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BI Skötbordsspecialisten AB
Gudmundsvägen 1
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Testing of changing units according to EN 12221:2008+A1:2013

(3 appendices)

Customer: BI Skötbordsspecialisten AB

Test object/ID: Changing unit/Robust

Test method: EN 12221-1:2008+A1:2013 Child use and care articles – Changing units for domestic use – Part 1: Safety requirements
EN 12221-2:2008+A1:2013 Child use and care articles – Changing units for domestic use – Part 2: Test methods

Scope: Complete test
Surface and materials have not been assessed

Date of test: 2023-10-09 – 2023-10-15

Test result: The tested object passed the test as far as tested

Reservation: The test results in this report apply solely to the specimen tested

Test environment: 23 ± 2°C and 50 ± 5% relative humidity

RISE Research Institutes of Sweden AB Department Building and Real Estate - Technical Wood Assessment

Performed by

Examined by

Lukas Andersson

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Appendices

1. Test result (5 pages)
2. Test object (1 page)
3. Pictures (1 page)

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Accred. No. 1002
Testing
ISO/IEC 17025



Appendix 1

Test result

Abbreviations: N/A = Not applicable
N/T = Not tested

Ref 12221-1	Requirements	Results
4.1	<p><u>Dimensions</u></p> <p>Type 1 changing units at least width: 380 mm, length: 650 mm Type 2 changing units at least width: 550 mm and length: 750 mm</p>	Type 2 ¹
4.2.1	<p><u>Wood-based materials</u></p> <p>Shall be free from decay and insect attack</p>	Pass
4.2.2	<p><u>Surfaces and materials</u></p> <p>Any coating of paint, varnish, lacquer or similar substances and parts consisting of dyed materials, leather, textiles, and plastics materials within the accessibility zone shall be made using products which in their soluble compound do not exceed the following amounts:</p> <p style="padding-left: 40px;">Antimony: 60 mg/kg Arsenic: 25 mg/kg Barium: 1000 mg/kg Cadmium: 75 mg/kg Chromium: 60 mg/kg Lead: 90 mg/kg Mercury: 60 mg/kg Selenium: 500 mg/kg</p> <p>The test procedure is defined in EN 71-3.</p>	Not assessed
5.1.1	<p><u>Finger entrapments</u></p> <p>Within the accessibility zone there shall be no holes, gaps and openings with a width greater than 7 mm and less than 12 mm, unless the depth is less than 10 mm</p>	Pass
5.1.2	<p><u>Entrapment of limbs</u></p> <p>Within the accessibility zone there shall be no holes, gaps and openings having a width greater than 25 mm and smaller than 45 mm</p>	Pass

¹ 560 x 760 mm

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5.1.3	<p><u>Entrapment of head, neck and torso</u></p> <p>Within the accessibility zone there shall be no hole, gap or opening larger than 65 mm and less than 223 mm</p> <p>Within the area 600 mm above the floor to the accessibility zone, see Figure 2, there shall be no hole, gap or opening accessible in normal use that allows the type 1 head probe to pass completely through unless it also allows the type 2 head probe to pass completely through</p> <p>V-shaped openings Within the area 200 mm above the floor to the accessibility zone any hole, gap or opening accessible in normal use that allows the type 1 head probe to pass completely through shall not be a V-shaped opening as defined in 3.6</p>	Pass
5.1.4	<p><u>Cords, strings</u></p> <p>(e.g. those used for ties) shall have a free length of not more than 220 mm</p>	N/A
5.1.5	<p><u>Loops</u></p> <p>Shall not have a peripheral dimension greater than 360 mm</p>	N/A
5.2	<p><u>Edges and protruding parts</u></p> <p>Parts accessible in normal use shall be rounded or chamfered and free of burrs The upper edges of the barriers and the changing surface shall have a radius of not less than 2 mm</p>	Pass
5.3	<p><u>Moving parts</u></p> <p>When the changing unit is erected ready for use the distance between two parts within the accessibility zone which move relative to each other shall always be less than 5 mm or more than 12 mm throughout the entire movement</p>	N/A
5.4	<p><u>Locking and folding mechanisms</u></p> <p>Open and close the complete unit 300 times fully operating any associated locking mechanisms</p> <p>When the changing unit is erected ready for use, the locking mechanisms shall fulfil one of the following requirements:</p> <ul style="list-style-type: none"> a) Require a minimum force of 50 N to release the folding mechanism before and after being tested according to 5.10.2 of EN 12221-2:2008; or b) Require at least two consecutive actions to release the mechanism, the operation of the second being dependent on the first having been carried out and maintained; or c) Require at least two separate but simultaneous actions to release the mechanism, operating on different principles. <p>(Wall mounted changing units and changing board flaps are excluded from this requirement)</p>	N/A
5.5	<p><u>Detachable components</u></p> <p>Shall not fit wholly in the small part cylinder</p>	N/A

