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Testing. Advising. Assuring.



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Dear Sirs

**Review of Test Report Referenced WFRC No. 137975 Issue 2**

## 1 Introduction

The report referenced WFRC No. 137975 Issue 2 relates to a fire resistance test performed utilising the general principles given in BS 476: Part 20: 1987 to evaluate the ability of two specimens of cavity closer systems to provide a fire stop within the cavity between the inner and outer leaf of an external cavity wall construction at positions where apertures have been provided for doors and windows. And additionally, to evaluate the ability of two specimens of linear gap sealing system to reinstate the fire resistance of aerated concrete structures at junctions between adjacent elements. The test utilised the general principles for fire resistance testing given in BS 476: Part 20: 1987.

The horizontal assembly was formed from pre-cast aerated concrete lintels nominally 150 mm thick and incorporated two apertures, one nominally 20 mm wide by 900 mm long and the other nominally 15 mm wide by 900 mm long. The wall construction was formed from aerated concrete blockwork nominally 150 mm thick and incorporated two apertures. Each aperture was nominally 100 mm wide by 900 mm high.

Specimen A comprised a section of mineral fibre based insulation, nominally 150 mm wide by 50 mm thick, bonded to a strip of polyethylene DPC material referenced “Pyroflex”.

Specimen B comprised a section of mineral fibre based insulation, nominally 150 mm wide by 25 mm thick, bonded to a strip of polyethylene DPC material referenced “Pyroflex”.

Specimen C was a section of cavity closer referenced “Weathercor/F” and comprised an extruded PVCu carrier incorporating a section of mineral fibre insulation material nominally 100 mm wide by 30 mm thick.

Specimen E was a section of cavity closer referenced “Pyrocor” and comprised an outer sleeve of polyethylene DPC material encapsulating a section of mineral fibre insulation material nominally 100 mm wide by 40 mm thick.

The performances of the specimens were assessed against the integrity and insulation (maximum temperature rise) criteria of British Standard 476: Part 20: 1987, the results obtained were therefore expressed as follows:

| Specimen Reference | Integrity (mins) | Insulation (mins) |
|---|---|---|
| A | 132 | 132 |
| B | 132 | 132 |
| C | 35 | 21 |
| E | 132 | 43 |

The test was discontinued after a period of 132 minutes.

## 2 Confirmation of Specification

It has been confirmed by Polypipe Building Products that there have been no changes to the specification or the construction given in the original report referenced WFRC No. 137975 Issue 2.

It should be noted that the mineral wool slab insulation material used within the system may be either Knauf LR128, Knauf HTB 690 or Paroc 140, as previously assessed under the reference WF Report no. 362148.

## 3 Conclusions

At present there are no additional resolutions adopted by the Fire Test Study Group since the original test was performed which would affect the manner in which the test would be conducted or the interpretation of the test results.

Whilst the referenced draft European document prEN 1366-4: 1998 has since become a formal test standard, the additional guidelines taken from it for the original test and assessment have not changed.

The procedures adopted for the original test have been re-examined and are similar to those currently in use.

Therefore, with respect to the fire resistance test report referenced WFRC No. 137975 Issue 2 its contents should remain valid until 1st December 2021.

## 4 Validity

This review is based on information used to formulate the original test report. No other information or data has been submitted by Polypipe Building Products which could affect this review.

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