



Sona installation manual v2.0

May 28, 2013



Introduction

Contents

This manual contains all information you need to assemble and install this product. Make sure you check all safety chapters and follow the instructions to prevent dangerous situations.

If you have any remarks or improvements, please contact us.

Have fun with the product!

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Preparation

Attention

Before assembling the product please make sure:

- You have all necessary parts
- You have the necessary tools

For installing and assembling a Sona it is recommended:

- To work with two persons.
- To assemble the Sona in a dry environment.
- To use soft protection on the floor, to prevent scratches.

For installation of the electronics a NEN-EN 1010 certified mechanic is needed.

Tools list

Assembling

- (electronic) tools for hexagon M8 and M10 bolts/nuts
- Power drill
- Drill bit 10mm
- Security Torx-45 bit (with hole cut-out)
- M10 tap
- Transparent sealant

Installation

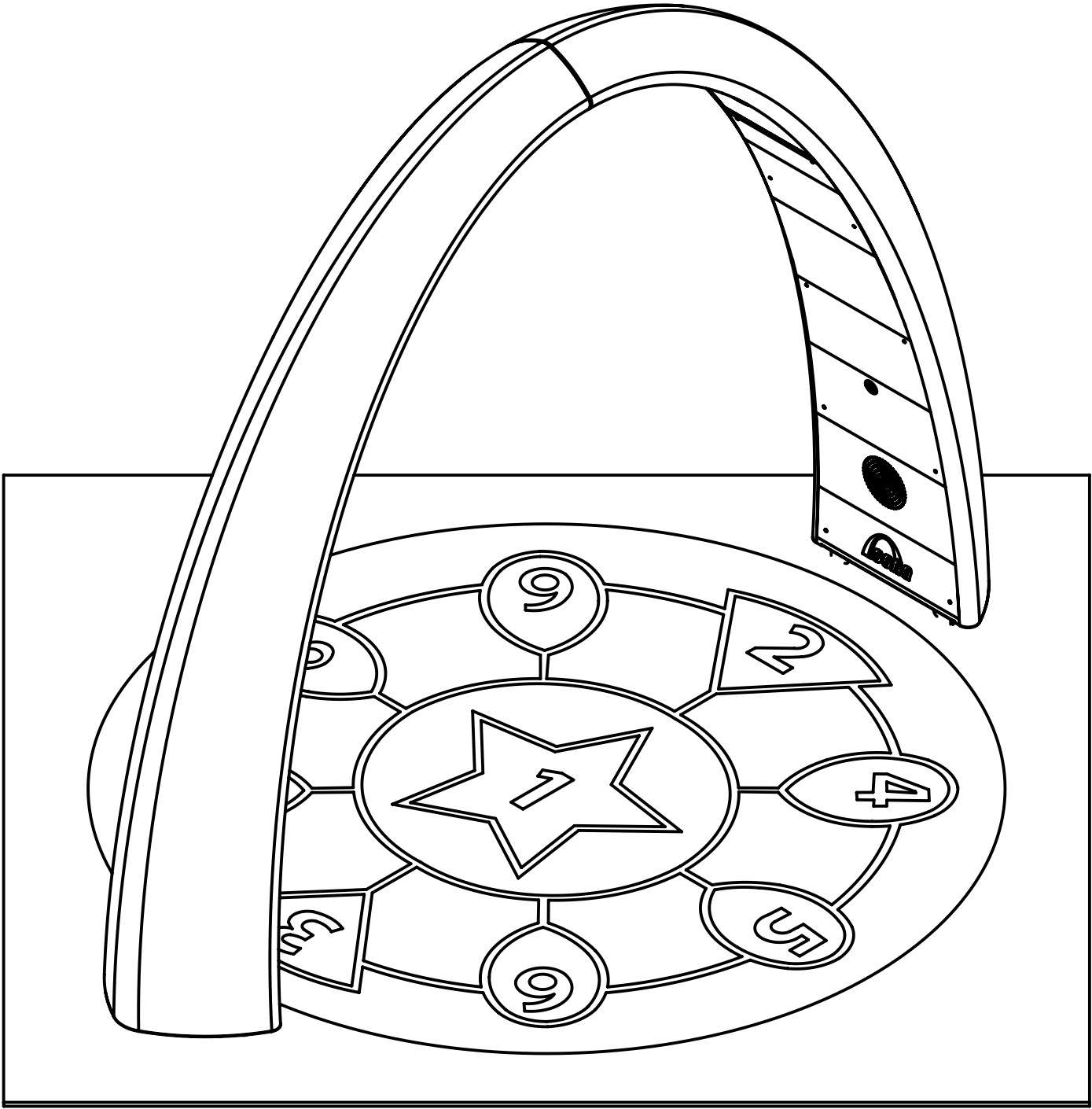
- Forklift truck/small crane
- Equator

Attention!

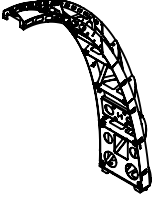
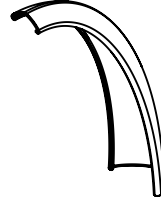

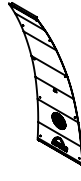
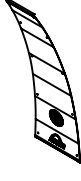
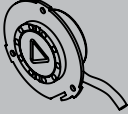

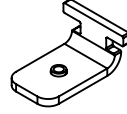

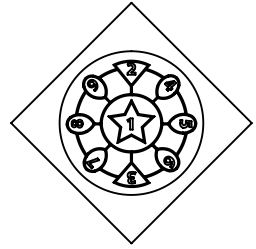

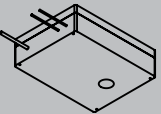
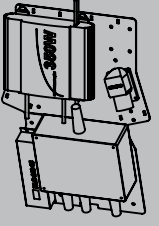
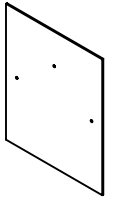
When placing Sona:

- Do not place Sona within 50m of nearest housing facade. Rule of thumb: Sona with sound level on 5 is not audible at nearest house.
- Do not place the Sona within fastly moving shadows. For example near flag poles, tree braches, etc. Shadows may interfere with the game play.
- Make sure the play area receives a sufficient amount of light. Outdoor ambient light is sufficient. Indoor, good light conditions are necessary for the camera to 'see' clearly.
- When using artificial lights, make sure the contrast and lenght of shadows is limited: Place the lights high, and close to the play area.
- Make sure at least 1,5m of free space without obstacles is available around the Sona play area for safety reasons.
- Make sure the side of the Sona with the button (above nr. 2 on the play floor) is closest to the power supply. This way, cable lengths and power loss are limited.
- Have a 3G SIM Card ready to install in the Sona for online management.