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5.6	<p><u>Castors/wheels</u></p> <p>shall not be fitted except in the arrangement, either:</p> <ul style="list-style-type: none"> - Two or more castors/wheels and at least two other support points; or - Four or more castors/wheels, of which at least two can be locked. <p>Put the castors and/or wheels in the locked position. Check by inspection and by moving the changing unit around whether the locks prevent the castors and/or wheels from rolling or if they can become unlocked</p>	N/A
5.7	<p><u>Self-tapping screws</u></p> <p>Shall not be used to fasten any component that is designed to be removed or loosened when dismantling the changing units for purposes of transportation or storage.</p>	N/A
5.8	<p><u>Stability</u></p> <p>When tested in accordance with 5.6 of EN 12221-2:2008+A1:2013, the changing unit shall not overturn and the maximum movement of any changing board flap shall be 10° from its closed position.</p>	N/A
5.9	<p><u>Strength</u></p> <p>Position the changing unit in its maximum extended position if possible, ready for use on the appropriate test base. Place a total mass of 50 kg uniformly distributed on the top of the changing area. If the changing unit is fitted with shelves or drawers, load each shelf or drawer with a weight of 2 kg. Leave the changing unit under these load conditions for one hour</p>	Pass
5.10	<p><u>Extension elements</u></p> <p>Extension elements located above the changing area shall be fitted with effective open stops.</p>	N/A
5.11	<p><u>Barriers</u></p> <p>Shall be provided as an integral part of the changing unit or by means of an additional item, e.g. barrier pad that can be affixed to the changing unit.</p> <ul style="list-style-type: none"> a) If w is greater than 1 and greater than 600 mm then the changing area shall have barriers on three sides of the changing area covering at least 75 % of l b) If l is greater than w the changing area shall have barriers on two sides of the changing area covering at least 90% of l <p>Where w is the width of the changing area and l is the length of the changing area For wall-mounted units, the wall is to be considered as a barrier for this side.</p> <p>Barrier test Place the changing unit on an inclined surface at 15° (+ 0,5°/ 0°) to the horizontal and put stops against all legs to prevent it overturning.</p> <p>Position the test cylinder (Ø200mm, 15 kg) in such a way that its turning axis lies parallel to the safety barrier to be tested so that the cylinder rests against the barrier to be tested. Roll the cylinder away from the barrier and release it when its longitudinal axis is aligned with, and at a distance of 260 mm from its rest position against the barrier. Test each safety barrier three times</p>	Pass

