CI/SfB
(32.5) Ro8 (K2)

LORIENT
ASSA ABLOY

FIRE RESISTANT GLAZING SYSTEMS

FIRE RESIST GLAZI SYSTE


Fire door
keep
shut

We've been designing and manufacturing high performance sealing systems for over 40 years.

And we're passionate about the products we make. Our dedicated R&D and testing facilities rigorously put our sealing systems through their paces – enabling us to enhance product form and function. We've built a strong reputation for design innovation; and for producing the highest quality sealing systems embracing acoustic, smoke, fire and thermal containment; as well as accessibility.

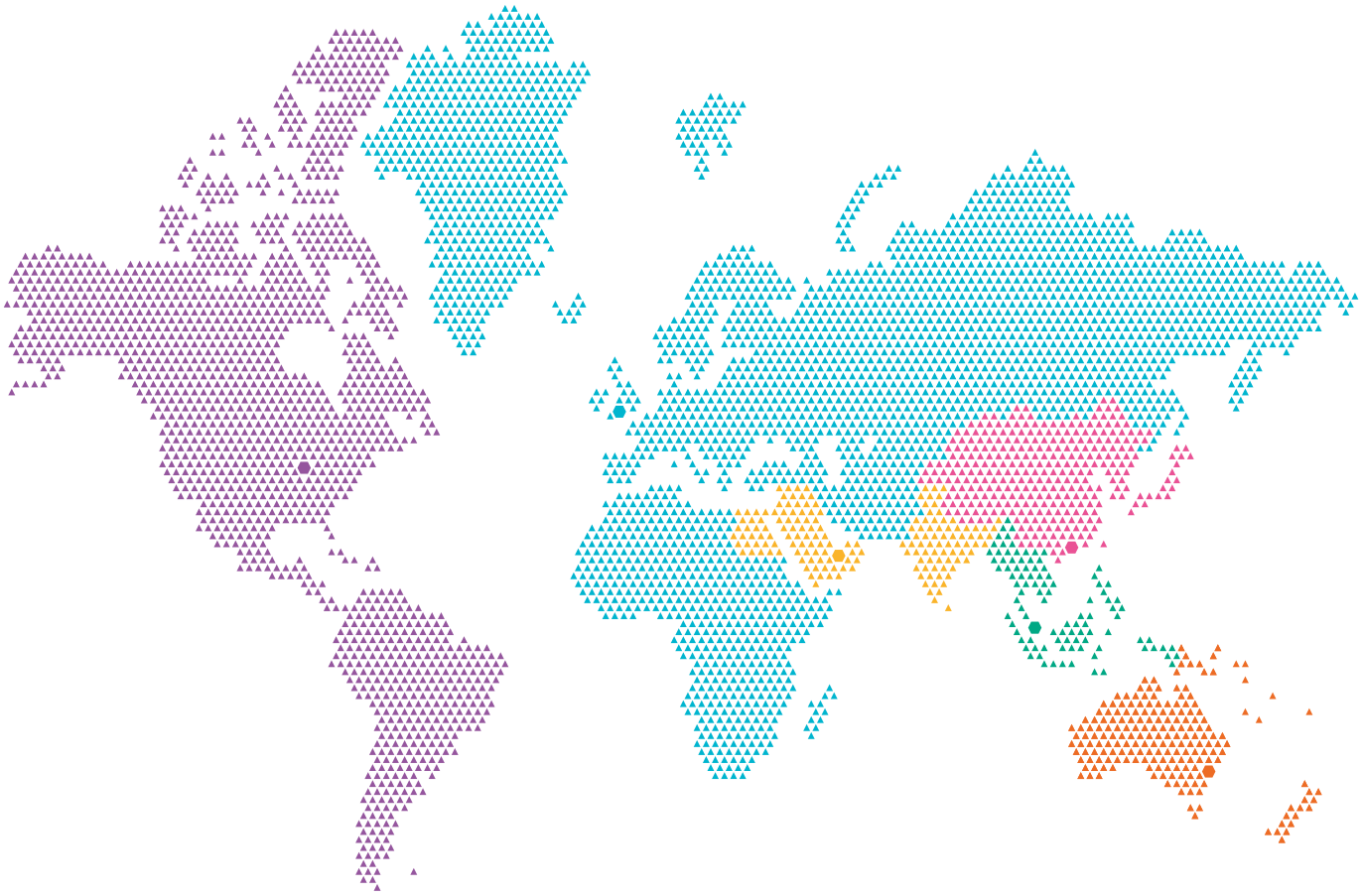
Respected throughout the industry for our technical expertise, we play an active role in helping to shape standards and best practice. We believe in providing excellent levels of customer service; and are at our best working in partnership with you.

Glazing in fire doors and screens is an important safety measure. But adding glazing to a door creates a point of weakness. Where the timber and glass meet, fire can take hold. Also, without support, the glass can quickly slump and fail in the extreme heat of a fire.

Lorient's intumescent glazing systems hold the glass firmly in place. In a fire, the glazing system prevents the glass from slumping. It also stops heat transferring to the timber, so fire cannot take hold around the edges of the glazing aperture. Our systems include a glazing channel or strip, beading, and in some cases an intumescent liner.

MADE IN BRITAIN

SEALING DOORS WORLDWIDE



The UK is home to our head office, manufacturing operation and dedicated R&D testing facility. Our UK & Europe head office supports operations around the world, delivering the best solutions locally to our customers across four continents.

By keeping abreast of technical developments and changes to regulations and standards across the world, we deliver the highest levels of expertise and support.

- UNITED KINGDOM (HQ)
- HONG KONG
- AUSTRALIA
- USA
- SINGAPORE
- UAE

LORIENT
ASSA ABLOY

ICONS EXPLAINED

The following icons are used throughout this brochure to give clear and easy recognition of a particular seal's function or possible application. Use of the icons does not necessarily indicate that test evidence exists. Refer to product system specification for relevant test evidence, or please check with the Lorient Technical team.

- Fire protection
- Smoke protection
- Acoustic protection
- Draught protection
- Dust protection
- Wheelchair friendly
- Light protection
- Thermal containment properties
- Weather protection
- 30 — Fire resistance - minutes
- Door leaf with a single rectilinear glazed aperture
- Door leaf with a single circular aperture
- Glazed screen with mullions and transoms
- Door leaf with a long vision panel
- Glazed screen or partition
- Door leaf with two rectilinear apertures including 2XGG joinery doors
- Door application

www.lorientuk.com/acousticsearch
Our Acoustic Search tool provides quick and easy access to a wide range of tested acoustic sealing systems on a variety of popular door constructions and configurations.

PRODUCT ILLUSTRATIONS

All dimensions in this brochure are in millimetres.

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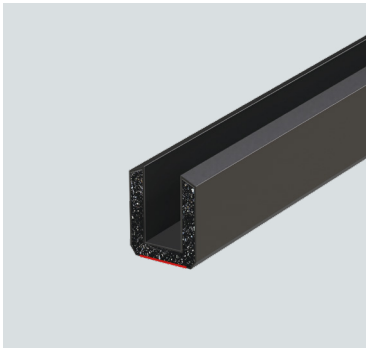
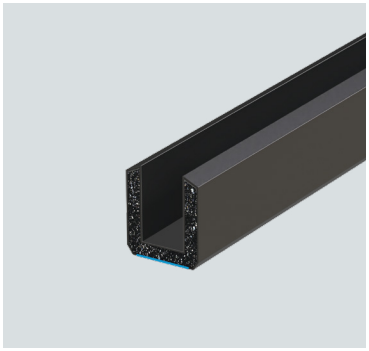
PRODUCT SELECTOR

Our range of fire resistant glazing systems can be used to specify and manufacture glazed doors and screens which provide fire resistance from 30 minutes up to 120 minutes. A wide range of applications and designs have been tested and approved; for further information see pages 10 - 26.

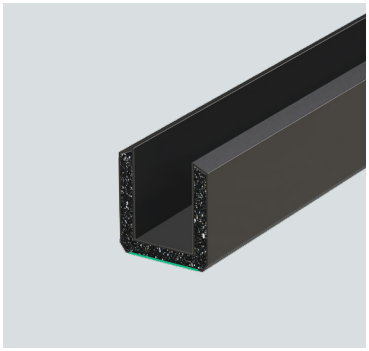
	Certification		Application		
Product	**Fire Rating**	**Certifire**	**Doors**	**Screens**	**Page**
System-36/6 PLUS	FR30	CF5060	▲	▲	10
System-36/7 PLUS	FR30	CF5060	▲	▲	12
System-36/10 PLUS	FR30	CF5060	▲	▲	14
System-36/15 PLUS	FR60	CF5060	▲	▲	16
System-36/23 PLUS	FR60	CF5060	-	▲	18
FF1	FD30	CF327	▲	-	20
RFT™	FR60	CF5033	▲	▲	22
System-90 PLUS	FR60 / FR90 / FR120	CF185	▲	▲	26



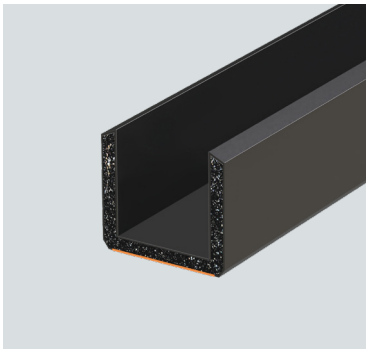
SYSTEM-36/6 PLUS



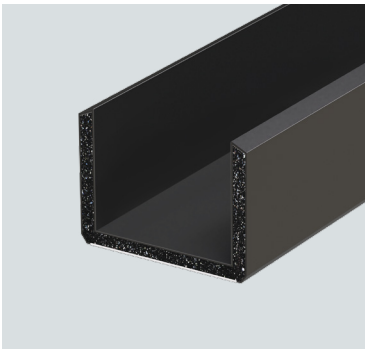
SYSTEM-36/7 PLUS



SYSTEM-36/10 PLUS

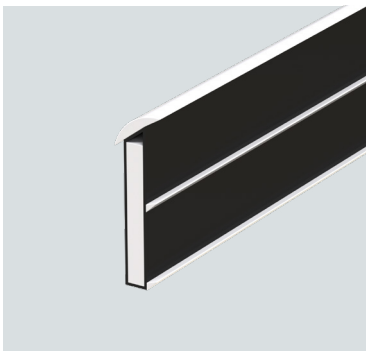


SYSTEM-36/15 PLUS

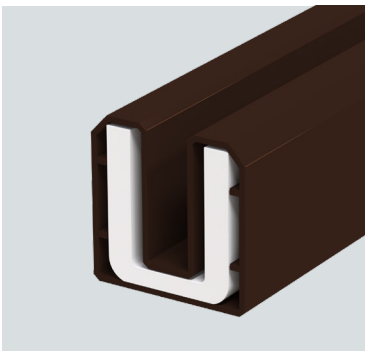


SYSTEM-36/23 PLUS

FF1

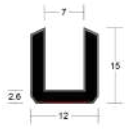
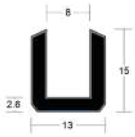
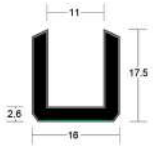
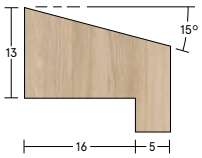
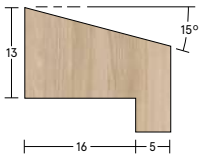
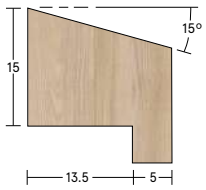
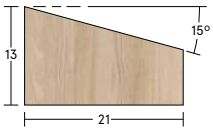
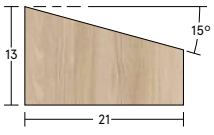