Sona isometric view

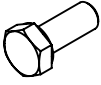
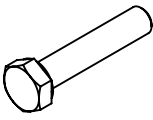
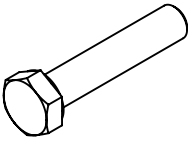
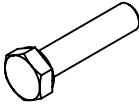
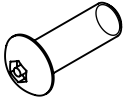


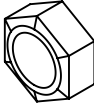



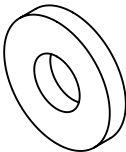

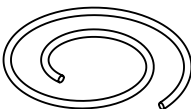



Parts - Sona

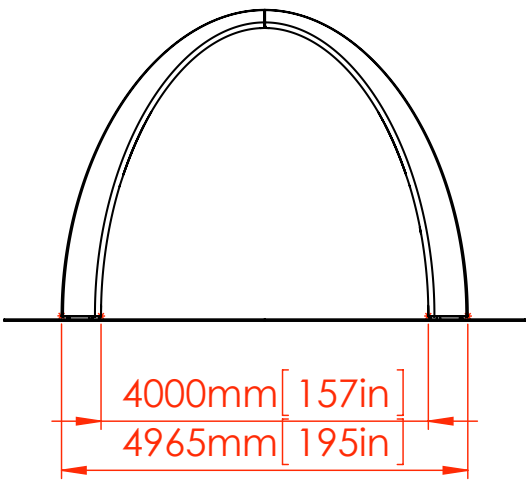
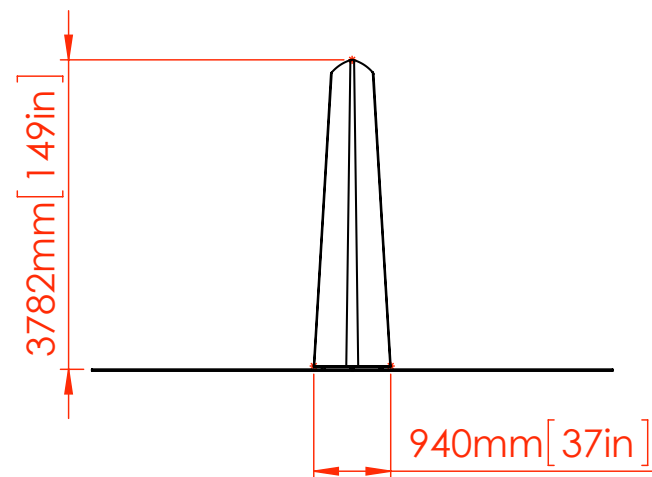
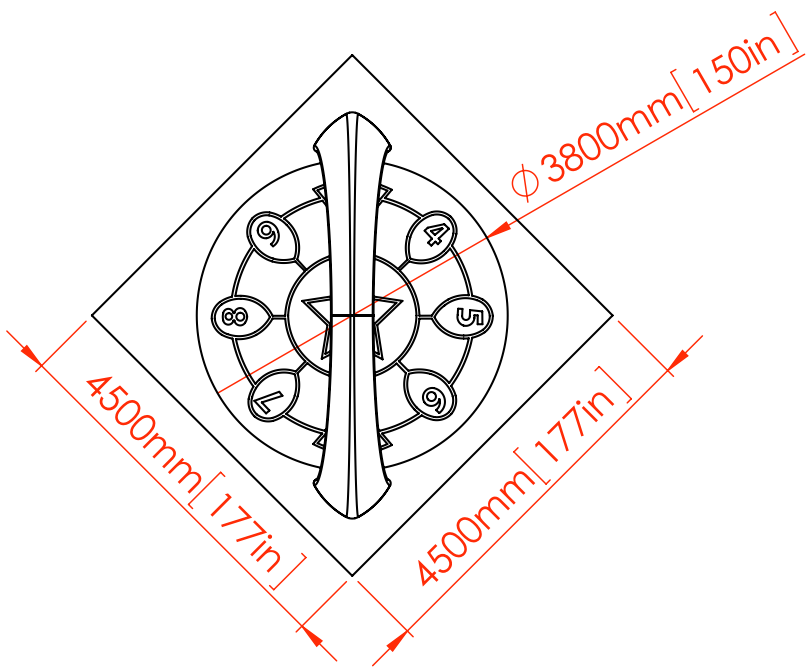
199-101	2 PCS	199-401	2 PCS	199-002_C	1 PCS	199-017	1 PCS	199-024	1 PCS
									
arch frame		Polyester cap		Hinge cap		Button plate		Plate	
100-112	1 PCS	100-113	1 PCS	199-221	16 PCS	199-065_C	1 PCS	199-501	1 PCS
									
EAO Button		EAO Bazel		polyester clamp		Hinge tube		FunkyFloor	
100-107	2 PCS	100-102	1 PCS	199-310	1 PCS	199-599	1 PCS		
									
Speaker JBL		Sona YIN box		electronics board		Installation mould			

Grey parts are pre-installed

Parts - Mounting

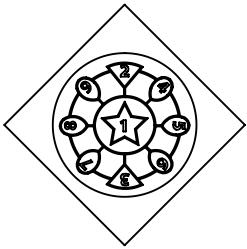
100-240	12 PCS	100-243	16 PCS	100-245	3 PCS	100-247	1 PCS
							
Hex bolt M8x20		Hex bolt M8 x 40		Hex bolt M10x50		Hex bolt M8x35	
100-213	24 PCS						
							
Bolt secured M10x30							
100-271	1 PCS	100-274	3 PCS	100-277	12 PCS	100-276	12 PCS
							
Torque nut M8		Torque Nut M10		Hex nut M16		Hex nut M8	
100-281	16 PCS	100-282	6 PCS	100-284	12 PCS		
							
Washer M8		Washer M10		Washer M16			
100-231	6 PCS	100-508	1 PCS	100-507	1 PCS		
							
anchor bolt M16		Rope		Transparent sealant			

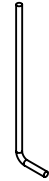
Dimensions

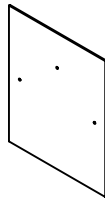


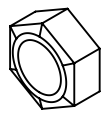
Foundation

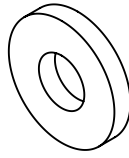
- 1. Put the anchor bolts in the concrete foundation. Use the installation mould for positioning. Get the power cable in place.
- 2. Put funky floor on top and add sand.

