

Test Report

No.: 70.452.20.10238.01

Date: 2020-03-27

Applicant: BESTWAY (HONGKONG) INTERNATIONAL LTD.
Address: SUITE 713, 7/FLOOR, EAST WING, TSIM SHA TSUI CENTRE, 66 MODY ROAD, KOWLOON, HONGKONG
Product Name: Pool ladder
Item No: 58331
Country of Origin: China
Receipt Date of Sample: 2020-02-27
Date of Testing: 2020-02-27 to 2020-03-26
Sample Submitted: The sample(s) was (were) submitted by applicant and identified.
Test Result: Refer to the data listed in following pages

Test Item

1. EN 16582-1:2015 Domestic swimming pools Part 1: General requirements including safety and test methods (Test Requirement for Ladder)

Conclusion
Pass

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
Testing Center

Prepared by:



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Authorized by:



Sawyer Tang
Technical Manager

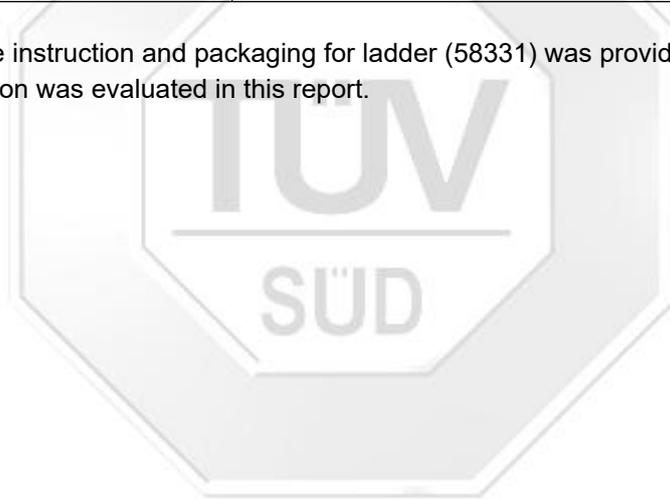
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Description of the Tested Subject

Sample	Description	Photo
A	Pool ladder (58331)	

Note: Electronic version of the instruction and packaging for ladder (58331) was provided by the applicant for evaluation. Only English version was evaluated in this report.



