RESISTANCE TO FIRE  CLASSIFICATION REPORT FOR PRODUCT
FIRES-CR-165-07-NURE

Glazed, 2 or 3 panel side-opening and 2 or 4 panel centre-opening lift landing door

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CLASSIFICATION OF FIRE RESISTANCE WITH EXTENDED FIELD OF APPLICATION OF THE TEST RESULTS

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Product name: Glazed, 2 or 3 panel side-opening and 2 or 4 panel centre-opening lift landing door

Report number: FIRES-CR-165-07-NURE
Task number: PR-07-0357
Date of issue: 26. 09. 2007

Distribution list:
1. KLEFER A.E., Kilkis Industrial Area, 61100 Stavroxori, Greece
2. KLEFER A.E., Kilkis Industrial Area, 61100 Stavroxori, Greece
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This classification report consists of 5 pages and 1 Appendix (34 x A4) and may only be used or reproduced in its entirety.
1. Introduction

This classification report defines the fire resistance classification of:

- glazed, 2 or 3 panel side-opening and 2 or 4 panel centre-opening lift landing door

with extended application of the test results. The classes given in EN 81-58: 2004 were used for the classification. Extended application of test results was stated according to internal methods of executor.

The document (No. FIRES-CR-165-07-NURE) was issued at request of the sponsor - Tecnolama s.a. (Spain) as one of the copies of the classification report No. FIRES-CR-036-07-NURE issued by FIRES, s.r.o. (Slovakia) on 05. 03. 2007.

2. Details of classified product

2.1 General

Product is used as lift landing door with fire resistance. Door is automatically closed after each open.

2.2 Product description

Construction:
glazed 2 or 4 panels centre-opening lift landing door / glazed 2 or 3 panels side opening lift landing door

<table>
<thead>
<tr>
<th>Type of construction</th>
<th>Clear opening range size (mm)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min. Width</td>
<td>Max. Width</td>
<td>Min. Height</td>
</tr>
<tr>
<td>T2</td>
<td>600</td>
<td>1400</td>
<td>2000</td>
</tr>
<tr>
<td>T3</td>
<td>600</td>
<td>1400</td>
<td>2000</td>
</tr>
<tr>
<td>C2</td>
<td>600</td>
<td>1400</td>
<td>2000</td>
</tr>
<tr>
<td>C4</td>
<td>1000</td>
<td>2300</td>
<td>2000</td>
</tr>
</tbody>
</table>

T2 – 2 panels side-opening lift landing door
T3 – 3 panels side-opening lift landing door
C2 – 2 panels centre-opening lift landing door
C4 – 4 panels centre-opening lift landing door

Door frame:
Made of steel profiles.

Door panels:
Non-insulated panels made of steel frame glazed with glass Pyran S, 6 mm thick.

Intumescent seals:
Bifire Advin Seal K or Sealbifibre (manufacturer: Bifire S.R.L., Italy).

Overlapping of the glass:
Has to be 20 mm (More detailed information about method of overlapping is shown in the drawings No. 9/18, 12/18, 13/18 and 14/18 for centre-opening doors and drawings No. 9/16 and 12/16 for side-opening doors, which form the appendix of this test report.)

Way of fixation:
The product is fixed to the supporting construction, 210 mm thick, built with ceramic bricks with bulk density 1600 kg/m³ in any of the following three ways:
• Between walls - Inside the reveal of the opening with an adjustable steel profile around the perimeter
• Between walls - Inside the reveal of the opening with the perimeter of the doorset infilled with concrete
• Behind wall – Face fixed to the unexposed face of the wall

More detailed information about doors construction is shown in the drawing which forms the appendix of this test report. Drawing was delivered by the sponsor.

