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EWFA Test Report No. DHAR 2570300a.2 Page 1 of 3

Test Sponsors	Issue Date
GEZE GmbH Reinhold-Vöster-Straße 21-29 71229 Leonberg, Germany and Pyropanel Technologies PTY LTD, Melba Industrial Park 122-124 Beresford Road, Lilydale, VIC 3140, AUSTRALIA	29/04/11
	Validity Date
	30/04/16

The Fire Resistance Performance of Pyropanel Doorsets with nominated variation to door closer

Variations Considered in this Report

Fitting the following door closers (overhead rack and pinion with guide rail or with link arm) in lieu of the door closer in the referenced tests.

Model	Outside dimensions of closer body Width x height x depth (mm)
GEZE TS 5000	287mm x 60mm x 46mm
GEZE TS 4000	287mm x 60mm x 46mm
GEZE TS 3000	226mm x 60mm x 46mm
GEZE TS 2000	226mm x 60mm x 48mm
GEZE TS 1500	177mm x 50mm x 39mm


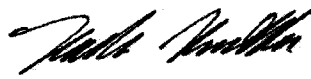
Referenced Test Reports

Test Report	Doorset Description	Test Standard
FR 2482	Single Leaf Pyropanel Pandor Core Doorset nominally 48 mm thick	BS 476: Part 22: 1987
FR 2485	Pyropanel Pandor Core Double Doorset nominally 48 mm thick	BS 476: Part 22: 1987

Additional Supporting Data

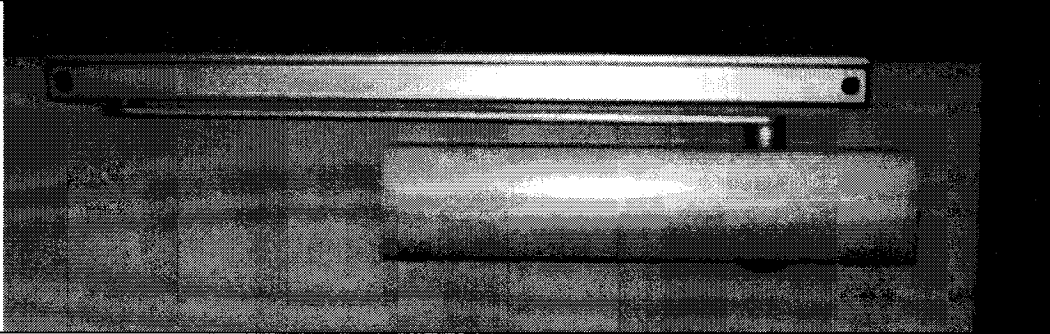
Test Report	Doorset Description	Test Duration	Test Standard
EWFA 2570300	Single Leaf Pyropanel Pandor Core Doorset nominally 48 mm thick	61 minutes	AS 1530.4-2005

A pilot fire resistance test in accordance with Appendix B11 of AS 1530.4 2005 was conducted on a pilot doorset on 25th February 2011. It included a TS 5000L GEZE door closer fitted to the door leaf.

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Hardware Description

Product name(s) and manufacturer:	Model: TS 5000L GEZE door closer. Manufacturer details held on confidential file.
Leaf Thickness	48 mm



Typical installation of a TS 5000L GEZE door closer

Discussion

It is expected if a proposed door closer does not initiate failure of the pilot doorset before failure occurred on the referenced doorsets, then substituting the proposed door closer 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 2570300, TS 5000L GEZE door closer does not initiate failure of the doorset for the duration of the test period.

Results from Pilot scale test EWFA 2570300 show that TS 5000L GEZE door closer is positively assessed for a period of 60 minutes integrity.

The additional door closers (TS 4000, TS 3000, TS 2000 and TS 1500- as stated by GEZE) are manufactured from the same materials, use the same internal operating mechanism (overhead rack and pinion), are equal or smaller size, are mounted in a similar position (with respect to distance away from hinge stile- not to be less than 110mm) as per the tested closer TS 5000.

With respect to the difference between the arm mechanisms of TS 4000 & TS 2000 and TS 5000, this variance is unlikely to be detrimental to the performance of the reference doorset because it only differs in the manner in which the force is applied.

Therefore these additional closers are positively assessed for the proposed period.

Conclusions

On the basis of the above discussion, it is the opinion of this laboratory that if a TS 5000, TS 4000, TS 3000, TS 2000 or TS 1500 door closer was fitted to the referenced doorset in lieu of the tested door closer, it would not reduce the FRL of the referenced doorsets up to 60 minutes integrity

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 access hardware is defined by the field of application of the doorset the hardware is installed upon.

Test Ref	Description	FRL
FR 2482	Door closer fitted to Single Leaf Pyropanel Pandor Core Doorset nominally 48 mm thick	Up to -/60/30
FR 2485	Door closer fitted to Pyropanel Pandor Core Double Doorset nominally 48 mm thick	Up to -/60/30

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 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.