

Test report no.: <i>Testrapport nr.:</i>	89218022-01	Order No.: <i>Opdracht nr.:</i>	89218022	Page 1 of 7 <i>Pagina 1 van 7</i>
Client Reference No.: <i>Klantreferentie nr.:</i>	2299831	Order date: <i>Opdrachtdatum:</i>	2020-12-03	
Client: <i>Klant:</i>	James Leckey Design LTD 19C Ballinderry Road LISBURN BT2 82SA IRELAND			
Test item: <i>Testvoorwerp:</i>	Seating Test - Seat mounted on a carrier frame.			
Identification/ Type No.: <i>Benaming / Type nr.:</i>	No identification number			
Order content: <i>Inhoud opdracht:</i>	The activities concern testing, judging and reporting for: 8.2 Static, impact and fatigue strength.			
Test specification: <i>Testomschrijving:</i>	Performing tests under accreditation following parts of ISO 7176-8:2014.			
Date of sample receipt: <i>Ontvangstdatum monster:</i>	2021-06-25			
Test sample No.: <i>Testproefstuk nr.:</i>	89218022-01			
Testing period: <i>Testperiode:</i>	2021-07-01 - 2021-08-31			
Place of testing: <i>Testlocatie:</i>	Arnhem, The Netherlands			
Testing laboratory: <i>Testlaboratorium:</i>	TUV Rheinland Nederland			
Test result*: <i>Testresultaat*:</i>	Pass			
tested by: <i>getest door:</i>		authorized by: <i>geautoriseerd door:</i>		
Date: 2021-09-06 <i>Datum:</i>		Issue Date: 2021-09-21 <i>Datum uitgave:</i>		
Position / functie:	Ortosector Kees Koestere Expert Medical Products	Position / functie:	Ortosector Mirjam Expert Medical Products	
Others / <i>Andere:</i>	Object under test is a orthopedic seating mounted on a carrier frame. The focus of the test is solely on the seating. The carrier frame is merely a means to have the seating tested.			
Condition of the test item at delivery: <i>Toestand van het test voorwerp bij ontvangst:</i>	Test item complete and undamaged			
* Legend:	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(s)	N/A = not applicable	N/T = not tested
* Legenda:	P(ass) = voldoet aan test omschrijving	F(ail) = voldoet niet aan test omschrijving	N/A = niet van toepassing	N/T = niet getest
<p>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</p> <p><i>Dit testrapport heeft alleen betrekking op het voorgenoemde test voorwerp. Zonder toestemming van het testcentrum mag dit testrapport niet in delen worden vermenigvuldigd. Dit keuringsrapport geeft geen recht op het dragen van enig keurmerk.</i></p>				

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Remarks
Opmerkingen

1	<p>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request. For the influence of the measuring uncertainties on the results, reference is made to the validation of the respective methods.</p> <p><i>De apparatuur welke tijdens de gespecificeerde testperiode is gebruikt, is gekalibreerd volgens ons kalibratieprogramma. De apparatuur voldoet aan de eisen welke zijn opgenomen in de relevante normen. De traceerbaarheid van de gebruikte testapparatuurs is gewaarborgd door naleving van de voorschriften in ons kwaliteitsmanagementsysteem. Gedetailleerde informatie over testomstandigheden, apparatuur en meetonzekerheid is beschikbaar in het testlaboratorium en kan op verzoek worden verstrekt. Voor de invloed van de meetonzekerheden op de resultaten wordt verwezen naar de validatie van de respectievelijke methode c.q. verrichting</i></p>
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3	<p>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report. Tests clauses marked with ^a are performed under ISO 17025 accreditation. Deviations of testing specification(s), test locations or customer requirements are listed in specific test clause in the report. This report is only to be read as a whole. No opinions or interpretation are included in this report. This test report consists of multiple pages and is only to be read as a whole. The number of pages can be seen in the header on the top right of each page, the report ends when the last page is reached. TÜV Rheinland Nederland B.V. is solely responsible for the content.</p> <p><i>Test onderdelen welke met * zijn gemarkeerd zijn uitbesteed aan gekwalificeerde onderaannemers en zijn beschreven in het respectievelijke test onderdeel van dit rapport. Test onderdelen welke met ^a zijn gemarkeerd zijn onder ISO 17025 accreditatie uitgevoerd. Afwijkingen van testspecificatie(s), testlocaties of klant eisen zijn vermeld in het van toepassing zijnde onderdeel in het rapport. Het rapport dient als geheel te worden gelezen. Er zijn geen opinies en interpretaties opgenomen binnen het rapport. Dit rapport bestaat uit meerdere pagina's en dient al geheel gelezen te worden. Het aantal pagina's is rechtsboven in de koptekst van dit rapport vermeld en eindigt wanneer de laatste pagina is bereikt. TÜV Rheinland Nederland is als enige verantwoordelijk voor de inhoud van het rapport.</i></p>
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Product description
Product omschrijving