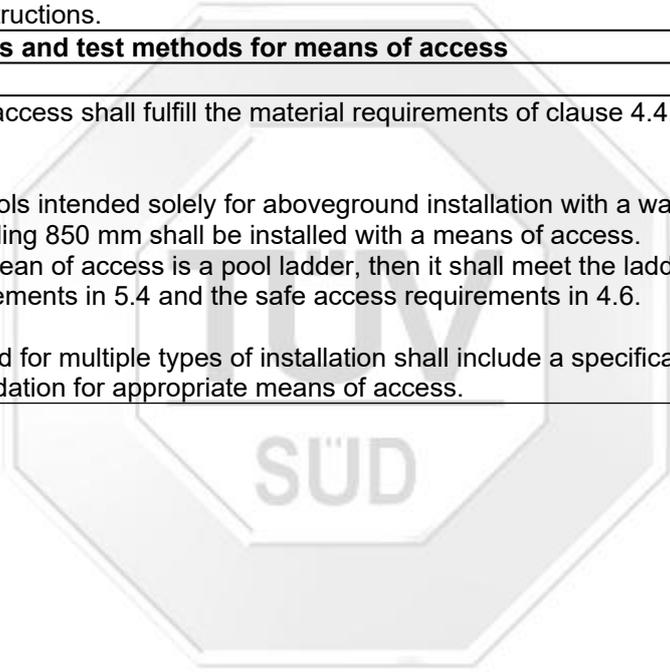
Test Results

1. EN 16582-1:2015 Domestic swimming pools Part 1: General requirements including safety and test methods

Clause	Requirement	Result	Verdict										
4	General requirements and test methods												
4.1	<p>General</p> <p>In use, installed according to the installation and commissioning manual, the swimming pool shall meet the requirements of this document.</p> <p>If the pool structure includes any water system covered by the EN 16713, the present document EN 16582 series shall be read in conjunction with the EN 16713 series.</p> <p>Assembled in accordance with the installation and commissioning manual, the electrical installation of any material related to the pool and its surrounding shall also comply with the requirements of HD EN 60364-7-702 or valid national requirements.</p> <p>When a membrane is used as a watertight system, it is not mandatory to have a minimum thickness; however any relevant standards shall apply if they exist.</p> <p>All manufacturers are required to carry out, either internally or via a test laboratory, the tests mentioned in section 4 for each new or revised material process.</p>	-	N/A										
4.2	<p>Tolerances</p> <p>The indicated dimensions and measurements are given with a tolerance of $\pm 3\%$ (unless otherwise indicated).</p>	Complied	P										
4.3	<p>Water leakage</p> <p>Wherever possible, swimming pools should be built so that they are watertight, as leakage and other water losses may affect the building and surrounding properties. The maximum leakage is specified in Table 1.</p> <p>Table 1 - Watertightness classification</p> <table border="1" data-bbox="411 1473 1086 1666"> <thead> <tr> <th>Tightness Class</th> <th>Maximum leakage liter per m² per day or mm per day</th> </tr> </thead> <tbody> <tr> <td>W₀</td> <td>0</td> </tr> <tr> <td>W₁</td> <td>1</td> </tr> <tr> <td>W₂</td> <td>2</td> </tr> <tr> <td>W₃</td> <td>3</td> </tr> </tbody> </table>	Tightness Class	Maximum leakage liter per m ² per day or mm per day	W ₀	0	W ₁	1	W ₂	2	W ₃	3	-	N/A
Tightness Class	Maximum leakage liter per m ² per day or mm per day												
W ₀	0												
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4.4	Minimum performance requirements for structural materials												
4.4.1	General	-	N/A										
4.4.2	Specific requirements and testing for corrosion resistance	Complied	P										
4.4.3	Osmosis resistance of composites and polymers	-	N/A										
4.4.4	Wood	-	N/A										
4.5	Injury risks												
4.5.1	<p>Small elements, edges and corners</p> <p>When the swimming pool is being used, any protrusion on accessible parts liable to present a risk of injury shall be protected by a method which in order to be removed, requires the use of a tool or a minimum amount of force of 60N, with an accuracy of 2 N.</p> <p>During the installation, equipment made of wood, fiberglass, or other</p>	Complied	P										
		Complied	P										

Clause	Requirement	Result	Verdict
	materials shall be free of splinters.		
	Small accessible and graspable elements shall not fully enter into the small part template (EN 71-1) or they shall be fixed to the item to which they belong such that they cannot be detached under a force of 60 N, with an accuracy of 2 N, applied in any direction whatsoever.	Complied	P
	All edges, protruding parts and corners accessible without use of tools or minimum amount of force of 60N (±2N) shall be designed not to cause any injury. When necessary they shall be treated appropriately to remove this risk. For example, edges can be beveled or rounded, and surfaces shall be smooth and free from burrs.	Complied	P
4.5.2	Permissible openings		
4.5.2.1	Principle		
	To prevent entrapment hazards inside the pool structure, accessible openings with the lowest point located beyond 500 mm below the water surface shall be restricted to the range of opening or gap size dimensions specified in 4.5.2.2 to 4.5.2.3, unless specifically permitted in other clauses/annexes of this standard and/or parts of this standard series. If the depth of penetration is less than 10mm, no requirements apply.	See below	P
4.5.2.2	Finger and toe entrapment		
	Where there is a risk of finger or toe entrapment, the permissible opening shall be ≤ 8 mm or ≥ 25 mm.	Complied	P
4.5.2.3	Head and neck entrapment		
	Where there is a risk of head or neck entrapment, the permissible opening shall be ≤ 110 mm or ≥ 230 mm. Where an opening is ≥ 230 mm it should not permit passage to further entrapment hazards. Where there is a combination of risks, the lesser of the permitted opening sizes shall be used.	Complied	P
4.5.2.4	Other body entrapment		
	Other permissible openings include the range between 25 mm and 110 mm. When such openings are used for construction or installation reasons, the installer shall alert their customer of a potential risk of entrapment.	Complied	P
4.6	Accessibility		
4.6.1	General		
	The risk of drowning for children (especially under 5 years) is high and reasonably predictable, either during the bathing period or at other times. Therefore it is recommended for adult supervisors to: <ul style="list-style-type: none"> - secure the means of access to the swimming pool; or - install a protection device; and - keep the children under constant supervision. For pools relying on a specific means of egress such means shall not be removed when the pool is in use.	-	N/A
4.6.2	Safe access to the swimming pool		
	The access to the above ground pools or partially buried pools (coming from outside to inside the pool) can be secured by using a safe access according to the requirements stated in § 5.4.4. Moreover the swimming pool shall be designed such that, once installed, unauthorized access to the pool for children (especially those under the age of five years) by striding over/climbing over is limited. The safe access to the basin is met when: <ul style="list-style-type: none"> - the height between the highest bearing point (according to the requirements stated in 5.5) and the upper level of the finished pool is greater than or equal to 1100 mm or; - the height between the ground and the lowest bearing point (according to the requirements stated in 5.5) is greater than or equal 	-	N/A

