



RESITANCE TO FIRE

Classification Report

REPORT NR: **245731ENG** PROJECT Nr: **PY18-0077** Ref Nr: **MV69349**

DATE OF ISSUE: **31/08/2018**

ACCREDITED BODY: **Accredited Body to ENAC (National Accreditation) with the number 288/LE634**

NOTIFIED BODY: **Notified Body nº 1668, Construction Products Regulation (UE) nº 305/2011**

TEST SPECIMEN	Type: DOORSET TIMBER SINGLE FOLDING LEAF
	Reference: Doorset B: PF T-60 A VIDRIERA
	Total Dimension: 2110 x 930 x 55 mm
STANDARD	UNE-EN 13501-2:2009 +A1:2010. Fire classification of construction products and building elements - Part 2: Classification using data from fire resistance tests, excluding ventilation services
APPLICANT	NORMA DOORS TECHNOLOGIES, S.A. PARAJE QUIÑONES S/N 42140 SAN LEONARDO DE YAGÜE SORIA
DATE/S OF TEST	Test Start Date: 20/07/2018 End Start Date: 20/07/2018

CLASSIFICATION E60

Elena Malaina Bengoa
Department Director

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1 SCOPE.

This classification report defines the classification in accordance with the procedures given in UNE-EN 13501-2:2009 + A1:2010 "Fire classification of construction products and building elements - part 2: classification using data from fire resistance tests, excluding ventilation services", clause 7.5.5. Classification of fire doors and shutters including their closing devices

Note: this classification report does not represent type approval or certification of the product

2 PRODCUT DESCRIPTION

The sample is defined as a fire resistant door according to the Standard UNE-EN 13501-2: 2009 + A1: 2010

The technical specifications and drawings of the test sample have been provided by the applicant and are included in the test report in support of this classification

The description of the sample is shown below

Element	
Description:	Single folding leaf
Manufacturer:	NORMA DOORS TECHNOLOGIES, S.A.
Reference:	PF T-60 A VIDRIERA
Number of leaves:	1
Total dimension:	2149 x 997 mm
Light measurement:	2105 x 909 mm
Leaf thickness:	55
Main material (leaf and frame):	LEAF: Pine wood – Wood particle board – MDF FRAME: Sapelli wood
Reference certification body:	Doorset B: FM 396239-B 1121 (opening towards the furnace)



3 TEST REPORTS AND TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION.

3.1 Test reports

Test Report Nr.:	laboratory	Applicant	Date of test	Test Method
245729ENG	ENSATEC, S.L.U.	NORMA DOORS TECHNOLOGIES, S.A.	20/07/2018	EN 1634-1:2014

3.2 Test Result

DOORSET B	
INTEGRITY (E): 60 minutes	
Cotton pad:	60 minutes (without failure, test stopped)
Gap gauge $\Phi 6$ mm:	60 minutes (without failure, test stopped)
Gap gauge $\Phi 25$ mm:	60 minutes (without failure, test stopped)
Sustained flame:	60 minutes
TEST EXTENSION: 60 minutes	
MAXIMUM DEFLECTION: 22 mm	
CONSLUSIONS:	
The test is stopped at minute 60 by flame output through the large glass.	

3.3 Exposure conditions

Direction of fire exposure:	Opening towards the furnace
Number of fire exposed sides:	1
Sample selection:	The sample was selected by Warrington in the sampling made on 17/07/2018 at the facilities of NORMA DOORS TECHNOLOGIES, S.A. and sent to the laboratory by the applicant. Reference certification body: FM 396239-B 1121
Supporting construction	Double recess with mortar plaster on both sides, total thickness 100 mm 745 kg/m ³



4 CLASSIFICATION

This classification has been carried out in accordance with clause 7.5, UNE-EN 13501-2:2009 +A1:2010.

