



REGULATORY INFORMATION REPORT

The fire resistance performance of a 225mm thick TBA party

wall system

Client: TBA Textiles Pty Ltd, Unite 12, 8 Leighton Place, Hornsby, NSW, 2077

Job number: FAS190092 Issuing consultant: Rami Al Darwish

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warringtonfire

Amendment schedule

Version	Date	Information relating to report			
RIR1.0	Issue:	Reason for issue	Initial review		
	21/05/2019		Prepared by	Reviewed by	Approved by
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1. Introduction

This report contains the minimum information sufficient for regulatory compliance and refers to the assessment report FAS190092.1

The tested prototypes described in section 2 of this report, when subjected to the proposed variations described in section 3 and tested in accordance with the relevant standards described in section 4, are assessed to achieve performance as summarised in section 5.

The validity of The referenced assessment is conditional on compliance with sections 6, 7, 8 and 9 of this report and subject to the wall being specified and built to the construction requirements of the NCC.

2. Tested prototypes

The referenced assessment is based on reference test FRT 180444.1, being a test on 225mm thick party wall system consisting of two 90 × 45mm MGP10 timber framed walls. Each wall was clad on the outer face with 13mm non fire-rated plasterboard and on the inner face with TBA Vulcan Fire barrier in general accordance with AS1530.4-2014. The test was sponsored by TBA Textiles Pty Ltd, Unite 12, 8 Leighton Place, Hornsby, NSW, 2077 and was conducted by Warringtonfire Aus Pty Ltd. In addition, the assessment is referencing test IF02073 being a test on a 1180mm wide × 1080mm high × 6mm thick Vulcan curtain fire barrier in accordance to BS 476 :Part 20.

Refer to 0 for a full summary of the test data.

3. Variation to tested prototypes

The proposed construction shall be as tested in FRT 180444.1 with consideration of following variations.

- The wall height shall be maximum 6m.
- Timber framing sizes can be varied provided they are designed and constructed in accordance with AS1720.1 and/or AS1684 and a minimum 90mm deep.
- There should be a minimum 13mm gap between the two Vulcan wrapped frames
- Linings fixed to the wall frame on each side of the wall shall be minimum 13mm thick standard core plasterboard or 13mm fire rated plasterboard.

ltem		Description		
Cladd	Cladding			
1.	Item name	Plasterboard		
	Specification	13mm thick, standard plasterboard.		
	Density	670 kg/m ³ (nominal)		
Framing				
2.	Item name	Timber framing		
	Size	MGP10 or MGP12, 90 × 45mm timber framing		
3.	Item name	Top Timber Nogging		
	Product	90 × 45 MGP10 Radiata Pine		
	Size	600mm wide × 90mm deep × 45mm high		
4.	Item name	Bottom Timber Nogging		
	Product	90 × 45 MGP10 Radiata Pine		

Table 1 Schedule of components of the assessed wall system

Item		Description	
	Size	600mm wide × 90mm deep × 45mm high	
Sealant	: :		
5.	Item name	Firetherm Intumastic	
	Installation	The sealant applied between the wall frame and the lintel at the top and bottom on the exposed and unexposed sides to ensure the joints are sealed	
6.	Item name	Jointing compound	
	Installation	Applied onto the plasterboard joints and screw fixings on the unexposed side.	
Fire ba	rrier		
7.	Item name	TBA Firefly 6mm thick Vulcan fire barrier	
	Linear Mass density	1.79 kg/m ² (measured)	
	Density of glass fibre	279 kg/m ³ (measured)	
Fixings	;		
8.	Item name	Plasterboard screws	
	Installation	To secure the plasterboard (item 1) to the timber frame (item 2) at nominal 300mm centre.	
9.	Item name	Masonry Anchors	
	Product	Ø 10 \times 120mm on the top plate.	
	Installation	To secure the unexposed side frame to the lintel at 600 mm centres on top plate.	
10.	Item name	Masonry Anchors	
	Product	$3/8" \times 1 \frac{1}{2}"$ on the bottom plate.	
	Installation	To secure the exposed and unexposed side frame to the lintel at 600 mm centres on bottom plate.	
12	Item name	Staples, 38mm × 5.7mm, 18 gauge	
	Product	Bright Finish Carbon Steel	
	Installation	To secure the TBA Vulcan (item 7) to the timber frame (item 2) at 50mm centres.	
Cavity	Insulation		
13	Item name	R 2.0 90mm thick Glass wool wall batts	
	Size	Overall size: 120mm high × 600mm wide × 90mm thick	
	Installation	Installed in the cavity of the timber framing (item 2).	