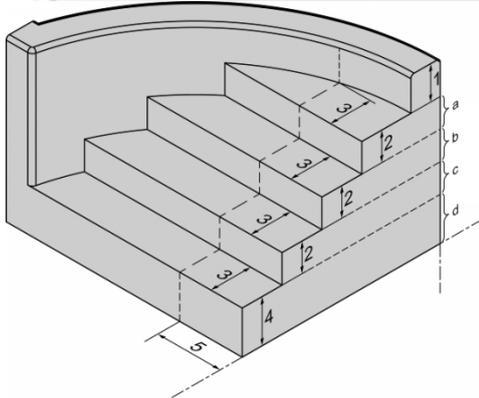
Clause	Requirement	Result	Verdict
	<p>to 1100 mm, or;</p> <ul style="list-style-type: none"> - the height between two consecutive bearing points (according to the requirements stated in 5.5) is greater than 1100 mm. <p>If:</p> <ul style="list-style-type: none"> - the above requirement is not satisfied and/or - the means of access according to the requirements stated in 5.4.4 is not safe; or - no means of access is provided with the swimming pool. <p>Then the manufacturer of the swimming pool shall recommend that the access to the finished swimming pool should be secured by a protection device to prevent children drowning.</p> <p>To prevent children drowning, inground pool manufacturers shall also recommend to secure the access to the finished pool with a protection device. The following warning "In order to prevent children from drowning, it is recommended to secure the access to the pool with a protection device" shall be present for the consumer in the information before purchase and in the safety instructions.</p>		
5	Requirements and test methods for means of access		
5.1	General		
	<p>All means of access shall fulfill the material requirements of clause 4.4, if applicable.</p> <p>Swimming pools intended solely for aboveground installation with a wall height exceeding 850 mm shall be installed with a means of access. When such mean of access is a pool ladder, then it shall meet the ladder design requirements in 5.4 and the safe access requirements in 4.6.</p> <p>Pools intended for multiple types of installation shall include a specification or recommendation for appropriate means of access.</p>	See clause 4.4 and 5.4	P



