

Blankfort™ 60+ MDF

Fire Resistance Test Data

Blankfort 60+ MDF 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:** double acting single door **TT:** Test Terminated

Test No.	Configuration	Leaf Size	Performance (Mins)
RF00122	ULSASD	2440 x 915	63
		2135 x 915	66 (glazing) 70 perimeter
RF01052/A	ULSADD + O/P	2396 x 850	63
RF08080	ULSADD	2750 x 915	65

Blankfort 60+ MDF has also been tested at Chiltern International Fire Limited to BSEN 1634-1 2000 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:** double acting single door **TT:** Test Terminated

Test No.	Configuration	Leaf Size	Performance (Mins)
RF08081	ULSASD	2135 x 917	56 (perimeter failure) No failure of glazing at 61

Blankfort™ 60+ MDF

Permitted Leaf Sizes and Configurations

Assessment FEA/F96046 Revision E 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:

Configuration	Frame	Max. Leaf sizes (mm)
LSASD	H/wood 70 x 32	From 2135 x 1016 To 2363 x 915
DASD & ULSASD	Ditto	From 2135 x 991 To 2313 x 915
<i>Intumescent for above: two 15mm x 4mm seals 500P, set 5mm each side of centre on jambs and head</i>		
LSASD	H/wood 70 x 32	From 2396 x 1046 To 2806 x 850
DASD & ULSASD	Ditto	From 2396 x 1021 To 2756 x 850
<i>Intumescent for above: To head, one 38mm x 4mm 500P, centrally fitted. To jambs, two 15mm x 4mm 500P set 5mm each side of centre</i>		
LSASD, DASD & ULSASD	H/wood 70 x 32	From 2120 x 1026 To 2300 x 915
<i>Intumescent for above: Type 617 to jambs and head and two 15mm x 4mm set 5mm each side of centre</i>		
LSADD, DADD & ULSADD	H/wood 70 x 32	From 2120 x 926 To 2255 x 915
<i>Intumescent for above: Type 617 to jambs and head and one meeting edge, two 15mm x 4mm centrally fitted 5mm each side of centre</i>		
LSASD + O/P	H/wood 70 x 32	From 2396 x 996 To 2706 x 850
ULSASD + O/P	Ditto	From 2396 x 971 To 2656 x 850
<i>Overpanels of up to 2000mm high are permitted in addition to the leaf sizes shown. Intumescent for above: To frame head, two 15mm x 4mm 500P set 5mm each side of centre. To jambs, two 15mm x 4mm 500P set 5mm each side of centre. To bottom edge of overpanel or top of door: Square edges: one 38mm x 4mm 500P centrally fitted. Rebated edges: one 20mm x 4mm 500P centrally fitted in rebate overpanel and door</i>		
LSADD	H/wood 70 x 32	From 2396 x 946 To 2606 x 850
DADD & ULSADD	Ditto	From 2396 x 921 To 2556 x 850

Blankfort™ 60+ MDF

Permitted Leaf Sizes and Configurations (Continued)

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)
LSADD + O/P	H/wood 70 x 32 Or 70 x 40 for leaves over 2300 x 1000	From 2396 x 896 To 2506 x 850
DADD & ULSADD + O/P	Ditto	From 2396 x 871 To 2456 x 850

Overpanels of up to 1500mm high are permitted in addition to the leaf sizes shown. Intumescent for above: To frame head, two 15mm x 4mm 500P set 5mm each side of centre. To jambs, two 15mm x 4mm 500P set 5mm each side of centre. To bottom edge of overpanel or top of door: Square edges: one 38mm x 4mm 500P centrally fitted. Rebated edges: one 20mm x 4mm 500P, centrally fitted in rebate of overpanel and door

Enhanced Construction Scope Top and Bottom Rails

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	From 2750 x 1028 To 3015 x 915
DASD & ULSASD	Ditto	From 2750 x 1003 To 2965 x 915
<i>Intumescent for above: To jambs and head, two 15mm x 4mm Type 617 set 5mm each side of centre, one 15mm x 4mm Type 617 centrally fitted in door head</i>		
LSADD	H/wood 70 x 32	From 2750 x 978 To 2915 x 915
DADD & ULSADD	Ditto	From 2750 x 953 To 2865 x 915
<i>Intumescent for above: To jambs and head, two 15mm x 4mm Type 617 set 5mm each side of centre, one 15mm x 4mm Type 617 centrally fitted in door head. Square meeting edges, two 15mm x 4mm Type 617 set 5mm each side of centre to one edge and one 15mm x 4mm Type 617 centrally fitted in opposite edge</i>		

Sizes

Blankfort™ 60+ MDF 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+ MDF - 28.50 kgm²

Blankfort™ 60+ MDF

Door Frames

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

Intumescent

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

- 500P, available from Mann McGowan
- Type 617 available from Lorient Polyproducts
- 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

Glazing

Up to 1.10m² of glazing is approved in **Blankfort 60+ MDF** in single or multiple paned form using 10mm Pilkington Pyrodur 60. Up to 0.72m² of glazing is approved in **Blankfort 60+ MDF** in single or multiple paned form using other listed glasses. No glazing is permitted within 100mm of the 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 0.52m²)
- 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

Blankfort™ 60+ MDF

Acoustic Performance

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

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

Mechanical Performance

Blankfort™ 60+ MDF 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, EN948, 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.

Further Production

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

Blankfort™ 60+ MDF 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 to all edges.

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

Rebated edges are permitted between doors and overpanels.

Wood veneers and plastic laminates up to 2mm thick can be applied to surfaces of **Blankfort™ 60+ MDF** with PVA UF or PF adhesives used in accordance with the manufacturer's 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
- A minimum of 3 hinges should be used but with doors over 2300 high, 4 hinges must be fitted
- Hinges should be 90-120mm x 30-35mm x 2.5-4mm thick, steel or stainless steel

Blankfort™ 60+ MDF

Ironmongery (Continued...)

As a general guide, latches/locks of the following specification 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 or brass*

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 10mm x 2mm Interdens intumescent gasket. The groove must then be capped by a hardwood lipping glued in place.

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+ MDF** doors as follows:

- Letter plate systems tested to BS 476: Part 22 1987 in timber-based doorsets and having achieved 60 minutes integrity
- Face-fixed panic ironmongery
- Brass and steel door viewers no more than 15mm in diameter
- Automatic threshold seals such as Lorient IS8010si, Raven RP8 and Schall-Ex Duo L-15
- 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+ MDF 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.

Blankfort™ 60+ MDF

Installation

Guidance for fixing doosets 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 between doors and frames and at meeting edges should not exceed 4mm (apart from threshold which may have up to 10mm between door bottom and top of floor covering).

Options available

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

Manufacturer

Blankfort Inc.

15 Boul. Chartier

St-Ephrem, QC

Canada GOM 1RO

Tel.: + 418-484-6980

info@blankfort.net

www.blankfortuk.com

UK Agent & Technical Support

Williamson Associates

2 Old Hall Drive

Dersingham

Norfolk

PE 31 6JT

Tel.: +44 1485 540349

Fax: +44 1485 543141

bob@blankfort.co.uk