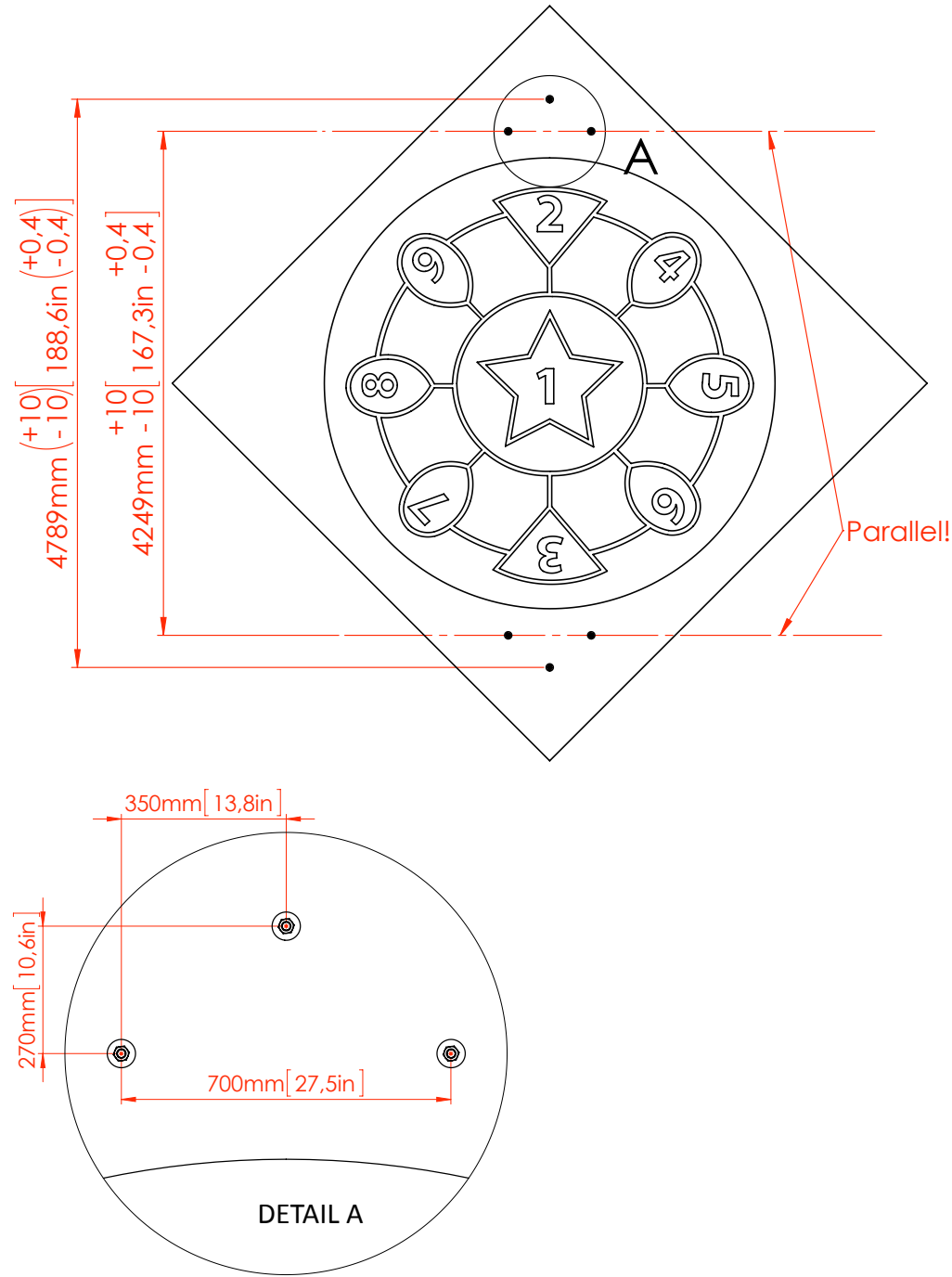
199-501	1 PCS
	
FunkyFloor	

100-231	6 PCS
	
anchor bolt M16	

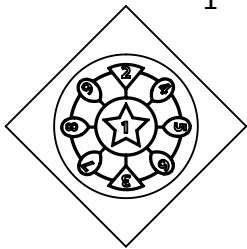

199-599	1 PCS
	
Installation mould	

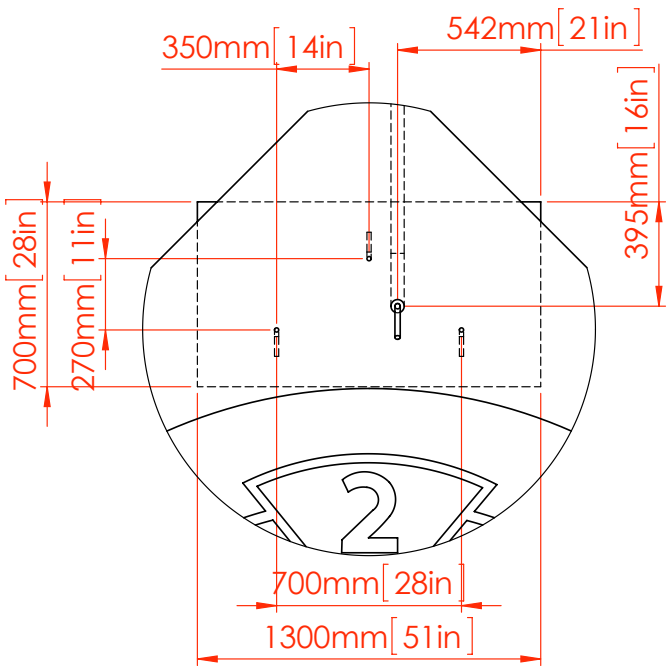
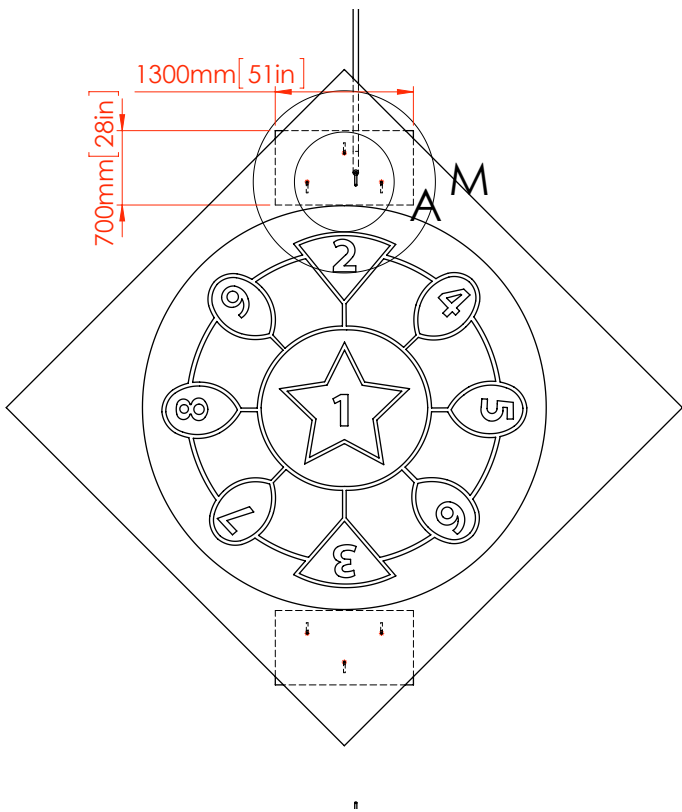
100-277	12 PCS
	
Hex nut M16	

100-284	12 PCS
	
Washer M16	

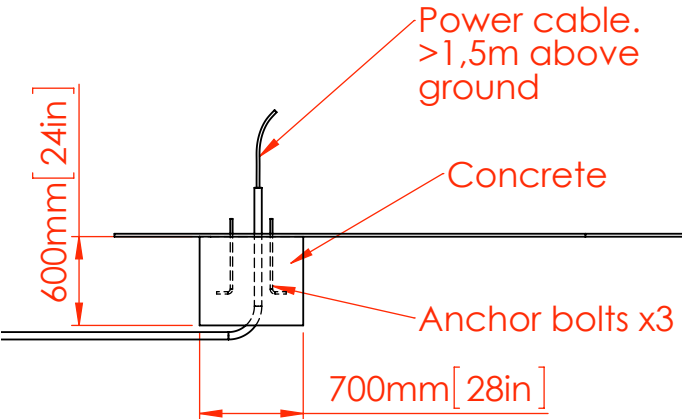


Foundation

199-501	PCS	100-231	PCS
1			
			
FunkyFloor		anchor bolt M16	



Make sure the power cable has at least 1,5m over-length.