Clause	Requirement	Result	Verdict																
5.2	<p>Slip resistance</p> <p>The slip resistance requirements only refer to walking surfaces of slopes, steps and treads located on the inner side of the basin, under the water line or not, and allowing the user to go down to the water.</p> <p>These requirements do not apply to:</p> <ul style="list-style-type: none"> – slopes or steps that are not intended to enter the water ; – water slides; – starting platforms; – diving boards, or – any similar equipment. <p>Requirements apply to slopes as a means of access with an inclination of more than 15°.</p> <p>If the slope declination is less than 15°, the requirements only apply from the water level to 600 mm depth.</p> <p>The walking surfaces of the relevant means of access have to comply with slip resistance requirements that shall be tested according to the Annex A of CEN/TS 16165. Rating groups are defined in below Table :</p> <table border="1"> <thead> <tr> <th>Rating group</th> <th>Critical angle($\alpha_{barefoot}$)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>$12^\circ \leq \alpha_{barefoot} < 18^\circ$</td> </tr> <tr> <td>B</td> <td>$18^\circ \leq \alpha_{barefoot} < 24^\circ$</td> </tr> <tr> <td>C</td> <td>$24^\circ \leq \alpha_{barefoot}$</td> </tr> </tbody> </table> <p>The requirements for the different means of access are given in below Table :</p> <table border="1"> <thead> <tr> <th>Means</th> <th>Minimum rating group</th> </tr> </thead> <tbody> <tr> <td>Treads of ladders</td> <td>A</td> </tr> <tr> <td>Steps</td> <td>A</td> </tr> <tr> <td>Slopes</td> <td>B</td> </tr> </tbody> </table> <p>A higher rating group may be taken into account by the installer and/or retailer if the swimming pool is to be used by people with mobility issues.</p> <p>In case there are different walking surfaces on the same tread or step or slope, the choice will be possible between:</p> <ul style="list-style-type: none"> – testing each surface (if possible): each one shall comply independently with the standard; or – testing the whole surface as it is designed. 	Rating group	Critical angle($\alpha_{barefoot}$)	A	$12^\circ \leq \alpha_{barefoot} < 18^\circ$	B	$18^\circ \leq \alpha_{barefoot} < 24^\circ$	C	$24^\circ \leq \alpha_{barefoot}$	Means	Minimum rating group	Treads of ladders	A	Steps	A	Slopes	B	<p>Tested sample type: ladder tread</p> <p>No slipping was found while increasing the angle of the slope to be 18°.</p>	P
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5.3	<p>Crushing and entrapment hazards</p> <p>When in use, movable parts of the ladder shall have no crushing and shearing points between the movable and/or rigid parts of the ladder, which can cause injury whilst stepping on it.</p> <p>If the use of the means of access creates a fall height of more than 600 mm above the floor inside and outside the pool, this can lead to a partial fall, resulting in a potential risk of strangulation, therefore the permissible openings shall be between 25 mm and 110 mm, or greater than 230 mm.</p>	Complied	P																

