



LABORATORY ASSESSMENT No. EFR-15-003678

Concerning fire resistance

Issued on	18 December 2015
Regarding	Metallic door set with one or two hinged leaves
Sponsor	OPENERS & CLOSERS C/ Cortit, 10 ES - 08027 BARCELONA

1 PURPOSE OF THE LABORATORY ASSESSMENT

Study of the influence of the mounting of electric strike on metallic door sets with one or two hinged leaves on their fire resistance performances in accordance with standards EN 1363-1 and EN 1634-1.

2 LABORATORY

EFFECTIS France
Voie Romaine
F - 57280 MAIZIERES-LES-METZ

3 REFERENCE AND ORIGIN OF THE ELEMENT STUDIED

References : 24L0.4.00.M, 24L0.4.00.N, 24L4.4.00.N, 24L6.4.00.L, 24L6.4.00.M, 24L6.4.00.N, 24L8.4.00.N, 24L8.4.00.P, 24R0.4.00.L, 24R0.4.00.M, 24R0.4.00.N, 24R4.4.00.N, 24R6.4.00.L, 24R6.4.00.M, 24R6.4.00.N, 24R8.4.00.N, 24R8.4.00.P, 24L0.4.00.L, 24L4.4.00.M and 24R4.4.00.M

4FL04M, 4FL04N, 4FL04L, 4FR04L, 4FL64L, 4FL64M, 4FL64N, 4FR04N, 4FR04M, 4FR64L, 4FR64M, 4FR64N, 4FL44M, 4FL44N, 4FL84P, 4FL84N, 4FR44M, 4FR44N, 4FR84P and 4FR84N

Origin : OPENERS & CLOSERS
C/ Cortit, 10
ES - 08027 BARCELONA

4 DESCRIPTION OF THE ELEMENT

4.1 GENERAL

The subject of the presented document is to verify the conservation of the fire resistance performances of metallic door sets equipped with electrical strikes.

The door sets concerned by this Laboratory assessment must in every case be covered by a fire performance report "Procès-Verbal de classement" and must be consistent in every point (realisation, implementation, dimensions,...) with the fire performance report "Procès-Verbal de classement" and/or its extensions of classification "Extensions de classement".

The metallic door sets with one or two hinged leaves, made of metallic doorframe and with door leaves made of :

- Metallic facings
- A metallic framework
- An insulation made with 2 plasterboards with minimal thickness 12,5 mm placed on the external side of the frame. The plasterboards can be associated with mineral wool or calcium silicate boards

4.2 DETAILS OF THE MODIFICATION

Initially, and in conformity with their referenced « Procès-Verbal », the door sets can be equipped with electrical strikes.

This material can be replaced by the following electrical strikes, from the series S4F (OPENERS & CLOSERS) :

ELECTRIC STRIKES		
SERIES 4F / FIRE		
Current Item No	NEW Item No	Description
24L0.4.00.M	4FL04M	fail-secure
24L0.4.00.N	4FL04N	fail-secure
24L4.4.00.N	4FL44N	fail-safe
24L6.4.00.L	4FL64L	fail-secure, monitoring
24L6.4.00.M	4FL64M	fail-secure, monitoring
24L6.4.00.N	4FL64N	fail-secure, monitoring
24L8.4.00.N	4FL84N	fail-safe, monitoring
24L8.4.00.P	4FL84P	fail-safe, monitoring
24R0.4.00.L	4FR04L	fail-secure
24R0.4.00.M	4FR04M	fail-secure
24R0.4.00.N	4FR04N	fail-secure
24R4.4.00.N	4FR44N	fail-safe
24R6.4.00.L	4FR64L	fail-secure, monitoring
24R6.4.00.M	4FR64M	fail-secure, monitoring
24R6.4.00.N	4FR64N	fail-secure, monitoring
24R8.4.00.N	4FR84N	fail-safe, monitoring
24R8.4.00.P	4FR84P	fail-safe, monitoring
24L0.4.00.L	4FL04L	fail-secure
24L4.4.00.M	4FL44M	fail-safe
24R4.4.00.M	4FR44M	fail-safe

All the other elements of the lock are unchanged.

5 ANALYSIS

The mounting of the electrical strikes from the series S4F (OPENERS AND CLOSERS) is based on the fire resistance test reference CSI n° 1369FR, realised on the 15th of January 2008 at the Laboratory CSI at BOLLATE (Italy) and concerning 2 one hinged leaf door set reference IDRA 1 B 120-CG (DIERRE) installed on fire on the hinges side and opposite to the hinges side. During this test the fire resistance performances of the electrical strike regarding the fire integrity and thermal insulation criterion has been satisfied for at least 120 minutes.

On this test report the reference of the electrical strike is 033 (DIERRE), this electrical strike is in every point identical to the S4F (OPENERS AND CLOSERS) electrical strike, the manufacturing of the product has not be modified since the fire resistance test and a statement from the Sponsor is kept in this Laboratory assessment.

The study of the technical files of every electrical strike model from the series S4F outlined that considering the very close conception of every model, the good results of test CSI n° 1369FR can be extended to all the models S4F.