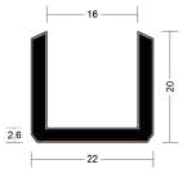
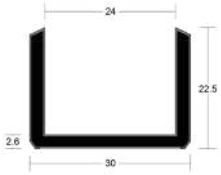
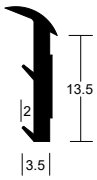
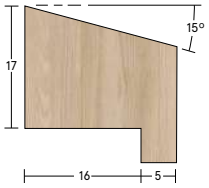
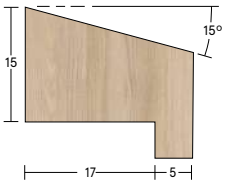
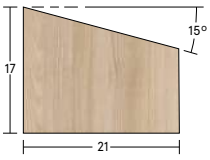
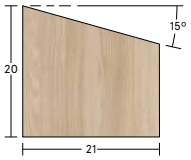
RF1™

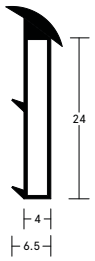
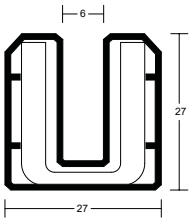
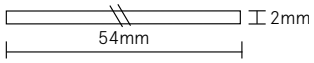
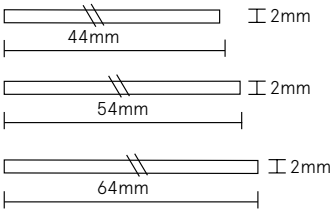
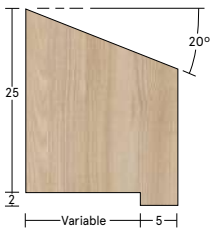
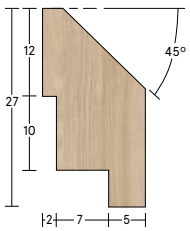
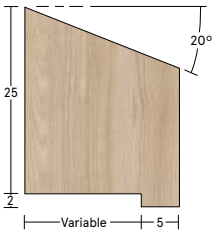
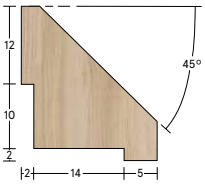


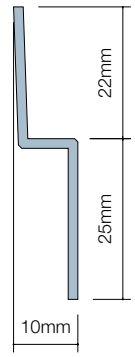
SYSTEM-90 PLUS

GLAZING SYSTEM OVERVIEW

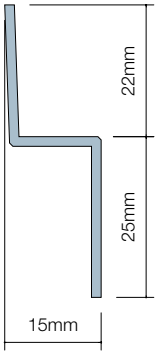
	System-36/6 PLUS	System-36/7PLUS	System-36/10 PLUS
			
Glass thickness	Suitable for use with 6mm - 7mm fire rated glass	Suitable for use with 7mm - 8mm fire rated glass	Suitable for use with 9mm - 11mm fire rated glass
Fire rating	FR30	FR30	FR30
Application	Doors & screens	Doors & screens	Doors & screens
Sodium silicate intumescent liner	Liner is required for flaxboard substrates below 500kg/m^3	Liner is required for flaxboard substrates below 500kg/m^3	Liner is required for flaxboard substrates below 500kg/m^3
Standard lengths	60m coils	60m coils	30m coils
Finish	black with red spine	black with blue spine	black with green spine
Glazing beads Glazing beads are required on both sides of the glass.			
	for 44mm thick doors	for 44mm thick doors	for 44mm thick doors
			
	for unrebated screen frames	for unrebated screen frames	for unrebated screen frames
Third Party Certification	certifire (CF5060)	certifire (CF5060)	certifire (CF5060)

System-36/15 PLUS	System-36/23 PLUS	Flexible Figure 1 (FF1)
		
Suitable for use with 14mm - 16mm fire rated glass	Suitable for use with 23mm - 24mm fire rated glass	Suitable for use with a variety of 5mm – 7.2mm fire rated glass types
FR60	FR60	FR30
Doors & screens	Screens	Doors
Liner is required for flaxboard substrates below 500kg/m^3	No liner is required	For flaxcore doors, use with a 6mm hardwood liner (min density 640 kg/m3), intumescent liner LX4402, or saddle bead (min density 640 kg/m3)
30m coils	25m coils	50m coils. 5 coils per box – minimum quantity 1 box
black with orange spine	black with white spine	black as standard: white and light brown to special order
	-	
for 54mm thick doors	-	for 44mm thick doors
		
for unrebated screen frames	for unrebated screen frames	
certifire (CF5060)	certifire (CF5060)	certifire (CF327)

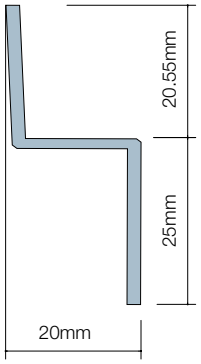
	Rigid Figure 1 (RF1)	System-90 PLUS
		
Glass thickness	Suitable for use with a variety of fire rated glass	Suitable for use with 5mm - 7mm fire rated glass
Fire rating	FR60	FR60 / FR90 / FR120
Application	Doors & screens	Doors & screens
Sodium silicate intumescent liner required		
Standard lengths	1 pack comprises 2 x RF1 in 2.1m and 2 x liners in 1.050m – MOQ 10 packs	1000 and 2100mm
Finish	Black profile with white, cream, grey, light brown, dark brown or black caps	Black, white, light brown & dark brown as standard. Other colours available to special order.
Glazing beads Glazing beads are required on both sides of the glass.		
	for 44mm timber fire doors	for 44mm timber fire doors
Note: Timber beads must be hardwood only (min density 650kg/m³) excluding Ash.		
	for unrebated screen frames	for unrebated screen frames
Third Party Certification	certifire (CF5060)	certifire (CF5060)



for 44mm mineral composite fire doors



for 54mm mineral composite fire doors



for 64mm FD90 timber fire doors


Fire door
keep
shut

BUILDING REGULATIONS

The Building Regulations provide guidance as to the minimum building standards to be achieved. They reference the relevant British and European Standards defining the test requirements and performance of the fire door assembly or fire doorset.

There are several aspects of the Buildings Regulations that must be considered in conjunction with each other when specifiying and installing fire resistant glazing systems. The regional variations of the Building Regulations:

ENGLAND	Approved Documents
WALES	Approved Documents
SCOTLAND	Technical Handbooks
N.IRELAND	Technical Booklets
IRELAND	Technical Booklets

	ENGLAND	WALES	SCOTLAND	N.IRELAND	IRELAND
FIRE	Approved Document B	Approved Document B	Technical Handbook 2	Technical Booklet E	Technical Guidance Document B
ACOUSTICS	Approved Document E	Approved Document E	Technical Handbook 5	Technical Booklet G	Technical Booklet G
ACCESSIBILITY	Approved Document M	Approved Document M	Technical Handbook 3	Technical Booklet R	Technical Booklet R
VENTILATION	Approved Document F	Approved Document F	Technical Handbook 3	Technical Booklet K	Technical Booklet K
THERMAL	Approved Document L	Approved Document L	Technical Handbook 6	Technical Booklet F	Technical Booklet F
SECURITY	Approved Document Q	Approved Document Q	-	-	-

STANDARDS + REGULATIONS

The requirements for fire and smoke containment with regard to `means of escape' are contained in the following standards:

FIRE + SMOKE

STANDARD	TITLE
BS 476-20:1987	Fire tests on building materials and structures. Method for determination of the fire resistance of elements of construction (general principles).
BS 476-22:1987	Methods for determination of the fire resistance of non-loadbearing elements of construction.
BS 476-31.1:1983	Fire tests on building materials and structures. Methods for measuring smoke penetration through doorsets and shutter assemblies. Method of measurement under ambient temperature conditions.
BS 8214:2016	Code of practice for fire door assemblies. Gives recommendations for the specification, installation and maintenance of timber-based fire doors. (BS 8214 no longer covers door sets, which are covered in BS EN 16034).
BS 9999:2017	Code of practice for fire safety in the design, management and use of buildings.
BS EN 1363-1:2020	Fire resistance tests. General requirements.
BS EN 1364-1:2015	Fire resistance tests for non-loadbearing elements. Walls.
BS EN 1634-1: 2014+A1:2018	Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware. Smoke control test for door and shutter assemblies.
BS EN 16034:2014	Pedestrian doorsets, industrial, commercial, garage doors and openable windows. Product standard, performance characteristics. Fire resisting and/or smoke control characteristics.

ACOUSTIC

STANDARD	TITLE
BS EN ISO 10140-1:2016	Acoustics. Laboratory measurement of sound insulation of building elements. Application rules for specific products
BS EN ISO 717-2:2020	Acoustics. Rating of sound insulation in buildings and of building elements. Impact sound insulation elements of construction
ASTM E413-16	Classification for Rating Sound Insulation

FIRE PROTECTING GLAZED APERTURES

Glazed panels are often required in fire resistant walls and doors. In door assemblies, especially those on circulation routes, glazed apertures allow people to see others approaching from the opposite direction: they also allow fire and smoke to be seen without opening the door, thereby making a real contribution to safety.

Glazing Systems

Glazed panels or complete glazed screens are often required to allow vision and natural light through fire-rated internal walls and doors.

Gaps, joints and interfaces between dissimilar materials invariably form points of weakness. Provision needs to be made to seal these effectively.

The Lorient solution is to fit fire resistant glass secured using one of our fire resistant glazing systems. These hold the glass firmly in place during normal use, but in the event of fire the intumescent material expands, securing and insulating the glass and protecting the surrounding timber.

Our glazing systems are designed to minimise smoke transfer, yet fit tightly on the perimeter of the glass and eliminate undesirable rattle at the same time. When forming a glazed aperture in a fire resistant door or wall it's essential that fire resistant glass is used. Our glazing systems may be used with most types of fire rated glass: details are shown on pages ** – ** of this brochure. Our glazing systems are designed to prevent or delay possible modes of failure in either the glass or its surroundings.

Acoustic Implications

According to Approved Document E of the Building Regulations (England & Wales), door assemblies in many situations are required to provide acoustic performance. To achieve the specified performance requirement (a minimum of 29dB Rw), it's essential to ensure the door assembly is fitted with an appropriate sealing system at the perimeter and threshold. Further information on acoustic sealing can be found in our Acoustic Sealing Systems for Door Assemblies brochure.

Glazed panels may be incorporated without a significant loss of acoustic performance and in some cases can improve the sound insulating properties, provided that the area of glass in relation to the area of door and thickness of glass being used is considered.

A range of fire rated glass has been tested in conjunction with our System-36/6 PLUS glazing gasket and provides optimum acoustic performance for most types of door construction, including FD30 / FD30S. By this method, up to 0.16m2 eg: 800mm x 200mm or 650mm x 250mm can be incorporated in a door assembly, without any significant loss of acoustic performance.

GLAZING SYSTEM OPERATION

In every day use our fire resistant glazing systems offer firm support with a degree of flexibility which absorbs shocks and minimises glass rattle. When exposed to fire the intumescent material expands forming a stable insulating seal which holds the glass firmly so it does not slump as it progressively softens.

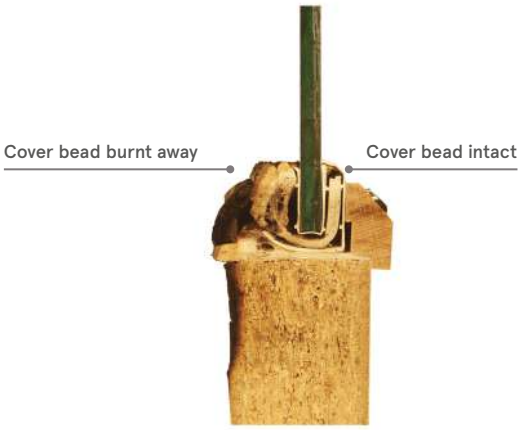
System-36 PLUS

System-36 PLUS in normal 'cold' condition

System-36 PLUS operating in 'hot' condition

System-90 PLUS

System-90 PLUS operating in 'cold' condition

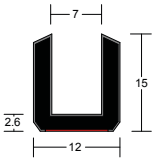


System-90 PLUS operating in 'hot' condition

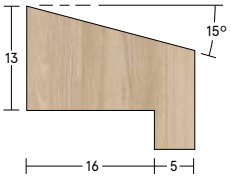
SYSTEM-36/6 PLUS

U-SHAPED GASKET

System-36/6 PLUS is a flexible U-shaped glazing gasket designed for 30 minutes fire resistance in doors and screens. Flexible enough to be fitted to curved corners and circular vision panels. Tested with many popular glass types. Supplied coiled in a box so it's easily dispensed and cut to length, reducing wastage.