Funky floor on tiles

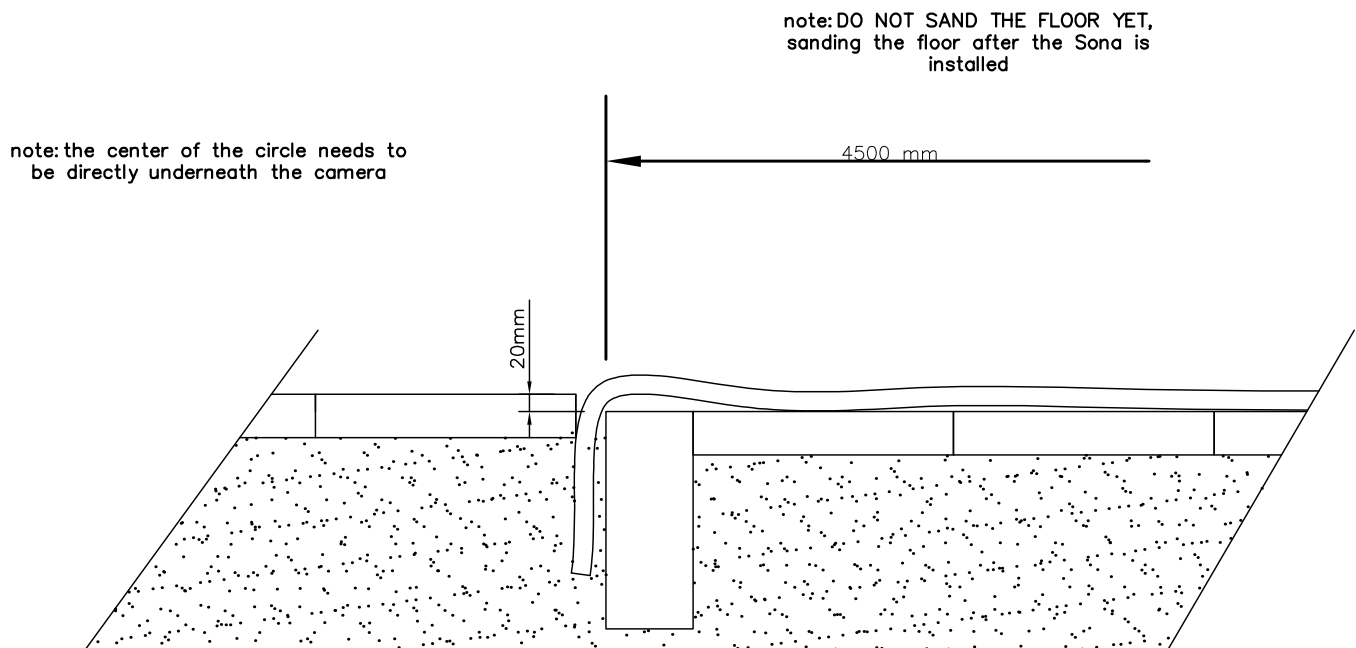
Alternative: Funky floor on tiles.

The funky floor will be supplied in one piece with dimensions 5x5m (16,4 ft). The actual play area will be 4,5x4,5m.

Install concrete borders to set off the play area of 4,5x4,5m (14,7 ft). Create a pleateau of tiles within that is approximately 2cm below ground level.

If you use tiles make sure these are installed upside down, for minimal seams.

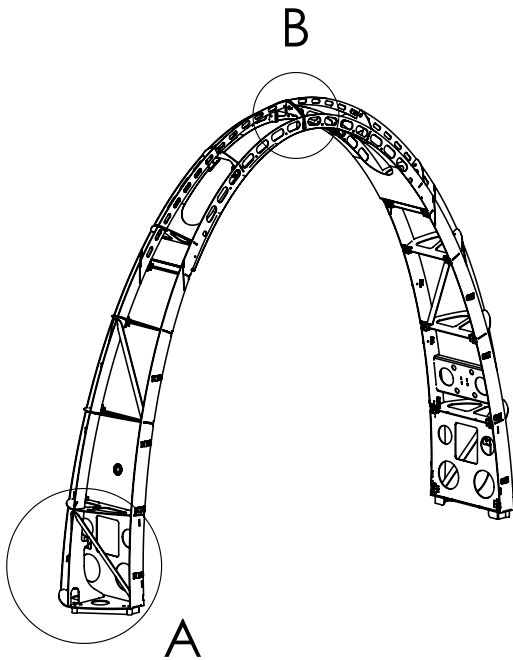
Install the Funky Floor on the plateau, pull the edges over the concrete borders and lock them by putting them at least 15cm (6inch) vertically into the ground.

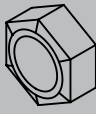

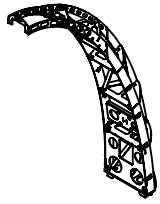
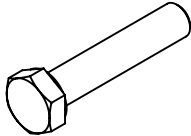




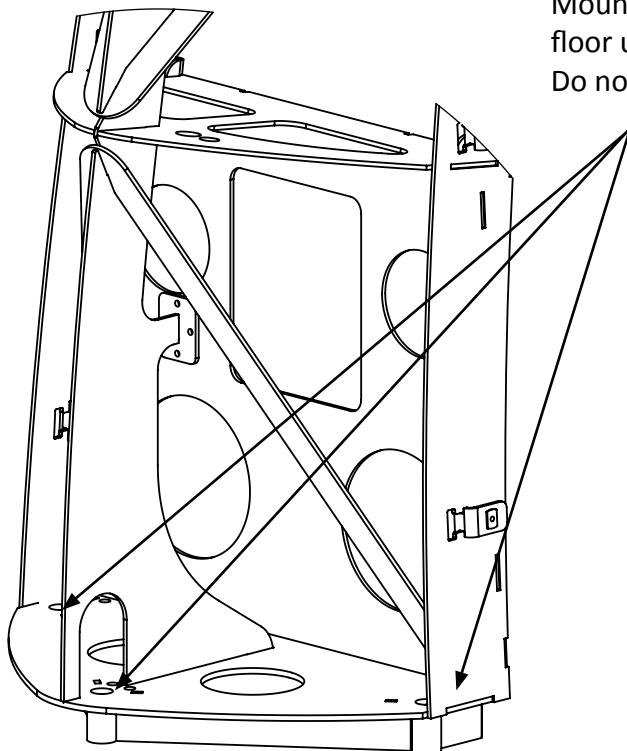
The arch

3. Put the arch frames up on top of the anchor bolts (A). Make sure the power cable goes through the foot (at the side of the 2 on the floor)

4. Connect the arches at the top (B).

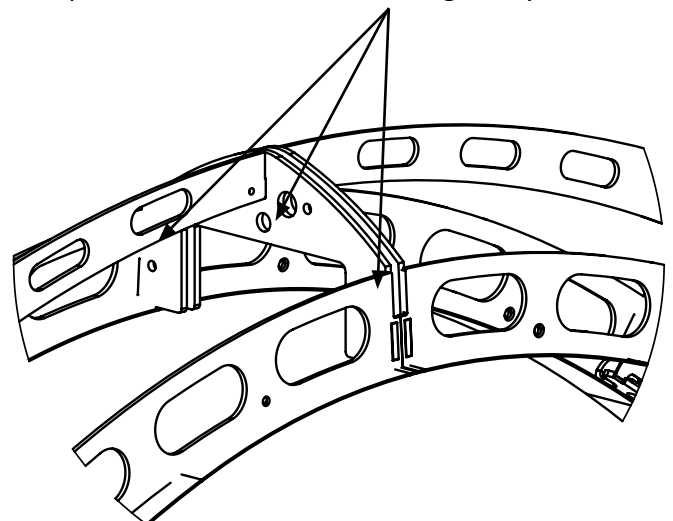


100-277	6 PCS	100-284	12 PCS	199-101	2 PCS
					
Hex nut M16		Washer M16		arch frame	
100-245	3 PCS	100-274	3 PCS	100-282	6 PCS
					
Hex bolt M10x50		Torque Nut M10		Washer M10	



Mount bow on top of anchors in concrete floor using 100-275 and 100-283 (both 6x). Do not tighten yet.

