An assessment of the fire performance of a single-leaf access panel, up to 2650mm high x 900mm wide

Prepared for:
Fire Proofing Services Limited
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11 March 2014

Assessment report number
CC 251334 Review 1

Protecting People, Property and the Planet

Prepared on behalf of BRE Global by

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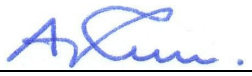
Signature 

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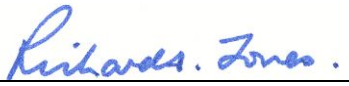
Date 11 March 2014

Signature 

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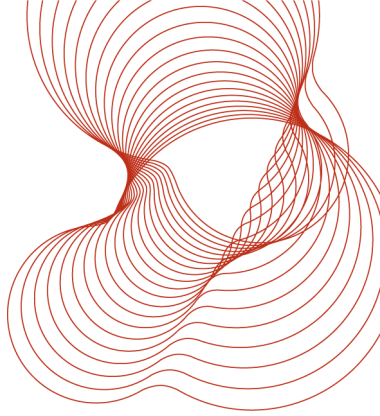


1 Introduction

The Fire Proofing Services single-leaf hinged access panel tested in BRE report TE 201768 is designed to provide up to 60 minutes fire resistance with respect to the integrity criteria of BS 476: Part 22: 1987. This assessment report considers the fire resistance of access panels larger than that tested.

2 Scope

This assessment report considers the fire resistance of single-leaf hinged access panels, up to 2650mm high x 900mm wide, installed in steel-framed plasterboard partition systems, against the integrity criteria of BS 476: Part 22: 1987, for fire exposures of up to 60 minutes from the opening side.

3 Supporting data

This assessment is based on supporting test data which is more than five years old. This supporting data has therefore been reviewed against current test procedures.

3.1 BRE test report TE 201768

A single-leaf steel/plasterboard access panel, 2000mm high x 900mm wide, incorporated in a steel-framed plasterboard partition, was subjected to a fire resistance test in accordance with BS 476: Part 22: 1987 (Method 6) on 2 November 2000.

The panel door tray was a 1.0mm-thick Zintec steel skin, which was polyester powder-coated in Ral9010 20% gloss with pre-formed 1.2mm-thick top-hat section vertical stiffeners welded to the sides and middle section. The stiffeners welded to each vertical side were 18mm x 30mm x 105mm x 30mm x 18mm and the central stiffener 18mm x 30mm x 87mm x 30mm x 18mm. The voids within the door tray were unfilled. A 12.5mm-thick sheet of Lafarge Megadeco wallboard, treated with one coat of Lafarge Drywall Sealer, was fixed to the rear face of the door tray using 32mm drywall screws. The panel had a fire retardant smoke seal attached to the frame and was locked by three budget locks; one lock positioned approximately 200mm in from each end, top and bottom, with one lock central.

The panel frame consisted of a 1.2mm-thick Zintec steel section with M6 bolts welded to the hinge side. The 25mm-wide front picture frame flange was mitred at each corner. The frame was polyester powder coated to Ral9010 20% gloss.

The access panel was incorporated in a steel-frame partition comprising two layers of 12.5mm-thick Lafarge Firecheck plasterboard on each face of the partition. The specimen, when tested opening towards the furnace, was found to have the following fire resistance:

Integrity: 70 minutes

Insulation: 7 minutes

For full details see BRE test report TE 201768.

4 Description of the proposed access panel

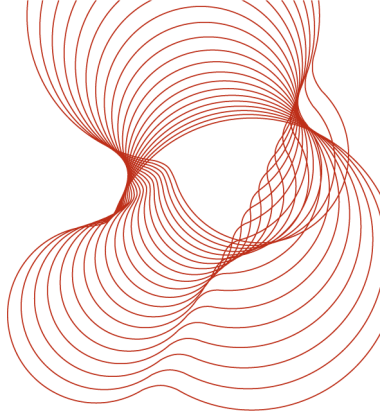
The proposed access panels have the same construction as that tested but are larger.

5 Assessment

The access panel tested in BRE report TE 201768 maintained its integrity for the duration of the test (70 minutes). Although the complete partition/access panel specimen tested deflected towards the furnace by a maximum of 70mm, there was very little deflection of the access panel relative to the supporting partition. It is our opinion that a larger access panel will satisfy the integrity criteria of the standard for at least 60 minutes as long as the leaf remains closely engaged with the frame. The continuous hinge and three budget locks should ensure that this is the case. In addition, the design of the access panel leaf perimeter and frame is such that should any differential bowing occur it is highly unlikely that any gaps exceeding 150mm x 6mm would open up between the two.

6 Conclusion

Therefore it is our opinion that single-leaf hinged access panels, up to 2650mm high x 900mm wide, installed in steel-framed plasterboard partition systems, as described in sections 3 and 4 of this report, are suitable for applications where a fire resistance of up to 60 minutes is required with respect to the integrity criteria of BS 476: Part 22: 1987, for fire exposure from the opening side.



7 Validity of the assessment

7.1 Declaration by applicant

- We the undersigned confirm that we have read and complied with the obligations placed on us by the PFPF Guide to Undertaking Assessments in Lieu of Fire Tests.
- We confirm that the component or element of structure, which is the subject of this assessment, has not to our knowledge been subjected to a fire test to the Standard against which this assessment is being made.
- We agree to withdraw this assessment from circulation should the component or element of structure be the subject of a fire test to the Standard against which this assessment is being made.
- We are not aware of any information that could adversely affect the conclusions of this assessment.
- If we subsequently become aware of any such information we agree to cease using the assessment and ask BRE Global to withdraw the assessment.

Signed: _____

For and on behalf of: _____

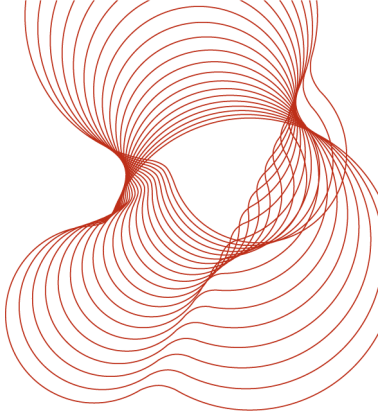
This assessment report is not valid unless it incorporates the declaration duly signed by the applicant.

7.2 BRE Global declaration

This assessment was reviewed on 11 March 2014. We have received written confirmation from Fire Proofing Services Limited that there have been no changes in the specification of their access panel since the original date of the assessment. There have been no changes in the fire test procedures or methods of assessment, which would adversely affect the fire performance of the access panel. We are therefore satisfied that the validity of this assessment may be extended for a further five years.

This assessment is based on test data, experience and the information supplied. If contradictory evidence becomes available to BRE Global the assessment will be unconditionally withdrawn and the applicant will be notified in writing. Similarly the assessment is invalidated if the assessed construction is subsequently tested since actual test data is deemed to take precedence over an expressed opinion. The assessment is valid for a period of five years after which it should be returned for review to consider any additional data, which has become available or any changes in the fire test procedures. Any changes in the specification of the product will invalidate this assessment.

This assessment has been carried out in accordance with Fire Test Study Group Resolution No. 82. It relates to the fire performance of the product and does not cover aspects of quality, durability, maintenance nor service requirements. This assessment relates only to the specimen(s) assessed and does not by itself infer that the product is approved under any Loss Prevention Certification Board approval or certification scheme or any other endorsements, approval or certification scheme.



Next review date: 11 March 2019

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