3. Test reports / test results in support of classification

3.1 Test reports

<table>
<thead>
<tr>
<th>No.</th>
<th>Test laboratory</th>
<th>Sponsor</th>
<th>Test report number/ date of issue</th>
<th>Date of test</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1]</td>
<td>FIRES s.r.o., Batizovce, Slovakia</td>
<td>Tecnolama s.a., Reus, Spain</td>
<td>FIRES-FR-137-06-AUNE (04. 11. 2006)</td>
<td>04. 10. 2006</td>
<td>EN 81-58</td>
</tr>
</tbody>
</table>

[1] Test specimen was stored in the climatic hall of test laboratory FIRES s.r.o. (Slovakia) and conditioned according to EN 1363-1.
[2] Test specimen was stored in the hall of test laboratory Warrington Fire Research Centre Ltd., Warrington, UK
* The WF Assessment report 155660 was executed on the basis of stated referenced test reports. The referenced test reports declare that glazed door, using Bifire Advin Seal K or Sealbifibre (manufacturer: Bifire S.R.L., Italy) intumescent seals, satisfies the sustained flaming performance criteria for a period of 120 minutes.

3.2 Test results

<table>
<thead>
<tr>
<th>No. of Test report (description of product tested)</th>
<th>Parameter/criterion</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1]</td>
<td>□ INSULATION average temperature maximum temperature</td>
<td>4 minutes 4 minutes</td>
</tr>
<tr>
<td></td>
<td>□ INTEGRITY sustained flaming flow through the door per meter width of door</td>
<td>59 minutes* 58 minutes no failure*</td>
</tr>
<tr>
<td></td>
<td>□ RADIATION 15kW/m²</td>
<td>28 minutes</td>
</tr>
</tbody>
</table>
### Table 1: Test Results

<table>
<thead>
<tr>
<th>Parameter/criterion</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INSULATION</strong></td>
<td></td>
</tr>
<tr>
<td>average temperature</td>
<td>-</td>
</tr>
<tr>
<td>maximum temperature</td>
<td>-</td>
</tr>
<tr>
<td><strong>INTEGRITY</strong></td>
<td></td>
</tr>
<tr>
<td>sustained flaming</td>
<td>11 minutes</td>
</tr>
<tr>
<td>flow through the door per meter</td>
<td>50 minutes</td>
</tr>
<tr>
<td>width of door</td>
<td></td>
</tr>
<tr>
<td><strong>RADIATION</strong></td>
<td></td>
</tr>
<tr>
<td>5kW/m²</td>
<td>51 minutes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Assessment</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INSULATION</strong></td>
<td></td>
</tr>
<tr>
<td>average temperature</td>
<td>-</td>
</tr>
<tr>
<td>maximum temperature</td>
<td>-</td>
</tr>
<tr>
<td><strong>INTEGRITY</strong></td>
<td></td>
</tr>
<tr>
<td>sustained flaming</td>
<td>120 minutes</td>
</tr>
<tr>
<td>flow through the door per meter</td>
<td>58 minutes*</td>
</tr>
<tr>
<td>width of door</td>
<td></td>
</tr>
<tr>
<td><strong>RADIATION</strong></td>
<td></td>
</tr>
<tr>
<td>15kW/m²</td>
<td></td>
</tr>
</tbody>
</table>

1. The test was discontinued in the 60th minute because integrity was failed.
2. The test was discontinued after a period of 58 minutes.
3. According to the WF Assessment report No. 155660, failure was caused by way of glazing. According to test report [1] the classification E60 is valid only in case if the overlapping of the glass will be increased from 15 mm to 20 mm.

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### 4. Classification and field of direct and extended application

#### 4.1 Reference of classification

The classes given in EN 81-58: 2004 were used for the classification.

#### 4.2 Classification

Product according to paragraph 2.2, glazed, 2 or 3 panel side-opening and 2 or 4 panel centre-opening lift landing door is classified according to following combinations of parameters, properties and classes. Another classification is not allowed.

**Fire resistance classification:** E 60, EW 20
4.3 Field of direct and extended application of test results

This classification according to paragraph 4.2 is also valid for similar constructions where one or more of the changes listed below are made and the construction continues to comply with the appropriate design code for its stiffness and stability:

