



CERTIFICATE OF APPROVAL

No CF 5533

This is to certify that, in accordance with
TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

IPG LTD T/A MORLAND

Unit 10 Buttington Cross Ent. Park, Welshpool, SY21 8SL
Tel: 01938 551980

Have been assessed against the requirements of the Technical Schedule(s)
denoted below and are approved for use subject to the conditions
appended hereto:

CERTIFIED PRODUCT
Morland FD30 ITT Door
Assemblies

TECHNICAL SCHEDULE
TS10 Fire Resisting Door
Assemblies with Non
Metallic Leaves

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan
Certification Manager



Issued: 21st March 2017
Reissued: 18th February 2022
Valid to: 17th February 2027





CERTIFICATE No CF 5533

IPG LTD T/A MORLAND

MORLAND FD30 ITT DOOR ASSEMBLIES

This approval relates to the use of the above doors in providing fire resistance of 30 minutes insulation (if incorporating not more than 20% of uninsulating glass) and 30 minutes integrity as defined in BS 476: Part 22: 1987. Subject to the undermentioned conditions, the doors would be expected to meet the relevant requirements of BS 9999 for FD30 door assemblies when used in accordance with the provisions therein.

1. This certification is provided to the client for their own purposes, and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.
2. The doors are approved on the basis of:
 - i) Initial type testing
 - ii) A design appraisal against TS10
 - iii) Inspection and surveillance of factory production control
 - iv) Certification under a CERTIFIRE approved Quality Management System
 - v) Audit testing in accordance with TS10
3. The blanks comprise cellulosic cored leaves in various finishes for use with timber or 'Forever Firecheck', wrapped MDF frames, with intumescent edge seals (ITT FD30).
4. This approval is applicable to both complete door assemblies and door leaves. Where the door is not supplied in a completely fitted form it is a condition of this approval that an agreed data sheet accompanies the product and is complied with in its entirety. Failure to do so will invalidate this approval and may jeopardise the fire performance of the door.
5. This approval is applicable to single and double-acting, single and double-leaf, latched and unlatched ITT door assemblies at leaf dimensions up to those given in the tables below. Double-leaf door assemblies incorporating unequal sized door leaves are also permitted, as detailed within the data sheet.
6. Glazing shall only be undertaken by the door manufacturer, or a CERTIFIRE approved Licensed Door Processor, and shall be in accordance with the Data Information Sheet and Construction Specification. No site cutting or glazing of apertures is permitted.
7. Hardware items, including closing devices and intumescent edge seals, shall be CERTIFIRE approved or otherwise as specified in the data sheet.
8. The door assemblies shall be mechanically fixed to wall constructions having a fire resistance of at least 30 minutes.
9. Labels to the CERTIFIRE design, or approved by CERTIFIRE, referencing CERTIFIRE and CERTIFIRE Ref. No. CF5533 and FD30 classifications resistance shall be affixed to each door in the in the prescribed position.

CERTIFICATE No CF 5533 IPG LTD T/A MORLAND

MORLAND FD30 ITT DOOR ASSEMBLIES

10. This approval relates to the on-going production. The product and/or its immediate packaging is identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application when appropriate.

Mann McGowan Pyrostrip 500P intumescents

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Maximum Area (m ²)
Single-Acting, Single-Leaf Latched / Unlatched	2635 (at 1165 wide)	1165 (at 2635 high)	3.07
Single-Acting, Double-Leaf Latched / Unlatched	2534 (at 948 wide)	1163 (at 2065 high)	2.40

Table 1. Maximum Permitted Door Leaf Dimensions

Lorient Polyproducts Type 617 intumescents

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Maximum Area (m ²)
Single-Acting, Single-Leaf Latched / Unlatched	2940 (at 1470 wide)	1470 (at 2940 high)	4.32
Double-Acting, Double-Leaf	2716 (at 1181 wide)	1181 (at 2716 high)	3.21

Table 2. Maximum Permitted Door Leaf Dimensions

AV2 Multipoint Locks - Mann McGowan Pyrostrip 500P intumescents

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Maximum Area (m ²)
Single-Acting, Single-Leaf Latched	2540 (at 1057 wide)	1174 (at 2287 high)	2.68

Table 3. Maximum Permitted Door Leaf Dimensions

Notes: Under no circumstances must either the maximum height or maximum width be exceeded without separate CERTIFIRE approval.

