



CERTIFICATE OF APPROVAL

No CF 632

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

NORMA DOORS TECHNOLOGIES, S.A

Paraje Quiñones, s/n 42140 San Leonardo De Yague (Soria), Spain
Tel: int + 34 975376000 Fax: int + 34 975376208

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

Norma Doors Technologies, S.A
Fire Resisting ITT FD60 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: 25th June 2008
Revised: 20th August 2019
Valid to: 14th January 2020

Page 1 of 3





CERTIFICATE No CF 632

NORMA DOORS TECHNOLOGIES, S.A.

NORMA DOORS TECHNOLOGIES - FD60 DOOR ASSEMBLY

This approval relates to the use of the above doors in providing fire resistance of 60 minutes insulation (if incorporating not more than 20% of uninsulating glass) and 60 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 FD 60 door assemblies when used in accordance with the provisions therein.

1. This certification is provided to the client for its 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 doors comprise cellulosic (chipboard) cored, timber framed leaves in various finishes for use with timber frames, with intumescent edge seals.
4. This approval is applicable to both complete door assemblies and door leaves. Where the door is not supplied in a fully 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-action, single-leaf latched ITT assemblies and single-acting double-leaf latched and bolted/unbolted ITT assemblies (with offset rebated meeting stiles only) at leaf dimensions up to those detailed within Table 1 below

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m ²)
Single-Acting, Single-Leaf Latched only	2199 (at 925 wide)	1003 (at 2030 high)	2.03
Single-Acting, Double-Leaf Latched only	2249 (at 925 wide)	986 (at 2110 high)	2.08

Table 1

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

Page 2 of 3 Signed
S/008

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NORMA DOORS TECHNOLOGIES - FD60 DOOR ASSEMBLY

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 Constructional Specification. No site cutting or glazing of apertures is permitted.
7. Hardware items, including closing devices and intumescent fire seals, shall as specified in the Data Sheet.
8. The door assembly shall be mechanically fixed to wall constructions having a fire resistance of at least 60 minutes.
9. Labels to the CERTIFIRE design, or approved by CERTIFIRE, referencing CERTIFIRE and CERTIFIRE Ref. No. CF 632 and FD60 classifications resistance shall be affixed to each door in the prescribed position.
10. This approval relates to 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.

CF 632 DATA SHEET

1. General

This door leaf has been fire tested and is certified by CERTIFIRE as being capable of providing fire resistance of 60 minutes integrity and 60 minutes insulation (if incorporating not more than 20% of uninsulated 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 60 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 Norma Doors Technologies, S.A may be considered to meet the requirements in respect of those items.

2. Door Leaf Dimensions

This approval is applicable to single-action, single and double-leaf, latched, assemblies at leaf dimensions up to those detailed within Table 1 below.

Door assembly configuration	Maximum Height (mm)	Maximum Width (mm)	Area (m ²)
Single-Acting, Single-Leaf Latched only	2199 (at 925 wide)	1003 (at 2030 high)	2.03
Single-Acting, Double-Leaf Latched only	2249 (at 925 wide)	986 (at 2110 high)	2.08

Table 1

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

The active leaf of single-acting double-leaf assemblies is to be latched with the passive leaf bolted/unbolted. Single-action, double-leaf assemblies are available with offset rebated meeting stiles only.

3. Door Frame

Material: Chipboard
Density: 700 kg/m³ minimum
Section Size: 100 mm by 30 mm minimum plus 12 mm stop, rebated from solid.

Material: MDF
Density: 730 kg/m³ minimum
Section Size: 155 mm by 28 mm minimum plus 10 mm stop, rebated from solid.

Door to Frame Gaps: Not to exceed 4 mm except at the threshold where up to 8 mm is permitted and 3.5 mm at the meeting stiles.

4. Supporting Construction

The door assemblies are approved to be installed in brick, block, masonry, timber or steel stud of minimum thickness 110 mm, providing at least 60 minutes fire resistance. 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.

5. Installation

The opening may be lined with hardwood which shall be continuous and of minimum width 85 mm. Any voids between lining and wall to be filled with mineral wool or if less than 6 mm wide, with intumescent paste or mastic. Each door frame jamb to be fixed through to the wall at not less than three points with steel fixings penetrating the wall to at least 50 mm. Any voids between door frame and lining or door frame and wall to be filled as above for lining to wall gaps. Architraves are optional with no restrictions on material, size or fixing.

