

Classification report

Lorient Intumescent Fire Dampers

Test Sponsor:
Lorient Polyproducts Ltd.

Test institute:
LGAI Technological Center, S.A. / Applus
(Notified body NB 0370)

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Bellaterra : 4 of December of 2008
File number : 08/32308172 Part 2
Test sponsor : Lorient Polyproducts LTD
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TEST SPONSOR

1.- INTRODUCTION

This classification report defines the classification of eight grids reference "LVV40", "LVH44", "LVC40", "LVHC44" and "LVHC50" of different sizes with according to the procedures given in UNE EN 13501-2:2004.

2.- DETAILS OF CLASSIFIED ELEMENTS

2.1.- Type of function.

The tested elements are defined as ten grids. Their function is withstand the fire resistance characteristics of integrity and thermal insulation as described in the clause 5 of the standard UNE EN 13501-2:2004.

2.2.- Description

The tested elements are fully described in test report, in which classification defined in point 4 of this report is based.

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This document consists of 6 pages

3.- TEST REPORT

The current classification report is based on the following test report:

File nº: 08/32308172 Part 1
 Sent with date: 4 of December of 2008
 Test carried out on: 16 of May of 2008

4.- TEST RESULTS

4.1.- Test standard:

UNE-EN 1634-1: 2000: " Fire resistance tests for door and shutter assemblies.
 Part 1 : Fire doors and shutters.

4.2.- Exposure conditions

Temperature/time curve	$T = 345 \log_{10}(8t + 1) + 20$
Exposure direction	The samples are installed to 100 mm depth of the exposed face the construction site.
Number of exposed faces	1
Support conditions	Concrete brick wall

4.3.- Results table

NOTE: The criteria of thermal insulation is not verified until minute 5 of test as indicated in dampers standard UNE EN 1366-2:2000. Since this moment the grid is totally sealed.

Grid A.

	Failure minute	Reason
Integrity	Do not fail during all the test	-
Thermal Isolation	Do not fail during all the test	-

Grid B.

	Failure minute	Reason
Integrity	Do not fail during all the test	-
Thermal Isolation	Do not fail during all the test	-

Grid D.

	Failure minute	Reason
Integrity	Do not fail during all the test	-
Thermal Isolation	Do not fail during all the test	-

Grid E.

	Failure minute	Reason
Integrity	Do not fail during all the test	-
Thermal Isolation	91	Grid's average temperature > 140 °C

Grid F.

	Failure minute	Reason
Integrity	100	Appear a crack
Thermal Isolation	91	Grid's average temperature > 140 °C

Grid H.

	Failure minute	Reason
Integrity	35	Appear a flame
Thermal Isolation	28	Mobile thermocouple > 180 °C

Grid I.

	Failure minute	Reason
Integrity	Do not fail during all the test	-
Thermal Isolation	101	Thermocouple 37 > 180 °C

Grid J.

	Failure minute	Reason
Integrity	Do not fail during all the test	-
Thermal Isolation	108	Grid's average temperature > 140 °C

Grid K.

	Failure minute	Reason
Integrity	50	Appear a crack
Thermal Isolation	31	Thermocouple 46 > 180 °C

Grid L.

	Failure minute	Reason
Integrity	Do not fail during all the test	-
Thermal Isolation	73	Thermocouple 52 > 180 °C

5.- CLASSIFICATION

According to clause 7.5. of UNE EN 13501-2:2004 the classification of the tested element is the following

Grid A ref. "LVV40" of dimensions 600 x 600 mm	EI 120
Grid B ref. "LVH44" of dimensions 600 x 600 mm	EI 120
Grid D ref. "LVC40" of dimensions 245 x 245 mm and 150 mm inner diameter.	EI 120
Grid E ref. "LVHC40" of dimensions 230 x 230 mm and 150 mm inner diameter.	EI 90 E 120
Grid F ref. "LVV40" of dimensions 200 x 200 mm	EI 90
Grid H ref. "LVC40" of dimensions 400 x 400 mm and 300 mm inner diameter.	EI 20 E 30
Grid I ref. "LVHC44" of dimensions 480 x 480 mm and 300 mm inner diameter.	EI 90 E 120
Grid J ref. "LVHC50" of dimensions 600 x 600 mm	EI 90 E 120
Grid K ref. "LVC40" of dimensions 530 x 530 mm and 450 mm inner diameter.	EI 30
Grid L ref. "LVHC44" of dimensions 530 x 530 mm and 450 mm inner diameter.	EI 60 E 120

The issues indicated in clause 6, "DIRECT FIELD OF APPLICATION" are out of the range of the ENAC accreditation.

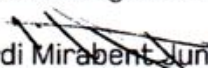
6.- DIRECT FIELD OF APPLICATION

Fire test results are applied directly to similar constructions when one or more of modifications indicated in clause 13 of UNE EN 1634-1:2000 are carried out.

Validity period is the one indicated in the product certification system.

This document doesn't represent any type approve and any certification of product.

LGAi Technological Center, S.A.


Jordi Mirabent Junyent
Fire Responsible

LGAi Technological Center, S.A.


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Albert Ger Castillo
Technical Responsible
LGAi Technological Center, S.A.

The results refer exclusively to the sample, product or material surrendered to the Laboratory, just as it is informed in the section of received material and tested under the conditions indicated in the norms mentioned in this document.

Quality Service Warranty

Applus+, guaranties that this work has been realized following the exigencies of our Quality and Sustainable System, complying with honoring the contractual conditions and the legal standard.

We would be very grateful if you would send us any comment you consider appropriate, addressing either to the signatory of this document or to the Applus+ Quality Director to the direction satisfaccion.cliente@appluscorp.com

Notification of a Body pursuant to article 10 of the Construction Products Directive 89/106/EEC

From : Subdirección General de Calidad
y Seguridad Industrial
Paseo de la Castellana, 160
28071 Madrid
Spain

To : **European Commission**
Enterprise Directorate-General
-
B 1049 Brussels
Other Member States

Reference :

Directive : 89/106/EEC Construction products

Body name, address, telephone, fax, email, website :

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Type of body :

NB 0370

Created : Unknown (Notifications pre-dating 2006 are not available in these lists) | **Last update :** 31/08/2009

Period of validity of the notification :

Valid until : Unlimited

Basis of competence assessment :

EN 45004 - EN ISO/IEC 17020

EN 45012 - EN ISO/IEC 17021

EN 45011

EN 45001 - EN ISO/IEC 17025

The body has :

- the required technical competence in relation to the product(s) under this directive
- sufficient competence in relation to the procedure(s)/attestation of conformity selected for these product(s)

Yes

Competence assessment performed by :

Nationally recognised accreditation body, operating according to EN 17011

The Nationally recognised accreditation body is a signatory to the following parts of the EA/MLA

Name(s) of Accreditation/Competence Assessment body :

Entidad Nacional de Acreditación (ENAC)

The nationally recognised accreditation body is a signatory to the following parts of the EA/MLA :

Testing

Inspection

Product certification

QMS (Quality System certification)