The above-mentioned element, DOORSET TIMBER SINGLE FOLDING LEAF, opening towards the furnace, with reference **PF T-60 A VIDRIERA**, is classified according to the following combinations of performance parameters and classes:

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5 FIELD OF DIRECT APPLICATION OF TEST RESULTS

The field of direct application defines the allowable changes to the test specimen following a successful fire resistance test. These variations can be applied automatically without the need for the sponsor to seek additional evaluation, calculation or approval.

Parameter	Variation allowed	Reference value (sample tested)
<i>Thickness of the door leaf. Density</i>	<p>The door panel thickness and/or density may be increased provided the total increase in weight is not greater than 25 %.</p> <p>The door thickness and/or density of the elements can not be reduced</p> <p>The composition of the particleboards (for example, amount of resin) can not be changed.</p>	<p>Leaf thickness: 55 mm</p> <p>Supporting frame: Perimetral, formed by 2 stiles and 2 rails of pine wood (approximate density 494 kg/m³ with a moisture content between 7-13%) measuring 30 x 45 mm section, assembled with staples</p> <p>Core: Wood particle board, formed by one standard chipboard 45 mm thick (approximate density 540 kg/m³, with a moisture content between 5 to 13%), manufactured by Tableros Hispanos, occupying the entire hollow interior of the supporting frame</p> <p>Facings: Wood fibreboard, CE certified and MDF medium density (approximate density 820 kg/m³, with a moisture content between 4 to 11%), formed by 2 tables of 5 mm thick, type ST manufactured by Tafibra</p>
<i>Frame components density</i>	Increase	Sapelli wood (approximate density 680 kg/m ³ , with moisture content between 7 to 13%)
<i>Cross-section dimensions</i>	Increase (rebates included)	100 mm width x 44 mm thickness / rebate of 56 mm width x 12 mm depth.



Parameter	Variation allowed	Reference value (sample tested)
<i>Fixings</i>	The number of fixings per unit length used to attach doorsets to supporting constructions may be increased, but shall not be decreased and the distance between fixings may be reduced but shall not be increased.	Fixing frame to supporting construction with 8 metallic anchors of metric 6 x 112 mm and diameter 10 mm for fixing door frames, reference EPS 6112 / M-6 x 112 PZ3 manufactured by Index, distributed 4 on the hinges side and 4 on the striker side on the frame rebate. The arrangement of the wood lag screws on each side will be made 100 mm from the top and 100 mm from the bottom, and the other two divided leaving 3 holes equal. The gap is filled with fire-resistant polyurethane foam, reference Orbafoam Fire-Stop from the manufacturer Quilosa.
<i>Decorative finishes. Paint</i>	Add paint / varnish that does not improve fire resistance of the door	Sample tested without surface paint
<i>Decorative laminates</i>	Decorative laminates and timber veneers up to 1,5 mm thickness may be added to the faces (but not the edges) of leaf door and frame	Sample tested without decorative laminates
<i>Building Hardware</i>	The number of hinges and dog bolts may be increased but shall not be decreased. (locks, hinges, handles) Interchange of building hardware is not covered by the field of direct application.	3 hinges by leaf and mortice lock (one single point) <i>Lock:</i> ARRONE AR910-R-60-SSS <i>Cylinder:</i> ARC EP70CTSKD <i>Handle and keyhole:</i> ARRONE AR961/60 <i>Threshold drop seal:</i> EXITEX Concealex A8100 Superior



Parameter	Variation allowed	Reference value (sample tested)
		<i>Hinges:</i> ARRONE AR8182-SSS Hinge 1: 175 mm; Hinge 2: 1035 mm; Hinge 3: 1890 mm Upper edge to upper hinge: 120 mm
	The doorset may be provided either with or without that closing device	<i>Door closing:</i> ARRONE AR5500-L-SE Uninstalled during the test
<i>Glazing elements</i>	The type of glass and the edge fixing technique can not be changed	2 glass per leaf Fixation technique: The fixing of the glass is done by means of a solid wood Sapelli molding (approximate density 680 kg/m ³ , with a moisture content between 7 to 13%), glued with adhesive and bolted to the leaf. The screws start to be placed 50 mm from the ends and then every 150 mm. (1) 20 screws per face (9 along + 1 width); (2) 8 screws per face (3 along + 1 width).
	It is not allowed to increase the number of glazed openings or each of the dimensions of the glass The glass dimensions (width and height) can be reduced in proportion to the leaf size reduction.	Dimensions: (1) 1415 x 155 mm and (2) 455 x 155mm Vision dimension: (1) 1365 x 105 mm and (2) 405 x 105 mm once the molding is placed
	The glazing element may be removed if the area is less than 15% of leaf area	Element area (1) to the leaf area: 11,2 % Element area (2) to the leaf area: 3,6 %



