	2100	1026
Double Door (LSADD)	То	2300	826

Maximum Glazed Area See Section 6 - Glazing	Single door doorset	0.722	Maximum	Single door doorset	NOT
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	APPROVED

**Frame Specification** See Section 7 - Frames

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with 640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

#### **Intumescent Seals**

2x20x4 + 20x4mm PVC encapsulated Lorient 617 +Yeoman Shield Door Edge Protector

See Section 4 - Intumescent Seals and Section 8 - Hardware

**Head:** 2No. 20x4mm exposed and fitted centrally in the frame head with 5mm separation. Jambs: 1No. 20x4mm fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector. Meeting edges:

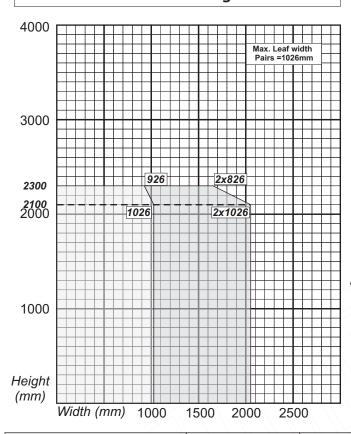
**Square:** 1No. 20x4mm exposed and fitted centrally in the Yeoman Shield / Lorient edge protectors to both door leaf edges.

## Fire Door Applications PLAMEBREAK 660 With Yeoman Shield Door Edge Protectors



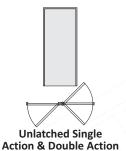
## FD60 - BS476 Pt.22 :1987

#### 2x20x4mm PVC encased Lorient 617 +Yeoman Shield Door Edge Protector



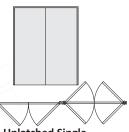
#### UNLATCHED DOORSETS

#### **Door Height Assemblies**



Single leaf





**Unlatched Single Action & Double Action Double leaf** 

Configuration		Height (mm)	Width (mm)
Unlatched Single Action	From	2100	1026
Single Door (ULSASD)	То	2300	926
Double Action	From	2100	1026
Single Door (DASD)	То	2300	926
Unlatched Single Action	From	2100	1026
Double Door (ULSADD)	То	2300	826
Double Action	From	2100	1026
Double Door (DADD)	То	2300	826

**Maximum Glazed Area** Single door doorset Single door doorset Maximum NOT 0.72m<sup>2</sup> See Section 6 - Glazing Overpanel height APPROVED **Double door doorset Double door doorset** 

> **Frame Specification** See Section 7 - Frames

Single leaf door assembly Double leaf door assembly NOTE: Glazed fanlights approved for door assemblies with

640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

**Intumescent Seals** 

2x20x4 + 20x4mm PVC encapsulated Lorient 617 +Yeoman Shield Door Edge Protector

> and Section 8 - Hardware

See Section 4 - Intumescent Seals

**Head:** 2No. 20x4mm exposed and fitted centrally in the frame head with 10mm separation. Jambs: 1No. 20x4mm fitted centrally in the Yeoman Shield / Lorient PVCu door edge protector. Meeting edges:

Square: 1No. 20x4mm exposed and fitted centrally in the Yeoman Shield / Lorient edge protectors to both door leaf edges.

Exova Warrington fire Report Ref: FEA/F02141Rev. J Valid until 23rd. February 2023



Rev. E - Issue Date: April 2018

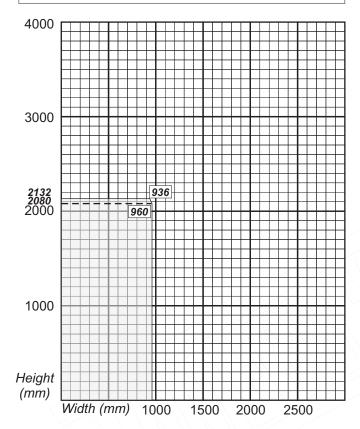




## Fire Door Applications **2E.1 FLAMEBREAK FF660**

## FD60 - BS476 Pt.22:1987

#### 2x15x4mm PVC encased Mann McGowan Pyrostrip 500P - 10mm separation



#### LATCHED DOORSETS

## **Door Height Assemblies Storey Height Assemblies with Transom**



**Latched Single Action Single leaf** with transomed overpanel or fanlight

Configuration		Height (mm)	Width (mm)	
Latched Single Action	From	2080	960	
Single Door (LSASD)	То	2132	936	
Latched Single Action	From	NOT ADDDOVED	NOT ADDDOVED	
Double Door (LSADD)	То	NOT APPROVED	NOT APPROVED	

<b>Maximum Glazed Area</b>	Single door doorset	0.722	Maximum	Single door doorset	2000mm
See Section 6 - Glazing	Double door doorset	0.72m	Overpanel height	Double door doorset	N/A

Single leaf door assembly Double leaf door assembly **Frame Specification** NOTE: Glazed fanlights approved See Section 7 - Frames for door assemblies with 640kg/m³ Hardwood frames only.

640kg/m³ Hardwood (Excluding Beech)

#### **Intumescent Seals**

2x15x4mm PVC encapsulated with 10mm separation

Mann McGowan Pyrostrip 500P See Section 4 - Intumescent Seals and

Section 8 - Hardware

**Head:** 2No. 15x4mm exposed and fitted centrally in the leaf or frame head with 10 mm separation. Jambs & Overpanel: 2No. 15x4mm exposed and fitted centrally in the leaf or frame with 10 mm separation.