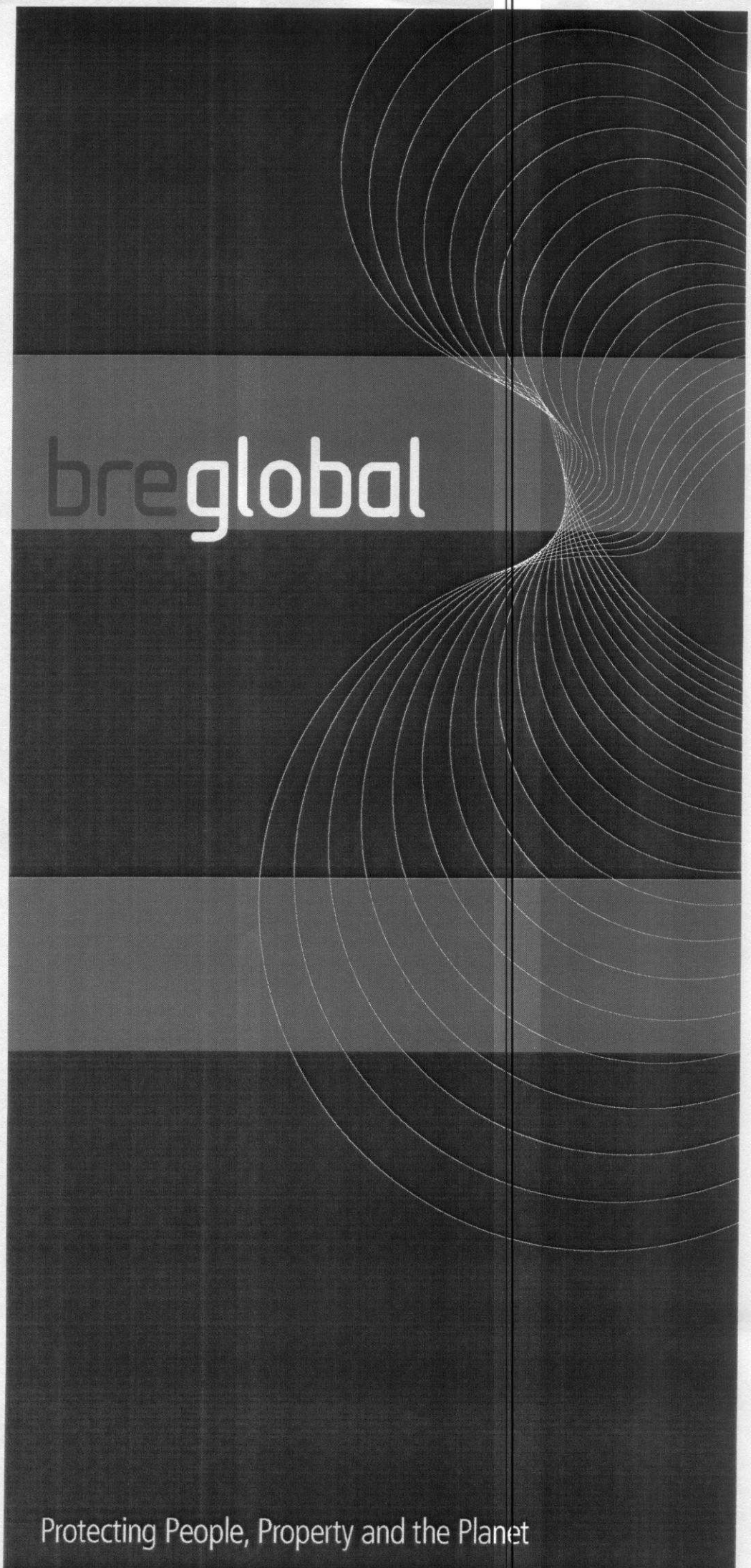

An assessment of the fire performance of a double-leaf access panel fitted with an architrave frame

Prepared for:
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27 January 2011

Assessment report number
CC 268204

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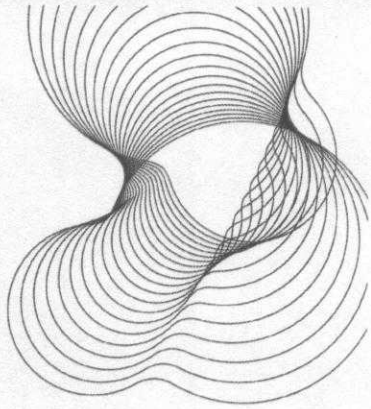

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Date of this report 27 January 2011

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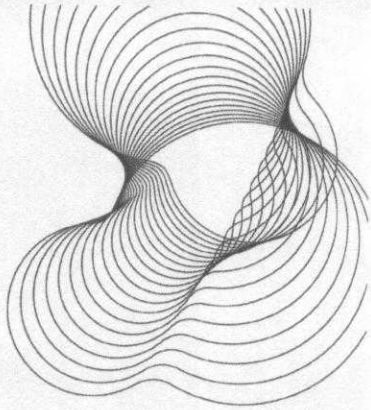
Contents



1 Introduction

A fire resistance test of 135 minutes duration has been carried out on a double-leaf access panel fitted into a steel-framed plasterboard partition. This assessment report considers the fire performance of this access panel when fitted with an architrave frame.

