



## **REGULATORY INFORMATION REPORT**

The performance of joiner plates and angle brackets in concrete protected by Unitex panel patch if tested in general accordance with the AS1530.4-2014 and AS4072.1-2005.

**EWFA Report No:**

RIR FAS180457.1

**Report Sponsor:**

Unitex Granular Marble Pty Ltd  
22 Park Drive  
Dandenong  
Vic 3175

## DOCUMENT REVISION STATUS

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Date Issued	Issue No	Description	Prepared By	Reviewed By
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## CONTACT INFORMATION

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**Exova Warringtonfire Aus Pty Ltd - ABN 81 050 241 524**

### NATA Registered Laboratory

Unit 2, 409-411 Hammond Road  
Dandenong Victoria 3175  
Australia

T: +61 (0)3 9767 1000  
F: +61 (0)3 9767 1001

### New South Wales

Suite 802, Level 8  
383 Kent Street  
Sydney NSW 2000  
Australia

T: +61 (0)2 9211 4333

### Perth

Unit 22  
22 Railway Road  
Subiaco WA 6008  
Australia

T: +61 (0)8 9382 3844

### Victoria

Unit 2, 409-411 Hammond Road  
Dandenong Victoria 3175  
Australia

T: +61 (0)3 9767 1000  
F: +61 (0)3 9767 1001

### Queensland

T6. L12  
133 Mary Street  
Brisbane QLD 4000  
Australia

T: +61 (0)7 3238 1700  
F: +61 (0)7 3211 4833

### Canberra

2/11 Murray Cres  
Griffith ACT 2603  
Australia

T: +61 (0)2 6260 8488

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## CONTENTS

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1	INTRODUCTION	4
2	TESTED PROTOTYPES	4
3	vARIATION TO THE TESTED PROTOTYPES	4
4	REFERENCED TEST PROCEDURES	6
5	FORMAL ASSESSMENT SUMMARY	6
6	DIRECT FIELD OF APPLICATION	6
7	REQUIREMENTS	6
8	VALIDITY	6
9	AUTHORITY	8
9.1	APPLICANT UNDERTAKINGS AND CONDITIONS OF USE	8
9.2	GENERAL CONDITIONS OF USE	8
9.3	AUTHORISATION ON BEHALF OF EXOVA WARRINGTON FIRE AUS PTY LTD	8
9.4	DATE OF ISSUE	8
9.5	EXPIRY DATE	8

## 1 INTRODUCTION

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This report contains the minimum information sufficient for regulatory compliance and refers to the Assessment Report FAS180457.1

The referenced report presents an assessment of the fire resistance performance of steel joiner plates and angle brackets for connecting pre-cast concrete wall panels when protected by Unitex Panel Patch if tested in general accordance with AS1530.4-2014 and AS4072.1-2005.

AS1530.4-2014 does not specifically address the performance of connection details. The general principles of AS1530.4-2014 and AS4072.1-2005 were therefore applied in order to assess the performance of the protection system.

The tested prototypes described in Section 2 of this report, when subject to the proposed variations described in Section 3 and tested in accordance with the referenced test method 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.

## 2 TESTED PROTOTYPES

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The referenced assessment report is based on reference test WFRA 40938, being a test on the performance of joiner plates and angle brackets in concrete protected by Unitex panel patch if tested in general accordance of AS1530.4-1997.

The test was sponsored by Unitex Granular Marble, and was conducted by Warrington fire research consultancy testing.