SYSTEM-36/6 PLUS



Glazing bead
For 44mm thick doors or rebated screen frames.

Glazing bead
For unrebated screen frames.

SYSTEM SPECIFICATIONS

Test evidence
- Fire: BS 476-22:1987 & BS EN 1634-1:2014.

Performance
- Provides 30 minutes fire resistance.

Size
- 12mm x 15mm.

Standard lengths
- 60m coils.

Minimum order quantity
- 60m coil.

Seal material
- Intumescent graphite.

Finish
- Black with red identification spine.

Glass thickness
- Suitable for use with 6mm - 7mm fire rated glass.

Glass type
- Please refer to Certifire certificate CF5060 for the full range of glass types.

Application
- FD30 timber fire doors and timber framed screens for 30 minutes integrity.

Sodium silicate intumescent liner
- B24402 liner is required for flaxboard substrates below 500kg/m^3.

Glazing beads
- Glazing beads are required on both sides of the glass.
- **Timber doors:** Hardwood retaining beads shall be of a min density 600kg/m^3. Variations in retaining bead profile are allowable with or without bolection detail and using alternative timber species of min density 600kg/m^3.
- **Timber screens:** Hardwood retaining beads shall be of a min density 640kg/m^3. Variations in retaining bead profile are allowable with or without bolection detail and using alternative timber species of min density 640kg/m^3, providing they fall within the 'other variations' section of CF5688.
- Where shaped apertures are used, only finger jointed glazing beads are acceptable.

Certification

certifire
(CF5060)

NBS Source
PARTNER

LORIENT
ASSA ABLOY

SYSTEM-36/6 PLUS

CERTIFIRE APPROVED APPLICATIONS: 30 MINUTE TIMBER FIRE DOORS + SCREENS

Certifire CF5060 Certificate of Approval relates to the following glasses when used in conjunction with Lorient System-36/6 PLUS glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane height	Max. pane width	Max. pane area	Doors				Screens	
30/0	5mm FireLite	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	✓	✓	✓	✓		
30/0	6mm Pyrotuf®	1300mm (at 460mm wide)	506mm (at 1180mm high)	0.598m²	✓	✓	✓	✓		
30/0	6mm Pyran-S®	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	✓	✓	✓	✓		
30/0	6mm Pyrocet®	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	✓	✓	✓	✓		
30/0	7mm Pyroshield® 2	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	✓	✓	✓	✓		
30/0	5mm FireLite	2530mm (at 910mm wide)	1019mm (at 2200mm high)	2.34m²					✓	✓
30/0	6mm Pyrocet®	1732mm (at 660mm wide)	829mm (at 1350mm high)	1.15m²					✓	✓
30/0	7mm Pyroshield® 2	2530mm (at 910mm wide)	1019mm (at 2200mm high)	2.34m²					✓	✓
30/0	6mm Pyran-S®	2530mm (at 910mm wide)	1019mm (at 2200mm high)	2.34m²					✓	✓

When using System-36/6 PLUS the profiles shown below have been deemed acceptable by Exova Warringtonfire:

Note: CF5060 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 40mm overall leaf thickness.

For screens or partitions, frame members to be of minimum cross-section 45mm x 70mm in either hardwood or softwood of not less than 520 kg/m3. Hardwood beads to be used for System-36/6 PLUS and System-36/7 PLUS (min density 640kg/m3).

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

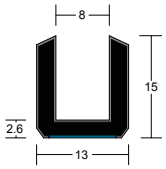
Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

certifire
(CF5060)

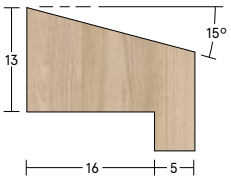
SYSTEM-36/7 PLUS

U-SHAPED GASKET

System-36/7 PLUS is a flexible U-shaped glazing gasket designed for 30 minutes fire resistance in doors and screens. Flexible enough to be fitted to curved corners and circular vision panels. Tested with many popular glass types. Supplied coiled in a box so it's easily dispensed and cut to length, reducing wastage.



SYSTEM-36/7 PLUS



Glazing bead
For 44mm thick doors or rebated screen frames.

Glazing bead
For unrebated screen frames.

SYSTEM SPECIFICATIONS

Test evidence
- Fire: BS EN 1634-1:2014.
- Fire: BS 476-22:1987.

Performance
- Provides 30 minutes fire resistance.

Size
- 13mm x 15mm.

Standard lengths
- 60m coils.

Minimum order quantity
- 60m coil.

Seal material
- Intumescent graphite.

Finish
- Black with blue identification spine.

Glass thickness
- Suitable for use with 7mm - 8mm fire rated glass.

Glass type
- Please refer to Certifire certificate CF5060 for the full range of glass types.

Application
- FD30 timber fire doors and timber framed screens for 30 minutes integrity.

Sodium silicate intumescent liner
- Liner is required for flaxboard substrates below 500kg/m^3.

Glazing beads
- Glazing beads are required on both sides of the glass.
- **Timber doors:** Hardwood retaining beads shall be of a min density 600kg/m^3. Variations in retaining bead profile are allowable with or without bolection detail and using alternative timber species of min density 600kg/m^3.
- **Timber screens:** Hardwood retaining beads shall be of a min density 640kg/m^3. Variations in retaining bead profile are allowable with or without bolection detail and using alternative timber species of min density 640kg/m^3, providing they fall within the 'other variations' section of CF5688.
- Where shaped apertures are used, only finger jointed glazing beads are acceptable.

Certification

certifire (CF5060)

NBS Source PARTNER

LORIENT ASSA ABLOY

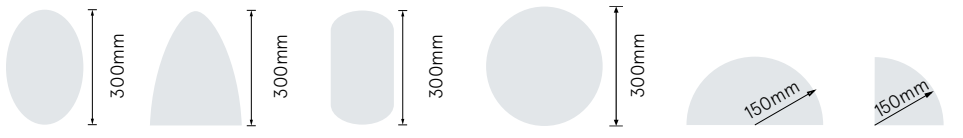
SYSTEM-36/7 PLUS

CERTIFIRE APPROVED APPLICATIONS: 30 MINUTE TIMBER FIRE DOORS + SCREENS

Certifire CF5060 Certificate of Approval relates to the following glasses when used in conjunction with Lorient System-36/7 PLUS glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane height	Max. pane width	Max. pane area	Doors				Screens	
30/0	7.2mm Pyroguard® C730	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	✓	✓	✓	✓		
30/0	7mm Pyrodur® Plus	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	✓	✓	✓	✓		
30/0	7mm Pyrostem® 2	1482mm (at 460mm wide)	580mm (at 1150mm high)	0.688m²	✓	✓	✓	✓		
30/0	7mm Pyranova® S3.0.7	1550mm (at 500mm wide)	517mm (at 1500mm high)	0.775m²	✓	✓	✓	✓		
30/0	7mm Pyrobelite®	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	✓	✓	✓	✓		
30/0	8mm Pyran-S®	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	✓	✓	✓	✓		
30/0	7mm Pyroshield® 2	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	✓	✓	✓	✓		
30/0	7.2mm Pyroguard® C730	2300mm (at 926mm wide)	926mm (at 2300mm high)	2.13m²					✓	✓
30/0	7mm Pyrodur® Plus	2320mm (at 1080mm wide)	1082mm (at 2310mm high)	2.50m²					✓	✓
30/0	7mm Pyrostem® 2	2530mm (at 910mm wide)	1019mm (at 2200mm high)	2.34m²					✓	✓
30/0	7mm Pyrobelite®	2875mm (at 920mm wide)	1157mm (at 2300mm high)	2.66m²					✓	✓
30/0	8mm Pyran-S®	2530mm (at 910mm wide)	1019mm (at 2200mm high)	2.34m²					✓	✓

When using System-36/7 PLUS, the profiles shown here have been deemed acceptable by Exova Warringtonfire:



elliptical | mitre | elongated circle | circular | arched | quadrant

Note: CF5060 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 40mm overall leaf thickness.

For screens or partitions, frame members to be of minimum cross-section 45mm x 70mm in either hardwood or softwood of not less than 520 kg/m3. Hardwood beads to be used for System-36/6 PLUS and System-36/7 PLUS (min density 640kg/m3).

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

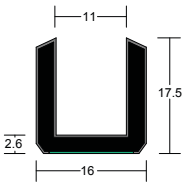
Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

certifire
(CF5060)

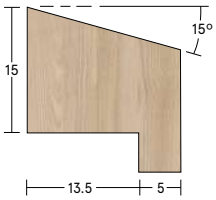
SYSTEM-36/10 PLUS

U-SHAPED GASKET

System-36/10 PLUS is a flexible U-shaped glazing gasket designed for 30 minutes fire resistance in doors and screens. Tested with many popular glass types. Supplied coiled in a box so it's easily dispensed and cut to length, reducing wastage.



SYSTEM-36/10 PLUS



Glazing bead
For 44mm thick doors or rebated screen frames.

Glazing bead
For unrebated screen frames.

SYSTEM SPECIFICATIONS

Test evidence
- Fire: BS EN 1634-1:2014.
- Fire: BS 476-22:1987.

Performance
- Provides 30 minutes fire resistance.

Size
- 16mm x 17.5mm.

Standard lengths
- 30m coils.

Minimum order quantity
- 30m coil.

Seal material
- Intumescent graphite.

Finish
- Black with green identification spine.

Glass thickness
- Suitable for use with 10mm - 11mm fire rated glass.

Glass type
- Please refer to Certifire certificate CF5060 for the full range of glass types.

Application
- FD30 timber fire doors and timber framed screens for 30 minutes integrity.

Sodium silicate intumescent liner
- Liner is required for flaxboard substrates below 500kg/m^3.

Glazing beads
- Glazing beads are required on both sides of the glass.
- **Timber doors:** Softwood or hardwood retaining beads shall be of a min density 550kg/m^3. Variations in retaining bead profile are allowable using alternative timber species of min density 550kg/m^3, including oak, beech, ramin, columbian pine and utile (subject to min density). The bead height shall be exactly 15mm, the bead width shall be a min of 18.5mm.
- **Timber screens:** Softwood or hardwood retaining beads shall be of a min density 550kg/m^3. Variations in retaining bead profile are allowable with or without bolection detail and using alternative timber species of min density 550kg/m^3,including oak, beech, ramin, columbian pine and utile (subject to min density). The bead height shaall be exactly 15mm, the bead width shall be a min of 21mm.

Certification
certifire (CF5060)
NBS Source PARTNER

LORIENT ASSA ABLOY

SYSTEM-36/10 PLUS

CERTIFIRE APPROVED APPLICATIONS: 30 MINUTE TIMBER FIRE DOORS + SCREENS

Certifire CF5060 Certificate of Approval relates to the following glasses when used in conjunction with Lorient System-36/10 PLUS glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane height	Max. pane width	Max. pane area	Doors				Screens	
30/0	10mm Pyran-S®	1482mm (at 450mm wide)	580mm (at 1180mm high)	0.688m²	✓	✓	✓			
30/0	10mm Pyrodur®	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	✓	✓	✓			
30/0	11mm Pyroguard® Rapide	1353mm (at 700mm wide)	870mm (at 1100mm high)	0.95m²	✓	✓	✓			
30/0	11mm Pyranova® 15 S2.0	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	✓	✓	✓			
30/0	10mm Pyrodur®	2000mm (at 950mm wide)	1378mm (at 1350mm high)	1.90m²					✓	✓
30/0	10mm Pyran-S®	2530mm (at 920mm wide)	1019mm (at 2300mm high)	2.34m²					✓	✓
30/0	11mm Pyroguard® Rapide	2300mm (at 926mm wide)	926mm (at 2300mm high)	2.13m²					✓	✓

Note: CF5060 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 40mm overall leaf thickness.

