An assessment of the fire performance of a single-leaf access panel mounted in a partition system

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Protecting People, Property and the Planet

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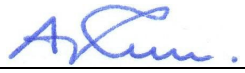
Signature 

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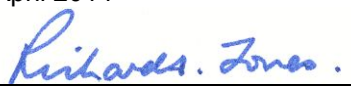
Signature 

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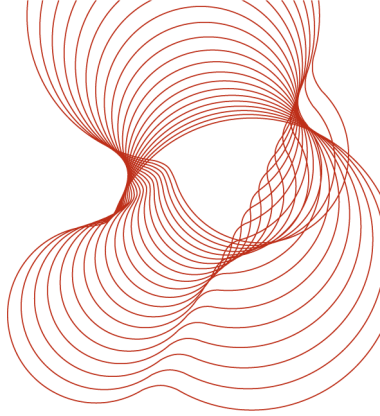


1 Introduction

A fire resistance test in accordance with BS 476: Part 22: 1987 has been carried out on a double-leaf access panel mounted in a partition system. This assessment report considers the fire performance of a similarly constructed single-leaf access panel.

2 Scope

This assessment report considers the fire performance of a single-leaf access panel mounted in a partition system against the integrity criteria of BS 476: Part 22: 1987, for fire exposures of up to 60 minutes from 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 no. 225286A

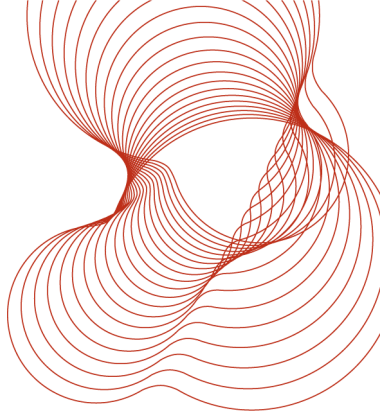
A double-leaf access panel door, 2000mm high x 1800mm wide, installed within the aperture of a fire rated plasterboard wall, was submitted to a fire resistance test in accordance with BS 476: Part 22: 1987 for a duration of 67 minutes on 28 September 2005.

The access panel door comprised two leaves, each nominally 2000mm high x 900mm wide. The individual leaves comprised 12.5mm Megadeco plasterboard to the exposed face, internal Z-section stiffeners with a 1.5mm-thick Zintec steel skin and box section stiffeners to the unexposed face. The doors were hung on hinges consisting of a steel pin and block with a steel roller ball caster. The right leaf (when viewed from the unexposed face) closed first and was retained closed with a two-point locking system. The left leaf closed over the first and was retained closed with a three-point locking system.

The access panel door frame was fixed into a plasterboard wall comprising a steel stud frame clad on both faces with two layers of 12.5mm-thick Lafarge Firecheck plasterboard.

The access panel door achieved the following fire resistance rating when tested opening towards the furnace:

Integrity:	66 minutes
Insulation:	23 minutes



4 Description of the proposed access panel

The proposed access panel is a single-leaf version of that tested in BRE report no. 225286A. The leaf construction is identical to that tested and it is hung on two hinge pin blocks and secured in the closed position by three budget locks. The maximum leaf size is 2000mm high x 900mm wide.

5 Assumptions

It is assumed that the partition system into which the access panel is installed has a fire resistance of at least 60 minutes and is capable of supporting the access panel throughout that period. It is also assumed that the access panel is installed in the partition in the same way as tested.

6 Assessment

The double-leaf access panel tested in BRE report no. 225286A satisfied the integrity criteria of the standard for the duration of the test, 66 minutes. During the test the panel leaves remained tightly engaged with the frame and there was no indication of any gap development between the leaves and the frame or between the leaves at the meeting stile.

It is our opinion that a single-leaf version of the tested access panel will perform in a similar manner for the following reasons:

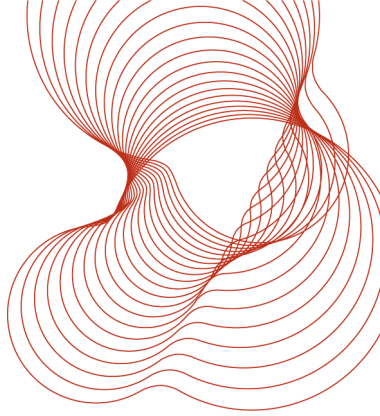
a) The panel leaf is no larger than that tested.

b) The three budget locks on the leading edge of the leaf should offer at least the same level of restraint as the two hinges on the other edge. Therefore as no gaps opened up on the hinge edge in the test it is unlikely that any gaps will open up on the latch edge of a single-leaf access panel.

c) The access panel leaf is 67mm thick. This means that the development of gaps due to differential distortion between the leaf and frame unlikely, particularly as the partition will tend to bow in the same direction as the access panel.

7 Conclusion

Therefore it is our opinion that a single-leaf version of the access panel tested in BRE report no. 225286A will satisfy the integrity criteria of BS 476: Part 22: 1987 for at least 60 minutes when installed in a partition system and exposed to fire from the opening side.



8 Validity of the assessment

8.1 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.

8.2 BRE Global declaration

This assessment is issued on the basis of test data and information to hand at the time of issue. 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 imply 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: 15 April 2019

==========REPORT ENDS==========