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5.4	Ladders																																																																																							
5.4.1	<p>Dimensions</p> <p>The dimensional requirements relating to ladders are given in below table and in Figure 6, Figure 7, Figure 8a and Figure 8b in the EN16582-1:2005.</p> <table border="1"> <thead> <tr> <th></th> <th>Dimensions (in mm) or angle (°)</th> <th>Minimum</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>(a)</td> <td>Usable distance between stiles</td> <td>320</td> <td>/</td> </tr> <tr> <td>(b)</td> <td>Platform depth</td> <td>250</td> <td>/</td> </tr> <tr> <td rowspan="2">(c)</td> <td>Cross-section of parts to be held</td> <td></td> <td></td> </tr> <tr> <td>Grip (see Figure 1)</td> <td>Shape inscribed in a \varnothing 25 circle</td> <td>Shape inscribed in a \varnothing 50 circle</td> </tr> <tr> <td></td> <td>Grasp (see Figure 2)</td> <td>/</td> <td>60</td> </tr> <tr> <td>(d)</td> <td>Stepping height between 2 treads</td> <td>/</td> <td>330</td> </tr> <tr> <td>(e)</td> <td>Entrapment space between 2 treads</td> <td>> 45 and < 110 or > 230</td> <td>/</td> </tr> <tr> <td>(f)</td> <td>Height of the 1st tread in relation to the ground, outside of the pool</td> <td>/</td> <td>400</td> </tr> <tr> <td>(g)</td> <td>Difference between the wall height (including coping) and the height of the last tread for external ladders without platform.</td> <td>/</td> <td>150</td> </tr> <tr> <td>(h)</td> <td>Difference between the pool wall height (including coping) and the height of the last tread for internal ladders.</td> <td>150</td> <td>300</td> </tr> <tr> <td>(i)</td> <td>Height of the handrails in relation to the last tread or the platform or the top of the wall (including coping for internal ladders)^c</td> <td>400</td> <td>/</td> </tr> <tr> <td>(j)^b</td> <td>Distance between the floor or lower base of the stabilizer and the 1st tread inside the pool</td> <td>> 45 and < 110 or > 230</td> <td></td> </tr> <tr> <td rowspan="3">(k)</td> <td>Angle of inclination of the legs in case of:</td> <td></td> <td></td> </tr> <tr> <td>-detachable ladders</td> <td>60</td> <td>75</td> </tr> <tr> <td>-fixed ladders (on the inside of the pool)</td> <td>60</td> <td>90</td> </tr> <tr> <td></td> <td>-fixed ladders (on the outside of the pool)</td> <td>60</td> <td>80</td> </tr> <tr> <td rowspan="3">(l1)</td> <td rowspan="3">Space between the submerged treads and the swimming pool wall for fixed ladders</td> <td>0</td> <td>8</td> </tr> <tr> <td>25</td> <td>110</td> </tr> <tr> <td>230</td> <td>270</td> </tr> <tr> <td>(l2)</td> <td>Space between the front edge of the coping and back edge of the top tread</td> <td>11</td> <td>11</td> </tr> <tr> <td>(m)</td> <td>Width of the treadsc</td> <td>36</td> <td>/</td> </tr> <tr> <td>(n)</td> <td>Distance between the ladder bar and the pool wall.</td> <td>0 to 8 25 to 110</td> <td>230</td> </tr> </tbody> </table> <p>^a Stabilizers resting on the ground are not considered as treads. ^b Both configurations are acceptable depending on the choice. ^c Depending on the capacity of the user, this distance could be increased.</p>		Dimensions (in mm) or angle (°)	Minimum	Maximum	(a)	Usable distance between stiles	320	/	(b)	Platform depth	250	/	(c)	Cross-section of parts to be held			Grip (see Figure 1)	Shape inscribed in a \varnothing 25 circle	Shape inscribed in a \varnothing 50 circle		Grasp (see Figure 2)	/	60	(d)	Stepping height between 2 treads	/	330	(e)	Entrapment space between 2 treads	> 45 and < 110 or > 230	/	(f)	Height of the 1st tread in relation to the ground, outside of the pool	/	400	(g)	Difference between the wall height (including coping) and the height of the last tread for external ladders without platform.	/	150	(h)	Difference between the pool wall height (including coping) and the height of the last tread for internal ladders.	150	300	(i)	Height of the handrails in relation to the last tread or the platform or the top of the wall (including coping for internal ladders) ^c	400	/	(j) ^b	Distance between the floor or lower base of the stabilizer and the 1st tread inside the pool	> 45 and < 110 or > 230		(k)	Angle of inclination of the legs in case of:			-detachable ladders	60	75	-fixed ladders (on the inside of the pool)	60	90		-fixed ladders (on the outside of the pool)	60	80	(l1)	Space between the submerged treads and the swimming pool wall for fixed ladders	0	8	25	110	230	270	(l2)	Space between the front edge of the coping and back edge of the top tread	11	11	(m)	Width of the treadsc	36	/	(n)	Distance between the ladder bar and the pool wall.	0 to 8 25 to 110	230	<p>(a): 325 mm (b): N/A (c): 32.0 mm (d): 275 mm (e): 234 mm (f): 304 mm (g): 92 mm (h): N/A (i): 511 mm (j): 259 mm (k): 74.5° (l1): NA (l2): NA (m): 65 mm (n): N/A</p>	P
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5.4.2	Load-bearing strength																																																																																							