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5.12.1	<p><u>Impact test</u></p> <p>Where the changing unit has a flap, which allows for an additional function, for example access to a bathtub, it shall not close and the fittings, e.g. locking mechanisms, hinges etc. shall not be damaged when tested in accordance with 5.9.1 of EN 12221-2:2008+A1:2013</p>	N/A
5.12.2	<p><u>Drop test</u></p> <p>Where the changing unit has a flap, locking mechanisms, hinges etc. shall not be damaged and the changing unit shall function normally after testing in accordance with 5.9.2 of EN 12221-2:2008+A1:2013</p>	N/A
5.13	<p><u>Child bath tub</u></p> <p>After testing in accordance with 5.11 of EN 12221-2:2008+A1:2013, no breakage or leakage shall be observed. The child bathtub and the changing unit shall remain intact and function normally.</p>	N/A
6	<p><u>Plastic packaging</u></p> <p>Any plastic covering used as packaging that does not fulfil the requirements of EN 71-1, shall be conspicuously marked in the official language(s) of the country where the changing unit is sold with the following statement:</p> <p>"TO AVOID DANGER OF SUFFOCATION REMOVE PLASTIC COVER BEFORE USING THIS ARTICLE. THIS COVER SHALL BE DESTROYED OR KEPT AWAY FROM CHILDREN"</p>	N/A ²
8	<p><u>Marking</u></p> <p>All changing units shall be permanently marked with the following information:</p> <ul style="list-style-type: none"> a) The name, registered trade name or registered trademark of either the manufacturer of distributor or retailer together with means of identifying the product; b) Warning: "WARNING. DO NOT LEAVE THE CHILD UNATTENDED"; c) The number and year of this European Standard. 	Pass
9	<p><u>Purchase information</u></p> <p>The following information shall be provided at the point of sale:</p> <ul style="list-style-type: none"> a) Weight of the child for which the product is intended up to a maximum weight of 15 kg; b) If a pad is not supplied with the unit, guidance on what changing pad, if any, is to be used and how to affix it in order to provide sufficient barriers; c) When applicable, information that the changing unit must be fixed to the wall for safe use of the product; 	N/A ²

² The changing unit is intended for public use in public areas, therefore the requirements can be considered not applicable

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7	<p><u>Instructions for use</u></p> <p>Instructions shall be provided in the official language(s) of the country where the unit is sold. These instructions shall be headed "IMPORTANT. RETAIN FOR FUTURE REFERENCE. READ CAREFULLY". These instructions shall include the following:</p> <ul style="list-style-type: none"> a) the warning: WARNING: "Do not leave the child unattended"; b) an assembly drawing, list and description of all parts and tools required for assembly and a diagram of the bolts and other fastenings required; c) statement that all assembly fittings shall always be correctly tightened and checked regularly; d) be aware of the risk of open fires and other sources of strong heat, such as electric bar fires, gas fires, etc. in the near vicinity of the changing unit; e) cleaning and maintenance recommendations; f) if a pad is not supplied with the unit, guidance on what changing pad, if any, is to be used and how to affix it in order to provide sufficient barriers; g) information concerning the adequate height of the unit and mounting instructions for wall mounted units; h) when applicable, information that the changing unit must be fixed to the wall for safe use of the product and that fastenings used should be appropriate to the wall; i) statement that when lockable castors/wheels are fitted, they shall be locked when the changing unit is in use; j) weight of the child for which the product is intended up to a maximum weight of 15 kg; k) means of identifying the product e.g. model number; l) the name, registered trade name or registered trademark of either the manufacturer of distributor or retailer; m) statement any additional or replacement parts shall only be obtained from the manufacturer or distributor; n) statement not to use the changing unit when any part is broken, torn or missing 	N/A ²
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² The changing unit is intended for public use in public areas, therefore the requirements can be considered not applicable

Appendix 2

Test object

Test object/ID: Changing unit/Robust

Dimensions

Width: 665 mm

Depth: 200 mm

Height: 785 mm

Barriers (height): 70 mm

Mass: 18.5 kg

Components

Frame: Solid beech

Closing device: Gas piston

Sampling: The test object was selected by the customer

Date of arrival at 2023-08-29

RISE test laboratory:

Observed defects before testing: No defects

Appendix 3

Pictures



Figure 1



Figure 2

Verification

Transaction 09222115557505842311

Document

1219230A Skötbordsspecialisten Robust

Main document

8 pages

Initiated on 2023-11-30 11:26:34 CET (+0100) by Bengt-Åke Andersson (BA)

Finalised on 2023-11-30 11:27:54 CET (+0100)

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