

PULL-OUT TEST REPORT

Report Number	LS21-1859-02 LT	Test Date	19/08/2021
Customer	Firecrunch Australasia Pty Ltd		
Customer Address	Suite 19, Level 44, 25 Martin Place, Sydney NSW 2000		
Requested By	Peter Jones	Purchase Order	COD
Issuing Laboratory	LMATS Sydney Laboratory		
Job Location	1C/137 Silverwater Rd, Silverwater NSW 2128 – LMATS Pty Ltd		
Job Description	Pull-out load test of 7.5 x 80mm masonry screws in composite panels		
Product Description (As Supplied by Client)	FireCrunch K-Floor TG 19mm thick magnesium oxide /SULPHATE composite sheeting TG19 Firecrunch Magnesium oxide composite (MgSo4) 1.15g/cm3		
Identification	Client's Specified Activities – Determine max pull-out load		
Material Specification	As outlined in Technical Data		
Test Specification	Hilti DPG-100 Anchor Tester – L1584		
Test Method	2 off composite panels approximately 150 x 150mm in diameter		
Equipment Data	Load applied using a Ramset 7.5 x 80mm galvanised masonry screw		
Technical Data	<p>Test Set-up was completed as per Figure 2</p> <p>Screw was tightened until max load was achieved</p> <p>Refer to Table 1</p> <p>Muhammed Sabah</p>		
Evaluation Data	Refer to Figure 3 for photographs of failure location		
Test Technician	Refer to Table 1		
Remarks			
Test Results			

Table 1 Pull-out test data

Sample ID	Test Number	Screw Size	Max Load (kN)	Average Failure Load (kN)
TG19 MgSO4	1	7.5 x 80mm	2.3	2.2
	2	7.5 x 80mm	2.3	
	3	7.5 x 80mm	2.1	

The kilonewton (abbreviation: kN) is the unit of force in metric system (SI). The kilonewton is equal to the amount of force needed to accelerate a one thousand kilograms mass at a rate of one meter per second squared. 1 kilonewton (kN) = 0.101971621 ton-force (tf, metric ton-force) = 101.971621 kilogram-force (kgf) = 224.808943 pound-force (lbf)

2.2kN = 494.56 lbf = 1/4 tonne

Signature

B.Eng (Materials)



Muhammed Sabah
23/08/2021



Figure 1 Photograph of as-received panel



Figure 2 Photograph of test-setup

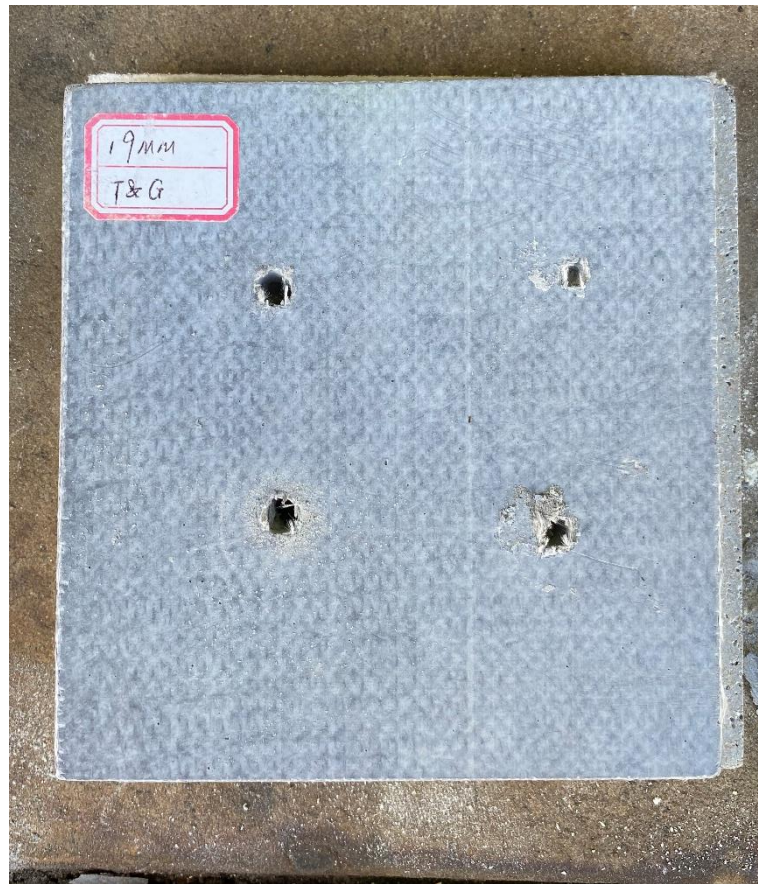


Figure 3 Photograph of Panel after testing

Notes

- 1. All test and inspection items will be discarded after 6 weeks, unless retrieved by the clients representative.*
- 2. Samples, identification of samples and all job specific details were supplied by the client.*
- 3. Any stated nominal pipe sizes and nominal thickness of the material were provided by the client.*
- 4. Where applicable, the Measurement Uncertainty (MU) applies to the test results as per LMATS procedure. MU can be obtained by contacting one of the LMATS ISO 17025 accredited laboratory.*
- 5. If this report does not specify acceptance criteria, then the test or inspection results should be referred to a competent authority for further action.*
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