Door assemblies shall be installed as stated in BS 8214, Table 3. 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 may be trimmed to fit the frame by the following maximum amounts:

- Stiles (each): 3 mm
- Top: 3 mm
- Bottom: 5 mm

6. Glazed Apertures

All apertures to be factory prepared by Norma Doors Technologies, 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 on the basis that each leaf of double-leaf door assemblies must be similarly glazed:

Area: Maximum total glazed area of 0.55 m² per leaf

Margins: Minimum 125 mm from the aperture to the top edge of door leaf.
Minimum 150 mm from the aperture to the vertical door leaf edges.
Minimum 320 mm between apertures

Maximum Permitted Aperture Dimensions		
Max. Height (mm)	Max. Width (mm)	Max. Area (m ²)
1415 (at 155 wide)	155 (at 1415 high)	0.22
1150 (at 480 wide)	552 (at 1000 high)	0.55

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

Additionally the leaf/leaves may incorporate any CERTIFIRE approved glazing system subject to the conditions contained within the relevant certificate (e.g. maximum size associated with glass or system, edge cover, aperture lining requirements, etc.) and the maximum pane dimensions given below (whichever is smaller):

Non-insulating glasses: 7 mm thick Pyrostem glass

Intumescent System	Bead Dimensions	Bead Density	Fixings	Max. Height (mm)	Max. Width (mm)	Max. Dia.	Max. Area (m ²)
Odice Superwool X607 SA & 52 x 2 mm Palusol aperture liner	32 mm high by 30 mm wide with a 10° splay, including a 7 x 7 mm bolection (23 mm +2/-1 mm edge cover)	Hardwood min 640 kg/m ³ excluding Ash, Beech & Iroko	Beads glued and screwed using 50 mm long steel screws at max 150 mm centres, max 50 mm in from the corners	1415 (at 155 wide)	155 (at 1415 high)	N/A	0.22

Insulating glasses: 25 mm thick Pyrobel glass

Intumescent System	Bead Dimensions	Bead Density	Fixings	Max. Height (mm)	Max. Width (mm)	Max. Dia.	Max. Area (m ²)
Odice Interdens 15 liner to the perimeter of the glass 20 x 1 mm	29 mm high by 15 mm wide square or splayed with a 10° splay, including a min. 7 x 7 mm bolection (20 mm +2/-1 mm edge cover)	MDF min 750 kg/m ³ with 0.5 mm thick veneer finish	Beads glued and pinned using 50 mm long steel pins at max 150 mm centres, max 50 mm in from the corners	1150 (at 480 wide)	552 (at 1000 high)	N/A	0.55

7. 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 FD60

Door assembly Configuration	Position	Required Intumescent Protection
Single-Acting, Single-Leaf Latched only	Head	Single Palusol 15 mm by 2 mm* seal in the frame adjacent to door stop + a single Palusol 30 x 2 mm* seal in the frame positioned 5 mm from the opening face. A further 15 mm by 2 mm* seal Palusol seal is required in the leaf head, adjacent to the door stop
	Vertical Edges	Single Palusol 15 mm by 2 mm* seal in the frame adjacent to door stop + a single Palusol 30 x 2 mm* seal in the frame positioned 5 mm from the opening face
	Rear face of frame	Single 30 x 2 mm graphite based seal to rear face of frame to provide a seal with the supporting construction.

Door assembly Configuration	Position	Required Intumescent Protection
Single-acting, Double-leaf Latched only**	Frame Head	Single Palusol 15 mm by 2 mm* seal in the frame adjacent to door stop + a single Palusol 25 x 2 mm* seal in the frame positioned 5 mm from the opening face. A further 15 mm by 2 mm* Palusol seal is required in the leaf head, positioned 5 mm from the opening face.
	Frame Jambs	Single Palusol 15 mm by 2 mm* seal in the frame adjacent to door stop + a single Palusol 25 x 2 mm* seal in the frame positioned 5 mm from the opening face.
	Meeting edge (offset rebate ***)	Single Palusol 25 mm by 2 mm* seal in the frame adjacent to door stop + a single Palusol 25 x 2 mm* seal to the meeting edge of the passive leaf fitted adjacent to the flushbolt
	Rear face of frame	Single 30 x 2 mm graphite based seal to rear face of frame to provide a seal with the supporting construction.