CF 5533 DATA SHEET

1. General

This door leaf has been fire tested and is certified by CERTIFIRE as being capable of providing fire resistance of 30 minutes integrity and 30 minutes insulation (if incorporating not more than 20% of uninsulating glass) as defined in BS 476: Part 22: 1987, when installed in accordance with the following conditions. Subject to these, the door will meet the relevant requirements of BS 9999 for FD 30 door assemblies when used in accordance with the provisions therein.

In recognition of this, the leaf carries a prefixed label on the top or hanging edge of the door, issued under the terms of the CERTIFIRE scheme. This label uniquely identifies the door leaf, the manufacture of which complies with a CERTIFIRE approved Quality Management System and is subject to on-going surveillance. This label shall not be removed.

It is emphasised that the certification is conditional upon the following instructions being complied with in their entirety. Failure to do so will invalidate this approval and may jeopardise the fire performance of the door. Door assemblies supplied pre-fitted with components by Newmor Group Ltd t/a Morland may be considered to meet the requirements in respect of those items.

2. Door Leaf Dimensions

This approval is applicable to single-acting, single and double-leaf ITT assemblies and double-acting, double-leaf ITT assemblies, latched and unlatched at leaf dimensions up to those given in Table 1. Double-leaf door assemblies including unequal sized door leaves are permitted on the assumption that the smaller leaf is no less than 30 % of the width of the larger leaf. The smaller leaf of such door assemblies should be rendered inactive by top and bottom surface mounted shoot bolts or flush bolts protected by nominally 1 mm thick mono ammonium phosphate or Graphite.

Mann McGowan Pyrostrip 500P intumescents

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Single-Acting, Single-Leaf Latched / Unlatched	2635 (at 1165 wide)	1165 (at 2635 high)	3.07
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Table 2. Maximum Permitted Door Leaf Dimensions

AV2 Multipoint Locks - Mann McGowan Pyrostrip 500P intumescent

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Maximum Area (m ²)
Single-Acting, Single-Leaf Latched	2540 (at 1057 wide)	1174 (at 2287 high)	2.68

Table 3. Maximum Permitted Door Leaf Dimensions

Note: Under no circumstances must either the maximum height or maximum width be exceeded without separate CERTIFIRE approval.

3. Door Frame

To be any of the following: -

Softwood or Hardwood - Single acting door assemblies		
i) Density:	510 kg/m ³ min.	
ii) Dimensions:	Rebated frame	70 mm wide by 40 mm thick minimum complete with 12 mm deep integral rebate
	Lining & planted stop	70 mm wide by 28 mm thick minimum complete with 12 mm thick planted stop. Stop to be glued & pinned or glued & screwed (min stop density 510 kg/m ³).
Softwood or Hardwood - Double acting door assemblies		
i) Density:	510 kg/m ³ min.	
ii) Dimensions:	70 mm by 40 mm min.	
*MDF 'Forever Firecheck' frames - Single acting door assemblies only		
i) Density:	680 kg/m ³ min.	
ii) Dimensions:	Rebated frame	75 mm wide by 42 mm thick minimum complete with 12 mm deep integral rebate
	Lining & planted stop	75 mm wide by 30 mm thick minimum complete with 12 mm thick planted stop. Stop to be glued & pinned or glued & screwed (min stop density 680 kg/m ³).
Jointing:	Butt joints, mortice and tenon, mitred or half lapped joints with the head screw fixed to the jambs using two steel screws	
Door to frame gaps:	Not to exceed 4.0mm except at threshold where up to 8 mm is permitted and 3.5 mm at the meeting stiles	

* MDF frames referenced 'Forever Firecheck' may be wrapped in veneer maximum 1 mm thick or paper, PVC or CPL at maximum 180 microns where required, however please note intumescent must be P500 graphite by Mann McGowan in accordance with CF356. The Mann McGowan CF356 intumescent may be concealed under the decorative facing or exposed as required.

Where door assemblies incorporate the AV2 multipoint lock the following frame specification is required.

