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Walltopia Ltd.
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1712 Sofia
Bulgaria

Your ref./from	Our ref./Name	Phone-ext/E-Mail	Fax-ext	Date	Page
	MSL-MUC-kr Volker Kron	+49 89 361965-480 volker.kron@tuev-sued.de	+49 89 361965-799	2013-04-25	1 of 8

Report from Test of Walltopia Belay Point; Order 713020277

Dear Mr. Zlatev,

In your letter from February 25, 2013 you announced for your climbing wall belay point a test evaluation according to EN 12572-1: 07.2007 (Artificial Climbing Structures).

The belay point is for the use of clipping in express slings for belay in climbing routes on a climbing wall. It has the following technical data:

- construction: U-bar with welded plate
- material: Ø10 mm stainless steel (AISI 304)
- dimension: 79 mm x 52 mm x 30 mm
- fixation: 2 M10 threads in 32 mm distance, fixed to the climbing structure (steel) with self-securing nuts M10
- attachment: 22 mm x 17 mm attachment hole for connectors
- marking: no marking on tested samples

The belay point was tested in a 22 mm plywood panel.

Trade Register Munich
HRB 85742
V.A.T. DE 129484267
HypoVereinsbank Munich
Acc.No. 48 852 211
Bank Code 700 202 70

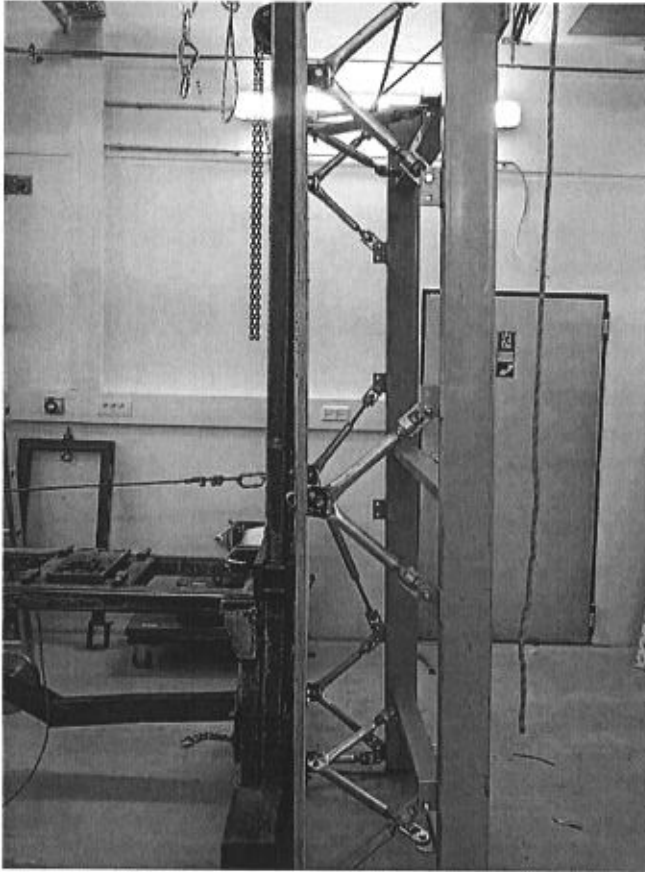
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Belay point in climbing panel at load test axial

The flange nut was verified by approval. Here the test data:

-Start of testing: 21.03.2013

-Test laboratory: TÜV Süd Product Service GmbH, Ridlerstr. 65, D-80339 Munich, TEC-TF4