Parameter	Variation allowed	Reference value (sample tested)
	<p>The distance between the edge of the glazing and the perimeter of each leaf should not be reduced.</p> <p>The positioning of the glazed holes is allowed if it does not involve the removal or relocation of structural elements relative to the glazing.</p>	<p>Situation: Each glass at 150 mm from the edge of the leaf and 150 mm from the top of the leaf.</p>
<i>Size variations</i>	<p>Category A (for classification E60)</p> <p>Unlimited dimensional decrease</p> <p>No dimensional increases</p>	<p>0 min over 60 min</p> <p>Dimensions: 2110 x 930 x 55 mm</p>
<i>Dimensional reduction</i>	<p>For smaller doorset sizes the relative positioning of movement restrictors (e.g. hinges and latches) shall remain the same as tested or any change to the distances between them will be limited to the same percentage reduction as the decrease of test specimen size.</p>	<p>Lock: Distance from the base of the leaf to the axis of the latch: 1070 mm</p> <p>Hinges: Hinge 1: 175 mm; Hinge 2: 1035 mm; Hinge 3: 1890 mm Upper edge to upper hinge: 120 mm</p>
<i>Dimensional Increase</i>	<p>The height of the latch must be equal to or greater than sample tested</p> <p>The distance from the top hinge to the top of the leaf must be equal to or less than the sample tested</p> <p>The distance from the lower hinge to the bottom of the leaf must be equal or lower than in the sample tested</p> <p>When three hinges are used, the distance between the bottom of the leaf and the centre hinge must be equal or higher than the sample tested</p>	<p>Lock: Distance from the base of the leaf to the axis of the latch: 1070 mm</p> <p>Hinges: Hinge 1: 175 mm; Hinge 2: 1035 mm; Hinge 3: 1890 mm Upper edge to upper hinge: 120 mm</p>



Parameter	Variation allowed	Reference value (sample tested)
<i>Seals. Timber construction</i>	The number, size, location and orientation of any seals in the timber framing shall not be changed	ODICE Palusol 100, section 55 x 2 mm. Perimetrally to the hole made in the door leaf for the placement of the glass. ODICE Superwool X607 SA paper, 3 seals of 17 x 6 mm. Its perimeter and on the faces of the glass. EXITEX Fire only and Fire & Smoke seal, section 15 x 4 mm. In the part of the rebate, around its perimeter. ARRONE AR/INT-DIN-LOCK-60, 1 mm thickness. In the lock, strike plate and hinges. ODICE Interdens 15, 1mm thickness. In threshold drop seal.
<i>Opening direction</i>	Valid for the tested direction	The door has been tested opening towards the furnace.
<i>Supporting construction</i>	Valid for: Rigid standard supporting constructions, density $\geq 745 \text{ kg/m}^3$ and thickness $\geq 100 \text{ mm}$ Flexible standard supporting constructions	Double recess with mortar plaster on both sides, total thickness 100 mm 745 kg/m^3 .
<i>Gaps</i>	The maximum allowable gap for door installation is shown in the test report Gaps less than the maximum allowable	Maximum allowed gaps: Hinges side: 2.6 mm Lock side: 3.1 mm Upper side: 4.3 mm Bottom side: 4.8 mm

6 LIMITATIONS

This document does not represent any type approval or product certification.

The duration of validity of this classification report is subject to the legislation in force at the time of issuance.