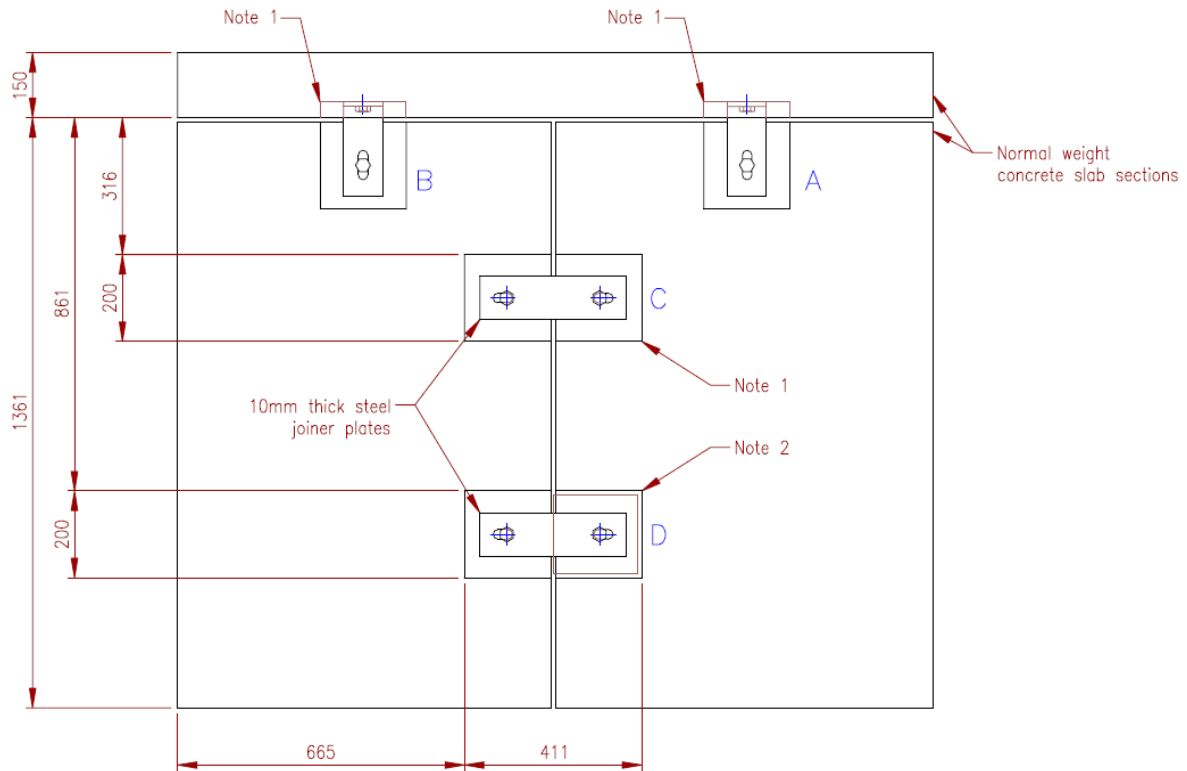
Refer to **Error! Reference source not found.** for a summary of the test data.

Unitex Granular Marble, and has confirmed in writing that there have been no changes to the design and material specifications of the Unitex Panel Patch since the referenced test.