Hardwood / Softwood	i) Density:	510 kg/m ³ min.
	ii) Dimensions:	75 mm by 30 mm min.
	iii) Door Stop:	12 mm deep pinned, screwed, or rebated from solid. Where the stop is rebated from solid the overall frame thickness must be increased by 12 mm to accommodate the 12 mm rebate depth. (min stop density 510 kg/m ³).
MDF	i) Density:	720 kg/m ³ min.
	ii) Dimensions:	75 mm by 30 mm min.
	iii) Door Stop:	12 mm deep pinned, screwed, or rebated from solid. Where the stop is rebated from solid the overall frame thickness must be increased by 12 mm to accommodate the 12 mm rebate depth. (min stop density 720 kg/m ³).

4. Overpanels /Sidepanels

Flush overpanels may be included up to a maximum height of 500 mm and shall include 6 mm thick hardwood lippings (minimum) and opposing lipping to the leaf head, or a rebated 23 mm thick (maximum) hardwood lipping with a 22mm wide by 15 mm deep maximum rebate at the bottom edge, with a corresponding 23 mm thick (maximum) hardwood lipping with a 22mm wide by 15 mm deep (maximum) to the top edge of the door leaf. Overpanels shall be lipped on all edges.

Flush overpanels shall be fixed using steel screws at a maximum of 400 mm centres and a maximum of 100 mm from each corner, through centre of panel to a depth of at least 30 mm.

Where rebated meeting edges are not incorporated on double leaf assemblies, timber astragals (min 640 kg/m³) are required at the junction between the bottom of the overpanel and the top edge of the doors.

Transomed overpanels, manufactured to the same specification as the door leaves, may be included up to 500 mm high, with a minimum 28 mm thick Hardwood transom rail with a minimum density of 530kg/m³ or minimum 44 mm softwood transom rail with a minimum density of 510 kg/m³.

Mullioned sidepanels, manufactured to the same specification as the door leaves, may be included up to 550 mm wide, with a minimum 28 mm thick Hardwood mullion with a minimum density of 530kg/m³ or minimum 44 mm softwood mullion with a minimum density of 510 kg/m³.

5. Glazed Fanlights

Any CERTIFIRE approved glazing systems may be used providing the specification and installation details given in the appropriate certification documents are adhered to.

6. Supporting Construction

The door assemblies are approved to be installed in brick, block, masonry, timber or steel stud supporting constructions of minimum overall thickness 85 mm, providing at least 30 minutes fire resistance and previously proven capable of supporting a fire door assembly for the required integrity performance.

Where stud partitions are used these should be suitably constructed to provide a secure fixing for the door assemblies as recommended by the partition manufacturer.

7. Installation

The opening may be lined with softwood, which shall be continuous and of minimum width, 85mm. Each door frame jamb to be fixed through to the wall at not less than four points with steel or nylon fixings at maximum 600 mm centres penetrating the wall to at least 50 mm. Architraves are optional with no restrictions on material, size or fixing.

Door assemblies shall be installed as stated in BS 8214. Suitable CERTIFIRE approved lineal gap sealing systems may also be utilised to protect the frame/supporting construction gap, subject to the conditions contained within the relevant certificate.

The use of third party accredited installers provides a means of ensuring that installations have been conducted by knowledgeable contractors, to appropriate standards, thereby increasing the reliability of the anticipated performance in fire

Door leaves with timber lippings may be trimmed to fit the frame by the following max amounts:

- Stiles (each): 3 mm
- Top: 3 mm
- Bottom: 3 mm if bottom lipping is fitted
Unlimited if bottom lipping is not fitted.

Doors with ABS lippings cannot be trimmed, with the exception of the bottom edges.

Where a lipping has not been fitted the bottom edge of the door may be reduced without limit.

Where a lipping is fitted to the bottom edge any reduction would require the bottom edge ABS lipping to be fully removed, subject to this the bottom edge of the door may be reduced without limit.

ABS Bottom lippings may not be reapplied on site.

Note that the maximum door to frame and door to threshold gaps specified shall not be exceeded, **nor shall the door edge fitted with the CERTIFIRE label be trimmed** since removal of the label will invalidate the certification.

The labelled edge may be subjected to minor 'shooting-in', providing the label is not damaged or removed in the process, and the amount of material removed does not exceed that stated previously.

