

Blankfort™ 60

Fire Resistance Test Data

Blankfort™ 60 has been tested at Chiltern International Fire Limited to BS 476: Part 22: 1987 in a wide variety of sizes and configurations as follows:

ULSASD: unlatched single acting single door DADD + O/P: double acting double door + overpanel LSASD: Latched single acting door
 ULSASDD: unlatched single acting double door DASD: dougle acting sindle door TT: Test Terminated

Test No.	Configuration	Leaf Size (mm)	Performance (Mins)
RF95119	ULSASD	2440 x 915	73
	ULSASD	2135 x 915	69
BTC 10971F	ULSASD	2440 x 915	64
RF00005	ULSASD	2135 x 915	64
RF00117	ULSASD	2044 x 886	66
RF96073	DADD	2138 x 916	64

Permitted Leaf Sizes and Configurations in Chipboard face

Assessment FEA/F96046 Revision D combines all the above evidence and based on the levels of over-performance achieved in fire testing, permits the following leaf sizes and configurations to be used in FD60/FD60S applications:

ULSASD: unlatched single acting single door DADD + O/P: double acting double door + overpanel LSASD: Latched single acting door
 ULSASDD: unlatched single acting double door DASD: dougle acting sindle door TT: Test Terminated

Configuration	Frame	Max. Leaf sizes (mm)
LSASD	H/wood 70 x 32	2135 x 915
DASD & ULSASD	Ditto	
<i>Intumescent for above: Palusol 100P, Type 617, 500P or Pyroplex 25mm x 4mm to jambs and head centrally fitted or two 15mm x 4mm set 5mm each side of centre</i>		
LSASD	H/wood 70 x 32	From 2440 x 970 To 2571 x 915
DASD & ULSASD	Ditto	From 2440 x 945 To 2521 x 915
<i>Intumescent for above: Palusol 100P, 500P or Pyroplex to head, one 38mm x 4mm, centrally fitted. To jambs, two 15mm x 4mm set 5mm each side of centre</i>		
LSADD	H/wood 70 x 32	From 2138 x 971 To 2259 x 916
DADD & ULSADD	Ditto	From 2138 x 946 To 2209 x 916
<i>Intumescent for above: Palusol 100P, 500P or Pyroplex to head, one 38mm x 4mm, centrally fitted. To jambs and one meeting edge, two 15mm x 4mm set centrally fitted 5mm each side of centre</i>		

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Permitted Leaf Sizes and Configurations in Chipboard face (Continued...)

Configuration	Frame	Max. Leaf sizes (mm)
ULSASD: unlatched single acting single door ULSASDD: unlatched single acting double door	DADD + O/P: double acting double door + overpanel DASD: double acting single door	LSASD: Latched single acting door TT: Test Terminated
LSASD, DASD & ULSASD <i>Intumescent for above: Type 617 to jambs and head, two 15mm x 4mm set 5mm centrally fitted each side of centre</i>	H/wood 70 x 32	2120 x 1026 To 2300 x 915
LSADD, DADD & ULSADD <i>Intumescent for above: Type 617 to jambs and head and one meeting edge, two 15mm x 4mm centrally fitted set 5mm each side of centre</i>	H/wood 70 x 32	From 2120 x 926 To 2255 x 915

Sizes

Blankfort™ 60 is available in the following standard sizes:

- 840mm x 2060mm x 54mm
- 915mm x 2135mm x 54mm
- 915mm x 2440mm x 54mm
- 915mm x 2750mm x 54mm
- 1220mm x 2440mm x 54mm
- 915mm x 3050mm x 54mm

Other sizes and thicknesses are available to special order.

Weight

Blankfort™ 60 with chipboard faces – 28.50 kgm²

Door Frames

Frames should be 640 Kg m³ density or greater hardwood with a minimum section of 70mm x 32mm (with 12mm planted or integral stop in single acting mode).

Intumescent

The following materials are approved for use with Blankfort™ 60 in all configurations and sizes:

- Palusol 100P, available from Lorient Polyproducts or Mann McGowan
- Type 617, available from Lorient Polyproducts
- 500P, available from Mann McGowan or
- Pyroplex, available from Reddiplex
- Hinges, lock forends and keeps, and lock mortises should be protected with 1mm Interdens, 1mm MAP, 1mm Therm-A-Strip or 1mm Pyrostrip 300 intumescent gaskets
- Floorspring top pivots and flush bolts should be protected with 2mm Interdens, 2mm MAP, 2mm Therm-A-Strip or 2mm Therm-A-Flex intumescent gaskets

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Glazing

Up to 1.10 m² of glazing is approved in **Blankfort™ 60** for single or multiple paned form using 10mm Pilkington Pyrodur 60. Up to 0.72 m² of glazing is approved in **Blankfort™ 60** in single or multiple paned form using other listed glasses. No glazing is permitted within 100mm of door edge and a minimum of 80mm left between apertures if multiple glazing.

The following glazing systems are approved:

- Sealmaster – Fireglaze 60
- Intumescent Seals - Therm-A-Glaze 60
- Lorient Polyproducts - System 90+
- Lorient Polyproducts – System 63 (circular apertures only)
- Lorient Polyproducts – System 36/15
- Mann McGowan - Pyroglaze 60

Approved glasses are as follows:

- 6 & 7 Pyroshield - Pilkington Glass Ltd
- 6 Pyran S - Schott Glass Ltd
- 10 Pyrodur (60) - Pilkington Glass Ltd
- 11 Pyroguard - CGI Ltd (limited to 0.52 M²)
- 12 Pyrobelite - AGC Flat Glass Europe
- 14 Swissflam Lite - Vetrotech Saint Gobain Ltd
- 15 Pyrostop - Pilkington Glass Ltd
- 16 Pyrobel - AGC Flat Glass Europe

Alternative glasses are acceptable providing they have demonstrated adequate performance in timber doorsets of comparable construction.