For screens or partitions, frame members to be of minimum cross-section 44mm x 94mm in softwood of not less than 520 kg/m³. Softwood of lower density less than 520 kg/m³ should not be used. Where alternative timbers are required, other timbers of the same density or higher may be used at the same section size. Softwood or hardwood retaining beads shall be of a minimum density 550 kg/m³.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

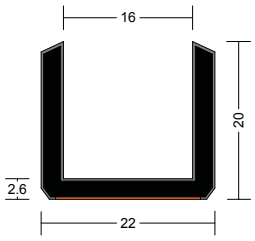
Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

certifire
(CF5060)

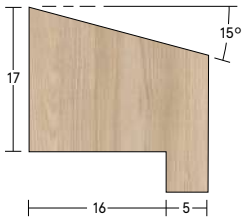
SYSTEM-36/15 PLUS

U-SHAPED GASKET

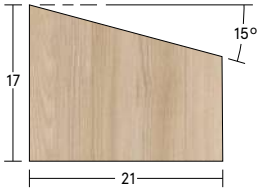
System-36/15 PLUS is a flexible U-shaped glazing gasket designed for 60 minutes fire resistance in doors and screens. Tested with many popular glass types. Supplied coiled in a box so it's easily dispensed and cut to length, reducing wastage.



SYSTEM-36/15 PLUS



Glazing bead
For 54mm thick doors or rebated screen frames. Timber bead for 44mm thick FD30 doors also available



Glazing bead
For unrebated screen frames.

SYSTEM SPECIFICATIONS

Test evidence
- Fire: BS EN 1634-1:2014.
- Fire: BS 476-22:1987.

Performance
- Provides 60 minutes fire resistance.

Size
- 22mm x 20mm.

Standard lengths
- 30m coils.

Seal material
- Intumescent graphite.

Finish
- Black with orange identification spine.

Glass thickness
- Suitable for use with 15mm - 16mm fire rated glass.

Glass type
- Please refer to Certifire certificate CF5060 for the full range of glass types.

Application
- FD30 and FD60 timber fire doors and timber framed screens for 30 or 60 minutes integrity and 30 minutes insulation.

Sodium silicate intumescent liner
- Liner is required for flaxboard substrates below 500kg/m^3.

Glazing beads
- Glazing beads are required on both sides of the glass.
- **Timber doors:** Softwood or hardwood retaining beads shall be of a min density 550kg/m^3. Variations in retaining bead profile are allowable using alternative timber species of min density 550kg/m^3, including oak, beech, ramin, columbian pine and utile (subject to min density). The bead height shall be exactly 17mm, the bead width shall be a min of 16mm.
- **Timber screens:** Hardwood retaining beads shall be of a min density 550kg/m^3. Variations in retaining bead profile are allowable using alternative timber species of min density 550kg/m^3,including oak, beech, ramin and utile (subject to min density). The bead height shaall be exactly 17mm, the bead width shall be a min of 21mm.

Certification

certifire
(CF5060)

NBS Source
PARTNER

LORIENT
ASSA ABLOY

SYSTEM-36/15 PLUS

CERTIFIRE APPROVED APPLICATIONS: 30 + 60 MINUTE TIMBER FIRE DOORS + TIMBER SCREENS

Certifire CF5060 Certificate of Approval relates to the following glasses when used in conjunction with Lorient System-36/15 PLUS glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane height	Max. pane width	Max. pane area	Doors				Screens	
30/30	15mm Pyrostop®	1790mm (at 620mm wide)	630mm (at 1760mm high)	1.11m²	✓	✓	✓			
30/30	15mm Pyroguard® Rapide Plus	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	✓	✓	✓			
30/30	15mm Pyranova® 30 S3.0	1875mm (at 500m wide)	625mm (at 1500mm high)	0.94m²	✓	✓	✓			
30/30	17.3mm Pyrobel® 16	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	✓	✓	✓			
60/30	15mm Pyrostop®	1790mm (at 620mm wide)	630mm (at 1760mm high)	1.11m²	✓	✓	✓			
60/30	15mm Pyranova® 30 S3.0	1830mm (at 500mm wide)	610mm (at 1500mm high)	0.92m²	✓	✓	✓			
60/30	17.3mm Pyrobel® 16	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	✓	✓	✓			
30/30	15mm Pyrostop®	2000mm (at 950mm wide)	1378mm (at 1350mm high)	1.90m²					✓	✓
30/30	15mm Pyranova® 30 S2.0	2000mm (at 950mm wide)	1378mm (at 1350mm high)	1.90m²					✓	✓
30/30	15mm Pyroguard® Rapide Plus	2000mm (at 950mm wide)	1378mm (at 1350mm high)	1.90m²					✓	✓
30/30	17.3mm Pyrobel® 16	2000mm (at 950mm wide)	1378mm (at 1350mm high)	1.90m²					✓	✓
60/30	15mm Pyrostop®	2000mm (at 950mm wide)	1378mm (at 1350mm high)	1.90m²					✓	✓
60/30	17.3mm Pyrobel® 16	2000mm (at 950mm wide)	1378mm (at 1350mm high)	1.90m²					✓	✓

Note: CF5060 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 40mm overall leaf thickness.

For timber framed screens or partitions for periods of 30 minutes integrity and 30 minutes insulation, frame members to be of minimum cross-section 44mm x 94mm in softwood of not less than 520 kg/m³. Softwood of lower density less than 520 kg/m³ should not be used. Where alternative timbers are required, other timbers of the same density or higher may be used at the same section size. Softwood or hardwood retaining beads shall be of a minimum density 550 kg/m³.

For timber framed screens or partitions for periods of 60 minutes integrity and 30 minutes insulation, frame members to be of minimum cross-section 44mm x 94mm in hardwood of 550 kg/m³. Lower density timber should not be used. Where alternative timbers are required, other timbers of the same density or higher may be used, excluding Ash, at the same section size. Hardwood retaining beads shall be of a minimum density 550 kg/m³.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

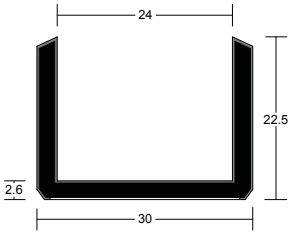
Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

certifire
(CF5060)

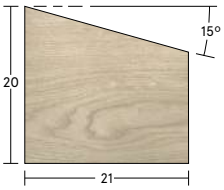
SYSTEM-36/23 PLUS

U-SHAPED GASKET

System-36/23 PLUS is a flexible U-shaped glazing gasket designed for 60 minutes fire resistance in screens. Tested with many popular glass types. Supplied coiled in a box so it's easily dispensed and cut to length, reducing wastage.



SYSTEM-36/23 PLUS



Glazing bead
For unrebated screen frames.

SYSTEM SPECIFICATIONS

Test evidence
- Fire: BS EN 1634-1:2014.
- Fire: BS 476-22:1987.

Performance
- Provides 60 minutes fire resistance.

Size
- 30mm x 22.5mm.

Standard lengths
- 25m coils.

Minimum order quantity
- 25m coil.

Seal material
- Intumescent graphite.

Finish
- Black with white identification spine.

Glass thickness
- Suitable for use with 23mm - 24mm fire rated glass.

Glass type
- Please refer to Certifire certificate CF5060 for the full range of glass types.

Application
- System for timber framed screens only for periods of 60 minutes integrity and 60 minutes insulation.

Sodium silicate intumescent liner
- No liner is required.

Glazing beads
- Glazing beads are required on both sides of the glass.
- Hardwood retaining beads shall be of a min density 550kg/m^3. Variations in retaining bead profile are allowable using alternative timber species of min density 550kg/m^3, including oak, beech, ramin, and utile, but excluding ash (subject to min density). The bead height shall be exactly 20mm, the bead width shall be a min of 21mm.
- Fixing of beads: Screwed using No.8 x 45mm countersunk screws at 200mm nom. centres.

Certification

certifire
(CF5060)

NBS Source
PARTNER

LORIENT
ASSA ABLOY

SYSTEM-36/23 PLUS

CERTIFIRE APPROVED APPLICATIONS: 60 MINUTE TIMBER SCREENS

Certifire CF327 Certificate of Approval relates to the following glasses when used in conjunction with FF1 glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane height	Max. pane width	Max. pane area	Doors				Screens	
60/60	23mm Pyrostop®	2000mm (at 900mm wide)	1342mm (at 1300mm high)	1.80m²					✓	✓
60/60	23mm Pyranova® 60 S3.0	2000mm (at 900mm wide)	1342mm (at 1300mm high)	1.80m²					✓	✓
60/60	23mm Pyroguard® Rapide Plus	2000mm (at 900mm wide)	1342mm (at 1300mm high)	1.80m²					✓	✓

Note: For timber framed screens or partitions for periods of 60 minutes integrity and 60 minutes insulation, frame members to be of minimum cross-section 44mm x 94mm in Utile hardwood of nominal density of 550 kg/m³. Lower density timber should not be used. Where alternative timbers are required, other timbers of the same density or higher may be used, excluding Ash. Hardwood retaining beads shall be of a minimum density 550 kg/m³.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

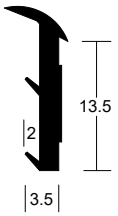
Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

certifire
(CF5060)

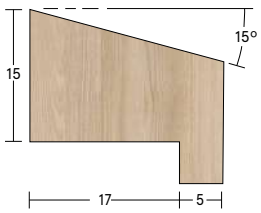
FF1

BEAD APPLIED SYSTEM

FF1 (Flexible Figure 1) is designed for use with glazed apertures in 30 minute fire resistant doors. Comprises a pair of bead applied intumescent strips. Featuring a unique design which enables tolerances between door, bead and glass thickness's to be accommodated. Tested with many popular glass types.



FF1



Glazing bead
For 44mm thick doors.

Note: Hardwood or softwood beads are available (min density 550kg/m³). Bead dimension could vary depending on glass type and door thickness.

SYSTEM SPECIFICATIONS

Test evidence
- Fire: BS 476-22:1987.

Performance
- Provides 30 minutes fire resistance.

Size
- 13.5mm x 3.5mm.

Standard lengths
- 50m coils. 5 coils per box.

Minimum order quantity
- 1 box (250m).

Seal material
- Intumescent graphite.

Profile
- Available with or without decorative top cap.

Finish
- Black, white, cream and light brown.

Glass thickness
- Suitable for use with a variety of 5mm – 7.2mm fire rated glass types.

Glass type
- Please refer to Certifire certificate CF327 for the full range of glass types.

Application
- FD30 timber fire doors.

Fixing
- FF1 is a two-strip system for use with glazed apertures in doors only. A strip must be fitted on both sides of the glass.

Sodium silicate intumescent liner
- For flaxcore doors, use with a 6mm hardwood liner (min density 640 kg/m³), intumescent liner LX4402, or saddle bead (min density 640 kg/m³).

Glazing beads
- Glazing beads are required on both sides of the glass.
- Beads may be either hardwood or softwood and a min density 550kg/m³.
- MDF beads with a min density 750kg/m³ may be utilised with Pyroguard C/W glass.
- Fixing of beads: The system may be used with either 40mm long pins or screws at maximum 150mm fixing centres.