8. Glazed Apertures

All apertures to be factory prepared by Newmor Group Ltd, Trading as Morland, or a CERTIFIRE approved Licensed Door Processor. **No site cutting of apertures permitted as this will invalidate the certification.**

Aperture dimensions: Doors may incorporate one or more vision panels to the maximum sizes identified in the table below:

Area: Maximum total glazed area of 1.62 m² per leaf

Margins: 130 mm from the perimeter edge, 130 mm between apertures.

Maximum Permitted Aperture Dimensions		
Maximum Height (mm)	Maximum Width (mm)	Maximum Area (m ²)
1688 (at 960 wide)	1200 (at 1350 high)	1.62

Hardwood or non-combustible setting blocks will be used to establish the correct edge cover.

Non-Insulating glasses: 6 mm Pyroshield™2 glass or other CERTIFIRE approved glass subject to the conditions of the glass certificate

Intumescent System	Bead dimensions (mm)	Bead Density	Fixings	Max. Height (mm)	Max. Width (mm)	Max. Area (m ²)
Sealmaster Fireglaze, 14 mm high by 2 mm thick min.	19 mm high by min 21 mm wide (including a 5 mm by 5 mm bolection) 11 mm +/-1 mm edge cover	Hardwood Min. 640 kg/m ³	40 mm long pins or air fired brads or No.6 x 38 mm long screws at max 150 mm centres, max. 50 mm in from corners,	1688 (at 960 wide)	1200 (at 1350 high)	1.62 m ²

Insulating glasses: 15 mm Pyroguard EI 30 glass or other CERTIFIRE approved glass subject to the conditions of the glass certificate

Intumescent System	Bead dimensions (mm)	Bead Density	Fixings	Max. Height (mm)	Max. Width (mm)	Max. Area (m ²)
Pyroplex 30049	15 mm high by min 16 mm wide flush bead with a 20° splay or left square. (A bolection detail can be added to the above min bead dimensions). 12 mm +/-1 mm edge cover	Hardwood Min. 640 kg/m ³	No.6 x 50 mm long screws at max 150 mm centres, max. 50 mm in from corners.	822 (at 590 wide)	669 (at 725 high)	0.48 m ²

Doors may incorporate CERTIFIRE approved glazing systems subject to the conditions contained within the relevant CERTIFIRE certificate (e.g., maximum size associated with glass, system, edge cover, aperture lining requirements, etc.) and the maximum pane dimensions stated within CF5533 (whichever is smaller):

9. Intumescent Seals

CERTIFIRE certificated intumescent seals are required to be fitted to these doors as below

For door assemblies to BS476: Part 22 – classified as FD30

Mann McGowan Pyrostrip 500P Graphite intumescent

Mann McGowan Pyrostrip 500P graphite Intumescent are required in conjunction with 'Forever Firecheck', MDF wrapped frames. The intumescent may be exposed or concealed by the decorative finish, as required.

Door assembly Configuration	Position	Required Intumescent Protection
Single-acting Single-leaf door assemblies	Head	Single 15 mm wide by 4 mm thick (with PVC case) or Single 13.5 mm wide by 1.5 mm thick (without PVC case)
	Vertical edges	Single 15 mm wide by 4 mm thick (with PVC case) or Single 13.5 mm wide by 1.5 mm thick (without PVC case)
Single-acting Double-leaf door assemblies	Head	Single 15 mm wide by 4 mm thick (with PVC case) or Single 13.5 mm wide by 1.5 mm thick (without PVC case)
	Hanging edges	Single 15 mm wide by 4 mm thick (with PVC case) or Single 13.5 mm wide by 1.5 mm thick (without PVC case)
	Meeting edge (primary leaf only)	2No. 10 mm wide by 4 mm thick intumescent positioned centrally in the leaf edge 8 mm apart.

Note: See table 1 for leaf size restrictions

Lorient Polyproducts Type 617 intumescents

Door assembly Configuration	Position	Required Intumescent Protection
Single-acting Single-leaf door assemblies	Head	Single 15 mm wide by 4 mm thick
	Vertical edges	Single 15 mm wide by 4 mm thick Type 617
Double-acting Double-leaf door assemblies	Head	Single 15 mm wide by 4 mm thick Type 617
	Hanging edges	Single 15 mm wide by 4 mm thick Type 617
	Meeting edge (primary leaf only)	Single 15 mm wide by 4 mm thick Type 617

Note: See table 2 for leaf size restrictions

AV2 Multipoint lock – Mann McGowan Pyrostrip 500P Intumescents

Doorset Configuration	Position	Intumescent Specification
Single-Acting, Single-Leaf Latched (Alternative intumescent types are not permitted)	Frame Jambs & Head	1 No Pyroplex 500P intumescents seals, 15 mm wide by 4 mm thick positioned 15 mm from the exposed face within the frame reveal

Note – See table 3 for leaf size restrictions

Seals may be interrupted at hinge and latch positions.