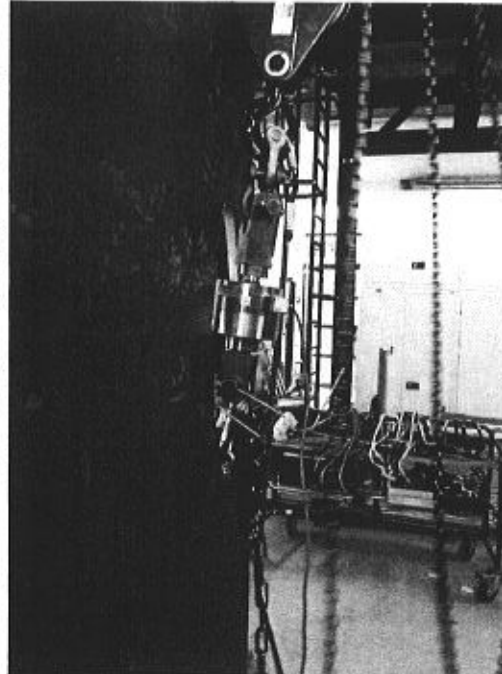
-Test requirement: DIN EN 12572-1: 07.2007, Pt.4.4/ Annex C and absolute break strength in panel

-**Test results** (test records see annex):

-The strength of the belay point (EN 12572-1, Pt. 4.4) was approved in axial and radial direction with 9,9 kN/ 1 min.



axial loading



radial loading

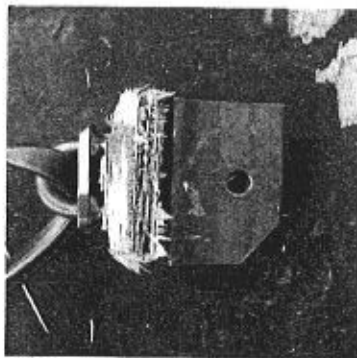
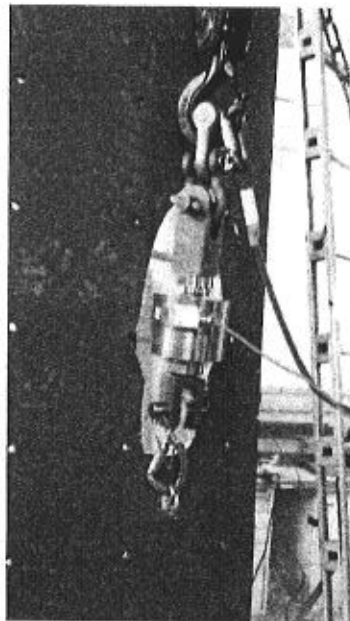
Here the belay point did not deform or break and did not went loose.

Requirement met

-The strength of the belay point (EN 12572-1, Pt. 4.4) was approved in axial and radial direction with 20 kN/ 1 min. Here the belay point did not break.



radial break test



axial break test (Sample after break test)

The break value in axial direction was 36,9 kN, the break value in radial direction was 31,7 kN.

Requirement met



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-Conclusion:

With this letter we can confirm, that the above mentioned belay point of company Walltopia Ltd. meets the requirement of EN 12572-1.

Yours sincerely,

TÜV SÜD Product Service GmbH

TEC-SP

Letter checked:

A handwritten signature in black ink, appearing to read 'M. Völz'.

i.o. Matthias Völz

Expert:

A handwritten signature in black ink, appearing to read 'V. Kron'.

