Load Test Report

Report Number	LB23-1709	**Test Date**	14/12/2023
Customer	**SHS Cleats**		
Customer Address	Level 4 South Tower 339 Coronation Drive, Milton, QLD 4064		
Requested By	Bruce Delahunty	**Purchase Order**	TBA
Accredited Laboratory	LMATS Brisbane Laboratory		
Job Description	Load testing of Cleats		
Identification	Refer to Table 1. below		
Material Specification	Carbon steel		
Test Specification	Client's requirement - Report findings		
Test Method	Client's specification		
Testing rate	5mm/mins		
Test Equipment	UTM A/N: L4600		
Discontinuities	Nil		
Test Restriction	Nil		
Test Technician	Gyu Tae No		
Test Results	Refer to the following summary and details on the following pages. The tests results are to be evaluated by the client		

Table 1. Sample Details & Identification

Specimen	SHS Size (mm)	Type	No of Teks	Fastening	Other
1	75	Corner	4	Tek only	Timber
2	75	Corner	4	Tek only	
3	75	Corner	5	Tek only	
4	89	Corner	6	Tek only	
5	75	Corner	4	Tek & Weld	NA
6	89	Corner	5	Tek & Weld	NA
7	89	Corner	6	Tek & Weld	NA
8	75	Corner	4	Weld Only	
9	75	Corner	5	Weld Only	
10	89	Corner	6	Weld Only	

Signatory
[Mechanical and Mechatronics Eng.]

[Signatory sign]
[Gyu No]
15/12/2023

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Table 2. Results of test

Specimen	No. of Teks	Max Breaking Force [kN]	Allowable Force (0.7xMax Breaking Force) [kN]	Comments
1	4	34	23.8	Tek screw sheared
2	4	37	25.9	Tek screw sheared
3	5	48	33.6	Tek screw sheared
4	6	72	50.4	Tek screw sheared
8	4	176	123.2	Post bended & slipped, Weld & Cleats OK
9	5	217	151.9	Post bended & slipped, Weld & Cleats OK
10	6	207	144.9	Post bended & slipped, Weld & Cleats OK

Figure 1. General view of the test setup and before testing (Tek only)

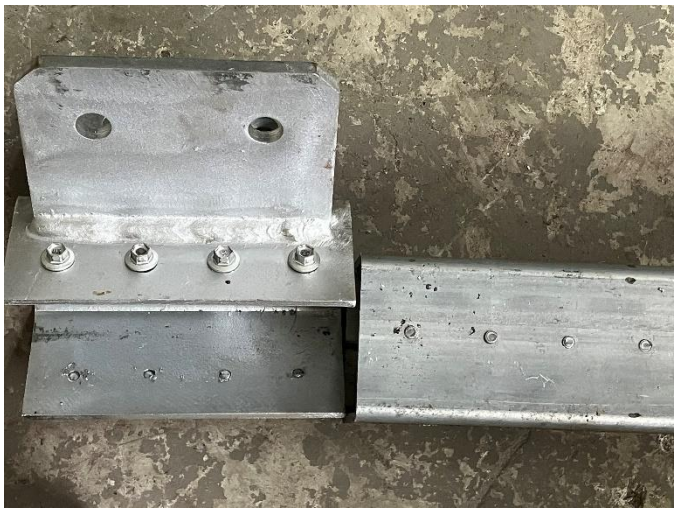

Figure 2. General view of the specimen after testing (Tek only)

Figure 3. General view of the test setup and before testing (Weld only)

Figure 4. General view of the specimen after testing (Weld only)

Notes

1. All test and inspection items will be discarded after 6 weeks, unless retrieved by the client's 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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