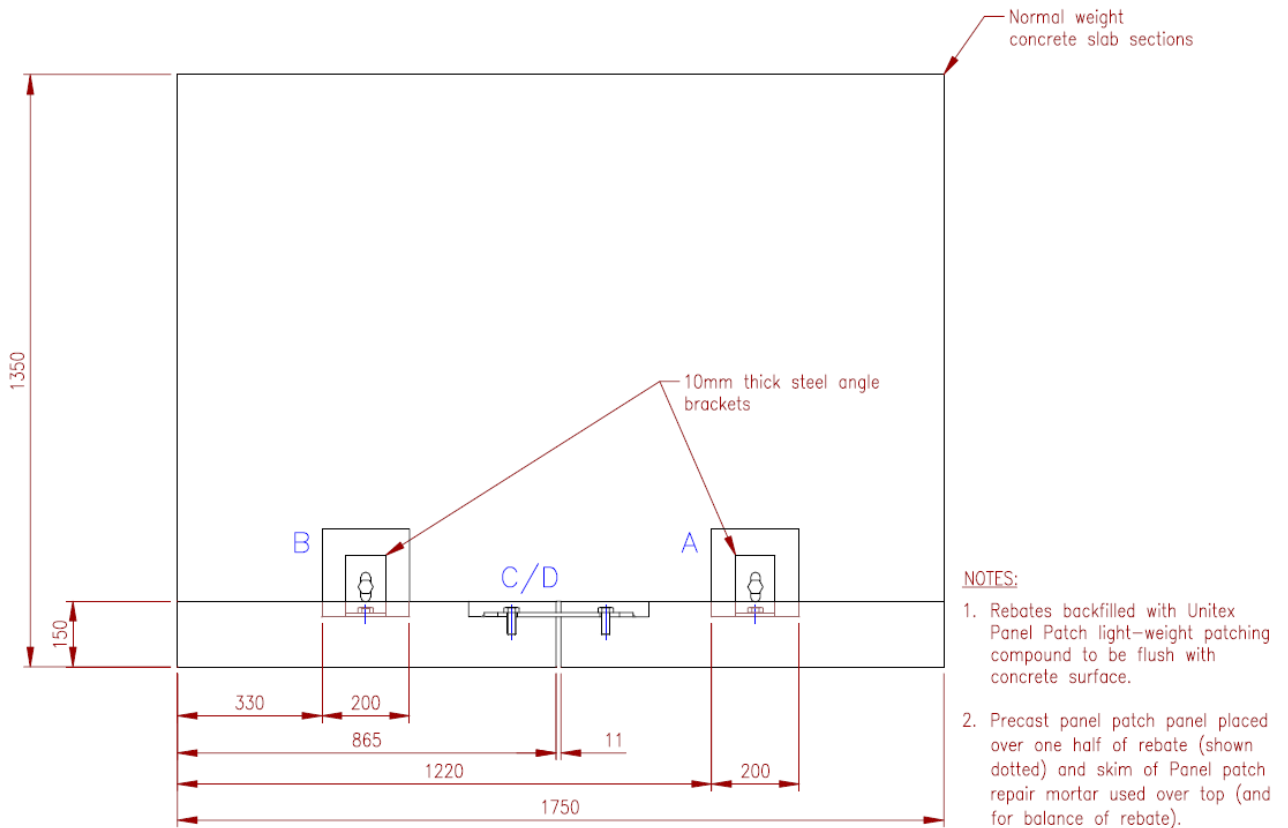
## 3 VARIATION TO THE TESTED PROTOTYPES

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The proposed construction shall be as tested in WFRA 40938 without any variation to the tested specimen and shall be as specified in Figures 1 and 2 below:



**Figure 1: Concrete slab joint construction detail (1) as tested in WFRA 40938.**



**Figure 2: Concrete slab joint construction detail (2) as tested in WFRA 40938.**

## 4 REFERENCED TEST PROCEDURES

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The referenced assessment report is prepared with reference to the general requirements of AS1530.4-2014 and AS 4072.1-2005 for penetration and joint sealing systems.

## 5 FORMAL ASSESSMENT SUMMARY

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

The proposed joint construction is not directly under any nominated section in AS1530.4-2014 and AS4072.1-2005 for methods of fire test on building materials, components and structures. Therefore, an FRL cannot be directly attributed to the system. However, similar “integrity” and “insulation” performances as originally achieved would not be affected for the period of fire resistance of up to 240 minutes.

## 6 DIRECT FIELD OF APPLICATION

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The results of the referenced assessment report are applicable to the general principles of the joint and penetration sealing systems.

The referenced assessment report’s outcome is necessarily limited to the performance requirement described in section 5 and the system construction in section 3 together with referenced test reports and discussion in the Appendices.

## 7 REQUIREMENTS

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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 general accordance with AS1530.4-2014 and AS4072.1-2005.

It is required that the supporting construction be otherwise tested or assessed to achieve the FRL in section 5.

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

## 8 VALIDITY

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

The conclusions of the referenced assessment report 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 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 report 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 the referenced assessment 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 the referenced assessment report. All details of construction should be consistent with the requirements stated in the relevant test reports and all referenced documents.

## 9 AUTHORITY

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### 9.1 APPLICANT UNDERTAKINGS AND CONDITIONS OF USE

By using the referenced assessment 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.

### 9.2 GENERAL CONDITIONS OF USE

The referenced assessment report may only be reproduced in full without modifications by the report sponsor. Copies, extracts or abridgments of the referenced assessment report in any form shall not be published by other organisations or individuals without the permission of Exova Warringtonfire Aus Pty Ltd.

### 9.3 AUTHORISATION ON BEHALF OF EXOVA WARRINGTON FIRE AUS PTY LTD

Prepared by:



Rami Al Darwish

Reviewed by:



Omar Saad

### 9.4 DATE OF ISSUE

9 November 2018

### 9.5 EXPIRY DATE

31 November 2023