Latched or unlatched, single-acting, single-leaves with maximum leaf dimensions 2040 mm high by 926 mm wide and of a minimum thickness of 43 mm (excluding those hung in 'Forever Firecheck' frames) may utilise alternative 15 mm wide by 4 mm thick Intumescents in-line with the relevant CERTIFIRE approval for the proposed intumescent seal. All seals to be CERTIFIRE approved (to Technical Schedule 35).

All other door assembly configurations including doors hung in 'Forever Firecheck' frames should include the specific intumescent size type and location as specified within the data sheet.

Smoke seals may be included subject to the conditions contained within the relevant CERTIFIRE certificate for the smoke seal.

10. Hinges

Hinges shall be CE marked against EN 1935 for use on 30 minute timber fire door assemblies.

Number:	Minimum 3 No. hinges	
Type:	Steel lift off or butt hinges.	
Positions:*	Option 1	
	Top Hinge:	Max 250 mm from the top of the door
	2 nd Hinge:	Max 1220 mm from the top of the door
	Bottom.	Max 335 mm from the bottom of the door
	Fourth hinge required to doors over 2440 mm high to be positioned centrally between the 2 nd and bottom hinges.	

	Option 2	
	Top Hinge:	Max 250 mm from the top of the door
	2 nd Hinge:	Max 450 mm from the top of the door
	Bottom.	Max 335 mm from the bottom of the door
	Fourth hinge required to doors over 2440 mm high to be positioned centrally between the 2 nd and bottom hinges.	
Dimensions:	blade height:	102 mm (+/- 20%)
	Blade width:	35 mm (+ 2 mm / - 5 mm)
	Thickness:	3 mm (+/- 0.5 mm)
	Knuckle dia.:	14 mm (+/- 1 mm)
Fixings:	Quantity:	4No. steel screws (minimum)
	Size:	No.8 by 32 mm long (minimum).
Intumescent Protection**	Hardwood lippings - Min 6 mm thick	None required to doors 2440 mm high & below. 1 mm mono ammonium phosphate, 1 mm Therm-A-Strip, 1 mm Graphite sheet material or 0.8 mm Exi-Fire hinge pads to doors 2441 mm high and above.
	ABS & Hardwood Lippings – 2 mm thick	1 mm mono ammonium phosphate, 1 mm Therm-A-Strip, 1 mm Graphite sheet material or 0.8 mm Exi-Fire hinge pads.

* The datum in all cases is the centreline of the hinge.

** The hinge specification above overrides any requirement for additional intumescent identified in the hinge manufacturer's certification providing the hinge specification falls within the parameters identified in the table above, specifically maximum dimensions and material.

Any other CERTIFIRE approved hinge may be fitted, providing the hinge dimension are no greater than 10% in blade width and 25% in blade height from that approved in the table above (excluding the tolerances stated). Where the Certifire approved hinge exceeds the specification given in the table above, the minimum requirement for intumescent protection to the hinges, by-passing perimeter intumescent, and the material density and thickness for the door and frame elements given in the hinge manufacture's CERTIFIRE certificate shall apply.

11. Locks and Latches

Locks / latches are not necessary. When fitted locks / latches shall be CE Marked for use on 30 minute timber fire doors.

Mortice type, automatic (sprung) latch bolt.

Max. case dimension:	166 mm high by 98 mm deep by 20 mm wide
Max. forend dimension:	235 mm high by 25 mm wide
Max. strike dimension:	180 mm high by 38 mm wide (including latch plate lip)
Latchbolt material:	Steel / brass
Position:	Max 1050 mm from bottom of door to centreline of lock case.

