



K.O.H. INTERNATIONAL Co.,Ltd.

45 Moo 1 Tumbon Borngern, Amphur Ladlumkaew, Prathomthanee 12140

Tel: 02-5993389 Fax: 02-5993391, 02-5993390

K.O.H. INTERNATIONAL Co.,Ltd.

Date 2020-11-5

A) Load Test Report of 4m Aluminium Single Straight Ladder According to

STD EN131-2-2010 Appendix-5.2

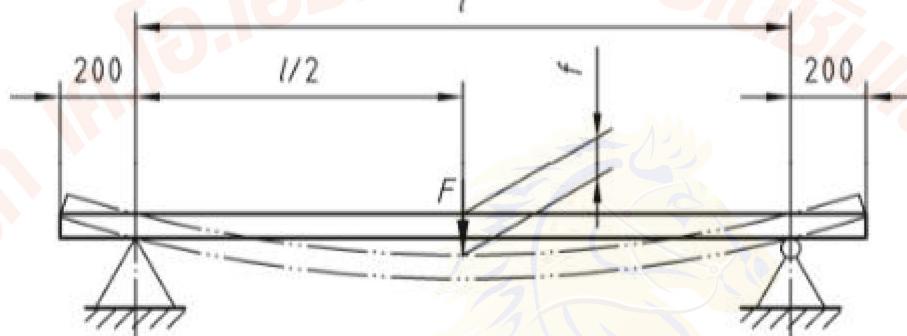
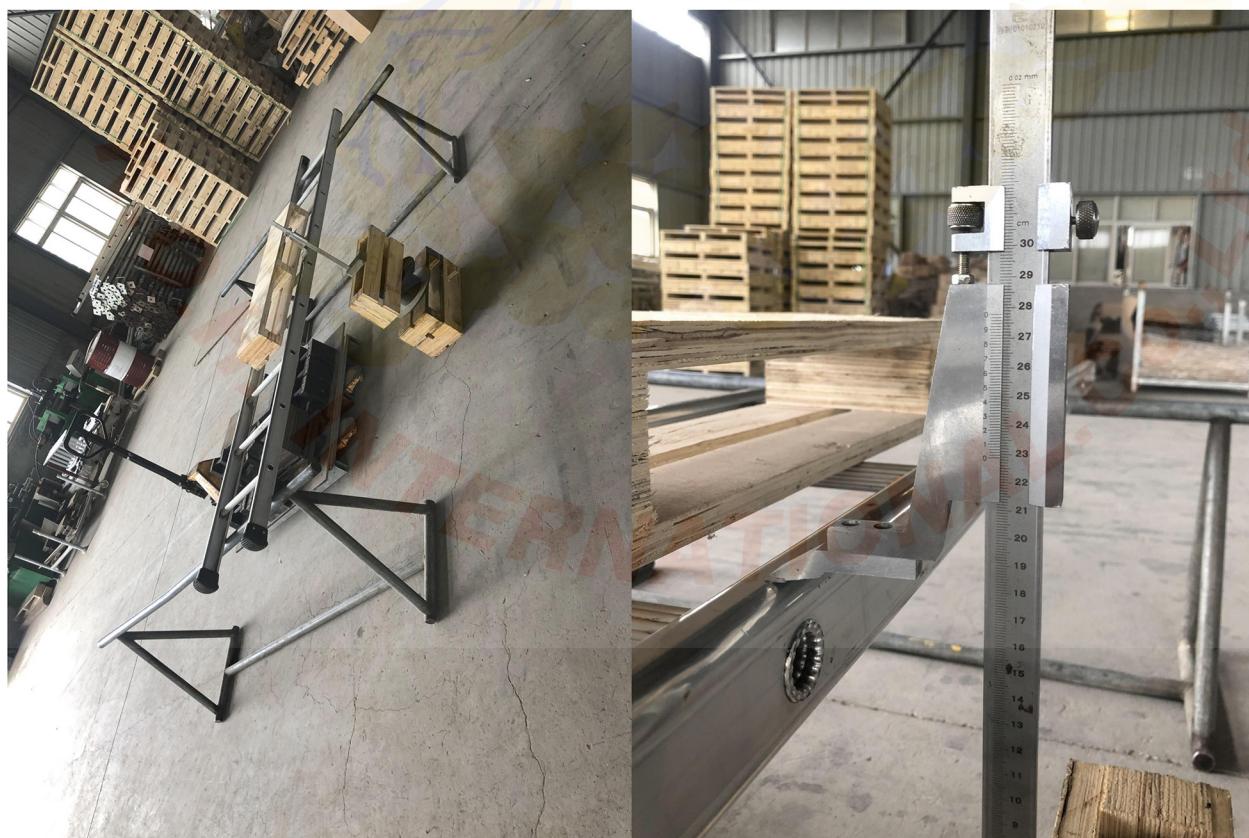


Figure 10 — Strength test

B) Testing for the ladder of length= 4.0 meter.

Test Photo for Preparation before testing





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Apply setting load 539N/55 Kgs(required 500N or 51 Kgs)on the middle of the ladder for the 60 sec.



Observation: Apply ultimate load 539N/55 Kgs(required 500N or 51 Kgs)on the middle of the ladder for the 60 sec and found 0.2 mm permanent deflection, There is not any weld crack and no any other failure, the test found satisfactory.

Apply setting load 1127N/115 Kgs(required 1100KN or 112.2 Kgs)on the middle of the ladder for the 60 sec.



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Observation Table:

Applied Load in N(Kgs)	Required min load in N(Kgs)	Before the load/mm	In the load/mm	After the load/mm	Permanent deformation/mm
539(55)	500(51)	226.3	202.4	226.1	0.2
1127(115)	1100 (112.2)	226.3	180.4	226.1	0.2

In the STD EN131-2-2010 5.3

Length of ladder=4 Mtr (4000mm)

$$l=4000-200 \times 2$$

$$=3600$$

$$0.1\%l=3600 \times 0.1\% =3.6$$

$$f=0.2$$

$$f < 0.1\%l$$

Test Result:

- The aluminum ladder unit size 4.0M length x 0.4M wide was tested
- The load applied as per above chart for G 5.2 of ladder at mid-point for 60 seconds
- We found 0.2 mm permanent deflection, no any failure observed in the ladder.
- The aluminum ladder unit size 4.0M length x 0.4M wide was passed the above test.
- The testing of aluminum ladder unit was done according to STD EN131-2-2010

Appendix-5.2 on the Date November 5 2020 at Changsha Xiangjia Metal Material Trading Co. Ltd.