Certification
certifire (CF327)

NBS Source PARTNER

LORIENT ASSA ABLOY

FF1

CERTIFIRE APPROVED APPLICATIONS: 30 MINUTE TIMBER FIRE DOORS

Certifire CF327 Certificate of Approval relates to the following glasses when used in conjunction with FF1 glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane height	Max. pane width	Max. pane area	Doors			Screens		
30/0	5mm FireLite	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	✓	✓	✓			
30/0	6mm Pyran-S®	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	✓	✓	✓			
30/0	6mm Pyroshield® Safety	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	✓	✓	✓			
30/0	6mm Pyrotech™ 630	1750mm (at 450mm wide)	560mm (at 1400mm high)	0.78m²	✓	✓	✓			
30/0	7mm Pyrostem® 2	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	✓	✓	✓			
30/0	7mm Pyrobelite®	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	✓	✓	✓			
30/0	7mm Pyrodur® Plus	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	✓	✓	✓			
30/0	7.2mm Pyroguard® C730	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	✓	✓	✓			
		1236mm (at 570mm wide)	750mm (at 940mm high)	0.71m²	✓	✓	✓			

Note: CF327 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 40mm overall leaf thickness. A secondary Palusol based intumescent is required to be used as a lining around the perimeter of apertures cut within flaxboard substrates.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

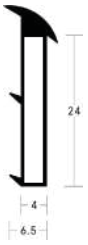
Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

certifire
(CF327)

RF1™

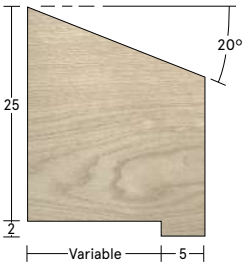
BEAD APPLIED SYSTEM

RF1™ is a versatile bead-applied glazing system for 60 minute fire resistant doors and screens. Comprises a pair of bead applied intumescent glazing seals and an intumescent liner. With premium aesthetics, the caps are the only visible elements when fitted and a variety of colours are available to harmonise with the door.

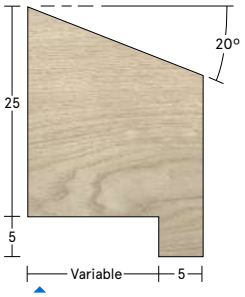


RF1™

B25402
Sodium silicate intumescent liner.



Glazing bead
For timber screens.



Glazing bead
For 54mm timber fire doors.

Note: The bead should be hardwood excluding Ash and Beech (min density 610 kg/m^3).

SYSTEM SPECIFICATIONS

Test evidence
- Fire: BS 476-22:1987.

Performance
- Provides 60 minutes fire resistance.

Size
- 24mm x 6.5mm.

Standard lengths
- 1 pack contains:
  2 x RF1 in 2.1m.
  2 x 2mm liner in 1.050m.

Seal material
- Sodium silicate intumescent encapsulated in rigid PVC with flexible fins.

Profile
- Available with or without decorative top cap & compression fins.

Finish
- Black profile with white, cream, grey, light brown, dark brown or black caps.

Glass thickness
- Suitable for use with a variety of fire rated glass types for both doors and screens.

Glass type
- Please refer to Certifire certificate CF5033 for the full range of glass types.

Application
- Timber door leaves and glazed screens for periods of 60 minutes integrity (and insulation depending on glass specification).

Sodium silicate intumescent liner
- A 2mm sodium silicate intumescent liner is required with doors and screens.

Glazing beads
- Glazing beads are required on both sides of the glass.
- Note: Hardwood beads are available (min density 550kg/m^3).
- Fixing of beads: pin or screw in to place using 50mm long steel pins at 150mm nom. centres, or steel screws 50mm long (No.8) at 150mm nom. centres.

Certification
certifire (CF5033)

NBS Source PARTNER

LORIENT ASSA ABLOY

RF1™

CERTIFIRE APPROVED APPLICATIONS: 60 MINUTE TIMBER FIRE DOORS

Certifire CF5033 Certificate of Approval relates to the following glasses when used in conjunction with RF1™ glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane height	Max. pane width	Max. pane area	Doors			Screens		
60/0	5mm FireLite	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	✓	✓	✓			
60/0	Pyran-S® (6mm, 8mm, 10mm, 12mm)	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	✓	✓	✓			
60/0	7mm Pyrostem® 2	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	✓	✓	✓			
60/0	7mm Pyroshield® 2	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	✓	✓	✓			
60/0	11mm Pyranova 15 S2.0	1770mm (at 420mm wide)	590mm (at 1260mm high)	0.885m²	✓	✓	✓			
60/0	11mm Pyroguard EW60	1400mm (at 530mm wide)	460mm (at 1610mm high)	0.575m²	✓	✓	✓			
60/0	12mm Pyrobelite® 12	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	✓	✓	✓			
60/0	13mm Pyrodur® 60-20	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	✓	✓	✓			
60/0	14mm Pyranova® 15 S2.1	1770mm (at 420mm wide)	590mm (at 1260mm high)	0.885m²	✓	✓	✓			
60/30	15mm Pyrostop® 30-10	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	✓	✓	✓			
60/30	15mm Pyranova® 30-S3.0	1770mm (at 420mm wide)	590mm (at 1260mm high)	0.885m²	✓	✓	✓			
60/30	15mm Pyroguard® EI30 INT	1440mm (at 510mm wide)	540mm (at 1370mm high)	0.65mm	✓	✓	✓			
60/30	17.3mm Pyrobel® 16	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	✓	✓	✓			

Note: CF5033 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 54mm overall leaf thickness. A secondary 2mm thick sodium silicate based intumescent material to the full width of the leaf is required to be used as a lining around the perimeter of apertures.

For screens or partitions, frame members manufacturered from hardwood with a minimum density of 610kg/m³, including 2mm sodium silicate liner. 2mm deep rebate in the bottom of the bead may vary in width depending on glass thickness.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

certifire
(CF5033)

RF1™

CERTIFIRE APPROVED APPLICATIONS: 60 MINUTE TIMBER SCREENS

Certifire CF5033 Certificate of Approval relates to the following glasses when used in conjunction with RF1™ glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane height	Max. pane width	Max. pane area	Doors				Screens	
60/0	5mm Firelite®	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/0	6mm Pyroshield® 2	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/0	6mm, 8mm, 10mm, 12mm Pyran-S®	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/0	7mm Pyrostem® 2	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/0	11mm Pyranova® 15 S2.0	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1770mm (at 500mm high)	590mm (at 1500mm high)	0.885m²					✓	✓
60/0	Insulating Glass Units including 11mm Clear or Wired Glass, 12mm steel spacer and 4mm float glass	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/0	11mm Pyroguard® Rapide	1400mm (at 410mm high)	460mm (at 1250mm high)	0.575m²					✓	✓
60/0	12.3mm Pyrobelite® 12	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/0	13mm Pyrodur® 60-20	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/0	14mm Pyranova® 15 S2.1	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1770mm (at 500mm high)	590mm (at 1500mm high)	0.885m²					✓	✓
60/30	15mm Pyrostop® 30-10	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/0	Insulating Glass Units including 15mm Pyrostop® 30-10 and 18mm Pyrostop® 30-20	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓

RF1™

CERTIFIRE APPROVED APPLICATIONS: 60 MINUTE TIMBER SCREENS

Certifire CF5033 Certificate of Approval relates to the following glasses when used in conjunction with RF1™ glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane height	Max. pane width	Max. pane area	Doors				Screens	
60/30	15mm Pyranova® 30 S3.0	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1770mm (at 420mm wide)	590mm (at 1260mm high)	0.885m²					✓	✓
60/30	17.3mm Pyrobel® 16	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/30	18mm Pyrostop® 30-20	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/30	15mm Pyroguard® E130 INT	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/60	23mm Pyroguard® EI60 INT	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/60	26.6mm Pyrobel® 25	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/60	23mm Pyrostop® 60-101	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓
60/60	Insulating Glass Units including 23mm Pyrostop® 60-101	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²					✓	✓
		1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²					✓	✓

Note: CF5033 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 54mm overall leaf thickness. A secondary 2mm thick sodium silicate based intumescent material to the full width of the leaf is required to be used as a lining around the perimeter of apertures.

For screens or partitions, frame members manufacturered from hardwood with a minimum density of 610kg/m³, including 2mm sodium silicate liner. 2mm deep rebate in the bottom of the bead may vary in width depending on glass thickness.

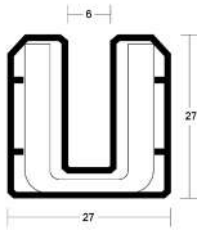
The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

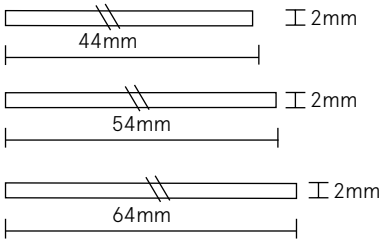
certifire
(CF5033)

SYSTEM-90 PLUS

System-90 PLUS is designed for 60 minute fire resistant doors and screens. Comprises a U shaped PVC profile containing an intumescent core and liner. When using a suitable door and screen construction it provides 90 minute fire resistance. 120 minute fire resistance can only be attained when a suitable door construction is used.



System-90 PLUS



B24402, B25402& B26402
Sodium silicate intumescent liners

SYSTEM SPECIFICATIONS

Test evidence
- Fire: BS 476-22:1987.

Performance
- Provides 60 minutes fire resistance.
- For applications 90 minutes and above please contact our technical department.

Size
- 27mm x 27mm.

Standard lengths
- 2.1m as standard. Other lengths available to special order.

Seal material
- Sodium silicate intumescent within rigid PVC profile. Secondary sodium silicate intumescent material used as lining around the perimeter of the aperture.

Application
- FD60 timber fire doors, FD90 64mm timber doors, FD90 mineral composite doors and timber framed screens.

Finish
- Black, white, light brown and dark brown as standard.
- Other colours available to special order. Minimum order quantities and extended lead times apply.

Glass thickness
- Suitable for use with a variety of 5mm – 7mm fire rated glass types.

Glass type
- Please refer to Certifire certificate CF185 for the full range of glass types.

Sodium silicate intumescent liner
- 44mm door: B24402.
- 54mm door: B25402.
- 64mm door: B26402.
- Must be used with liner and beading to prevent erosion from under the system.

Glazing beads
- Glazing beads are required on both sides of the glass.
- Note: Timber beads must be hardwood only (min density 650kg/m^3) excluding ash.
- Fixing of beads: Screwed using No.8 x 45mm countersunk screws at 150mm nom. centres or metal beading through-bolted.

Accreditation

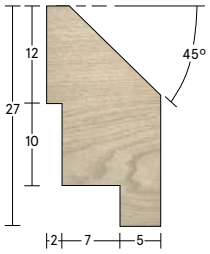
certifire
(CF185)

NBS Source
PARTNER

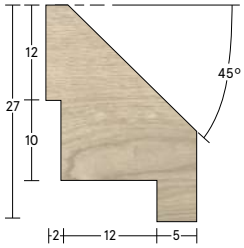
LORIENT
ASSA ABLOY

SYSTEM-90 PLUS

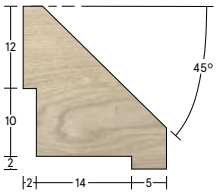
Timber glazing beads:



Glazing bead
For 44mm
thick doors



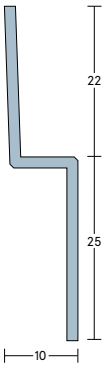
Glazing bead
For 54mm
thick doors



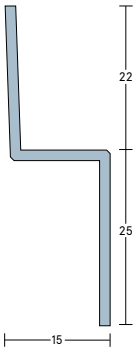
Glazing bead
For unrebated
screen frames

Note: Timber beads must be hardwood only (min density 650kg/m^3) excluding Ash.

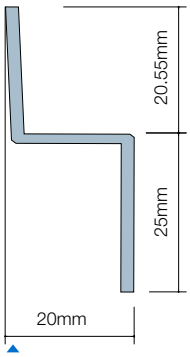
Non-combustible glazing beads:



Glazing bead
For 44mm
thick doors



Glazing bead
For 54mm
thick doors



Glazing bead
For 64mm
thick doors

Non-combustible beads for doors (90 and 120 minute applications).