Position: Seals may be partially interrupted at hinge and latch positions.

* Palusol intumescent seals must be CERTIFIRE approved and may incorporate PVC carriers to give and overall thickness of 4 mm.

** The active leaf of single-acting double-leaf assemblies is to be latched with the passive leaf bolted / unbolted.

*** Single-action, double-leaf assemblies are available with offset rebated meeting stiles only.

8. Hinges

Hinges shall be CE Marked against EN 1935 for use on 60 minute timber fire door assemblies.

Number: 3 hinges per leaf minimum
Type: Steel, butt, journal supported, lift off and fixed pin. Any washers or ball bearings to be of phosphor bronze or steel.
Positions*: 173 mm, 511 mm, 917 mm and 1740 mm (± 50 mm) from the head of the leaf.
Dimensions: i) Blade height: 140 mm (+10/ -25 mm)
ii) Blade width: 35 mm (+6/ -3 mm)
iii) Blade thickness: 3 mm (± 0.5 mm)
iv) Knuckle dia.: 10 mm (+1/ -3 mm)
Fixings: 4 No. steel screws (min.) no smaller than No.8 by 32 mm long.
Protection**: 2 mm Interdens sheets to each hinge blade

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

** This specification overrides any requirement for additional intumescent identified in the hinge manufacturer's certification providing the hinge specification falls within the parameters identified above, specifically maximum dimensions and material. Where alternative hinges exceed the specification given above the intumescent protection as identified in the hinge manufacture's CERTIFIRE certificate shall apply.

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 above.

Where the Certifire approved hinge exceeds the specification given 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.

Any other CERTIFIRE approved hinges may be used, subject to the conditions contained within the relevant certificate.

9. Locks and Latches

Latches shall be CE marked in accordance with BS EN 12209 or EN 179 for use on fire resisting timber doors, in addition to the specification below:

Case dimensions:	175 mm high by 75 mm wide by 20 mm thick.
Fore plate:	240 mm high by 24 mm wide
Strike plate:	185 mm high by 24 mm wide
Latch bolt material:	steel
Protection*:	2mm Interdens behind forend & strike & wrapped around case

* This specification overrides any requirement for additional intumescent identified in the lock manufacturer's certification providing the lock/latch specification falls within the parameters identified 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 above and subject to the conditions contained within the relevant certificate.

Where the Certifire approved lock/latch exceeds the specification given 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 should result in a tight fit, allowing for any intumescent protection.

Locks may be fitted with double cylinder, cylinder/thumbturn, single cylinder, lever lock and latch only.

No restriction on type and material of mechanical lever handles and knobs.

10. 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.

10a Surface mounted overhead closers

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

10b Transom Mounted and Concealed Closers

Not permitted

10c Floor Springs

Not permitted

11. Ancillary items

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

11a Protection plates and signage

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

- < 2mm thick
- Do not occupy more than 20% of the door leaf in total, or exceed 500mm in height for kickplates and 300mm 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 40-50mm narrower than door width)
- Plates/signage can be bonded with a thermally softening adhesive. Additionally screws may be used.

11b Flushbolts

Flushbolts may be fitted to latched door assemblies incorporating an offset rebated meeting stile arrangement, in accordance with the following specification:

Max. dimension	150 mm high x 12 mm wide x 14 mm deep
Material:	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) permitted for use in doors with offset rebated meeting stiles. Flushbolt to be positioned tight against the rebate to ensure the 25 mm wide by 2 mm Palusol intumescent is not interrupted and therefore fully bypasses the flushbolt.
Intumescent: protection*	None required

11c 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 fixing is of steel.

11d. Air transfer grilles

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

Where apertures are pre-cut by NORMA DOORS TECHNOLOGIES, S.A, 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 FD60 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.

11e. 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 FD60 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.

11f. Door Viewers

Not permitted

11g. 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 insulated glazing

12. Further Information

Further information regarding the details contained in this data sheet may be obtained from Norma Doors Technologies, S.A (Tel: int + 34 975376000).

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