Considering above analysis, the mounting of the electrical strikes references 4FL04M, 4FL64L, 4FL64M, 4FL64N, 4FR04M, 4FR64L, 4FR64M, 4FR64N, 4FL44M, 4FL44N, 4FL84P, 4FL84N, 4FR44M, 4FR44N, 4FR84P et 4FR84N, from the series S4F (OPERNERS & CLOSERS) is authorised for a maximal fire performance EI₂ 120.

6 EXCLUSIONS

This Assessment can't be applied to the following elements:

- Metallic doors made without internal metallic frame, known as "composite doors".
- Timber door sets.
- Doors covered by a French « Avis de Chantier », or documents different than a « Procès-Verbal de classement ».
- Doors with fire performances greater than E 120 or EI₂ 120
- Doors covered by a "Procès-Verbal de classement" delivering a fire performance type PF/CF HCM.

7 CONDITIONS OF VALIDITY

The following conditions have to be respected :

- The number of locking points must be the same as in the « Procès-Verbal ».
- The fillister hold must allow the locking of the door during a fire. The minimal fillister hold is the one of the reference « Procès-Verbal ».
- The installation of new elements comparing to the « Procès-Verbal » must keep the eventual seals (reference, section) placed on the doorframe around the strike.
- The dimensions of the electrical strike case used in the « Procès-Verbal » must be greater or equal than those of the strike case of this assessment.

8 CONCLUSIONS ON THE FIRE PERFORMANCES

The replacement of the electrical strike by the electrical strike described in the paragraph 4, and in the exclusions and conditions of validity described in paragraph 6 and 7, do not decrease the initial fire resistance performances of the elements given in the reference "Procès - Verbaux".

On the request of the owner of the « Procès-Verbal », an « Extension de classement » should be done to allow the validation of the electrical strikes subject of the present document into the concerned doors.

Villeurbanne, December the 18th 2015



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Project Manager



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Head of Testing Department

APPENDIX Plates

Numero de elemento	CODIGO	DENOMINACION	Cantidad	Material	ACABADO
1	00398901	Security Box fire	1	F - 211	Cu+Ni+Cr
2'	00311511	Eje pestillo 5mm	1	IF-16 (34CrMo4)	Zincado + deshidrogenado
3	00302500	EJE LATON DIAMETRO 4	1	Laton	BOMBEO PARA PULIR ARISTAS
4	00301500	EJE LATON DIAMETRO 3.5	1	Laton	BOMBEO PARA PULIR ARISTAS
5	00149000	BORINADO CENTRAL ESPECIAL GISA	2	PAG+30%FV	color NEGRO
7	00107000	Spool Reel	2	PAG6 + 30% FV	Black Colour
8	00720551	TORNILLO REGULABLE DIN 913 Maxido	1	Acero	COLOR NEGRO
10	00940600	Security Latch	1	Acero Inoxidable	
11	00312511	Dual Core Coil	2	Hierro	Zncked
12	00715000	MICROSWITCH OMRON D2F-F	1		COLOR NEGRO
13	00206511	Doble Coil Angle	1	Hierro	Zncked
14	00901531	Short Sinterized Steel Latch	1	Acero Sinterizado	Zncked
16	00781551	Washer DIN 6799 2,3MM	2	Acero	Temperate
17	00840500	MUELLE CORREDERA GISA	1	Acero Inoxidable	
18	00121400	Tripolar Lead	1		
19	00120400	Bipolar Lead	1		
20'	00204511	Mobile Support	1	Hierro	Zncked
21'	00902531	long Sinterized Steel Latch	1	Acero	Zncked

INTERPRETACION MODELO S4F

4F: INDICA MODELO CORTA-FUEGOS
R o L: MANO DERECHA o MANO IZQUIERDA
6 o 8: MODELO STANDARD MICRO o MODELO INVERSO MICRO.
4: PESTILLO CON RANURA STANDARD
L: BOBINA 12 Vdc MODELO STANDARD
M: BOBINA 12 Vdc MODELO STANDARD INVERSO
N: BOBINA 24 Vdc MODELO INVERSO Y STANDARD

MODELOS S4F _ NEW CODIFICATION	
4FL04M	4FR04N
4FL04L	4FR04M
4FL64L	4FR64N
4FL64M	4FR64M
4FL84N	4FR84N

FECHA: _____	FECHA: _____	FECHA: _____	FECHA: _____
TERMINAL: _____	TERMINAL: _____	TERMINAL: _____	TERMINAL: _____
REVISADO: _____	REVISADO: _____	REVISADO: _____	REVISADO: _____
PREPARADO: _____	PREPARADO: _____	PREPARADO: _____	PREPARADO: _____
CONSEJERÍA: _____	CONSEJERÍA: _____	CONSEJERÍA: _____	CONSEJERÍA: _____
BOBINA: _____	BOBINA: _____	BOBINA: _____	BOBINA: _____
MANO: _____	MANO: _____	MANO: _____	MANO: _____
ESCALA: _____	ESCALA: _____	ESCALA: _____	ESCALA: _____
FECHA: _____	FECHA: _____	FECHA: _____	FECHA: _____

OPENERS & CLOSERS
SERIE S4F MODELOS CORTA FUEGOS

OFICINA TECNICA
S4F