<table>
<thead>
<tr>
<th>Change of dimensions</th>
<th>according to paragraph 2.2, no change is allowed;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting construction</td>
<td>product is installed in the rigid supporting construction with bulk density 600 kg.m$^{-3}$ and 100 mm thick, alternatively to another wall provided that bulk density and wall thickness is the same or greater; way of fixation according to 2.2, no change is allowed;</td>
</tr>
<tr>
<td>Construction</td>
<td>according to paragraph 2.2, no change is allowed;</td>
</tr>
<tr>
<td>Door frame and door panels</td>
<td>according to paragraph 2.2, no change is allowed;</td>
</tr>
<tr>
<td>Intumescent seals</td>
<td>according to paragraph 2.2, no change is allowed;</td>
</tr>
<tr>
<td>Overlapping of the glass</td>
<td>according to paragraph 2.2, no change is allowed;</td>
</tr>
<tr>
<td>Addition of glass</td>
<td>an additional non-fire rated glass may be laminated to the fire side of the tested glass by a PVB interlayer, with total thickness 3.5 mm.</td>
</tr>
</tbody>
</table>

5. Limitation

This classification document does not represent type approval or certification of the product. The classification is valid until 05.03.2012 provided that the product and field of application are not changed.

EXECUTED

[Signature]

Ing. Henrieta Lapková
technician
FIRES spol. s.r.o. Batizovce

APPROVED

[Signature]

Ing. Mária Gašperová
head of product certification body
FIRES spol. s.r.o. Batizovce
MONTANTE APERTURA 120-200 (con botonera)
OPENING FRAME 120-200 (with button)

Llave / Key

Rellano / Landing

Proy. / Proj.: 40-50
Used in configs 2, 3, 6 and 7

- IF no ≤ 300 = WITHOUT reinforcing.
- IF 300 < no ≤ 600 = 1 reinforcing.
- IF no > 600 = 2 reinforcements.
TOO JUICIO ADJUDICACIóN EJECUTIVÓ RESOLUCIóN 403/98

**Note:** Right side according to drawing. Left side opposite drawing. Flat glass according drawing 18/18.

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**TECNOLAMA**

**HOJA LENTA**
**SLOW PANEL**

**Relator / Lending**
**Proy. / Proj. 140-50**

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**Drawings and Diagrams**

- **SECCIÓN A-A**
- **SECCIÓN B-B**
- **DETALLE C**
- **DETALLE D**
- **DETALLE E**
- **DETALLE F**

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**Technical Specifications**

- **Tolerances de Ubicación**
- **Peso/Weight**
- **Material/Materia**
- **Fecha/Date**
- **Nombre/Nam**
- **Modificaciones/Modifications**

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**Schedule**

- **Fecha/Date**
- **Nombre/Nam**
- **Modificaciones/Modifications**

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**Figure 1**

- **Proy. / Proj. 140-50**
Nota: Vidrio plano según dibujo 18/10.

HOJA RÁPIDA IZQUIERDA
FAST LEFT PANEL

Reliano / Landing
Proy./Proj.: 40-50
Note: Flat glass according dwg 10/10

Material: Material
Acabado/Finishing: -

HOJA RÁPIDA DERECHA
FAST RIGHT PANEL

Rellano / Landing: C2-C4
Proy./Proj.: 40-50

Fecha / Date: 31/10/06
Nombre / Name: gregorio

Material / Code: E-60

E-60: TAPAJUNTAS
ADJUSTMENTS

Rellano/ Landing: C2-C4
Proy./ Projet: 40-50

Horizontal adjustment
Vertical adjustment

Section A-A'
Section B-B'

Horizontal adjustment
Vertical adjustment
Glass installation detail
Valid for d-w 9/18, 12/18, 13/18 and 14/18.

E-60: CRISTAL ENRASADO
FLAT GLASS

Reliano / Landing: C2-C4
Proy./Proj.: 40-50
Used in configs 1 and 3:

* If ma < 300 = Without reinforcement.
* If 300 < ma < 600 = 1 reinforcement
* If ma > 600 = 2 reinforcements
SECCIÓN A-A

DETALLE B

Fire resistant Glass

DETALLE C

SECCIÓN D-D

DETALLE F

Intumescent Seal

DETALLE E

Intumescent Seal

Used in configs 2 and 4. Note: Flat glass according dwg 14/14.

MONTANTE I/D GRAN MIRILLA
BIG VISION L/R FRAME

Proy./Proj. 40-50

T2-T3
Note: Right side according to drawing. Left side mullite lining.
Flat glass according to fig. 14/14.
Glass installation detail
Valid for dwg 8/14 and 11/14.