Connect the arches together with 100-245 (3x), 100-274 (3x) and 100-282 on both sides (6x). Use the top holes on the side. Do not tighten yet.



Polyester caps

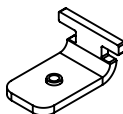
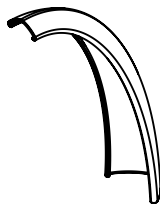
5. Install the polyester caps in place.

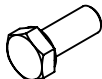

6. Mount the polyester caps to the steel arches.

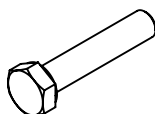

7. Tighten all bolts

ster caps in place.

ster caps to the

199-221	16 PCS		199-401	2 PCS	
polyester clamp			Polyester cap		

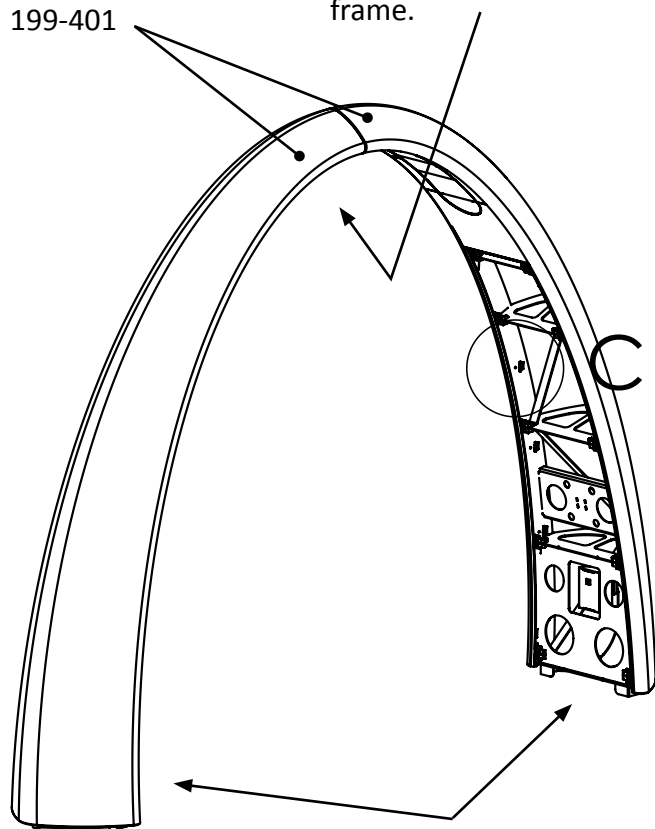
100-240	12 PCS		100-276	12 PCS	
Hex bolt M8x20		Hex nut M8			

100-243	16 PCS		100-281	16 PCS	
Hex bolt M8 x 40		Washer M8			

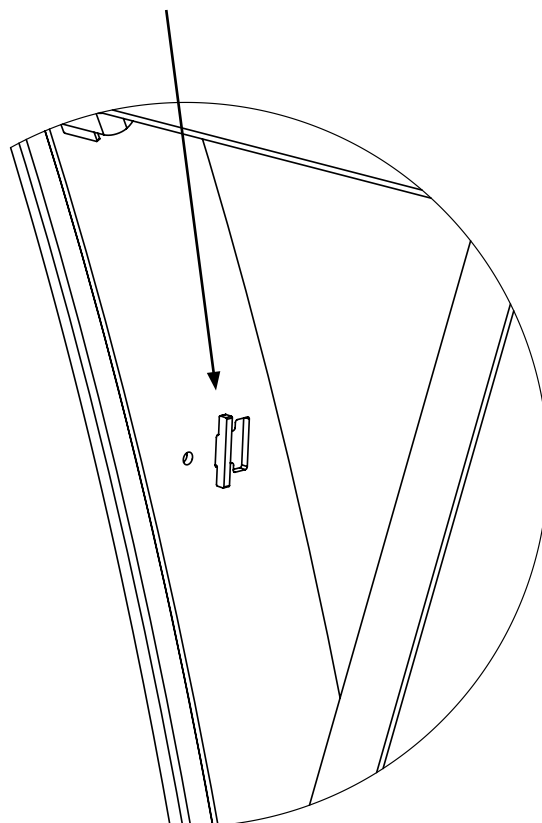
Install polyester caps 199-401

Use a power drill to drill holes in the top of the polyester caps on the inside and secure them with bolt 100-240 and nut 100-276 to the steel frame.

Tighten the polyester cap to the steel frame with the polyester clamps 199-221 and bolts 100-243 + washers 100-281.

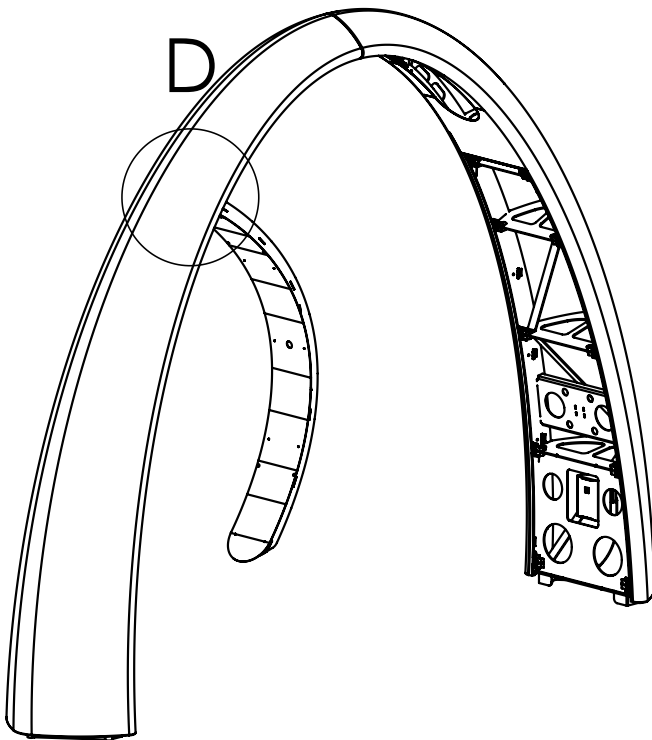





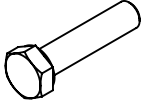
After installing the caps, tighten all the bolts in the arch.

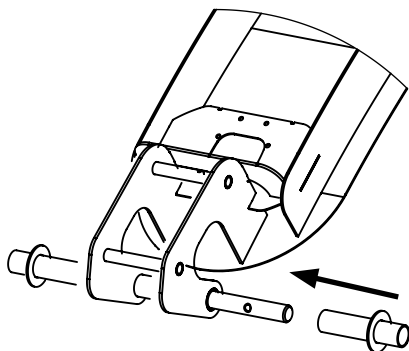


The hinge cap

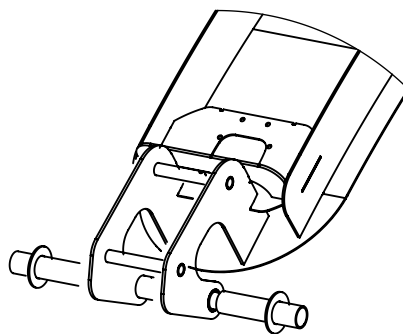
7. Insert the hinge cap into the arch.
Lock it with the bolt, and secure it with
a rope.