2 Scope

This assessment report considers the fire resistance of a double-leaf access panel fitted with an architrave frame and installed in a steel-framed plasterboard partition against the integrity and insulation criteria of BS 476: Part 22: 1987, for fire exposures of up to 120 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 94530

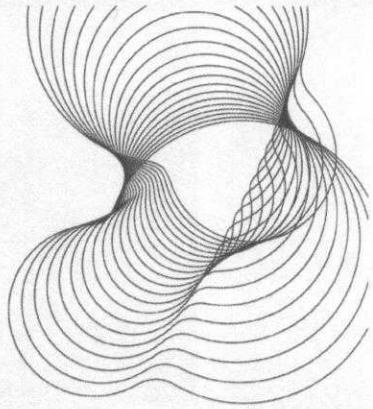
A double-leaf access panel installed in a steel-framed plasterboard partition was subjected to a fire resistance test in accordance with BS 476: Part 22: 1987 on 12 April 2000 for a period of 135 minutes.

The access panel, nominally 2000mm wide x 2000mm high, had two door leaves, each nominally 45mm thick. The door leaves comprised a 1mm-thick polyester powder coated steel sheet with three pre-formed vertical top hat stiffeners welded to the reverse along both edges and the centre. The voids within the door tray were filled with stone mineral wool insulation. A 12.5mm-thick sheet of Lafarge Megadeco plasterboard was fixed over the stone mineral wool on the rear of each door tray using 32mm-long drywall screws. The leaves were each hung on continuous hinges which were welded to the door leaf and bolted to the door frame using M6 bolts; the bolts were welded to the frame at nominal 300mm centres. The right-hand leaf, when viewed from the unexposed face, was fitted with a 1mm-thick back plate and locked top and bottom by budget locks. The left-hand leaf was locked using a three-point locking system.

The access panel frame, which incorporated a smoke seal, comprised a 1.2mm-thick Zintec steel section.

In the orientation tested, with both leaves opening towards the furnace, the specimen was found to have the following fire resistance:

Integrity:	135 minutes
Insulation:	16 minutes



For full details see BRE test report TE 94530.

4 Description of the proposed access panel

The proposed access panel has the same construction as that tested except that it is fitted with an architrave frame. The architrave frame is fabricated from 1.2mm thick Zintec steel with overall dimensions of 97mm wide x 65mm deep. The frame is spot welded to a steel fixing angle, 41.5mm x 50mm x 1.2mm thick, at 150mm centres, and the fixing angle is fixed back to the studwork of the partition using 3.9mm x 32mm self-tapping screws at nominal 300mm centres. The frame provides a rebate that is the same as that of the tested access panel.

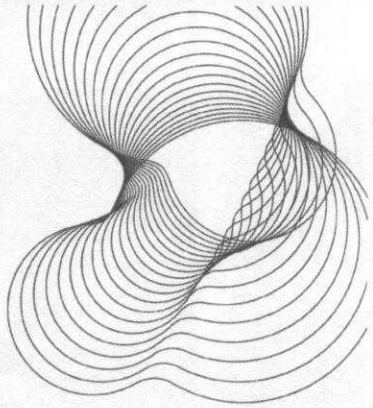
The maximum dimensions of the access panel are 2000mm wide x 2000mm high.

Details of the proposed construction are shown in figure 1.

5 Assessment

The access panel tested in BRE report TE 94530 satisfied the integrity criteria of BS 476: Part 22: 1987 for the test duration, 135 minutes. During the test, there was no indication of any gap development between the leaves, between the leaves and the frame or between the frame and the partition. The locks all remained fully engaged and the continuous hinge remained securely attached to both the leaf and the frame.

The proposed access panel has the same construction as that tested except that the picture frame has been replaced with an architrave frame. The architrave frame is fabricated from the same thickness of steel and has the same rebate dimensions as that tested; we would not therefore expect any gaps to open up between the leaves and the frame. The frame is fixed back to the partition in a similar manner to that tested - the frame itself is fixed back to a fixing angle using spot welds at nominal 150mm centres and the fixing angle is fixed back to the partition using the same fixings and centres as were used in the test. This should ensure that no gaps open up between the frame and supporting partition. There may be some twisting of the frame as it is only fixed along the edge closest to the leaf, but we do not think that this will impact on the integrity of the access panel.



