



RESISTANCE TO FIRE

Classification Report

Report Nr:	244662ENG	Project Nr:	PY18-0077	Ref Nr:	MV69676
Date of issue	21/03/2018				
Accredited Body	Accredited Body to ENAC (National Accreditation) with the number 288/LE634				
Test Specimen	Type:	Timber simple leaf swinging door, with glass			
	Reference:	Door 1: RF T-30-B PARALLAMAS			
	Dimension block:	2110 mm x 930 mm x 44 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 tests	Test Start Date:	23/02/2018			
	End Start Date:	23/02/2018			

CLASSIFICATION

E 30/E45

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Department Director

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This report is the translation of report n° 244662.



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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 PRODUCT 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

Type:	Timber simple leaf swinging door
Manufacturer:	Norma Doors Technologies S.A.
Reference:	RF T-30-B PARALLAMAS
Number of leaves:	1
Total Dimension:	2141 mm x 981 mm
Dimension of leaf:	2110 x 930 mm
Light dimension:	2105 X 893 mm
Leaf thickness:	44 mm
Main Material (leaf and frame):	LEAF: PARTICLE BOARD FRAME: WOOD



3 TEST REPORTS AND TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION

3.1 Test Reports

Test report Nr.:	Name of Laboratory	Applicant	Date of test	Test Method
244659	ENSATEC, S.L.U.	NORMA DOORS TECHNOLOGIES, S.A.	23/02/2018	EN 1634-1:2014

3.2 Test Results

Report Nr: 242527	
INTEGRITY (E): 46 min	
Cotton pad:	46 min (without fail, end of sample evaluation)
Gap gauge $\Phi 6$ mm:	46 min (without fail, end of sample evaluation)
Gap gauge $\Phi 25$ mm:	46 min (without fail, end of sample evaluation)
Sustained flame:	46 min (without fail, end of sample evaluation)
THERMAL INSULATION (I₁): 3 min	
Mean temperature:	3 min (without fail, end of sample evaluation)
Maximum temperature:	3 min 0
THERMAL INSULATION (I₂): 3 min	
Mean temperature:	3 min (without fail, end of sample evaluation)
Maximum temperature:	3 min (without fail, end of sample evaluation)
TEST EXTENSION: 46 min	
MAXIMUM DEFLECTION: 27 mm	
CONCLUSIONS:	
The test is stopped after 46 minutes without failure due to integrity. Fault isolation in the glass, in 3 minutes.	

3.3 Exposure conditions

Direction of fire exposure: Opening into the furnace

Number of fire exposed sides: 1

Sample selection: The sample was selected by Warrington Certification in the sampling made on 21/02/2018 at the facilities of NORMA DOORS TECHNOLOGIES S.A. and sent to the laboratory by the applicant. Reference certification body: 1121 FM395212 Door 1

Supporting constructions Ceramic block 90 mm + 5 mm mortar render on both sides. Total wall thickness 100 mm. Density 677 kg / m³



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, fire timber swinging door single leaf, EI2 120 C5, opening into the furnace, is classified according to the following combinations of performance parameters and classes:

CLASSIFICATION

EI30/ EI45



5 FIELD OF DIRECT APPLICATION OF TEST RESULTS

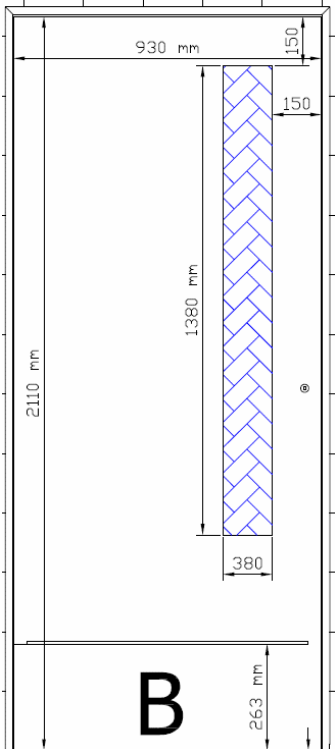
The field of direct application defines the allowable changes to the test specimen following a successful fire resistance test. These variations can be applied automatically without the need for the sponsor to seek additional evaluation, calculation or approval.

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>Thickness of the leaf: 44 mm</p> <p>Supporting frame: Perimetral, formed by 2 stiles of MDF medium density fibres, density 650 kg/m³, measuring 23 x 34,2 mm and 2 pine-wood rail, density 494 kg/m³, measuring 30 x 34.2 mm, assembled using staples. Attached to each of the two rails of MDF are placed 2 edges of solid wood of 44 mm x 7 mm</p> <p>Core: Particle board consisting of 1 ultralight chipboard 34,2 mm thick manufactured by GRUPO LOSAN, density 455 kg/m³.</p> <p>External surface: Medium-density fibreboard (MDF), density 820 kg/m³, consisting of 2 tables of 5 mm thick, type ST manufacturer by TAFIBRA.</p>
<i>Density of frame components</i>	Increase	Pine Wood, 450 Kg/m ³
<i>Cross-section dimensions</i>	Increase (rebates included)	100 mm / 44 mm with rebate of 46 x 12 mm