Aperture shape is unrestricted.

Acoustic Performance

When tested to BS EN ISO 140-3 1995, **Blankfort™ 60** doorsets fitted with simple perimeter seals and concealed drop threshold seals, and in fully operational mode achieved:

- Weighted SRI Rw : 35dB in single doors
- Weighted SRI Rw : 36dB in glazed single doors
- Weighted SRI Rw : 35dB in double doors (square edges)

Mechanical Performance

Blankfort™ 60 particleboard-faced doorblanks in single-acting single door, single-acting double door and double-acting single door configurations have been mechanically tested at the laboratories of Chiltern Dynamics to DD171, EN947, EN 948, EN949, EN950, EN1191, and PAS 23 clause 6.3

All configurations achieved **Severe Duty** gradings to BS EN 1192 and DD171

Chiltern Dynamics assessment report Chilt/P06121 applies

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Further Production

Blankfort™ 60 can be cut and machined with standard woodworking tools.

Blankfort™ 60 can be cut in length or in width without invalidating fire test evidence. Simply ensure that a minimum of 100mm of the top rail is retained.

Hardwood lippings with minimum density of 640 Kg/m³ are required on all edges.

Hardwood lippings of 615 kg/m³ are permitted in single leaf configurations in conjunction with 500P intumescent in maximum leaf sizes of 2150mm x 930mm.

Lippings should be applied with Urea Formaldehyde, Cascamite or PU adhesives.

Minimum lipping dimensions are: square edges: 6mm – 18mm thick, rounded edges: 8mm -18mm with maximum of 2mm profiling, rebated edges: not permitted.

Wood veneers and plastic laminates up to 2mm thick can be applied to surfaces of **Blankfort™ 60** with PVA UF or PF adhesives used in accordance with manufacturers recommendations and as appropriate for the materials involved.

Ironmongery

Standard ironmongery components used in fire, acoustic and mechanical testing included the following:

- Royde & Tucker H105 lift off hinges
- Dorma TS83V face-fixed overhead closers
- Geze TS500 floor spring assemblies
- Geze Type B upper pivot
- Geze Type C bottom strap
- Geze stainless steel cover plate
- Tubular and standard 75mm mortise latches with aluminium lever handles
- When using hinges with doors over 2300mm high, 4 hinges must be fitted
- Hinges should be 90-120mm x 30-35mm x 2.5-4mm thick, steel or stainless steel

As a general guide, latches/locks of the following specifications are acceptable:

- **Maximum forend and strike plate dimensions:**
200mm high x 28mm wide x 4mm thick
- **Maximum body dimensions: 25mm thick x 100mm wide x 165mm high**
- **Materials: No combustible materials and all parts essential to the locking/latching action must be steel**

Concealed cableways for electro-magnetic closing/latching mechanisms are permitted in one of the following ways:

- An 8mm diameter hole centrally drilled in the core extending across the width of the leaf.
- A central 8mm x 8mm groove rebated into the edges of the core, with the base of the groove lined with 2mm Interdens intumescent gasket. The groove must then be capped by a hardwood lipping glued in place.

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Smoke Control

When a smoke control function is required, the doorset must be fitted with a smoke seal that has been tested in accordance with BS 476: Part 31: Section 31.1 and demonstrated to maintain a leakage rate below 3m³/m/h when tested at 25 Pa.

Ancillaries

A variety of additional components are also permitted to be used with **Blankfort™ 60** doors as follows:

- Letter plate systems tested to BS 476: Part 22: 1987 or BSEN 1634-1 2000 in timber based doorsets and have achieved 60 minutes integrity
- Face-fixed panic ironmongery
- Brass and steel door viewers no more than 15mm in diameter with glass lenses
- Automatic threshold seals such as Lorient IS8010si, Raven RP8 or Athmer Schall-Ex Duo L-15
- Silicon based flame retardant acoustic, weather and dust seals such as Lorient IS1212 and IS1511, IS7025 and IS7060 are permitted providing they do not interfere with the function of the intumescent seals or self closing action of the doors
- Face fixed ironmongery (kick, push plates and pull handles not exceeding 20% of the leaf area) may be fitted
- Bolt through handles may be fitted providing the hole is line with Interdens intumescent gaskets

Storage

Blankfort™ 60 should be stored flat on at least three equally spaced bearers and in a dry and controlled environment similar to that intended for further production or use.

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Installation

Guidance for fixing doorsets and methods of providing adequate fire resistant sealing to the structural openings is documented in BS8214: 1990 "Code of practice for fire door assemblies with non metallic leaves".

Frame jambs must be fixed to an adequate supporting construction using steel fixings at 500mm maximum centres. The fixings must be of the type suitable for the supporting construction and must penetrate to a depth of at least 50mm. Whilst it is not essential to fix the frame head, packers must be inserted.

As a general guide, gaps should not exceed 4mm.

Options available

- Special sizes and thicknesses
- FSC and UFF components
- Urea-formaldehyde free
- Pre-lipped Blank
- Pre-veneered blank
- Cut-to-size blank

Manufacturer

Blankfort™ 60 door blanks are made in Quebec, Canada, by Baillargeon Doors Inc. Baillargeon is well known in Canada as a producer of high quality architectural and commercial doors as well as a doorblank manufacturer for specialists in the industrial and highly specialised timber door industry.

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