6 Conclusion

Therefore, it is our opinion that a double-leaf access panel, up to 2000mm wide x 2000mm high, fitted with an architrave frame, as described in section 4 of this assessment report, is suitable for applications where a fire resistance of up to 120 minutes against the integrity criteria is required 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 UK Fire Test Study Group Resolution No. 82 : 2001.
- 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 Testing to withdraw the assessment.

Signed: _____

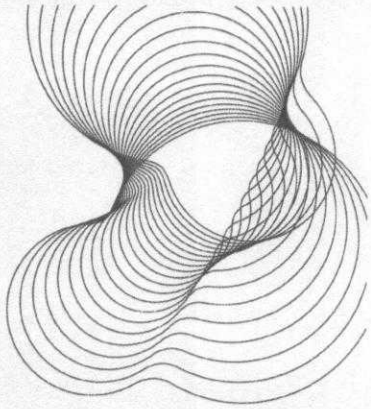
For and on behalf of: FIRE PROOFING SERVICES

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

7.2 BRE Testing 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 Testing 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: 27 January 2016

8 Figures

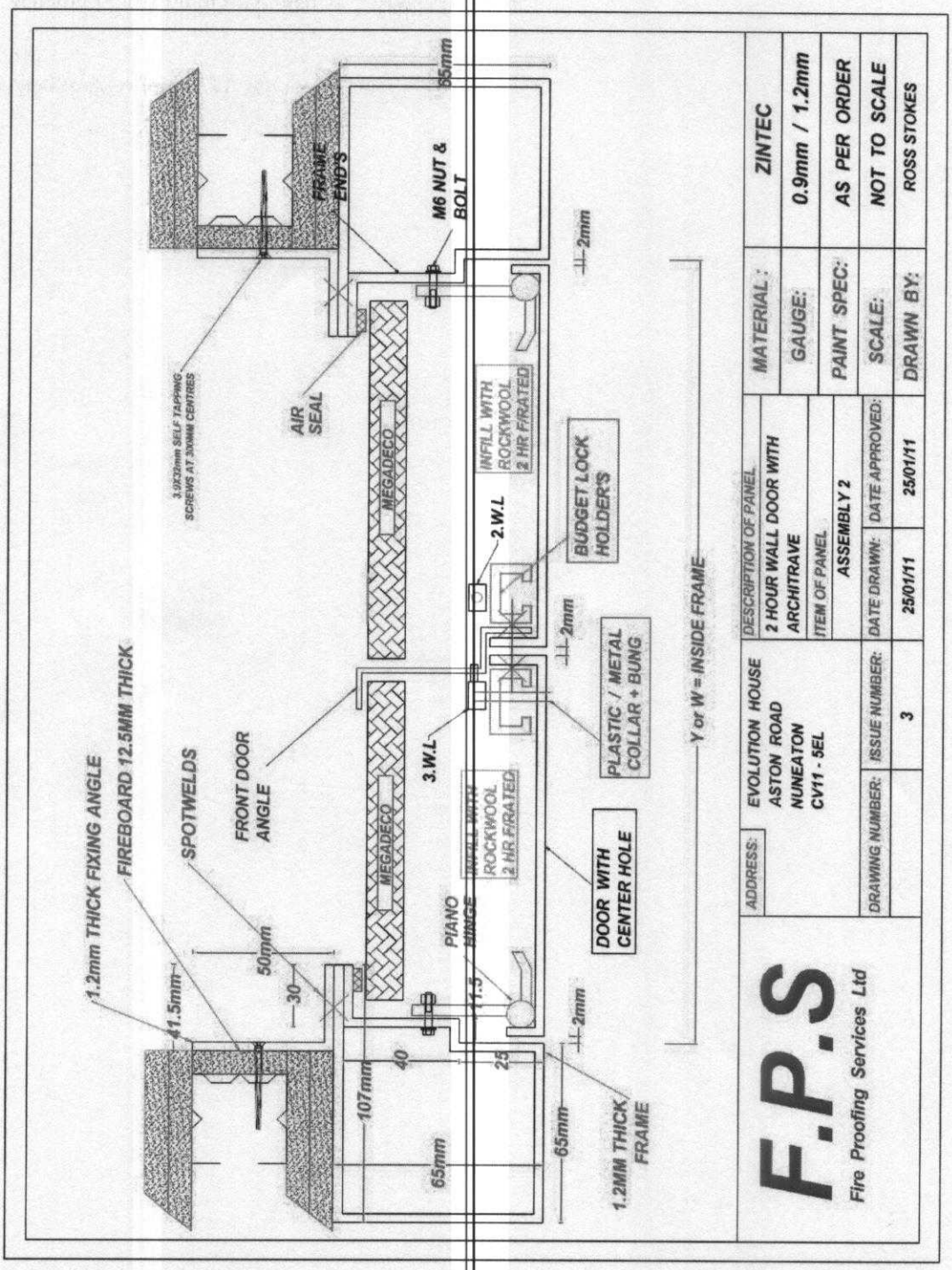


Figure 1

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