SYSTEM-90 PLUS

CERTIFIRE APPROVED APPLICATIONS

Certifire CF185 Certificate of Approval relates to the following glasses when used in conjunction with Lorient System-90 PLUS glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane height	Max. pane width	Max. pane area	Doors				Screens	
60/0	5mm FireLite	1600mm (at 200mm wide)	200mm (at 1600mm high)	0.32m²	✓	✓	✓			
		720mm (at 590mm wide)	720mm (at 590mm wide)	0.43m²	✓	✓	✓			
60/0	7mm Pyroshield® 2	1600mm (at 200mm wide)	200mm (at 1600mm high)	0.32m²	✓	✓	✓			
		720mm (at 590mm wide)	720mm (at 590mm wide)	0.43m²	✓	✓	✓			
60/0	6mm Pyran-S®	1600mm (at 200mm wide)	200mm (at 1600mm high)	0.32m²	✓	✓	✓			
		720mm (at 590mm wide)	720mm (at 590mm wide)	0.43m²	✓	✓	✓			
60/0	7mm Pyrostem® 2	1300mm (at 626mm wide)	626mm (at 1300mm high)	0.81m²	✓	✓	✓			
60/0	7mm Pyrostem® 2	1400mm (at 300mm wide)	300mm (at 1400mm high)	0.42m²	✓	✓	✓			
90/0	5mm FireLite	600mm (at 600mm wide)	600mm (at 600mm high)	0.36m²	✓	✓	✓			
		1400mm (at 500mm wide)	500mm (at 1400mm high)	0.7m²	✓	✓	✓			
90/0	6mm Pyran-S®	600mm (at 600mm wide)	600mm (at 600mm high)	0.36m²	✓	✓	✓			
		1400mm (at 500mm wide)	500mm (at 1400mm high)	0.7m²	✓	✓	✓			
90/0*	5mm Firelite®	500mm (at 400mm wide)	400mm (at 500mm high)	0.2m²	✓	✓	✓			
		1600mm (at 200mm wide)	200mm (at 1600mm high)	0.32m²	✓	✓	✓			
90/0*	6mm Pyran-S®	500mm (at 400mm wide)	400mm (at 500mm high)	0.2m²	✓	✓	✓			
		1600mm (at 200mm wide)	200mm (at 1600mm high)	0.32m²	✓	✓	✓			
120/0	5mm FireLite	500mm (at 400mm wide)	400mm (at 500mm high)	0.2m²	✓	✓	✓			
120/0	6mm Pyran-S®	500mm (at 400mm wide)	400mm (at 500mm high)	0.2m²	✓	✓	✓			

Note: CF185 relates to System-90 PLUS applied to minimum 64mm thick timber based door leaves for 90 minutes integrity and composite mineral based door leaves for 90 and 120 minutes integrity. For screens or partitions, frame members to be of minimum cross-section 94mm x 44mm in hardwood of minimum density 650 kg/m³. Where alternative timbers are to be used, other hardwoods of the same density or higher may be used with the exception of Ash.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

certifire
(CF5033)

LORIENT
ASSA ABLOY

SYSTEM-90 PLUS

CERTIFIRE APPROVED APPLICATIONS

Certifire CF185 Certificate of Approval relates to the following glasses when used in conjunction with Lorient System-90 PLUS glazing system at the maximum sizes shown below:

Protection Integrity / Insulation (minutes)	Glass types	Max. pane dimension (mm) at any aspect ratio less than 1:1	Max pane dimension (mm) at an aspect ratio of 1:1	Max. pane area	Doors				Screens	
60/0	7mm Pyroshield® 2	1000mm (at 1000mm wide)	1000mm (at 1000mm high)	1.00m²					✓	✓
60/0	5mm FireLite	2420mm or 1077mm	1460mm (at 1460mm high)	2.15m²					✓	✓
60/0	6mm Pyran-S®	2420mm or 1077mm	1460mm (at 1460mm high)	2.15m²					✓	✓

Note: CF185 relates to System-90 PLUS. For screens or partitions, frame members to be of minimum cross-section 94mm x 44mm in hardwood of minimum density 650 kg/m³. Where alternative timbers are to be used, other hardwoods of the same density or higher may be used with the exception of Ash.

certifire (CF5033)

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

APPLICATION DETAILS

The following pages show the levels of protection provided by our fire resistant glazing systems when used in doors and screens, and with different shaped and sized glazed apertures.

FIRE RESISTANT GLAZING SYSTEMS

			Doors				Screens	
Protection		**System**						
FR30		System-36/6 PLUS	Page 31	Page 31	Page 31	Page 33	Page 39	Page 39
FR30		System-36/7 PLUS	Page 31	Page 31	Page 31	Page 33	Page 39	Page 39
FR30		System-36/10 PLUS	Page 32	Page 32	Page 32	-	Page 39	Page 39
FR30		System-36/15 PLUS	Page 32	Page 32	Page 32	-	Page 39	Page 39
FR30		FF1	Page 32	Page 32	Page 32	-	-	-
FR60		System-36/15 PLUS	Page 35	-	-	-	Page 40	Page 40
FR60		System-90 PLUS	Page 35	-	-	-	Page 40	Page 40
FR60		System-36/23 PLUS	-	-	-	-	Page 41	Page 41
FR60		RF1™	Page 34	-	-	-	Page 42	Page 42
FR90		System-90 PLUS	Page 36	-	-	-	-	-
FR120		System-90 PLUS	Page 37	-	-	-	-	-

ICONS EXPLAINED

- Door leaf with a single rectilinear glazed aperture
- Door leaf with two rectilinear apertures including 2XGG joinery doors
- Door leaf with a single circular aperture
- Door leaf with a long vision panel
- Glazed screen or partition
- Glazed screen with mullions and transoms

Note: The maximum glass sizes shown on the following pages relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure.

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DOORS

FD30 TIMBER FIRE DOORS | 44MM | SINGLE OR DOUBLE LEAF DOORS

1. System-36/6 PLUS
2. LG1321 glazing beads
3. 6mm Pyrotuf®

System	Integrity/ insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
System-36/6 PLUS	30/0	5mm FireLite	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	CF5060
System-36/6 PLUS	30/0	6mm Pyrotuf®	1300mm (at 460mm wide)	506mm (at 1180mm high)	0.598m²	CF5060
System-36/6 PLUS	30/0	6mm Pyran-S®	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	CF5060
System-36/6 PLUS	30/0	6mm Pyrocet®	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	CF5060
System-36/6 PLUS	30/0	7mm Pyroshield® 2	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	CF5060
System-36/7 PLUS	30/0	7.2mm Pyroguard® C730	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	CF5060
System-36/7 PLUS	30/0	7mm Pyrostem® 2	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	CF5060
System-36/7 PLUS	30/0	7mm Pyranova® S3.0	1550mm (at 500mm wide)	517mm (at 1500mm high)	0.775m²	CF5060
System-36/7 PLUS	30/0	7mm Pyrobelite®	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	CF5060
System-36/7 PLUS	30/0	7.5mm Pyrodur® Plus	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	CF5060
System-36/7 PLUS	30/0	8mm Pyran-S®	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	CF5060

Note: CF5060 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 40mm overall leaf thickness.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence. Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

DOORS

FD30 TIMBER FIRE DOORS | 44MM | SINGLE OR DOUBLE LEAF DOORS

1. System 36/15 PLUS
2. LG1721 glazing beads
3. 15mm Pyrostop®

System	Integrity/ insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
System-36/10 PLUS	30/0	10mm Pyran-S®	1482mm (at 460mm wide)	580mm (at 1180mm high)	0.688m²	CF5060
System-36/10 PLUS	30/0	10mm Pyrodur®	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	CF5060
System-36/10 PLUS	30/0	11mm Pyroguard® EI30 INT	1353mm (at 700mm wide)	870mm (at 1100mm high)	0.95m²	CF5060
System-36/10 PLUS	30/0	11mm Pyranova® 15 S2.0	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	CF5060
System-36/15 PLUS	30/30	15mm Pyrostop®	1790mm (at 620mm wide)	630mm (at 1760mm high)	1.11m²	CF5060
System-36/15 PLUS	30/30	Pyranova® 30 S3.0	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	CF5060
System-36/15 PLUS	30/30	15mm Pyroguard® EI30 INT	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	CF5060
System-36/15 PLUS	30/30	15mm Pyranova® 30 S3.0	1875mm (at 500mm wide)	625mm (at 1500mm high)	0.94m²	CF5060
System-36/15 PLUS	30/30	17.3mm Pyrobel® 16	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	CF5060

Note: CF5060 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 40mm overall leaf thickness.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

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DOORS

FD30 TIMBER FIRE DOORS | 44MM | SINGLE OR DOUBLE LEAF DOORS

1. FF1
2. LG1522 glazing beads
3. 7mm Pyrodur® Plus

System	Integrity/ insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
FF1	30/0	5mm FireLite	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	CF327
FF1	30/0	6mm Pyran-S®	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	CF327
FF1	30/0	6mm Pyroshield® Safety	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	CF327
FF1	30/0	6mm Pyrotech™ 630	1750mm (at 450mm width)	560mm (at 1400mm height)	0.78m²	CF327
FF1	30/0	7mm Pyrostem®	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	CF327
FF1	30/0	7mm Pyrobelite®	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	CF327
FF1	30/0	7mm Pyrodur® Plus	875mm (at 750mm wide)	750mm (at 875mm high)	0.66m²	CF327
FF1	30/0	7.2mm Pyroguard® C730	1236mm (at 570mm wide)	750mm (at 940mm wide)	0.71m²	CF327

Note: CF327 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 40mm overall leaf thickness.

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DOORS

FD60 TIMBER FIRE DOORS | 54MM | SINGLE OR DOUBLE LEAF DOORS

1. *RF1™*
2. *B25402 intumescent liner*
3. *RG2704 glazing beads*
4. *7mm Pyroshield® 2*

System	Integrity/ insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
RF1™ with 2mm intumescent liner	60/30	15mm Pyroguard® EI30 INT	1440mm (at 510mm wide)	540mm (at 1370mm high)	0.65m²	CF5033
RF1™ with 2mm intumescent liner	60/0	5mm FireLite 7mm Pyroshield® 2 Pyran-S® (6mm, 8mm, 10mm, 12mm) 7mm Pyrostem® 12mm Pyrobelite® 13mm Pyrodur® 60-20	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™ with 2mm intumescent liner	60/0	11mm Pyranova® 15 S2.0	1770mm (at 420mm wide)	590mm (at 1260mm high)	0.885m²	CF5033
RF1™ with 2mm intumescent liner	60/0	11mm Pyroguard® Rapide	1400mm (at 530mm wide)	460mm (at 1610mm high)	0.575m²	CF5033
RF1™ with 2mm intumescent liner	60/0	14mm Pyranova® 15 S2.1	1770mm (at 420mm wide)	590mm (at 1260mm high)	0.885m²	CF5033
RF1™ with 2mm intumescent liner	60/30	15mm Pyrostop® 30-10	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™ with 2mm intumescent liner	60/30	15mm Pyranova® 30 S3.0	1770mm (at 420mm wide)	590mm (at 1260mm high)	0.885m²	CF5033
RF1™ with 2mm intumescent liner	60/30	17.3mm Pyrobel® 16	1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033

Note: CF5033 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 54mm overall leaf thickness. A secondary 2mm thick sodium silicate based intumescent material to the full width of the leaf is required to be used as a lining around the perimeter of the apertures.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

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DOORS

FD60 TIMBER FIRE DOORS | 54MM | SINGLE OR DOUBLE LEAF DOORS

1. System-36/15 PLUS
2. LG1721 glazing beads
3. 7mm Pyroshield® 2

System	Integrity/ insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
System-36/15 PLUS	60/30	15mm Pyrostop®	1790mm (at 620mm wide)	630mm (at 1760mm high)	1.11m²	CF5060
System-36/15 PLUS	60/30	15mm Pyranova® 30 S3.0	1830mm (at 500mm wide)	610mm (at 1500mm high)	0.92m²	CF5060
System-36/15 PLUS	60/30	17.3mm Pyrobel® 16	1800mm (at 600mm wide)	600mm (at 1800mm high)	1.08m²	CF5060
System-90 PLUS with 2mm intumescent liner	60/0	5mm FireLite	720mm (at 590mm wide)	720mm (at 590mm high)	0.43m²	CF185
			1600mm (at 200mm wide)	200mm (at 1600mm high)	0.32m²	CF185
System-90 PLUS with 2mm intumescent liner	60/0	7mm Pyroshield® 2	720mm (at 590mm wide)	720mm (at 590mm high)	0.43m²	CF185
			1600mm (at 200mm wide)	200mm (at 1600mm high)	0.32m²	CF185
System-90 PLUS with 2mm intumescent liner	60/0	6mm Pyran-S®	720mm (at 590mm wide)	720mm (at 590mm high)	0.43m²	CF185
			1600mm (at 200mm wide)	200mm (at 1600mm high)	0.32m²	CF185
System-90 PLUS with 2mm intumescent liner	60/0	7mm Pyrostem® 2	1300mm (at 626mm wide)	626mm (at 1300mm high)	0.81m²	CF581A
			1400mm (at 300mm wide)	300mm (at 1400mm high)	0.42m²	CF581A

Note: CF5033 relates to timber based door leaf constructions consisting of timber faces coupled with timber or other cellulosic cores of not less than 54mm overall leaf thickness. A secondary 2mm thick sodium silicate based intumescent material to the full width of the leaf is required to be used as a lining around the perimeter of the apertures.