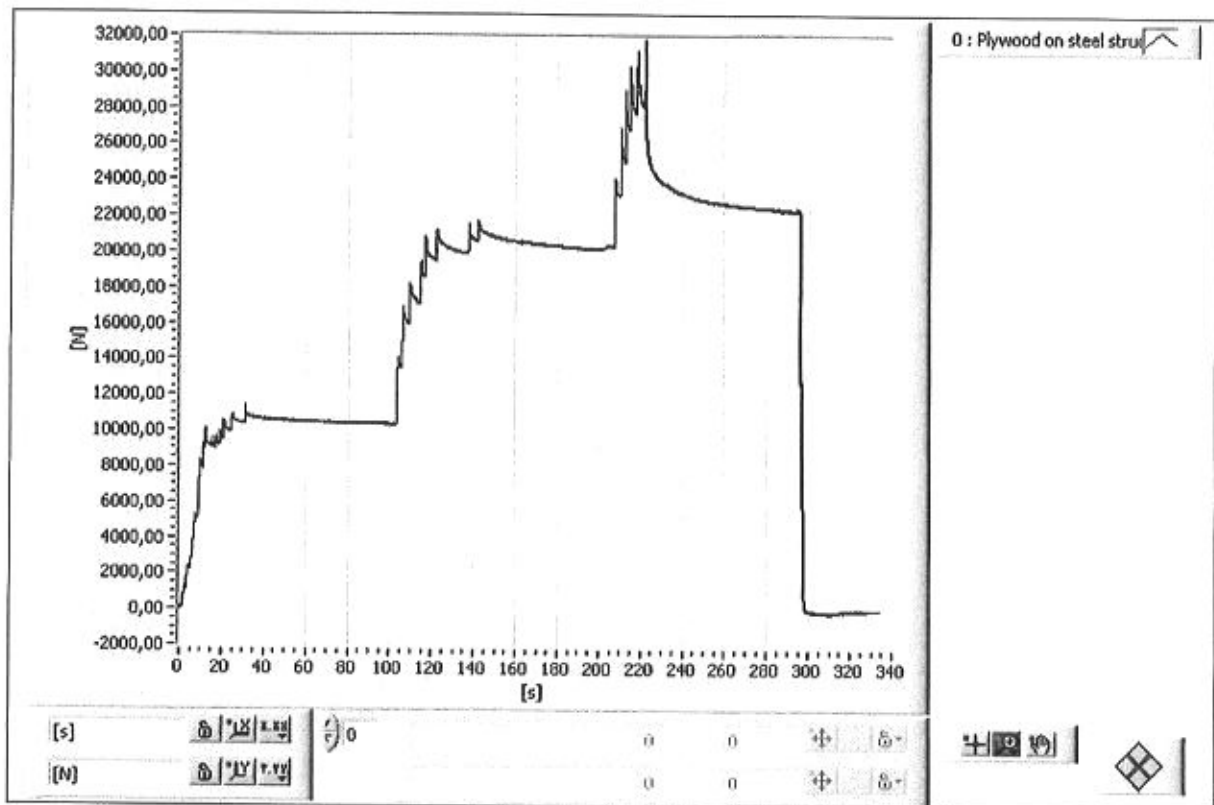
i.o. Volker Kron

Annex:

-test records



Bearbeiter / Project Manager: Klinger Guido
Auftraggeber / Applicant: Walltopia
Auftragsnr. / Report-No.: 713018457
Produkt / Product: Belay point of Climbing Wall
Modell / Item: Plywood on steel structure
Prüfungsart / Kind of test: radial load EN 12572-1
Kenndaten / Technical Data: 9,9kN 1min.



Bezeichnung	Minimum X	Maximum X	Minimum Y	Maximum Y
0 : Plywood on steel structure [N]	0,00 s	333,80 s	-210,64 N	31792,22 N

Berechnungen / Calculations:

Kommentar / Comment: 9.9 kN: no deformation; 20 kN: no break; 31.7 kN: Plywood panel broke