Cylinders:	Euro profile single cylinder, double cylinder or cylinder / thumbturn CE marked in accordance with BS EN 1303 as suitable for use on FD30 fire resistant assemblies may be utilised where 1 mm Therm-A-Strip or 1 mm Graphite intumescent sheet material is fitted under the latch forend, under the strike and to fully encase the latch body.	
Intumescent: protection*	Hardwood Lippings – Min 6 mm thick:	
	Tubular latches with a Max. Forend 57 x 26mm:	None required
	Latch / locks with a forend larger than 57 x 26 mm:	1 mm Therm-A-Strip or 1 mm Graphite intumescent sheet material under the latch forend, under strike and encasing the latch body.
	ABS & Hardwood Lippings – 2 mm thick:	
	1 mm Graphite or 1 mm Therm-A-Strip intumescent sheet material under the latch forend, under strike and encasing the latch body.	

* The lock specification above overrides any requirement for additional intumescent identified in the lock manufacturer's certification providing the lock/latch specification falls within the parameters identified in the table above, specifically maximum dimensions and material.

Any other CERTIFIRE approved lock/latch may be fitted, providing no lock/strikeplate dimension is more than 25% of that approved in the table above and subject to the conditions contained within the relevant certificate. Where the Certifire approved lock/latch exceeds the specification given in the table above, the minimum requirement for intumescent protection to the locks, latches and strikeplates, by-passing perimeter intumescent, and the material density and thickness for the door and frame elements given in the lock/latch manufacture's CERTIFIRE certificate shall apply.

- Recessing for locks shall result in a tight fit, allowing for the intumescent protection specified.
- No restriction on type and material of face fixed mechanical lever handles and knobs providing these are wholly surface mounted (with the exception of the spindle and fixing holes) and the spindle hole is a maximum 15 mm in diameter.
- The Euro profile cylinder recess in the door face shall follow the shape of the cylinders and be as tight as possible; furthermore, the single cylinders door preparation shall penetrate through only half the thickness of the door leaf.
- The use of oval profile cylinders is not permitted.

Vingcard Locks

Vingcard Euro lock cases complete with card readers in accordance with CF5494 may be fitted in accordance with the following specification requirements:

- Max case: 154 mm by 139 mm by 20 mm
- Max Strike: 180 mm long by 40 mm wide (including lip)

- MDF frames with a minimum density of 680kg/m³ or Hardwood frames with a minimum density of 510kg/m³
- Min door thickness of 44 mm
- Doors to be lipped in 2 mm thick ABS or hardwood (min. density of 640kg/m³) as currently permitted in CF5533
- Euro lock case option only, in conjunction with card reader
- Recess for Euro lock and card reader to be fully lined with 1 mm thick graphite or intumescent sheet material
- Forend and strike to be bedded on 1 mm thick graphite intumescent sheet material
- Locks are to be fitted no higher than 1100mm from the spindle to the finished floor level.

Salto Locks

Salto lock cases complete with card readers in accordance with CF5596 may be fitted in accordance with the following specification requirements:

- Max case: 165 mm by 100 mm by 15 mm
- Max strike: 170 mm long by 24 mm wide (excluding lip)
- Max forend: 235 mm by 24 mm
- MDF frames with a minimum density of 680kg/m³ or Hardwood frames with a minimum density of 510kg/m³
- Min door thickness of 44 mm
- Doors to be lipped in 2 mm thick ABS or hardwood (min. density of 640kg/m³) as currently permitted in CF5533
- Recess for lock and card reader to be fully lined with 1 mm thick graphite intumescent sheet material
- Forend to be bedded on 1 mm thick graphite intumescent sheet material
- Strike to be bedded on 1 mm thick graphite or 1 mm thick mono ammonium phosphate intumescent sheet material
- Locks are to be fitted no higher than 1100mm from the spindle to the finished floor level.

Miwa Locks

Miwa ALV2 S-3 and ALV2 P-3 lock cases complete with Miwa Slimline hotel card readers may be fitted in accordance with the following specification requirements:

- Max case: 160 mm by 105 mm by 20 mm
- Max strike: 123 mm long by 45 mm wide (including lip)
- Max forend: 235 mm by 22 mm
- MDF frames with a minimum density of 680kg/m³ or softwood / Hardwood frames with a minimum density of 510kg/m³
- Min door thickness of 44 mm
- Doors to be lipped in 2 mm thick ABS or hardwood (min. density of 640kg/m³) as currently permitted in CF5533
- Locks are to be fitted no higher than 1100mm from the spindle to the finished floor level.

