### FIRE DOORS AND UK REGULATIONS

# 1. Overeenstemming van de Europese brandrapporten met de BS 476-22

Answer Warrington Fire concerning compliance of test report 2008-Efectis-R0218 with British Building Regulations for fire doors

### 2. Samenvatting van Onderzoek

Test report 2008-Efectis-R0218

2.1.1. "Fire resistance of two single leaf door/frame constructions consisting of a 39 mm-thick Theuma door hung in Mono(plus) steel frame."

#### **Geert Dekens**

Van:

Frans Paap [Frans.Paap@Exova.com]

Verzonden:

donderdag 17 januari 2013 13:46

Aan:

Geert Dekens

Onderwerp:

fire doors and UK regulations

Dear Sir,

The test report 2008-Efectis-R0218 and the corresponding 'Samenvatting van Onderzoek' (Summary of the test report) clearly describe the test performed on your door constructions, done following the European standard EN 1634-1.

Approved Document B (the guidance document for the English Building Regulations) state in Appendix A that fire resistance performance can be demonstrated by both relevant BS tests (BS 476-22) and relevant EN tests (EN 1634-1 for fire doors. Efectis can be regarded as a competent laboratory as defined in the introduction of the Appendix A.

Appendix B: Fire doors of this Approved Document B also gives both the BS 476-22 and the EN 1634-1 as methods to determine the performance of fire doors.

You can thus conclude that your test evidence is sufficient to demonstrate compliance with British Building Regulations for fire doors.

The english translation of the test report summary should in most cases provide sufficient detail about your door construction and the approved field of application.

I hope this explanation helps to clarify the situation regarding the UK Building Regulations for fire doors.

Please let me know if we can be of any more help.

#### Kind regards,

Frans Paap
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## 14 SEP. 2018

FIRE RESISTANCE OF TWO SINGLE-LEAF DOOR/FRAME CONSTRUCTIONS CONSISTING OF A 39 MM-THICK THEUMA DOOR SUSPENDED IN A FILLED, METAL MONOPLUS FRAME

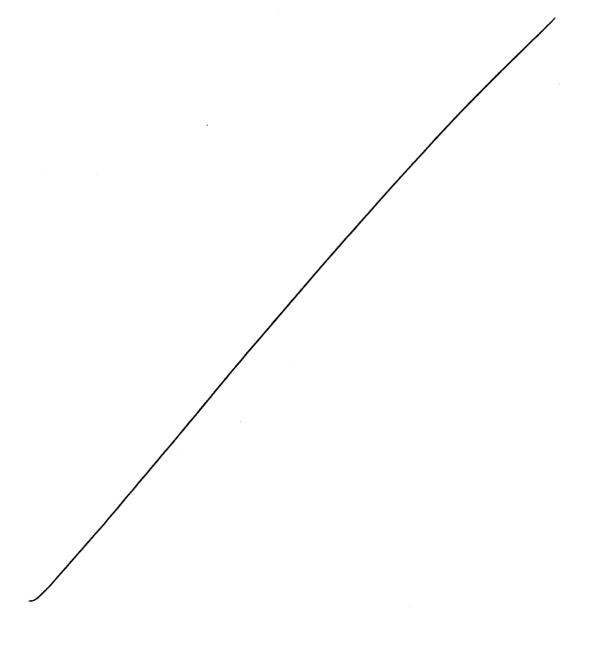
SvO number Report number(s) Valid until 2008-Efectis-R0218-S 2008-Efectis-R0218

Valid until Client October 2019 Theuma N.V. Zandstraat 10 B-3460 Bekkevoort

Belgium

Number of pages

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At the behest of Theuma N.V. of Bekkevoort (Belgium), the fire resistance of two single-leaf door/frame constructions consisting of a 39 mm-thick Theuma door suspended in a filled, metal Monoplus frame was investigated.

The experimental research was conducted according to NEN EN 1634-1:2001. The construction was investigated for a case of "door leaves turning toward the fire." Details and results are shown in the Efectis report 2008-Efectis-R0218.

These are some of the characteristics with respect to the examined construction:

Square edge door (both doors)Glass openingsSteel frameheight: 2,350 mmType of glass: Pyrobel Type El60/16Material thickness: 1.5 mmwidth: 950 mmDoor 1: glass dimensions 442 x 1,192 mmRabbet 45 x 25 mmthickness: 39 mmDoor 2: glass dimensions 662 x 1,592 mmFilling present

The frame of door 1 is mounted in a 100 mm-thick cellular concrete supporting construction. The frame of door 2 is mounted in a 100 mm-thick metal stud wall.

#### Conclusion

Taking account of the conditions below it was established that for the above-mentioned product described in the Efectis report 2008-Efectis-R0218 the following applies: "Fire resistance for the separating function in the sense of NEN-EN 1634-1:2001: El<sub>1</sub>30, El<sub>2</sub>30, EW60, and E60.