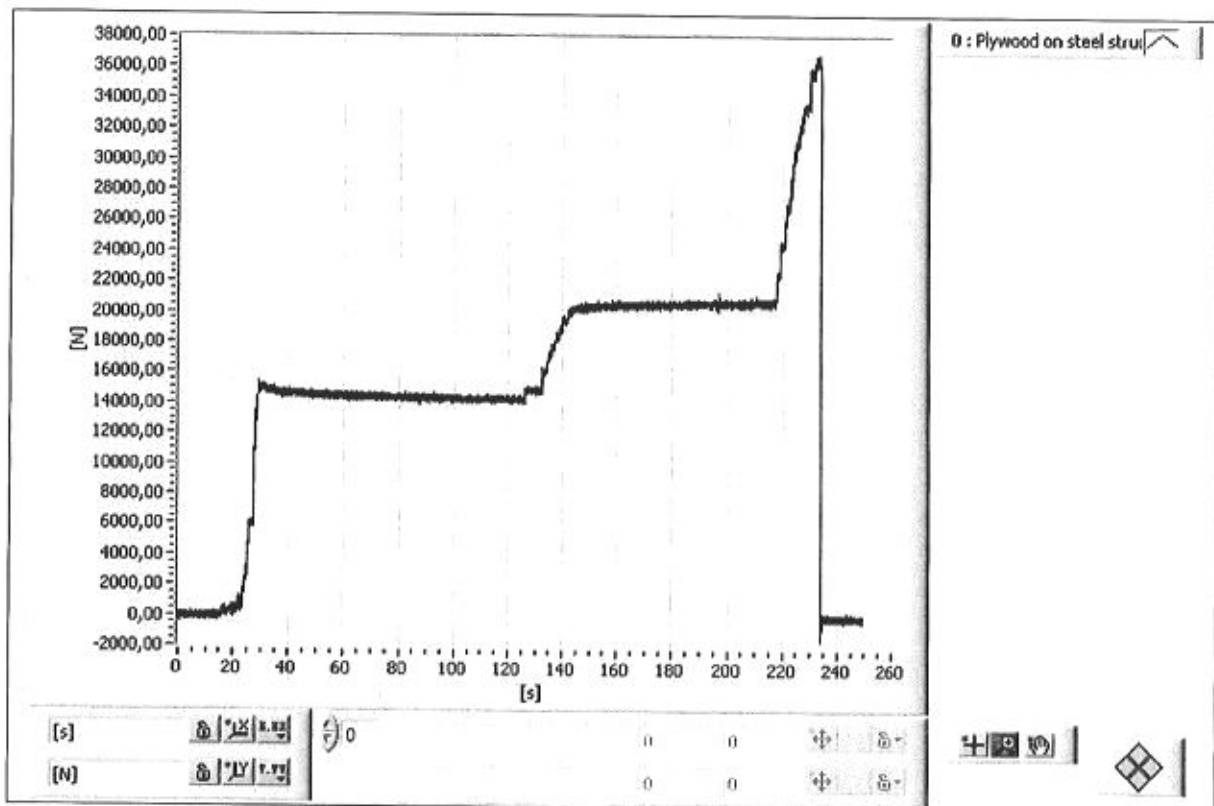
Messkarten / DAQ-Card:
 DAQ-CardAI-16XE-50
Aufnehmer / DAQ-Card:
 100kN

Messverstärker / Amplifier:
 MGC 30
Software / Software:
 UniLAB 2004 / HE-Datentechnik



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Bearbeiter / Project Manager: Klinger Guido
Auftraggeber / Applicant: Walltopia
Auftragsnr. / Report-No.: 713018457
Produkt / Product: Belay point of Climbing Wall
Modell / Item: Plywood on steel structure
Prüfungsart / Kind of test: axial load EN 12572-1
Kenndaten / Technical Data: 9,9kN 1min.



Bezeichnung	Minimum X	Maximum X	Minimum Y	Maximum Y
0 : Plywood on steel structure [N]	0,00 s	249,20 s	-1624,64 N	36913,04 N

Berechnungen / Calculations:

Kommentar / Comment: Höhe Kletterwand: 470mm Höhe Vierkantprofil: 120mm Durchmesser Streben: 32mm
 9.9 kN: no deformation; 20 kN: no break; 36.913 kN: fixation screw in back construction broke;

Messkarten / DAQ-Card:
 DAQ-CardAI-16XE-50
Aufnehmer / DAQ-Card:
 100kN

Messverstärker / Amplifier:
 MGC 30
Software / Software:
 UniLAB 2004 / HE-Datentechnik



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End of Report 713020277