The Miwa locks may incorporate either of the following intumescent protection options:

- Option A: Recess for lock and card reader to be fully lined with 0.8 mm thick graphite intumescent sheet material complete with 1 mm thick graphite intumescent sheet material under the forend and strike.
- Option B: 2 mm thick graphite intumescent sheet material to the lock case perimeter (no intumescent to the faces) complete with 2 mm thick graphite intumescent sheet material under the forend and 1 mm thick graphite intumescent sheet material under the strike.

Where the Miwa card reader handles are installed on the non-fire side, there is no requirement for intumescent protection, however where the exposure direction cannot be identified the use of intumescent protection will be required in accordance with either Option A or B as stated above.

AV2 Multipoint Locks – Latched (top / middle / bottom)

Dimensions:	Lock Forend:	1770 mm high by 20 mm wide by 3 mm thick
	Centre lock case:	185 mm high by 78 mm deep by 16.5 mm wide
	Top & Bottom Case:	113 mm high by 48 mm deep by 16.5 mm wide
	Centre Keep:	235 mm high by 24 mm wide by 5 mm thick
	Top & Bottom Keep:	176 mm high by 24 mm wide by 5 mm thick
Cylinder:	Euro profile double cylinder or cylinder / thumbturn CE marked in accordance with BS EN 1303 as suitable for use on FD30 fire resistant assemblies.	
Intumescent protection	Forend:	Forend to be bedded on a 1 mm thick graphite based intumescent kit referenced ITL-WINKAV2-9PT.
	Centre, Top & Bottom Lock cases:	All 3No lock cases to be fully wrapped with a 1 mm thick graphite based intumescent kit referenced ITL-WINKAV2-9PT
	Centre, Top & Bottom Keeps:	All keeps shall each include a 1 mm thick graphite based intumescent kit referenced ITL-WINKAV2-9PT to the sides and lower edge of the dust pocket.

- Recessing for locks shall result in a tight fit, allowing for the intumescent protection specified.
- No restriction on type and material of face fixed mechanical lever handles and knobs providing these are wholly surface mounted (with the exception of the spindle and fixing holes) and the spindle hole is a maximum 15 mm in diameter.
- The Euro profile cylinder recess in the door face shall follow the shape of the cylinder and result in a tight fit.

12. Self-Closing Devices

All doors are required to be fitted with a CERTIFIRE certificated self-closing device. The exceptions are doors kept locked shut such as service access doors. Note: closers with mechanical hold-open mechanisms are not permitted to be used. Building Regulations may identify locations within domestic locations where self-closing devices are not mandatory.

The closers shall have a power rating appropriate to the leaf sizes, subject to the closer having the ability to close the door from any angle and against any latch and/ or seals fitted. The closer shall have the ability to provide size 3 closing force. Where doors are unlatched a minimum size 3 shall be maintained.

Closers shall be CE Marked against EN 1154 and categorised as grade 1 – suitable for use on fire / smoke door assemblies.

12a Surface mounted overhead closers

Any CERTIFIRE approved surface mounted overhead closer may be fitted, subject to the conditions contained within the relevant certificate.

12b Concealed Overhead Closers – Single-Action Only

Door assemblies may incorporate CERTIFIRE approved concealed overhead closers in accordance with the following:

- Concealed overhead closers are to be CERTIFIRE approved for use with single-acting, latched and unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores in timber frames having a fire resistance of 30 minutes (code ITT).
- Minimum leaf thickness to be in accordance with the CERTIFIRE certificate of approval for the specified closer.
- Intumescent protection to the closer body and arm channel is to be in accordance with the CERTIFIRE certificate of approval for the specified closer.
- Closer body and arm positioning is to be in accordance with the CERTIFIRE certificate of approval for the specified closer.
- The minimum required frame density and section size are to be in accordance with the CERTIFIRE certificate of approval for the specified closer.
- Compliance is required with all additional requirements as stated within the CERTIFIRE certificate of approval for the specified closer.

12c Floor Springs – double action use only

Floor springs will be CE Marked in accordance with EN 1154 and categorised as grade 1, in addition to the specification below:

Max. Top pivot dimension	Frame portion: 165 mm long x 37 mm deep x 25 mm wide Door portion: 122 mm long x 11 mm deep x 29 mm wide
Max. bottom arm dimension:	235 mm long x 20 mm deep x 24 mm wide
Material:	Steel
Intumescent: protection*	Required to be supplied by and fitted in accordance with the CERTIFIRE certificate for the required floor spring.

