



**SETSCO SERVICES PTE LTD**

18 Teban Gardens Crescent  
Singapore 608925  
Tel : (65) 6566 7777  
Fax: (65) 6566 7718  
Website: www.setsco.com  
Business Reg. No. 196900269D

**TEST REPORT**

(This Report is issued subject to the terms & conditions set out below)

Your Ref: - Our Ref: MM-29819/LL/3 Date: 04 September 2012

Page 1 of 2

**Subject** : Testing of GFRP Rebar submitted by FiReP Rebar AG on 03 September 2012.

**Tested For** : **FiReP Rebar AG**  
Alte Jonastrasse 83  
CH-8640 Rapperswil  
Switzerland

**Attn:** Mr. Marc Schurch

**Date and Place of Test** : 04 September 2012 at Setsco Laboratory, Singapore

**Method of Test** : Tension Load Test  
The test sample was clamped on the Universal Testing Machine in a vertical position. Tension load was applied gradually until failure. Maximum load and E-Modulus were then recorded.

**Description of Sample** : Three (03) pieces of GFRP Rebar with approximately total length of 1500mm (Refer to Photograph 1 attached) were received as follows:

S/No	Description	Qty
01	Ø34 GFRP Rebar	03

**Results** : Tension Load Test  
Refer to Table attached.

**Witnesses** : Mr. David Lee (SSJV)  
Mr. Nyo Nyo Saw (R.E)  
Mr. Park Jun Tak (Tuksu)  
Ms. Tay Li Ying (Basler & Hofmann)

LAWRENCE LIM  
Testing Officer

NG AIK MIU  
Engineer (Mechanical Testing)  
Mechanical Technology Division

ReportsOthers/2012/meiyi

**Terms & conditions:**

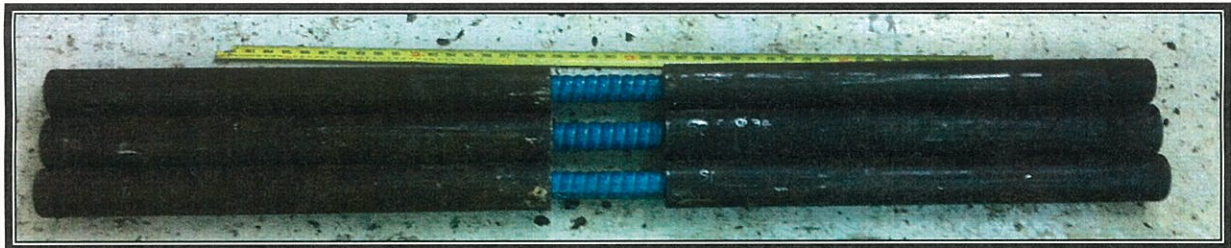
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**Results:**

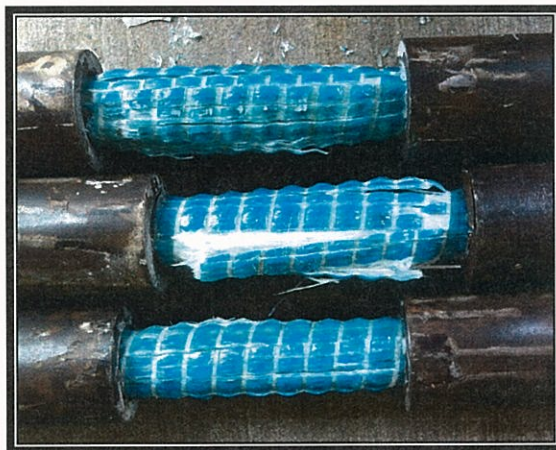
**Table : Tension Load Test**

Sample Reference	Ø34 GFRP Rebar		
	S1	S2	S3
Nominal Cross-sectional Area (mm <sup>2</sup> ) #	908		
Overall Length (mm)	1500		
Exposed Length (mm)	156	156	157
Maximum Load (kN)	866.3	853.3	861.4
Tensile Strength (N/ mm <sup>2</sup> )	954.1	939.8	948.7
Tensile E-Modulus (GPa)	63	66	75
Mode of Failure	Failure of the bar (See Photograph 2 attached)		

# - Based on Client's Sample Reference.



**Photograph 1 : Show samples submitted**



**Photograph 2 : Show tested samples**

*James*

*ja*