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DOORS

FD90 MINERAL COMPOSITE DOOR | 54MM | SINGLE OR DOUBLE LEAF DOORS

1. System-90 PLUS
2. B25402 intumescent liner
3. LG4715
4. 6mm Pyran-S®

System	Integrity/ Insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
System-90 PLUS with 2mm intumescent liner	90/0	5mm FireLite	500mm (at 400mm wide)	400mm (at 500mm high)	0.2m²	CF185
			1600mm (at 200mm wide)	200mm (at 1600mm high)	0.32m²	CF185
System-90 PLUS with 2mm intumescent liner	90/0	6mm Pyran-S®	500mm (at 400mm wide)	400mm (at 500mm high)	0.2m²	CF185
			1600mm (at 200mm wide)	200mm (at 1600mm high)	0.32m²	CF185

Note: Only valid when used with door components made from suitable high density mineral composite material together with steel glazing beads

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

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DOORS

FD120 MINERAL COMPOSITE DOOR | 54MM | SINGLE OR DOUBLE LEAF DOORS

1. System-90 PLUS
2. B25402 intumescent liner
3. LG4715
4. 6mm Pyran-S®

System	Integrity/ Insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
System-90 PLUS with 2mm intumescent liner	120/0	5mm FireLite	500mm (at 400mm wide)	400mm (at 500mm high)	0.2m²	CF185
System-90 PLUS with 2mm intumescent liner	120/0	6mm Pyran-S®	500mm (at 400mm wide)	400mm (at 500mm high)	0.2m²	CF185

Note: Only valid when used with door components made from suitable high density mineral composite material together with steel glazing beads

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

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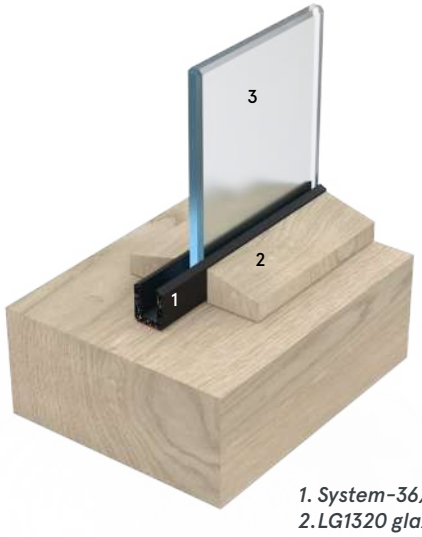
SCREENS OR PARTITIONS

TIMBER SCREENS | HARDWOOD FRAMED SCREENS |
MULTI-PANED ASSEMBLIES WITH SHARED MULLIONS
+ TRANSOMS + SIDELIGHTS/OVERPANELS TO DOORSETS



1. System-36/6 PLUS
2. LG1320 glazing beads
3. 5mm Pyrocet®

System	Integrity/ insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
System-36/6 PLUS	30/0	5mm Pyrocet®	1732mm (at 660mm wide)	829mm (at 1350mm high)	1.15m²	CF5060
System-36/6 PLUS	30/0	5mm FireLite 7mm Pyroshield® 2 6mm Pyran-S®	2530mm (at 920mm wide)	1019mm (at 2300mm high)	2.34m²	CF5060
System-36/7 PLUS	30/0	7.2mm Pyrogua'd® C730	2300mm (at 926mm wide)	926mm (at 2300mm high)	2.13m²	CF5060
System-36/7 PLUS	30/0	7.5mm Pyrodur® Plus	2320mm (at 1080mm wide)	1082mm (at 2310mm high)	2.50m²	CF5060
System-36/7 PLUS	30/0	7mm Pyrostem® 8mm Pyran-S®	2530mm (at 920mm wide)	1019mm (at 2300mm high)	2.34m²	CF5060
System-36/7 PLUS	30/0	7mm Pyrobelite®	2875mm (at 2875mm wide)	1157mm (at 2300mm high)	2.66m²	CF5060
System-36/10 PLUS	30/0	10mm Pyrodur®	2000mm (at 950mm wide)	1378mm (at 1350mm high)	1.90m²	CF5060
System-36/10 PLUS	30/0	11mm Pyroguard® Rapide	2300mm (at 926mm wide)	926mm (at 2300mm high)	2.13m²	CF5060
System-36/10 PLUS	30/0	10mm Pyran-S®	2530mm (at 920mm wide)	1019mm (at 2300mm high)	2.34m²	CF5060
System-36/15 PLUS	30/30	15mm Pyrostop® 17.3mm Pyrobel® 16 Pyranova® 30 S3.0 15mm Pyroguard® EI30 INT	2000mm (at 950mm wide)	1378mm (at 1350mm high)	1.90m²	CF5060

Note: CF5060 applies to softwood and/or hardwood framed screens (specification subject to fire performance and detailed in the Certifire Certificate), including multi-paned assemblies with shared mullions and transoms.

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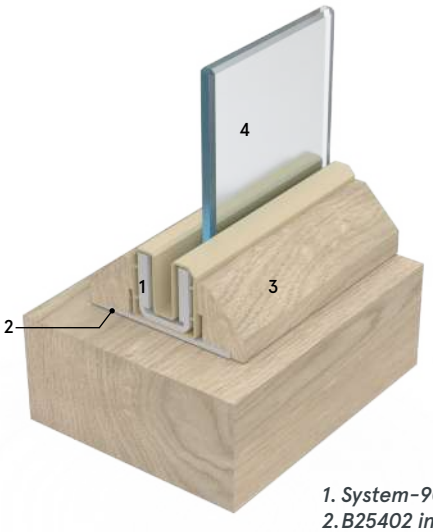
SCREENS OR PARTITIONS

TIMBER FRAMED SCREENS



1. System-90 PLUS
2. B25402 intumescent liner
3. LG2220
4. 7mm Pyroshield® 2

System	Integrity/ insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
System-36/15 PLUS	30/30	15mm Pyrostop® 17.3mm Pyrobel® 16	2000mm (at 950mm wide)	1378mm (at 1350mm high)	1.90m²	CF5060
System-36/23 PLUS	30/30	23mm Pyrostop® 23mm Pyranova® 60 S3.0 23mm Pyroguard® EI60 INT	2000mm (at 900mm wide)	1342mm (at 1300mm high)	1.80m²	CF5060
System-90 PLUS with 2mm intumescent liner	60/0	7mm Pyroshield® 2	1000mm (at 1000mm wide)	1000mm (at 1000mm high)	1.00m²	CF185
System-90 PLUS with 2mm intumescent liner	60/0	5mm FireLite 6mm Pyran-S®	2420mm (at 880mm wide)	1460mm (at 1440mm high)	2.15m²	CF185

Note: CF5060 applies to softwood and/or hardwood framed screens (specification subject to fire performance and detailed in the Certifire Certificate), including multi-paned assemblies with shared mullions and transoms.

CF185 applies to softwood and/or hardwood framed screens (specification subject to fire performance and detailed in the Certifire Certificate), including multi-paned assemblies with shared mullions and transoms.

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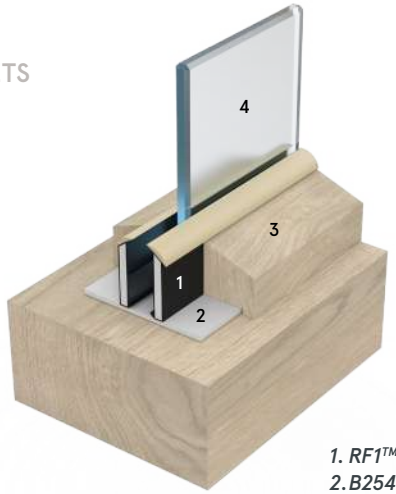
SCREENS OR PARTITIONS

TIMBER SCREENS | HARDWOOD FRAMED SCREENS |
MULTI-PANED ASSEMBLIES WITH SHARED MULLIONS
+ TRANSOMS + SIDELIGHTS/OVERPANELS TO DOORSETS



1. RF1™
2. B25402 intumescent liner
3. RG2704
4. 6mm Pyran-S®

System	Integrity/ insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
RF1™	60/0	7mm Pyroshield® 2	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/0	5mm Firelite®	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/0	Pyran-S® (6mm, 8mm, 10mm, 12mm)	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/0	7mm Pyrostem® 2	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/0	13mm Pyrodur® 60-20	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/30	15mm Pyrostop® 30-10	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/0	11mm Pyroguard® Rapide	1400mm (at 410mm wide)	460mm (at 1250mm high)	0.575m²	CF5033

Note: CF5033 applies to hardwood framed screens, including multi-paned assemblies with shared mullions and transoms and sidelights/overpanels to doorsets.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

SCREENS OR PARTITIONS

TIMBER SCREENS | HARDWOOD FRAMED SCREENS |
MULTI-PANED ASSEMBLIES WITH SHARED MULLIONS
+ TRANSOMS + SIDELIGHTS/OVERPANELS TO DOORSETS

1. RF1™
2. B25402 intumescent liner
3. RG2704
4. 15mm Pyrostop® 30-10

System	Integrity/ insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
RF1™	60/0	Pyranova® 15-S2.0/S2.1	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1770mm (at 500mm wide)	590mm (at 1500mm high)	0.885m²	CF5033
RF1™	60/30	Pyranova® 30-S3.0	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1770mm (at 500mm wide)	590mm (at 1500mm high)	0.885m²	CF5033
RF1™	60/30	18mm Pyrostop® 30-20	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/30	Insulating Glass Units including 15mm Pyrostop® 30-10 and 18mm Pyrostop® 30-20	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/60	23mm Pyrostop® 60-101	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/60	Insulating Glass Units including 23mm Pyrostop® 60-101	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/0	12mm Pyrobelite®	1400mm (at 410mm wide)	460mm (at 1250mm high)	0.575m²	CF5033

Note: CF5033 applies to hardwood framed screens, including multi-paned assemblies with shared mullions and transoms and sidelights/overpanels to doorsets.

