Ontario

Ministry of Health

Assistive Devices Program (ADP)
5700 Yonge Street, 7th Floor
Toronto ON M2M 4K5
Telephone: 416-327-8804

Prior Testing Disclosure – Manual Wheelchair

Instructions

1) For more information refer to ISO 7193, ISO 7176, ADP Minimal Technical Criteria for Manual Wheelchairs, ADP Minimal Technical Criteria for Tilt/Recline Systems, and ADP Classification Guidelines for Manual Wheelchairs.

2) Generally, criteria reflect a test load for a 18X16 inch seat of 75 kg and 14X14 inch seat of 25 kg. If results at these test loads and sizes are not available, please include results that are closest to this and indicate the test loads used during testing. Completion of Section 4.1.a) i and ii is mandatory. Be prepared to supply supporting documentation on request. Do not attach to this document.

3) Source refers to the source of the result. M refers to results provided by the manufacturer's in-house test facility and I refers to results obtained through testing at an independent test centre.

A) ☐Manual Wheelchair ☐Dynamic positioning ☐Stroller

B) ☐Adult ☐Paediatric

Name of Device	Model Number

Section 1 – Manufacturer's In-House Testing Facility (M)

Name of Manufacturing In-House Testing Facility

Unit Number	Street Number	Street Name	PO Box

Lot/concession/rural route	City/Town	Province	Postal Code

Contact Name

Last Name	First Name	Position/Title

Telephone Number ext.	Email Address

Serial number	Weight capacity	Evaluation Start Date (yyyy/mm/dd)	Evaluation End Date (yyyy/mm/dd)

Specific sizes, parts or options evaluated

Section 2 – Independent Test Centre (I)

Independent Test Centre

Unit Number	Street Number	Street Name	PO Box

Lot/concession/rural route	City/Town	Province	Postal Code

Contact Name

Last Name	First Name	Position/Title

Telephone Number ext.	Email Address

Serial number	Weight capacity	Evaluation Start Date (yyyy/mm/dd)	Evaluation End Date (yyyy/mm/dd)

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Specific sizes, parts or options evaluated

Section 3 – Signature

Note: This form may be signed only by the person responsible for the testing of the equipment

I certify that the information I have provided on this form is true, correct and complete to the best of my knowledge. I understand that this information is subject to audit.

Name (Last name, First name)	Signature

Position/Title	Telephone Number	Email Address
	ext.	

Section 4 – ADP Minimal Technical Criteria for a Manual Mobility Device

4.1. Construction and Design

a. Construction [ISO 7176-8]

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Two Drum Fatigue Test Meets ISO fatigue strength requirements (Clause 4.1)	≥ 200,000 Cycles Yes	Cycles ☐Yes ☐No	☐M ☐I	☐Yes ☐No
ii. Curb Drop Test Meets ISO fatigue strength requirements (Clause 4.1)	≥ 6,666 Cycles Yes	Cycles ☐Yes ☐No	☐M ☐I	☐Yes ☐No
iii. Does the product have sufficient mechanical integrity to withstand reasonable static loading and impact?	Yes	☐Yes ☐No	☐M ☐I	☐Yes ☐No

b. Design [ISO 7176-14:8]

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Are shrouds or guards present to prevent the user from moving parts?	Yes	☐Yes ☐No	☐M ☐I	☐Yes ☐No

Testing Notes

Drum Fatigue Test and Curb Drop Tests should be conducted using test load closest to capacity. Test Load Used Kg

Comments

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4.2. Statics

a. Dimensions [ISO 7176-5]

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Overall length	N/A	cm	☐M ☐I	☐Yes ☐No
ii. Overall width	≤ 70 cm (with 51cm seat)	cm	☐M ☐I	☐Yes ☐No
iii. Overall height	N/A	cm	☐M ☐I	☐Yes ☐No
iv. Folded width	N/A	cm	☐M ☐I	☐Yes ☐No
v. Folded height	N/A	cm	☐M ☐I	☐Yes ☐No
vi. Ground clearance under frame	≥ 50 mm	mm	☐M ☐I	☐Yes ☐No
vii. Ground clearance under anti-tips	N/A	mm	☐M ☐I	☐Yes ☐No
viii. Minimum turning radius	N/A	cm	☐M ☐I	☐Yes ☐No
ix. Mass	N/A	kg	☐M ☐I	☐Yes ☐No

Testing Notes

Comments

b. Stability in Least Stable Configuration [ISO 7176-1:9-12]

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Forward stability when loaded	N/A	o	☐M ☐I	☐Yes ☐No
ii. Rearward stability when loaded	N/A	N/A	☐M ☐I	☐Yes ☐No

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• Wheels locked	T1 ≥ 10°, T2 ≥ 6° T3 ≥ 6°, T4 ≥ 1° T5 ≥ 10°	o	☐M ☐I	☐Yes ☐No
• Wheels unlocked	T1 ≥ 10°, T2 ≥ 6° T3 ≥ 6°, T4 ≥ 1° T5 ≥ 10°	o	☐M ☐I	☐Yes ☐No
• Anti-tip devices	T1 ≥ 10°, T2 ≥ 6° T3 ≥ 6°, T4 ≥ 1° T5 ≥ 10°	o	☐M ☐I	☐Yes ☐No
iii. Sideways stability when loaded	N/A	o	☐M ☐I	☐Yes ☐No
iv. Is there a label warning against the removal of anti-tip devices?	Yes, if used for stability	☐Yes ☐No	☐M ☐I	☐Yes ☐No

Orientation	Describe least stable device configuration for each orientation
Forward	
Rearward	
Sideways	

Testing Notes

Test Load Used Kg

Forward - device facing down the slope; Rearward - device facing up the slope; Sideways - device facing across the slope.
Criteria assumes adult 18X16 inch seat and 75 kg ISO test dummy; paediatric 14X14 seat and 25 kg ISO test dummy. Indicate actual test load used. Test product in least stable configuration not including dynamic positioning features. (Impact of dynamic positioning is evaluated separately – see Section 5.1. b.). T1-T5 refer to ADP type classifications for manual wheelchairs.
Tipping point as defined in ISO 7176-1.