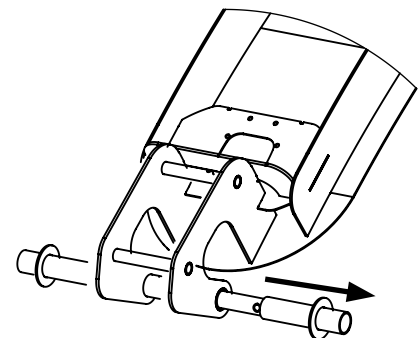
199-065_C 1 PCS	199-002_C 1 PCS
	
Hinge tube	Hinge cap
100-271 1 PCS	100-247 1 PCS
	
Torque nut M8	Hex bolt M8x35



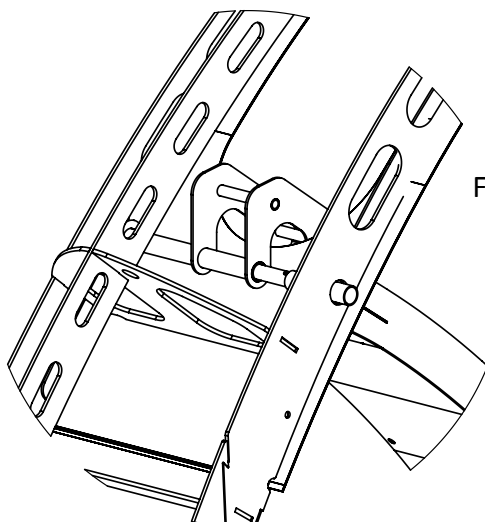
Step 1: Slide part 199-065 on the axis of 199-002.



Step 2: Insert the assembly in the arch. Put the fixed end of the axis in first.



Step 3: Slide part 199-065 back through the hole on the opposite side and lock it in place with bolt 100-247 and nut 100-271.



Final result.

Electronics

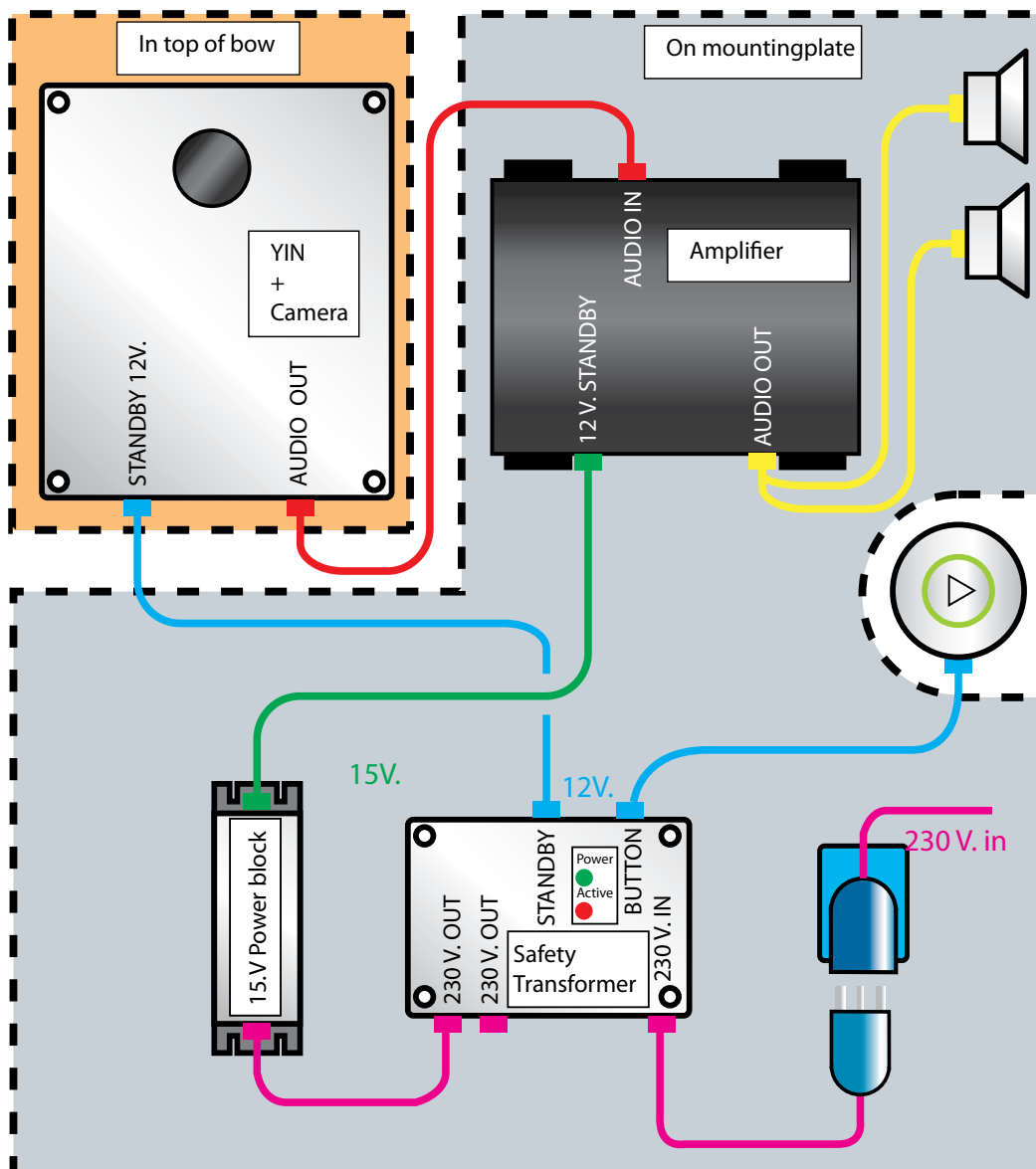
8. Connect the power cable to (by EN1010 certified installer!) the CEE plug socket. Connect the plug.

9. Connect other cables (picture).
Button, power to the top, audio cables.
Check the electronics. See schematic view below as a check.

Cable 1: main computer cable.

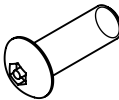
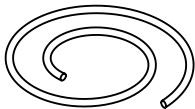
Cable 2: sound cable out.