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	<p>Apply a minimum force of 1500 N vertically to the centre of the most unfavorable tread for 5 min. Then apply the same force successively to the centre of the platform, if one exists. The test shall be performed over a surface area of 100 mm x 100 mm.</p> <p>No permanent deformation greater than 1% in relation to the length measured between the stiles shall be observed. Take the measurement within the minute following removal of the force.</p>	<p>Test load: 1500 N No permanent deformation greater than 1% was found after the test.</p>	P
5.4.3	Test for lateral stability of removable ladders		
	<p>Place the ladder on a plane inclined by 10° in relation to the horizontal, on completion of this test, the ladder shall not tip over. This test does not apply to embedded or fixed ladders.</p>	No tip over	P
5.4.4	Specific requirements for secured access points to enter the pool		
	<p>To meet the requirements in 4.6, the secured means of access to the pool shall comply with the following requirements:</p> <p>When the means of access is in a secured position, the height between the lowest bearing point of the means of access and the ground shall be greater than or equal to 1100 mm.</p> <p>A visible marking in usage position reminding that the outer leg shall be removed, or retracted, or lifted after use shall be provided with each secured means of access.</p> <p>To prevent the risk of unlocking in safe position by children under the age of five years or an unintentional unlocking, the unlocking system shall require at least one manual action with a minimum force of 50 N (applied at the farthest point from the axis for the rotating parts) to be released or depending on the choice:</p> <ul style="list-style-type: none"> - require at least two consecutive actions on the unlocking system to release it, the second being dependent on the first, which is performed and maintained; or - require two separate but simultaneous actions working according to different principles; or - comprise two unlocking devices at least 1 000 mm away from one another and which shall be activated simultaneously; or - be inaccessible to a child under the age of five with an unlocking system at an extended length greater than 1500 mm (measurement taken from the ground outside of the protected area). <p>The use of tools such as a token, a key, a magnetic card, etc. is not considered as being an action as defined above.</p>	<p>Visible marking was provided properly on the ladder and proper instruction information was indicated in the manual. Two consecutive actions were needed on the unlocking system on the ladder to release it, the second being dependent on the first, which is performed and maintained.</p>	P
5.4.4.2	Ladders with lifting access		
	<p>For ladders that can be lifted, provide a blocking device to maintain the ladders in high position. The locking in high position shall be automatic and signaled in a visible or audible manner.</p>	Cannot be lifted	NA
5.4.4.3	Ladders with retractable access		
	<p>If the outer leg is retractable, this leg or the device that allows the ladder to be retracted shall withstand, in safe position, a tensile pulling force of 100 N, in the direction of separation of the elements.</p>	Not retractable	NA
5.4.4.4	Means of access to the deck (ladder or stairs)		
	<p>In the case of aboveground swimming pools fitted with a deck, the means of access to the deck shall be detachable or designed so as to meet at least</p>	No deck	NA

Clause	Requirement	Result	Verdict																								
	one of the requirements described in 5.4.4.2 (ladders with lifting access) or 5.4.4.3 (ladders with retractable access).																										
5.4.5	Other requirements The treads shall not be able to rotate around their axis. Ladders inside the swimming pool shall be equipped with handrails, separated or not from the ladder vertical side supports. Ladders whose legs have an angle of inclination greater than 75° shall be embedded or fixed.	Treads cannot be rotatable. Handrail was provided. Inclination angle of the leg is less than 75°.	P																								
5.5	Bearing points	Noted	-																								
5.6	Submerged stairs																										
5.6.1	<p>General</p> <p>The dimensional requirements relating to submerged stairs are given in below Table and in Figure 13.</p> <table border="1"> <thead> <tr> <th></th> <th>Dimensions (in mm)</th> <th>Minimum</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>Height from the pool surround to the first step</td> <td>/</td> <td>400^a</td> </tr> <tr> <td>(2)</td> <td>Height between 2 steps</td> <td>/</td> <td>300</td> </tr> <tr> <td>(3)</td> <td>Step depth (Regardless of the shape of the step / See also dimension 5)</td> <td>210 (Absolute minimum), recommended 250</td> <td>/</td> </tr> <tr> <td>(4)</td> <td>Height from the last step to the pool bottom</td> <td>/</td> <td>/</td> </tr> <tr> <td>(5)</td> <td>Step width on both side of the stair centre line with the required step depth (See dimension 3)</td> <td>160</td> <td>/</td> </tr> </tbody> </table> <p>^a Where the height between the top step and the walkable surface area is higher than 400mm then a handrail shall be installed. This maximum height shall be ≤ 450mm (without tolerances).</p>  <p>Stairs installed in a pool area with a depth greater than or equal to 1300mm shall have a minimum of 3 internal steps excluding the walkable surface and the pool bottom.</p> <p>A bench seat or a sitting area is not considered as a means of access. However, where a bench seat is used as a means of access to and from the pool, it has to fulfill the requirements of this clause.</p>		Dimensions (in mm)	Minimum	Maximum	(1)	Height from the pool surround to the first step	/	400 ^a	(2)	Height between 2 steps	/	300	(3)	Step depth (Regardless of the shape of the step / See also dimension 5)	210 (Absolute minimum), recommended 250	/	(4)	Height from the last step to the pool bottom	/	/	(5)	Step width on both side of the stair centre line with the required step depth (See dimension 3)	160	/	No such design	NA
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(3)	Step depth (Regardless of the shape of the step / See also dimension 5)	210 (Absolute minimum), recommended 250	/																								
(4)	Height from the last step to the pool bottom	/	/																								
(5)	Step width on both side of the stair centre line with the required step depth (See dimension 3)	160	/																								