Comments

4.3. Dynamics – Rolling Resistance

a. Rolling Resistance

Test Specifications	Requirements	Result	Source	Meets Requirements
i. During acceleration to 1.8 m/s	≤ 44 N	N	☐M ☐I	☐Yes ☐No
ii. At a constant speed of 1.8 m/s	≤ 22 N	N	☐M ☐I	☐Yes ☐No

Testing Notes

Test Load Used Kg

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The force to push wheelchair while loaded with ISO test dummy is measured at the level of the push handles.

Comments

4.4. Braking – Efficiency and Operation

a. Efficiency [ISO 7176-3:7.1]

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Maximum angle at which brake will hold in the forward direction	≥ 12°	° ☐roll ☐tip ☐skid	☐M ☐I	☐Yes ☐No
ii. Maximum angle at which brake will hold in the rearward direction	≥ 12°	° ☐roll ☐tip ☐skid	☐M ☐I	☐Yes ☐No

b. Operation [ANSI/RESNA WC/Vol.1:22 Annex A]

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Force to engage wheel locks	≤ 100 N	N	☐M ☐I	☐Yes ☐No

Testing Notes

Test Load Used Kg

Comments

4.5. Instructions

a. Product Literature [ISO 7176-15:7, ISO 7176-14:6.1]

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Test Specifications	Requirements	Result	Source	Meets Requirements
i. Was an owner's manual and/or product literature provided?	Yes	☐Yes ☐No	☐M ☐I	☐Yes ☐No
ii. Did it include clear instructions for safe operation and maintenance?	Yes	☐Yes ☐No	☐M ☐I	☐Yes ☐No

Testing Notes

Comments

Section 5 – ADP Minimal Technical Criteria for a Tilt/Recline System

5.1. Dimensions and Stability

a. Angular Dimensions [ISO 7176-7:7.3]

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Maximum tilt only angle	≤ 60°	o	☐M ☐I	☐Yes ☐No
ii. Minimum tilt only angle	N/A	o	☐M ☐I	☐Yes ☐No
iii. Maximum recline only angle	≤ 180°	o	☐M ☐I	☐Yes ☐No
iv. Minimum recline only angle	N/A	o	☐M ☐I	☐Yes ☐No
v. Maximum combined tilt/recline angle	≤ 180°	o	☐M ☐I	☐Yes ☐No
vi. Minimum seat-to-back angle	≥ 80°	o	☐M ☐I	☐Yes ☐No

b. Stability in Least Stable Configuration

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Forward stability when loaded	In all planes, tilted/reclined to least stable position: ≥ 6°	o	☐M ☐I	☐Yes ☐No

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ii. Rearward stability when loaded	In all planes, tilted/reclined to least stable position: ≥ 6°	o	☐M ☐I	☐Yes ☐No
iii. Sideways stability when loaded	In all planes, tilted/reclined to least stable position: ≥ 6°	o	☐M ☐I	☐Yes ☐No

Orientation	Describe least stable device configuration for each orientation
Forward	
Rearward	
Sideways	

Testing Notes

Forward - device facing down the slope; Rearward - device facing up the slope; Sideways - device facing across the slope.

Test Load Used Kg

Comments

5.2. Dynamics

a. Manual Tilt/Recline Systems

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Force to activate manual recline mechanism	≤ 80 N or ≤ 3.4 Nm	N or Nm	☐M ☐I	☐Yes ☐No
ii. Force to initiate recline	≤ 150 N	N	☐M ☐I	☐Yes ☐No
iii. Force to return reclined back to upright position (no tilt)	≤ 150 N	N	☐M ☐I	☐Yes ☐No
iv. Force to return reclined back to upright position (full tilt)	≤ 150 N	N	☐M ☐I	☐Yes ☐No
v. Force to activate manual tilt mechanism	≤ 80 N or ≤ 3.4 Nm	N or Nm	☐M ☐I	☐Yes ☐No
vi. Force to initiate tilt	≤ 150 N	N	☐M ☐I	☐Yes ☐No
vii. Force to return tilted seat to upright position (no recline)	≤ 150 N	N	☐M ☐I	☐Yes ☐No

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viii. Force to return tilted seat to upright position (full recline)	≤ 150 N	N	☐M ☐I	☐Yes ☐No

Testing Notes

Test Load Used Kg

Comments

5.3. Safety

a. All Tilt/Recline Systems

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Is there a mechanical range-limiting device to prevent operation of system beyond limits in Section 4.1. a.	Yes	☐Yes ☐No	☐M ☐I	☐Yes ☐No
ii. Are all other performance claims of the system validated?	Yes	☐Yes ☐No	☐M ☐I	☐Yes ☐No

b. Manual Tilt/Recline Systems

Test Specifications	Requirements	Result	Source	Meets Requirements
i. Is a locking mechanism present that will securely lock the seat and seat back in any position within the safe range given in Section 4.1. a.	Yes	☐Yes ☐No	☐M ☐I	☐Yes ☐No
ii. Does the activation mechanism automatically lock the seat and seat back in place upon release?	Yes	☐Yes ☐No	☐M ☐I	☐Yes ☐No

Testing Notes

Test Load Used Kg

Comments

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