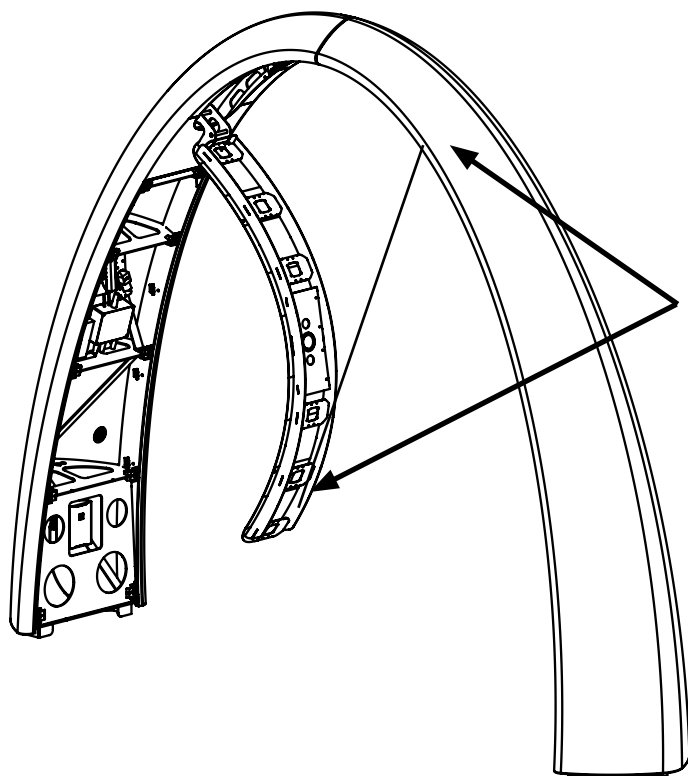
Cable 3: Cable to speaker on other side



Closing up


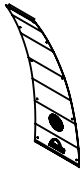
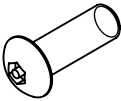
10. Close the cap. Connect the rope for safety, and use bolts 100-213 to close up. Make sure cables do not get between the axis!

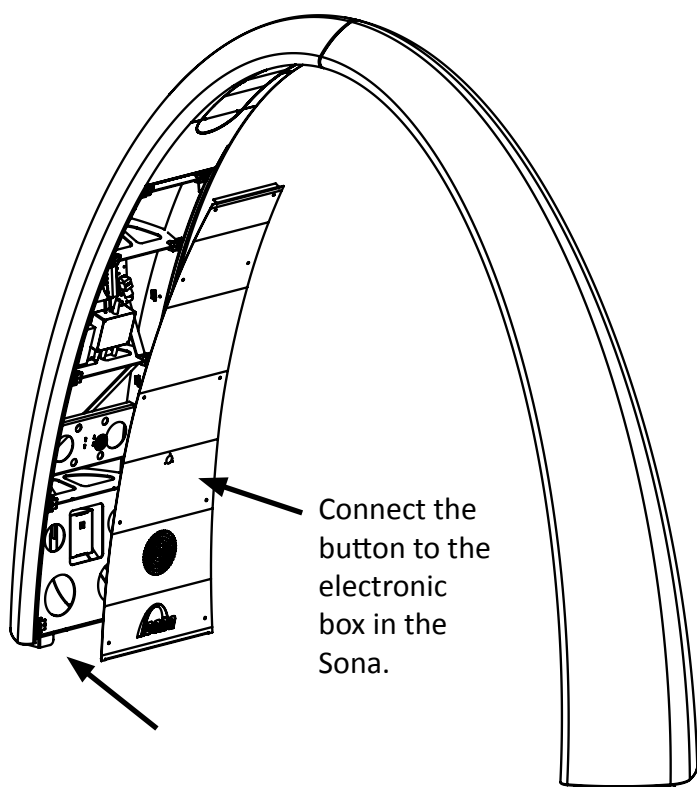
100-213	4 PCS	100-508	1 PCS
			
Bolt secured M10x30		Rope	



Secure rope to cap and in top of Sona.

11. Close the sides with 199-017 (button, on hinge side and number 2 side) and 199-024. cap. Close up with bolts 100-213.

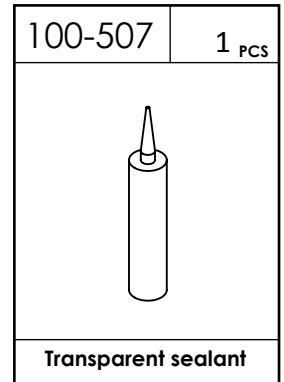
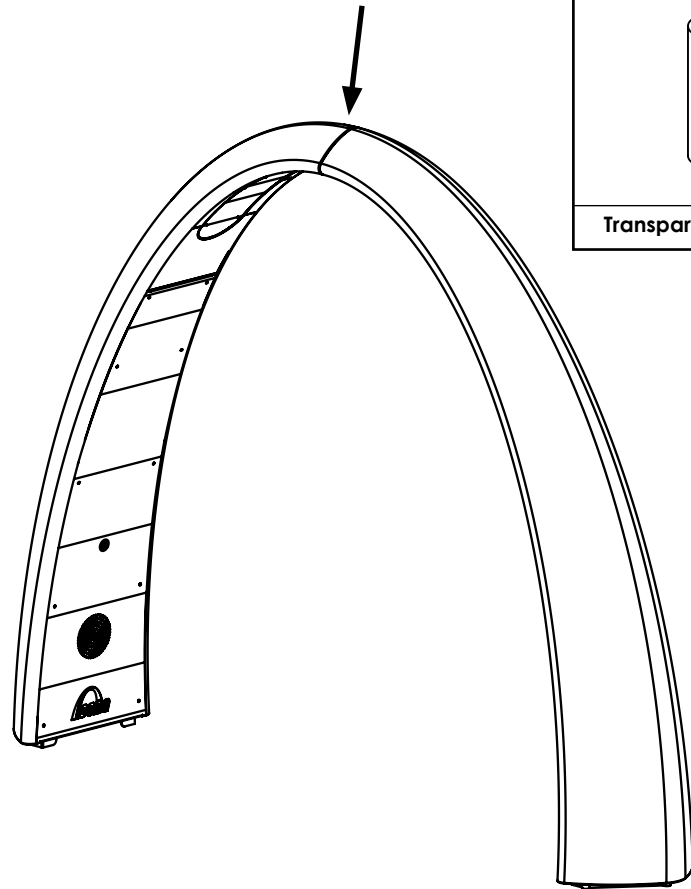
199-017	1 PCS	199-024	1 PCS
			
Button plate		Plate	
100-213	20 PCS		
		Bolt secured M10x30	



Connect the button to the electronic box in the Sona.

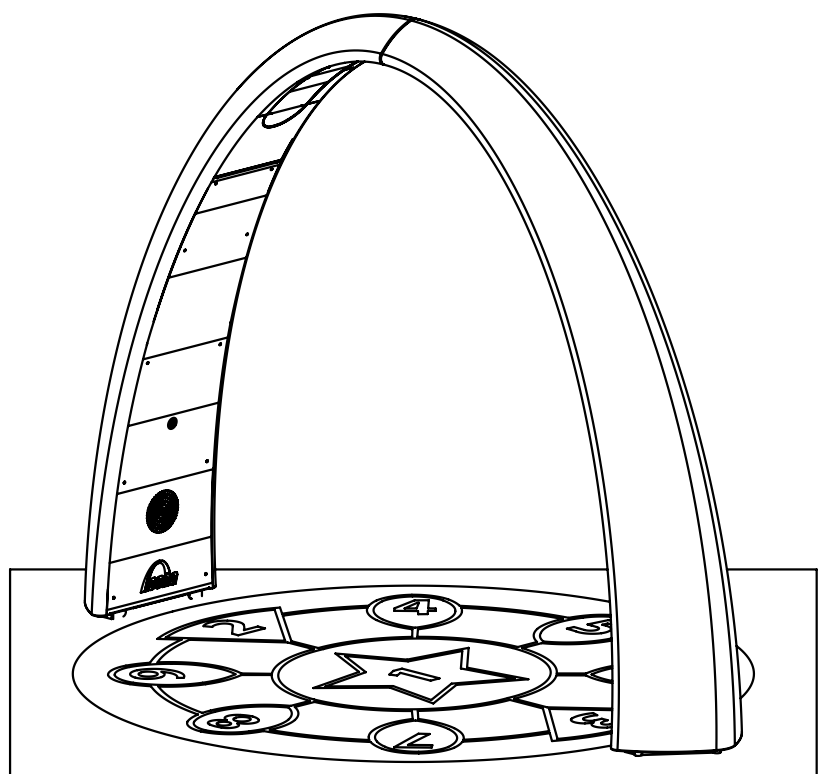
Finishing touch

12. Close the top gap with transparent sealant to make Sona watertight.



13. Now Sona is ready to play. Look in the product manual how to get it online, and do all settings.

Let's play!