### Conditions and area of application

The conclusion only applies for door/frame constructions of which the details including materials, type and position of the hinges, locks, and strips foaming with heating, etc., are equivalent to the examined construction and where the following conditions have also been met:

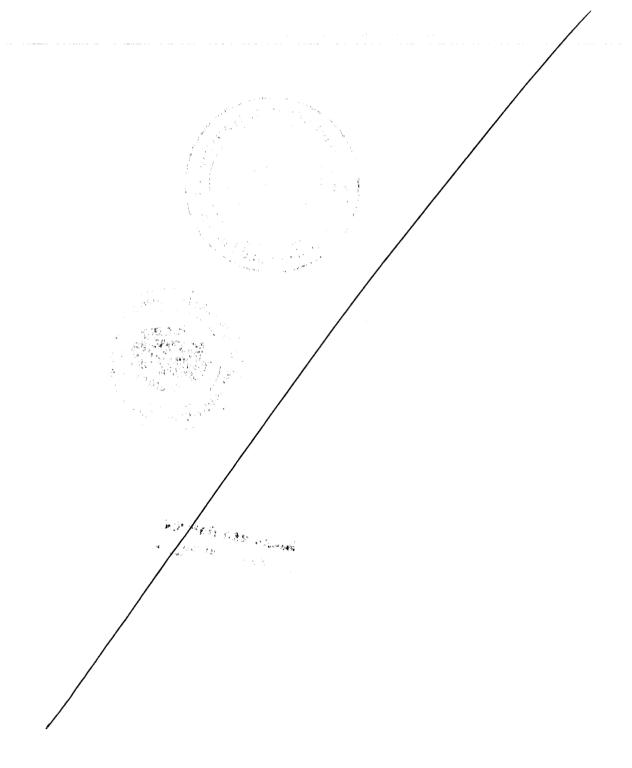
- a) the door is the 39 mm-thick Theuma door:
- with dimensions equal to or smaller than 2,350 x 950 mm (h x w);
- suspended on three hinges in the positions indicated in this report.
- b) the frame is a filled, metal Monoplus frame as specified as follows:
- built into a wall as described in d);
- c) the door leaves turning towards the fire or turning away from the fire;
- d) a wall of metal studs or cellular concrete or stony material;
- e) a floor of fire-proof material.

Based on the Efectis reports 2008-Efectis-R0628 and 2009-Efectis-R0332, the following supplementary assessments were conducted:

- the door may not be used if it is expected that the paint coat or top coat has a negative influence;
- an extra lift-off hinge may be added;
- the steel frame may be replaced by a wooden frame of which the volumetric mass is at least  $650 \text{ kg/m}^3$  with a minimum rabbet size of  $45 \times 25 \text{ mm}$ ;
- for fire resistance of 60 minutes, the door leaf may be enlarged in the following way: maximum height 2,703 mm, maximum width 1,093 mm, and maximum surface area 2.68 m<sup>2</sup>;
- the test result applies to both sides of the door;
- buffer sealing may be used;
- the doors may be fitted with a hardwood side lath to a maximum of 10 mm;
- a minimum stop of 15 mm for a steel frame and 25 mm for a hardwood frame is allowed;



- the door may be made thicker provided that the maximum weight increase of 25% is maintained;
- the door may be fitted with another type of lock on the condition that the lock case does not have larger dimensions;
- the doors may be fitted with an extra bottom rail or top rail;
- the addition of an ABS side lath with a thickness of 2 mm is allowed provided that:
  - a foaming strip is fitted directly behind the side lath;
  - the foaming strip is pressure-building;
  - the joint widths around the door do not increase compared to the tested situation;
  - the dimensions of the door are not increased compared to the tested situation.





Voor eensluidende vertaling ne varietur van het Nederlands naar het Engels van: Certified translation ne varietur from the Dutch into the English language of:

## TECHNISCH RAPPORT TECHNICAL REPORT

Gedaan te Gentbrugge, op 8 september 2018 Issued in Gentbrugge, Belgium, on September  $8^{th}$ , 2018

Identification no.:

502595

Naam/Name:

Michaël Hugo Joseph HAUSPIE

Titel/Title:

Beëdigd vertaler-tolk Japans, Engels en Nederlands

Sworn translator and interpreter of Japanese, English, and Dutch

Japanese, English and Dutch: Court of First Instance of Ghent

Gszien deur ens. D. VAN DEN BOSSCHS. afdelingsvoorzitter van de rechtbank van eerste aa Oost-Vlaanderen, afdeling Gent, voor echtverklarin

BELANGRIJK!! De legalisatie bevestigt enkel en alleen de echtheid van de handlekening van de vertale; op dit

document.

Gent. de

Voor de afde<del>ling</del>svoorzitter. De gemachtiede griffier.

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