Clause	Requirement	Result	Verdict
	The installation and bracing instructions shall be supplied with stairs. The constituent material or coating of the stairs shall allow easy maintenance.		
5.6.2	Built-in stairs		
	Built-in stairs that are part of the swimming pool structure shall conform to the general characteristics as defined in 4.4 and 5.4.2.	No such design	NA
5.6.3	Fitted stairs		
	Stairs fitted inside the volume formed by the wall shall comprise a means of fastening that guarantees perfect stability and shall not affect the general characteristics as defined in 4.4 and 5.4.2.	No such design	NA
5.7	Handrails		
	If a handrail is installed, the cross section of parts designed to be gripped can be round, oval, a rounded rectangular or elliptical and shall be between 25 mm and 50 mm.	Diameter of handrail:32.0 mm	P
6	Instructions for the consumer		
6.1	General principles		
	All documents shall contain:		
	the following statement: "Please read carefully and keep for future reference";	-	N/A
	the information to identify the model of the basin, swimming pool or swimming pool kit to which the document relates;	-	N/A
	the name and contact information of the person responsible for placing the product on the market (manufacturer, distributor or importer).	-	N/A
	All instructions shall be legible, clear, comprehensible to the buyer and written in official national languages where the product is sold.	-	N/A
	When the instructions contain several pages, the manuals shall be document with numbered pages.	-	N/A
	The cautions and warnings shall be highlighted.	-	N/A
	Illustrations, if any, shall be placed such that they can be seen while the text referring to them is being read.	-	N/A
	The visuals shall not contradict the requirements included in this document. Where it is not specified in other rules and/or it does not conflict with existing regulations, the manufacturer's instructions need to be considered.	-	N/A
6.2	Self-built/installed pools		
6.2.1	Point-of-purchase information		
	To allow the buyer to make a choice, the point-of-purchase information shall indicate the following at least:		
	the reference to this document and its following parts if applicable;	-	N/A
	the kit type : "Inground or aboveground or recessed swimming pool kit";	-	N/A
	the commercial name or reference;	-	N/A
	the dimension of the water body;	-	N/A
	the maximum effective water depth;	-	N/A
	the maximum total overall dimension;	-	N/A
	the effective volume of water;	-	N/A
	all indications regarding the construction of reinforcement works related to the kit type;	-	N/A
	the composition of the swimming pool kit (examples: pool structure, ladder, filtration system, etc.);	-	N/A
	the number of people required for the installation;	-	N/A
	the approximate time required to install the swimming pool kit, excluding earthworks and filling;	-	N/A
	the warranty period(s) of the provided elements of the swimming pool kit;	-	N/A
	the following or equivalent warning: "The use of a swimming pool implies	-	N/A

Clause	Requirement	Result	Verdict
	compliance with the safety instructions described in the operating and maintenance guide. In order to prevent drowning or other serious injuries, pay particular attention to the possibility of unexpected access to the swimming pool by children under 5 years by securing the access to it, and, during the bathing period, keep them under constant adult supervision";		
	the tightness class	-	N/A
	awareness of the risk of drowning in the swimming pool;	-	N/A
	adult supervision of children;	-	N/A
	awareness of the risk of diving, if applicable.	-	N/A
	The seller shall indicate to the purchaser that they should consult the local building code for any applicable installation requirements.	-	N/A
6.2.2	Installation and commissioning manual		
	The installation and commissioning manual shall contain all of the information necessary for a correct and complete installation, and in particular the following information:		
	ground preparation including, if appropriate, specific recommendations concerning the type of soil;	-	N/A
	the number of people required for the installation;	-	N/A
	the approximate time required for the entire installation, excluding earthworks and filling;	-	N/A
	the list of all of the parts and the description of the installation phases in chronological order;	-	N/A
	the list of the tools required for the installation and of the materials complementary to the installation of the swimming pool kit as well as their use;	-	N/A
	the address or telephone number where the consumer can obtain additional information during the installation of the swimming pool kit, in the event of problems;	-	N/A
	all of the structural works necessary for the proper construction of the structure.	-	N/A
6.2.3	Operating and maintenance manual		
	The swimming pool kit shall be accompanied by an operating and maintenance manual. These manuals shall contain all the information necessary for a correct use of the pool structure.	-	N/A
	The operating and maintenance manual shall also contain:		
	the safety instructions	-	N/A
	recommendations concerning the filling level;	-	N/A
	if appropriate, recommendations concerning the need to monitor bolts and screws; splinters or any sharp edges;	-	N/A
	a warning about the hazards resulting from complete emptying of the basin;	-	N/A
	recommendations on winterizing and long-term storage;	-	N/A
	irrespective of materials used for swimming pool construction, accessible surfaces have to be checked regularly to avoid injuries.	-	N/A
	More detailed information may be provided with each element of the swimming pool kit	-	N/A
6.3	Constructed / installed pools by professionals		
6.3.1	Point-of-purchase information		
	To allow the buyer to make a choice, the point-of-purchase information shall indicate the following at least:		
	the reference to this document and its following parts if applicable;	-	N/A
	the commercial name or reference;		
	the dimension of the water body;		
	the maximum effective water depth;		

