

Warringtonfire job number: 501877  
Test Report under review: BMT/FEP/F15263

29 March 2021

Ritherdon & Co Ltd  
Lorne Street Works  
Lorne Street  
Darwen  
BB3 1QW

## Test Report Revalidation Letter

### 1. Introduction

Test report referenced (BMT/FEP/F15263) relates to a fire resistance test originally carried out in accordance with BSEN 1364-1: 1999 and utilising the principles of BSEN 1366-3: 2009, on 10No. surface mounted FireSeal meter boxes.

The test demonstrated the ability of the FireSeal units to achieve the integrity and insulation performance detailed below:

Specimen test reference	Integrity			Insulation
	Cotton pad	Gap gauge	Continuous flaming	
1 Extra Large FireSeal	90 (ninety) minutes *	90 (ninety) minutes *	73 (seventy three) minutes	4 (four) minutes
2 Extra Large FireSeal	90 (ninety) minutes *	32 (thirty two) minutes	90 (ninety) minutes *	1 (one) minutes
3 R22 FireSeal	90 (ninety) minutes *	90 (ninety) minutes *	77 (seventy seven) minutes	1 (one) minutes
4 R22 FireSeal	90 (ninety) minutes *	90 (ninety) minutes *	76 (seventy six) minutes *	3 (three) minutes
5 R22 FireSeal	90 (ninety) minutes *	90 (ninety) minutes *	14 (fourteen) minutes	1 (one) minutes
6 R22 FireSeal	90 (ninety) minutes *	90 (ninety) minutes *	14 (fourteen) minutes	1 (one) minutes
7 R22 FireSeal	90 (ninety) minutes *	90 (ninety) minutes *	90 (ninety) minutes *	4 (four) minutes
8 R22 FireSeal	90 (ninety) minutes *	90 (ninety) minutes *	90 (ninety) minutes *	3 (three) minutes

Specimen test reference	Integrity			Insulation
	Cotton pad	Gap gauge	Continuous flaming	
9 R22 FireSeal	90 (ninety) minutes *	90 (ninety) minutes *	90 (ninety) minutes *	5 (five) minutes
10 R22 FireSeal	90 (ninety) minutes *	90 (ninety) minutes *	90 (ninety) minutes *	6 (six) minutes

\* No failure of the test criteria had occurred at termination of the test at 90 minutes

## 2. Confirmation of Specimen

It has been confirmed by Ritherdon & Co Ltd that there have been no changes to the specification of the construction tested and documented within test report reference BMT/FEP/F15263.

The specification documentation process within test reports has generally been enhanced since the test and subsequent original report was issued, due to general industry and testing developments. Therefore, the review of the test report is based upon the completeness of information contained within the test report, as was accepted at the time. The user of the test evidence should therefore consider the usefulness of the data when being applied in practice.

## 3. Findings from The Test Report

The test was originally conducted against the standard BSEN 1364-1: 1999 and utilised the principles of BSEN 1366-3: 2009. The current version of the former is BSEN 1364-1: 2015, for the latter, BS EN 1366-3: 2009 is still the prevailing version of the standard for fire resistance testing of penetration sealing products. This review considers the results obtained from the specimens of the elements of construction under the conditions of the original testing only.

In the opinion of Warringtonfire, the meter boxes do not fall within a designated harmonised standard and is the reason why the testing was previously undertaken utilising the 2No standards referenced above, which at the time was considered appropriate. However, on the basis of the lack of harmonised standard, as part of this review, Warringtonfire would now propose that the evidence should have been referenced utilising the principles of both standards, rather than referring to the evidence being in accordance with BSEN 1364-1: 1999. This would therefore mean the testing would be considered ad-hoc, and not fall within UKAS accreditation. This should therefore be considered moving forward when considering the use of this test evidence. However, this point does not necessarily affect the validity of the test evidence, it merely reassigns the designation of the approach taken, rather than discrediting the results of the test.

In terms of variations to the testing standards from those used in the original testing, there has only been minor changes between the 1999 and 2015 versions of BSEN 1364-1, focused primarily on thermocouple locations, deflection measurements for larger specimens, additional thermocouples for glazed constructions, additional rules in the field of direct application and rules for testing non-load bearing external and internal walls designed to span horizontally.

These changes would not impact the suitability of the test evidence for BMT/FEP/ F15263 with respect to the tested specimens.

The supporting construction comprised of a 140mm thick timber stud, plasterboard clad partition that was fixed on both vertical edges for the test. Whilst this was deemed most appropriate at the time of testing, it would now be more appropriate to follow the prescribed European 'standard supporting constructions'. In the case of steel stud, plasterboard clad partitions, one or both of the vertical edges would remain unrestrained for the test. On this basis the supporting construction would now be seen as an associated construction and therefore the evidence from test report referenced (BMT/FEP/ F15263) should be considered for the wall type and arrangement, including restraint, as tested.

The acceptability of tests performed to the previous versions of the standards should be confirmed by the approving authority.

#### 4. Conclusion

This report covers a test which was conducted to BSEN 1364-1: 1999, an older, now superseded version of the current testing standard BSEN 1364-1: 2015 and utilising the principles of BSEN 1366-3: 2009, which remains the current version of the standard.

Since fire tests are the subject of a continuing Standardisation process, and because existing standards are the subject of review and possible amendment and new interpretations, it is recommended that the report be referred back to the test laboratory after a period of five years to ensure that the methodology adopted and the results obtained remain valid in the light of the situation prevailing at that time.

Given the findings noted in Section 3, the procedures adopted for the original test have been re-examined and are deemed suitably similar to those currently in use, however, the comments in Section 3 relating to the ad-hoc referencing of the evidence and the restrictions in terms of the supporting construction should be considered.

Therefore, with respect to the fire resistance test review report referenced (BMT/FEP/F15263) its contents should remain valid until 29<sup>th</sup> March 2026.

## 5. Limitations

The test report has been reviewed in-so-far as possible, based upon the information contained within the document as well as available information held on file. It is necessarily dependant, therefore, on the accuracy and completeness of the information in our possession.

<b>Signature:</b>		
<b>Name:</b>	<b>*Eliot Power</b>	<b>*Rob Axe</b>
<b>Title:</b>	Trainee Product Assessor	Technical Manager

\* For and on behalf of Warringtonfire

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## 6. Revalidation Issue Record

The below table notes the issue record for the test report, including previous revalidations.

<b>Rev.</b>	<b>WF Ref.</b>	<b>Date</b>	<b>Description</b>
First issue	BMT/FEP/15263	30/11/15	First issue of test report
Rev A	501877	29/03/21	Revalidation of test report