1	Product details: <i>Product details:</i>	Subject:	Specification/value:
		Manufacturer seating	James Leckey Design LTD
		Trade mark of seating	Leckey
		Type	unknown
		Version	unknown
		Serial number	unknown
		Max. user mass	70 kg
		Dummy mass	70 kg
		Trade mark and type first wheelchair	Quickie / Iris
		Trade mark and type second wheelchair	Quickie / SR45
2	Other: <i>Andere:</i>	Test sample(s), wheelchair frames, sample information, description, product details and intended usage was provided by customer.	
3	Test sample obtaining: <i>Selectie van het proefstuk:</i>	<input checked="" type="checkbox"/> Sending by customer <input type="checkbox"/> Sampling by TÜV Rheinland Group <input type="checkbox"/> others:	
4	Configuration test sample: <i>Configuratie van het proefstuk:</i>	The seating under test was mounted on two different carrier frames, both configured according to ISO 7176-22:2014.	

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Clause <i>Deel</i>	Requirements - Tests / <i>Vereisten - Tests</i>
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Summary of test results

Summary of test results after performing all requested tests according to the international Standard ISO 7176-8:2014 (E); Wheelchairs – Part 8: Requirements and test methods for static, impact and fatigue strengths, International Organization for Standardization.

Par.	Subject	Result
8	Static strength	P <input checked="" type="checkbox"/> F <input type="checkbox"/> N/A <input type="checkbox"/> N/T <input type="checkbox"/>
9	Impact strength	P <input checked="" type="checkbox"/> F <input type="checkbox"/> N/A <input type="checkbox"/> N/T <input type="checkbox"/>
10	Fatigue strength	P <input checked="" type="checkbox"/> F <input type="checkbox"/> N/A <input type="checkbox"/> N/T <input type="checkbox"/>

Detailed results of the seating tests

Req. nr.	Description of the requirement	Value of the test	Pass/ fail/ n.a
	Static, impact and fatigue strength on the seating		
8	Static strength		
8.4	Arm supports: resistance to downward forces	used load 58.1 N	conforms pass
8.5	Foot supports: resistance to downward forces	used load 76.5 N	conforms pass
8.6	Tipping levers	used load na N	not applicable n.a.
8.7	Handgrips	used load na N	not applicable n.a.
8.8	Arm supports: resistance to upward forces	used load 72.4 N	conforms pass
8.9	Foot supports: resistance to upward forces	used load 36.7 N	not applicable n.a.
8.10	Push handles, resistance to upward load	used load na N	not applicable n.a.
8.11	Scooter steering handles: resistance to forward forces	used load na N	not applicable n.a.
8.12	Scooter steering handles: resistance to rearward forces	used load na N	not applicable n.a.
8.13	Scooter steering handles: resistance to downward forces	used load na N	not applicable n.a.
8.14	Scooter steering handles: resistance to upward forces	used load na N	not applicable n.a.
9	Impact strength		
9.3	Back support: resistance to impact	used: pendulum (30°)	conforms pass

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Clause <i>Deel</i>	Requirements - Tests / <i>Vereisten - Tests</i>
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Req. nr.	Description of the requirement		Value of the test	Pass/ fail/ n.a
9.4	Handrim: resistance to impact	used: pendulum (na°)	not applicable	n.a.
9.5	Castors: resistance to impact	used: pendulum (na°)	not applicable	n.a.
9.6	Foot supports: resistance to impact	used: pendulum (47.3°)	conforms	pass
9.7	Impacts on anti-tip devices	used: pendulum (na°)	not applicable	n.a.
10	Fatigue strength			
10.3	Multi-drum test	200,000 cycles	conforms	pass
10.4	Drop test	6,666 cycles (or 1/30 of cycles of 2- drum test)	conforms	pass
10.5	Fatigue test of manually operated parking brakes		not applicable	n.a.

Remarks on the test results

Req.nr.	Description of the requirement	Remark
10.3	Multi-drum test	The first carrier frame failed during the test. The seating system was subsequently moved, including the mounting hardware, to the second carrier frame after which the test was finished.

Conclusion

The seating, mounted on a carrier frame, trade mark: Leckey, meets the requirements of ISO 7176-8:2014, chapter 8, 9 and 10.

The test results exclusively relate to the tested object. The focus of the test is solely on the orthopedic seating. The carrier frame is merely a means needed to test the orthopedic seating. Therefore, the carrier frame is not subject to the requirements of the tests and has no influence on the results of the tests.

Remark 1

Testing of the wheelchair other than the seating was not performed on request of the client.

Remark 2

During the double drum test the first wheelchair frame failed and was therefore replaced by the second frame.

Remark 3

When and if changes are made in production method and/or equipment, assessment according to this standard shall be reconsidered and re-tests shall be performed when the changes can lead to different specifications of the product. The decision and responsibility lies at the manufacturer.

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PHOTO-DOCUMENTATION
FOTO-DOCUMENTATIE

Picture 1, 2 and 3: seating on first carrier frame

Afbeelding 1, 2 en 3:



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PHOTO-DOCUMENTATION
FOTO-DOCUMENTATIE

Picture 1, 2 and 3: seating on second carrier frame

Afbeelding 2, 2 en 3:



End of report