Clause	Requirement	Result	Verdict
	the maximum total overall dimension;		
	the effective volume of water;		
	the warranty period(s) of the installed products;		
	the following or equivalent warning: "In order to prevent drowning and other serious injuries:		
	The use of a pool implies compliance with the safety instructions described in the operating and maintenance guide.		
	Pay particular attention to the possibility of unexpected access to the swimming pool by children under 5 years by securing the access to it.		
	During the bathing period, keep them under constant adult supervision.		
	the tightness class.		
6.3.2	Operating and maintenance manual		
	The swimming pool shall be accompanied by an operating and maintenance manual. These manuals shall contain the information necessary for the correct use of the pool structure. The operating and maintenance manual shall also contain:		
	the safety instructions;	-	N/A
	recommendations concerning the filling level;		
	if appropriate, recommendations concerning the need to monitor bolts and screws; splinters or any sharp edges;		
	a warning about the hazards resulting from complete emptying of the basin;		
	recommendations on winterizing and long-term storage.		
6.4	Means of access		
6.4.1	Point-of-purchase information		
	if the means of access is sold alone (not included in the swimming pool kit), the point-of-purchase information specific to the means of access shall indicate at least the following, in order to allow the buyer to make a choice:		
	the reference to this document;	Complied	P
	the type of means of access, e.g.: secured means of access or unsecured means of access.	Complied	P
	the commercial name or reference;	Complied	P
	illustrations repeating the overall dimensions of the product;	Complied	P
	stepping height and width of the wall, if appropriate;	Complied	P
	if appropriate, any indication concerning the construction of onsite reinforcement works for installing the means of access;	Complied	P
	the warranty period(s) of the means of access.	Complied	P
	A handrail may be proposed with the means of access in case of use by people with mobility issues.	Complied	P
6.4.2	Operating and maintenance manual		
	The operating and maintenance manual of the means of access, if supplied alone, shall contain at least the following information:		
	the instructions regarding the winterizing of the means of access itself;	Complied	P
	an indication of the maximum allowable weight;	Complied	P
	a clarification on the fact that the means of access shall not be used for other purposes;	Complied	P
	if appropriate, recommendations concerning the need to monitor bolts and screws, splinters or any sharp edges.	Complied	P
6.5	Examples illustrating pool sizes	-	NA
7	Safety signage		
	All swimming pools (whether manufactured or constructed) shall be provided with:		
	– the safety sign in Figure 15 and/or the following text: " Keep children under supervision in the aquatic environment ", and	-	NA

Clause	Requirement	Result	Verdict
	<p>– the safety sign in Figure 16 and/or the following text: "No diving" where applicable. Instructions shall be given to affix the safety sign on the pool and/or the text within 2000 mm of the pool in a prominent visible position.</p> <div style="text-align: center;">  <p>Figure 15 — safety sign – ISO 20712-1 – WSM002, Keep children under supervision in the aquatic environment</p>  <p>Figure 16 — Safety sign ISO 20712-1 - WSP005, No diving</p> </div>		

Abbreviation: P = Pass; NA = Not Applicable.



- End of Test Report -