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.	The set is fixed using 8 metric 6 x 112 mm metal anchors and 10 mm diameter to fix door frames, reference EPS 6112 / M-6 x 112 PZ3 manufactured by INDEX, distributed 4 on the side of the hinges and 4 on the side of the strike. The arrangement of the metal anchors on each side is 100 mm from the top and 100 mm from the bottom, and the other two distributed leaving 3 equal holes.
<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 Note: The sample includes pantographed on the facings, section 10 x 4 mm, both the exposed face and the face not exposed to fire.
<i>Glazed elements</i>	The type of glass and the edge fixing technique can not be changed	Parallamas EW 30 minutes, reference PYROSTEM 1 rectangular glass The glazing is fixed with a beech wood moulding, section 22 x 25 mm, glued with adhesive and screwed to the leaf. The screws are at a height of 50 mm from the ends and every 150 mm. Perimeter to the glass, a joint channel is placed in U-shaped intumescent product, fire-resistant material, with graphite base thermo-expandable, reference Exiglaze 30 U Channel manufactured by EXITEX.



Parameter	Variation allowed	Reference value (sample tested)
	<p>The number of glazed openings or each of the dimensions of the glass can not be increase</p> <p>The dimensions (width and height) of the glass can be reduced in proportion to the reduction in the size of the leaf</p>	<p>Dimensions: 1414 mm x 410 mm x 7 mm Viewer glass: 1380 mm x 380 mm</p>
	<p>The glazing element can not be removed since the area is greater than 15% of the area of the leaf</p>	<p>Element area to the area of the leaf: 29.5%</p>
	<p>The distance between the edge of the glazing and the perimeter of each leaf should not be reduced.</p> <p>The change of position of the glazed holes is allowed if it does not involve the removal or relocation of structural elements related to the glazing</p>	<p>Situation on the leaf:</p> 
<p><i>Building Hardware</i></p> <p>Door closing</p>	<p>The number of hinges and dog bolts may be increased but shall not be decreased. (locks, hinges, handles)</p> <p>Interchange of building hardware is not covered by the field of direct application.</p>	<p>3 hinges by leaf and mortice lock (one single point)</p> <p>Lock: ARRONE AR910-R60-SSS</p> <p>Cylinder lock: ARC EP70CTSKD</p> <p>Handle and keyhole ve: AT SIENA</p>



Parameter	Variation allowed	Reference value (sample tested)
	The doorset may be provided either with or without that closing device	Hinges EXITEX Concealex A8100 Hinge 1: 120 mm from the ground Hinge 2: 1005 mm from the ground Hinge 3: 1888 mm from the ground Door closing: AR1500-SE/SE Uninstalled during the test
<i>Size variations:</i>	Category A (E45) Unlimited dimensional decrease No dimensional increases	1 min over 45 min Total Leaf Dimension 2100 mm x 930 mm x 44 mm
	Category B (E30) Unlimited dimensional decrease The dimensional increase to 15% in height and width is allowed if 20% is not exceeded in the area	16 min over 30 min Total Leaf Dimension 2100 mm x 930 mm x 44 mm
<i>Dimensional reduction</i>	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.	Lock: Distance from the base of the leaf to the axis of the latch: 1070 mm Hinges: Hinge 1: 120 mm from the ground Hinge 2: 1005 mm from the ground Hinge 3: 1888 mm from the ground



Parameter	Variation allowed	Reference value (sample tested)
<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 center 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: 120 mm from the ground Hinge 2: 1005 mm from the ground Hinge 3: 1888 mm from the ground</p>
<i>Seals. Timber constructions</i>	<p>The number, size, location and orientation of any seals in the timber framing shall not be changed</p>	<p>EXITEX Palusol in the frame, section 15 x 4 mm, throughout its perimeter</p> <p>EXITEX Exiglaze 30 U, perimeter to the glass.</p> <p>ARRONE AR/INT-DIN_LOCK-60, in the mortise lock and the strike plate.</p>
<i>Opening direction</i>	<p>Valid for the tested direction</p>	<p>The door has been tested opening into the furnace</p>
<i>Supporting construction</i>	<p>Valid for:</p> <p>Rigid standard supporting constructions, density ≥ 899 kg/m³ and thickness ≥ 140 mm</p> <p>Flexible standard supporting constructions</p>	<p>Supporting construction made by clay block. Total wall thickness 100 mm.</p> <p>Density 677 kg / m³</p>
<i>Gaps</i>	<p>The maximum allowable gap for door installation is shown in the test report</p> <p>Gaps less than the maximum allowable</p>	<p>Maximum allowed gaps:</p> <p>Hinges side: 3.8 mm Lock side: 3.4 mm Upper side: 3.4 mm Bottom side: 8.1 mm</p>



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.