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SCREENS OR PARTITIONS

TIMBER SCREENS | HARDWOOD FRAMED SCREENS |
MULTI-PANED ASSEMBLIES WITH SHARED MULLIONS
+ TRANSOMS + SIDELIGHTS/OVERPANELS TO DOORSETS

1. RF1™
2. B25402 intumescent liner
3. RG2704
4. 15mm Pyrostop® 30-10

System	Integrity/ insulation	Glass types	Max. pane height	Max. pane width	Max. pane area	Certifire
RF1™	60/30	16mm Pyrobel®	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1770mm (at 500mm wide)	590mm (at 1500mm high)	0.885m²	CF5033
RF1™	60/60	25mm Pyrobel®	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1770mm (at 500mm wide)	590mm (at 1500mm high)	0.885m²	CF5033
RF1™	60/0	Insulating Glass Units including 11mm Clear or Wired Glass, 12mm steel spacer and 4mm float glass	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/30	15mm Pyroguard® EI30 INT	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033
RF1™	60/60	23mm Pyroguard® EI60 INT	500mm (at 1000mm wide)	1000mm (at 500mm high)	0.5m²	CF5033
			1488mm (at 500mm wide)	620mm (at 1200mm high)	0.75m²	CF5033

Note: CF5033 applies to hardwood framed screens, including multi-paned assemblies with shared mullions and transoms and sidelights/overpanels to doorsets.

The maximum glass sizes shown relate to our test evidence. However, the test evidence for the door leaf being used will show the maximum glass size possible, and this may be smaller than the dimensions given in this brochure. The shape and number of apertures will be dependant on the door manufacturers test evidence.

Please always refer to the test evidence for the door leaf being used, and in case of any query please contact our Technical Services team on 01626 834252.

TESTING + TECHNICAL SERVICES

We've built our reputation on the quality and dependability of our products, and our investment in R&D has played a pivotal role in keeping our products at the forefront of our industry. Our dedicated Testing and Technical Services division has established itself as an important facility for manufacturers and designers of doors, windows, glazing systems and hardware, to name just a few.

TESTING SERVICES

Whether you're investigating new materials, or developing new or existing products, right through to durability testing and benchmarking performance – our team of experts will support you throughout the process. We are able to offer:

- Fire testing (indicative);
- ATG commissioning and maintenance for fire & smoke resisting air transfer grilles;
- Mechanical cycling;
- Environmental chamber analysis;
- Attendance at external fire tests;
- Consultancy services.

Lorient Indicative Furnace

ADDITIONAL INFORMATION

TECHNICAL REFERENCES

Lorient is quality assured under the disciplines of BS EN ISO 9001:2015.

Certification to this standard is an assurance that we conduct our business to the complete satisfaction of our customers with regard to design solutions, manufacturing consistency and management procedures.

As a result, this internationally recognised standard for quality management generates customer confidence. Regular audits of our company procedures are undertaken by qualified BSI staff to ensure ongoing compliance with all aspects of the standard.

BS EN ISO 9001:2015 Certificate No. Q6104

Lorient has attained the BS EN ISO 14001:2015 certificate for environmental management, making us the first seal manufacturer to have achieved this important award. This internationally recognised standard shows that we have demonstrated our commitment to responsible environmental behaviour, including prevention of pollution, control and reduction of waste, and ongoing monitoring and improvement of our environmental performance. Achieving the ISO 14001 certificate is just one part of our ongoing commitment to operate in a sustainable way.

BS EN ISO 14001:2015 Certificate No. EMS 541906

FITTING INSTRUCTIONS

Comprehensive fitting instructions are available to download from our website **www.lorientuk.com**

MAINTENANCE

It's recommended that all fire resistant glazing is inspected and cleaned once a month. The retaining channel or gasket should be cleaned with a damp cloth. Any cracked glass should be immediately replaced with a matching pane. The Lorient retention system will normally be re-useable.

Please Note: Recommendations as to methods, use of materials and construction details are based on the experience and knowledge of Lorient and are given in good faith as a general guide and a service to designers, contractors and manufacturers.

HANDLING + STORAGE

Our glazing seals should be stored flat in a clean, dry, dust-free area away from heat.

Flexible glazing seals: Storage temperature of between 5°C and 40°C @ any humidity.

Rigid glazing seals: Storage temperature of between 5°C and 30°C, @ normal humidity.

Our glazing products are classed as articles under REACH Regulation, hence don't require SDS. However, a Product Safety Data Sheet (PSDS) can be supplied on request, especially if rigid product need to be length adjusted.

No special precautions are required when handling our flexible glazing seals but they should always be treated with care and not bent or twisted.

The Sodium silicate insert within rigid glazing seals is hydroscopic, and should be handled with gloves. Please refer to PSDS for further information.

GUARANTEE OF ORIGIN

It's important to always use a product that can be clearly identified. All our glazing systems carry identification (where possible).

MADE IN BRITAIN

We are proud to have been granted the prestigious Made in Britain marque for our products, designed and manufactured at our main facility in South West of the UK.

INTELLECTUAL PROPERTY

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We are committed to continually enhancing and improving our product range. We reserve the right to change product specifications from time to time without prior notice. E&OE.

June 2024.

TRADE ASSOCIATIONS

Lorient is a member and active contributor to the following:

CERTIFICATIONS

BBA

BBA approvals provide independent assurance for the designer, specifier and end-user as to the 'fitness for purpose' of building products.

CERTIFIRE

Operated by Exova Warringtonfire, CERTIFIRE is an independent product conformity scheme that requires products to meet the requirements of the tests, to add minimal resistance to opening and closing forces, to prove long term performance under a variety of service conditions, and to be permanently marked for easy identification.

IFC

IFC Certification Ltd is a UKAS approved and internationally recognised provider of third party Certification services – designed to give confidence to specifiers, users, occupiers, owners and enforcement bodies that products have been thoroughly and independently evaluated and will continue to be manufactured to the same specification as originally tested.

UL

UL is a global independent safety science company that tests a diverse range of products; representative samples of a product must be tested and meet UL's stringent requirements to carry the marque. These requirements are based primarily on UL's published and nationally recognised Standards for Safety. Businesses, consumers and regulatory authorities around the world recognise the trusted rigour and technical excellence of UL certifications. Lorient is proud to have achieved the UL Mark on many of its products. These are detailed on individual pages.

CPDs

We offer three fully-accredited CPD seminars. Impartially presented by knowledgeable speakers, the seminars are structured to be technically informative, and provide practical advice.

Performance Door Design: The Basics of Sound Reduction

Effective acoustic containment helps to improve the quality of the built environment, preserving privacy as well as excluding unwanted noise. With changing regulations, it's essential to be informed of the relevant requirements and the implications for door assemblies.

Our acoustic CPD seminar covers:

- the nature of sound, examining airborne transmission of sound;
- regulatory requirements and British Standards that relate to acoustic performance;
- test procedures and interpretation of test reports;
- effective design of door assemblies for acoustic performance, including door construction and the influence of sealing systems;
- design conflicts between acoustic performance, durability and ease of operation of the door;
- independent accreditation.

The Role and Performance of Fire and Smoke-Resisting Door Assemblies

The importance of fire and smoke resisting door assemblies is illustrated by the 216 fire related fatalities and 5,454 casualties in fires (England 2022/23). Apart from the human toll, property losses each year approach £2.52 billion.

Our fire and smoke containment CPD seminar covers:

- hard facts concerning deaths, injuries and property damage caused by fire and smoke;
- regulatory requirements for fire and smoke resisting door assemblies;
- the nature and behaviour of smoke;
- effective design of door assemblies for smoke containment, including the threshold gap;
- design conflicts between fire containment, smoke containment, durability and ease of operation of the door;
- independent accreditation.

The Regulatory Reform (Fire Safety) Order 2005 and its implications for fire doors

The RRO consolidated 70 pieces of legislation; shifted responsibility for fire safety management; abolished the Fire Safety Certificate; established the Fire Risk Assessment and created major change in legal liability.

Our RRO CPD seminar covers:

- an overview of the RRO;
- product solutions;
- the dangers of fire and smoke;
- the importance of fire doors – including installation and maintenance.

Our CPD materials have been independently verified and certified by the RIBA as CPD approved. A certificate for 1 hour's CPD will be provided, which contributes to Continuing Professional Development requirements.

If you are interested in booking a seminar, please contact our Marketing department or email **cpd@lorientuk.com**

AIR TRANSFER GRILLE CPD WEBINAR

We're delighted to offer a CPD entitled: The Specification + Design of Air Transfer Grilles / Dampers.

This is a fantastic addition to our growing collection of CPD seminars and explores:

- the latest test standards and building regulations;
- the major difference between intumescent air transfer grilles and dampers;
- the importance of correct specification, installation and maintenance;
- plus it offers practical solutions to fire and smoke containment over a range of applications.

All of our CPD seminars are available to view virtually, please visit **www.lorientuk.com** or email **cpd@lorientuk.com** for more information.

ON-DEMAND WEBINAR

COMPREHENSIVE SUPPORT

As a company we have over 40 years' experience, so our experts are well equipped to listen, help and advise you on your sealing system requirements.

Technical Services

We're happy to provide specialist advice on acoustic, smoke and fire protection for refurbishment and new build projects. If you need assistance, you can call our Technical Services team.

Alternatively, we can arrange a site visit to get a clearer idea of your needs and how we can help you. We also provide copies of test reports and samples where needed; and can give guidance on how best to meet Building Regulations and Standards.

Web Support

Our website features a comprehensive range of supporting documents covering the entire range of products, including installation guides and CAD drawings. All of our brochures and products sheets are also available for download, together with copies of certification and specification texts.

Online Acoustic Search tool

Our Acoustic Search tool on our website gives you quick and easy access to a wide range of tested acoustic sealing systems on a variety of popular door constructions & configurations.

www.lorientuk.com/acousticsearch

The tool allows users to select a specific decibel rating; along with door configuration, fire door rating, doorset type etc to filter the results. The 'Acoustic Search' tool is updated frequently with Lorient's ever-expanding portfolio of test evidence. If you're looking for high performance or specialist applications – please contact us on **+44 (0) 1626 834252**, there may be some additional configurations we haven't yet published.

Customisation

If you have a particular requirement which isn't covered by the applications in this brochure, we may be able to supply an existing non-standard item, or even develop a customised solution for you. Utilising in-house expertise, bespoke products are created to your requirements; from a functional or aesthetic perspective, or both.

Lorient's dedicated Technical Services team supports and works as part of your design team, offering informed product advice and guidance on regulatory requirements and standards.

Call our Technical Services team

+44 (0) 1626 834252

www.lorientuk.com

SEALING SOLUTIONS

Detailed information about our products can be found in the following brochures:

Acoustic Sealing Systems for Door Assemblies

A comprehensive series of acoustic sealing systems for various types of door construction.

Acoustic, Smoke and Fire Seals for Door Assemblies

Our core range of high performance acoustic, smoke and fire seals.

AURA® Architectural Seals

A discerning selection of drop seals, perimeter seals, door bottom seals, threshold plates and ramps - all with strong design accents.

Lorient Architectural Seals

A variety of complementary door sealing systems including perimeter seals, drop seals, threshold plates, door bottom seals etc.

Fire Resistant Door Hardware Protection

Letterplates, door viewers, door edge protectors and intumescent kits that can safely be installed into fire rated doors without compromising the fire/ smoke performance.

Fire Resistant Glazing Systems

Fire resistant glazing systems for doors, screens and partitions.

Fire and Smoke Resistant Air Transfer Grilles

A comprehensive range of intumescent air transfer grilles for doors, walls, ducts, floors and ceilings.

Copies of these brochures are available by calling **+44 (0)1626 834252** or download from our website **www.lorientuk.com**

LORIENT

ASSA ABLOY

TANTNGMS

UK / EUROPE
T: +44 (0) 1626 834252
E: sales@lorientuk.com

AUSTRALIA
T: +61 (0) 3 8574 3888
E: customerservice.au@assaabloy.com

SINGAPORE
T: +65 6880 0000
E: sales.lorient@assaabloy.com

HONG KONG
T: +852 2260 0888
E: sales@lorienthk.com

UAE
T: +971 4 8804888
E: mktg@lorientuk.com

USA
T: +1 859 252 7441
E: info@lorientna.com

For further information about Lorient products please visit:
www.lorientgroup.com

@lorientuk /company/lorient
@lorientuk @lorientuk
@lorientuk @lorientuk

REVISION 2.1