

Test Report



Customer Alu Rehab
Test Item Netti 4U CED
Test ISO 7176-19:2008 as amended by
EN 12183:2014
Millbrook Report No. 18/0473
Millbrook Test No. S15331

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Millbrook Proving Ground Ltd Millbrook Bedford MK45 2JQ	Contract file	PDF	1

Report Revision History

Rev.	Revision Description	Date	Author	Approver	Pages
0	Initial release	19 th March 2018	C. Sells	N. Targett	All

Test Results Summary

Test No: S15331 Test Type ISO 7176-19:2008 as amended by EN12183:2014 Manufacturer Alu Rehab. WC Model: Netti 4U CED Mass: 33.1kg Seat Rail Angle: 5° Seat Back Angle: 9° Head Restraint: Fitted Occupant: Hybrid II 50 th Percentile (75kg) Front Tie Downs: Unwin OF01 Rear Tie Downs: Unwin OR02 Occupant Restraint: MPG SORv1	RESULTS
5.1 During the Test	
a) Horizontal ATD and wheelchair excursion limits as per limits shown in Table 3:-	
Was the horizontal movement of the test wheelchair P- Point (X_{ss}) less than 200 mm. (± 5 mm)	Pass 46mm
Was the horizontal movement of the dummy Knee (X_{knee}) less than 375 mm. (± 5 mm)	Pass 188mm
Was the forward horizontal movement of the Dummy Head (X_{headF}) less than 650 mm. (± 5 mm)	Pass 367mm
Was the rearwards horizontal movement of the Dummy Head (X_{headR}) greater than -450 mm. (± 5 mm)	Pass -290mm
b) Was the ratio $X_{knee}/X_{ss} > 1.1:1$	Pass 4.1:1
c) Did the batteries of powered wheelchairs, or their surrogate parts:-	
I. move outside of the wheelchair footprint	N/A
II. move into the wheelchair user's space	N/A
5.2 Post Test	
a) Did the wheelchair remain upright on the test platform and did the ATD remain in a seated posture in the test wheelchair with a torso angle $> 45^\circ$	Pass
b) Did the wheelchair securement points show visible signs of material failure	Pass (See Note)
c) Did any components of a mass greater than 100g become detached from the wheelchair	Pass
d) Did any occupant contactable components fragment or separate with an edge of less than 2mm	Pass
e) Did any primary load carrying components of the wheelchair show any visible signs of failure	Pass
f) Did any 'tilt in space' locking mechanisms show signs of failure	Pass
g) Was the ATD released from the wheelchair without the use of tools	Pass
h) Was the wheelchair released from the restraint system without the use of tools	Pass
i) Was the average decrease of H-Point height relative to the wheelchair platform less than 20% of the pre-test height	Pass <1%
j) Did the wheelchair and its components cause partial or complete failure of the webbing or any of the WTORS assemblies	Pass
The Netti 4U CED satisfied the dynamic test requirements of ISO 7176-19:2008 as amended by EN12183:2014 Note: RH front cross-member weld failed at front tie-down anchorage point during test allowing partial detachment of front tie-down webbing.	