12d Transom Mounted

Not permitted

13. Ancillary items

Please note that hardware items other than those discussed within this certificate of approval are not permitted.

13a. Protection plates and signage

Surface mounted plastic, steel, aluminium or brass plates are acceptable on the following basis:

- < 2 mm thick
- Do not occupy more than 20% Of the door leaf in total or exceed 500 mm in height for kick plates and 300 mm for mid-plates, whichever is the smaller.
- Do not wrap around the vertical edges, and on the closing face do not extend beneath the door stops (generally 40 – 50 mm narrower than door width)
- Plates/signage can be bonded with a thermally softening adhesive. Additionally, screws may be used.

13b. Pull Handles

Screw-fixed, bolt-fixed from the back and back-to-back fixed pull handles of steel, brass, aluminium and nylon coated are permitted providing any through-bolt fixings are of steel and maximum bolt to bolt centres do not exceed 1000 mm.

A maximum 15 mm diameter recess is permitted for through bolt fixings.

Bolt through fixings will require intumescent protection in the form of a 1 mm thick graphite tube, or Intumescent mastic to the full depth of the recess.

13c. Flushbolts

Max. dimension	203 mm high x 30 mm deep x 19 mm wide
Material:	Aluminium or Steel
Position:	Top and bottom on door edge or face (positioned a minimum of 50 mm from leading edge of the door to the centre of the bolt).
Intumescent: protection*	1 mm Graphite or Therm-A-Strip intumescent sheet material to base and sides of bolt body and beneath keep.

13d. Air transfer grilles

No site cutting of apertures permitted as this will invalidate the certification.

Where apertures are pre-cut by Newmor Group Ltd t/a Morland, or a CERTIFIRE approved Licensed Door Processor, intumescent air transfer grilles may be fitted on site by NON-CERTIFIRE approved staff, however, the intumescent air transfer grilles shall be CERTIFIRE approved for use in FD30 timber based doors.

The air transfer grilles must be fitted into apertures prepared in line with the relevant CERTIFIRE certificate for the air transfer grille. Care must be taken to ensure all fitting instructions are followed, including any constraints imposed by the CERTIFIRE certificate with regards to position of the air transfer grille within the door assembly.

13e. Letter Plates

Where letter plates are fitted, the aperture for a letter plate may be formed on site by NON-CERTIFIRE approved staff, however, the letter plates shall be CERTIFIRE approved for use in FD30 timber based doors. The letter plates must be fitted into apertures prepared in line with the relevant CERTIFIRE certificate for the letter plate. Care must be taken to ensure all fitting instructions are followed, including any constraints imposed by the CERTIFIRE certificate with regards to position of the letter plate within the door assembly.

13f. Door Viewers

A door viewer may be fitted into the leaf providing the viewer comprises a metal sleeve and optical glass lens and is not positioned higher than 1500 mm from the bottom edge of the door leaf. The door viewer should have an external diameter of not greater than 14 mm and be tightly fitted within the leaf. The aperture provided for the installation of the viewer should be lined with Lorient RM301D intumescent mastic or 1 mm mono ammonium phosphate, intumescent sheet material.

13g. Coat Hooks and other Surface Mounted Hardware

Ancillary items which are wholly surface mounted may be fitted providing:

- These items are screw fixed or bonded only
- Are not bolted through the full thickness of the door
- Are not directly above, or closer than 100 mm to any non-insulated glazing.

13h Dropseals

Dropseals are to be CERTIFIRE approved with maximum dimensions 14 mm by 35 mm.

Where dropseals are fitted, the recess for a dropseal may be formed on site by NON-CERTIFIRE approved staff. Care must be taken to ensure all fitting instructions are followed, including any constraints imposed by the CERTIFIRE certificate.

13i. Electric Strikes / Electromechanical locks

Not permitted

14. Further Information

Further information regarding the details contained in this data sheet may be obtained from Newmor Group Ltd t/a Morland (Tel: 01938 551980).

Further information regarding the CERTIFIRE certification and other approved products can be obtained from Warrington Certification (Tel: +44 (0) 1925 646777).