SOUTH

NORTH



Figure 1 Elevation of test specimen (unexposed side)



Figure 2 Vertical cross-section A-A



Figure 3 Horizontal cross-section B-B

4. Referenced test standard

The referenced assessment report is prepared with reference to the requirements of AS1530.4-2014.

5. Formal assessment summary

On the basis of the discussion presented in the referenced assessment report, it is the opinion of this testing authority that if the tested prototypes described in Section 2 had been varied as in Section 3, they will achieve the fire resistance performances below if tested in accordance with the test method referenced in Section 4 and subject to the requirements of Section 7:

FRL: 60/60/60

6. Direct field of application

The application of the results of the referenced assessment is to walls exposed to fire from either side.

AS 1530.4-2014 states that the results of a fire resistance test on a wall are directly applicable without reference to the testing authority, to similar constructions where one or more of the following changes are made provided no individual component is removed or reduced:

- a. An increase in the width of a wall of identical construction is permitted.
- b. An increase in thickness of the framing is permitted.
- c. For framed walls:
 - i. increase in timber density;
 - ii. increase in cross-sectional dimensions of the framing element(s);
 - iii. decrease in sheet or panel sizes;
 - iv. decrease in stud spacing; or
 - v. decrease in fixing centres of wall sheet materials.

7. Requirements

The referenced assessment report details the methods of construction, test conditions and assessed results that would have been expected had the specific elements of construction described herein been tested in accordance with AS1530.4-2014.

All services shall be supported in the manner in which they are assessed as described in section 3. Any further variations with respect to size, constructional details, loads, stresses, edge or end conditions, other than those identified in this report, may invalidate the conclusions drawn in this report.

8. Validity

The referenced assessment report does not provide an endorsement by Warringtonfire Aus Pty Ltd of the actual products supplied.

The conclusions of this assessment may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all conditions.

Because of the nature of fire testing, and the consequent difficulty in quantifying the uncertainty of measurement, it is not possible to provide a stated degree of accuracy. The inherent variability in test procedures, materials and methods of construction, and installation may lead to variations in performance between elements of similar construction.

The referenced assessment can therefore only relate only to the actual prototype test specimens, testing conditions, and methodology described in the supporting data, and does not imply any performance abilities of constructions of subsequent manufacture.

The referenced assessment is based on information and experience available at the time of preparation. The published procedures for the conduct of tests and the assessment of test results are the subject of constant review and improvement and it is recommended that this report be reviewed on or, before, the stated expiry date.

The information contained in the referenced assessment report shall not be used for the assessment of variations other than those stated in the conclusions above. The assessment is valid provided no modifications are made to the systems detailed in this report. All details of construction should be consistent with the requirements stated in the relevant test reports and all referenced documents.

9. Authority

9.1 Applicant undertakings and conditions of use

By using this report as evidence of compliance or performance, the applicant(s) confirms that:

- To their knowledge the component or element of structure, which is the subject of this assessment, has not been subjected to a fire test to the standard against which this assessment is being made, and
- They agree to withdraw this assessment from circulation should the component or element of structure be the subject of a fire test by a test authority in accordance with the standard against which this assessment is being made and the results are not in agreement with this assessment, and
- They are not aware of any information that could adversely affect the conclusions of this assessment and if they subsequently become aware of any such information, agree to ask the assessing authority to withdraw the assessment.

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