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EWFA Test Report No.	EWFA 28275800b.1 Page 1 of 3
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Test Sponsors	Issue Date
Austyle Architectural Hardware Pty Ltd 137-145 Chesterville Road Moorabbin, VIC 3190 and Pyropanel Developments Pty Ltd Unit 1, 97 Lewis Rd Wantirna South, VIC 3152	14/05/14
	Validity Date
	14/05/19

The Fire Resistance Performance of Pyropanel Doorsets with nominated variation to the Door hinge

Variations Considered in this Report
Fitting an Austyle 45108 Door hinge in lieu of the door hinge tested in the referenced tests.

Referenced Test Reports		
Test Report	Doorset Description	Test Standard
FR 1618	Single Leaf Pyropanel Doorset nominally 48mm thick	AS 1530.4-1990
FR 1645	Two Leaf Pyropanel Doorset nominally 48mm thick	AS 1530.4-1990

Additional Supporting Data			
Test Reference	Doorset Description	Test Duration	Test Standard
EWFA 28275800	Maxi Pyropanel FR Door nominally 48mm thick.	240 minutes	AS 1530.4-2005

A pilot fire resistance test in accordance with Appendix B11 of AS 1530.4 2005 was conducted on a pilot doorset on the 28th of February 2014. It included an Austyle 45108 door hinge fitted to the door leaf.

TESTING AUTHORITY	Exova Warringtonfire Aus Pty Ltd	
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Hardware Description

Door edge side

Product name: Austyle 45108 door hinge

Door system properties:

Door leaf thickness: 48mm

Function test:

Latching force: 33.1N

Opening force: 1.96N

Closing force: 2.15N

Function verification:

50 opening and closing cycle: Completed before the test (Manual open)

Average door gap clearance: Top edge:0.88mm
East edge:1.02mm
West edge:0.67mm

Discussion

It is expected if the proposed Austyle 45108 door hinge does not initiate failure of the pilot doorset before failure occurred on the referenced doorsets, then substituting the proposed door hinge with the one tested on the reference doorsets will not be detrimental to the performance of the reference doorsets.

AS 1530.4-2005 states that sustained flaming on the surface of the unexposed face for 10 seconds or longer constitutes integrity failure. During the referenced test EWFA 28275800 the Austyle 45108 door hinges do not initiated failure for the duration of the test period.

Results from Pilot scale test EWFA 28275800 show that the Austyle 45108 door hinge did not initiate an integrity failure on the doorset before 240 minutes

Conclusions

On the basis of the above discussion, it is the opinion of this laboratory that the doorsets listed below will achieve the FRL listed below if they are fitted with an Austyle 45108 door hinge on the doorsets as described in this assessment report.

This assessment has been prepared in accordance with Section 4.2 of AS 1905.1:2005 and is conditional upon the operational characteristics and materials of the doorset complying with Section 2 of AS 1905.1:2005. The field of application of the door hinge is defined by the field of application of the doorset the door hinge is installed upon.

Test Ref	Description	FRL
FR 1618	Austyle 45108 door hinges fitted to a single leaf Plywood faced Pyropanel Doorset nominally 48mm thick	-/240/30
FR 1645	Austyle 45108 door hinges fitted to a two Leaf Plywood faced Pyropanel Doorset nominally 48mm thick	-/240/30

Conditions/Validity

The conclusions of this assessment may be used to directly assess the 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 resistance 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.

This 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 by the validity date by Exova Warringtonfire Aus Pty. Ltd.

The information contained in this 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.