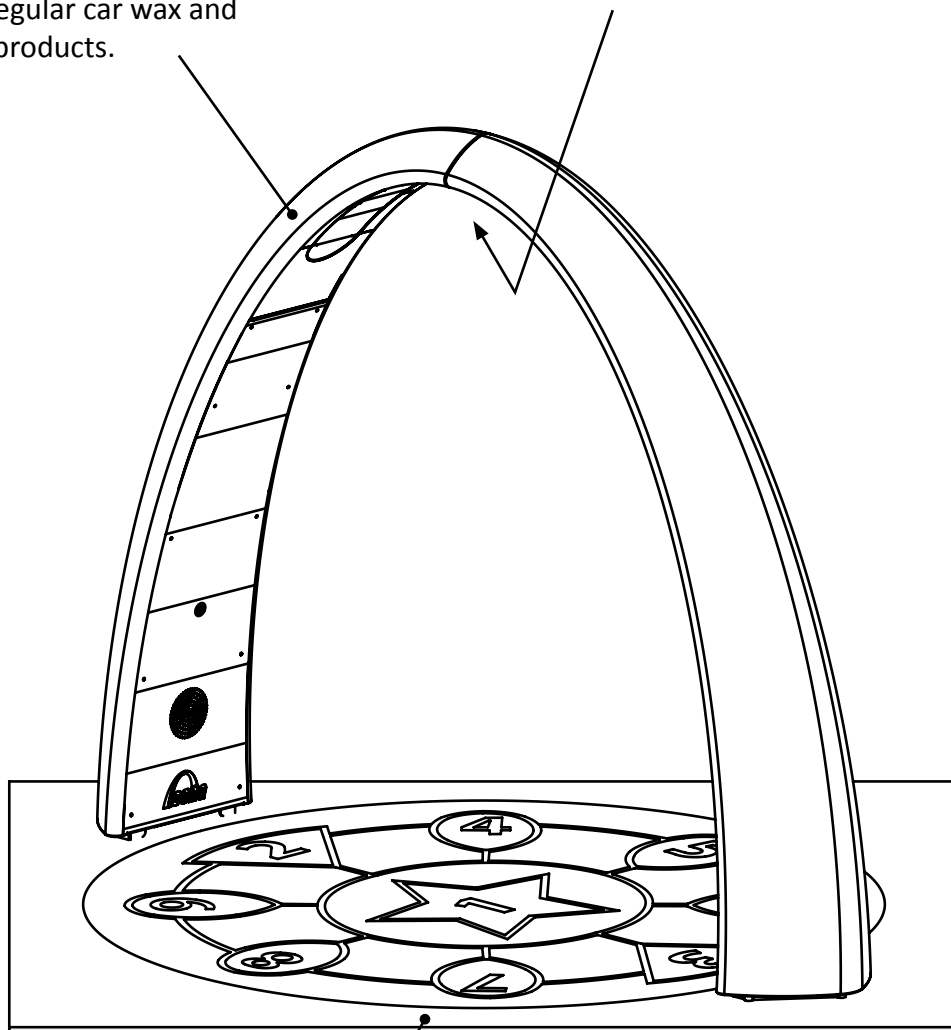


Maintenance

Clean caps at least every year with water and mild detergent.

Remove small scratches by using regular car wax and polish products.

Keep camera hole clean of cobwebs or other kind of debris.



The Funky floor is filled with quartz sand.

Sweep the sand is swept away due to intensive use, sweep it back with a broom.

If the filling sand is lost replace it with quartz sand washed and dries with a dimension of $> 0,2$ and $< 1,0$ mm.

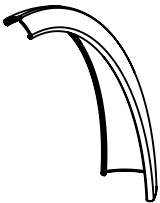
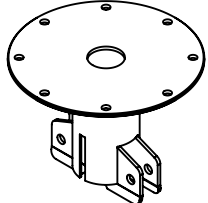
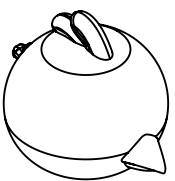
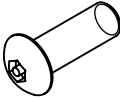
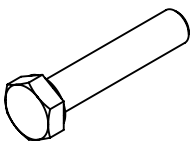


Angry Birds version - parts

The Sona Angry Birds version is equipped with a 3D figure of an Angry Bird on top of the Sona arch.

The figure is mounted on a foot flange, which is placed on top of the Sona.

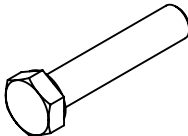
The polyester caps are a special version, with circle cutouts for the foot flange.


The playfloor has a different design, and is delivered in the package.


199-402	2 PCS	199-610	1 PCS	904803	1 PCS
					
Polyester cap AB		AB foot flange		AB figure	
100-213	4 PCS	100-245	2 PCS		
					
Bolt secured M10x30		Hex bolt M10x50			
100-274	2 PCS	100-282	4 PCS		
					
Torque Nut M10		Washer M10			

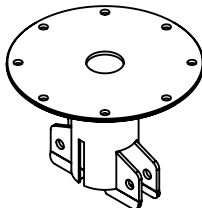
Angry Birds version - installation

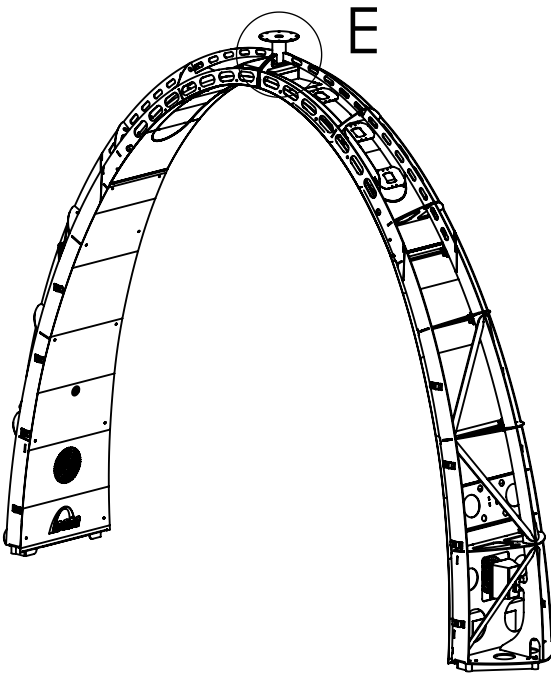
AB1. After setting up the arch (step 4 in the installation manual), mount the AB flange into place on top of the arch.

100-245	2 PCS
	
Hex bolt M10x50	

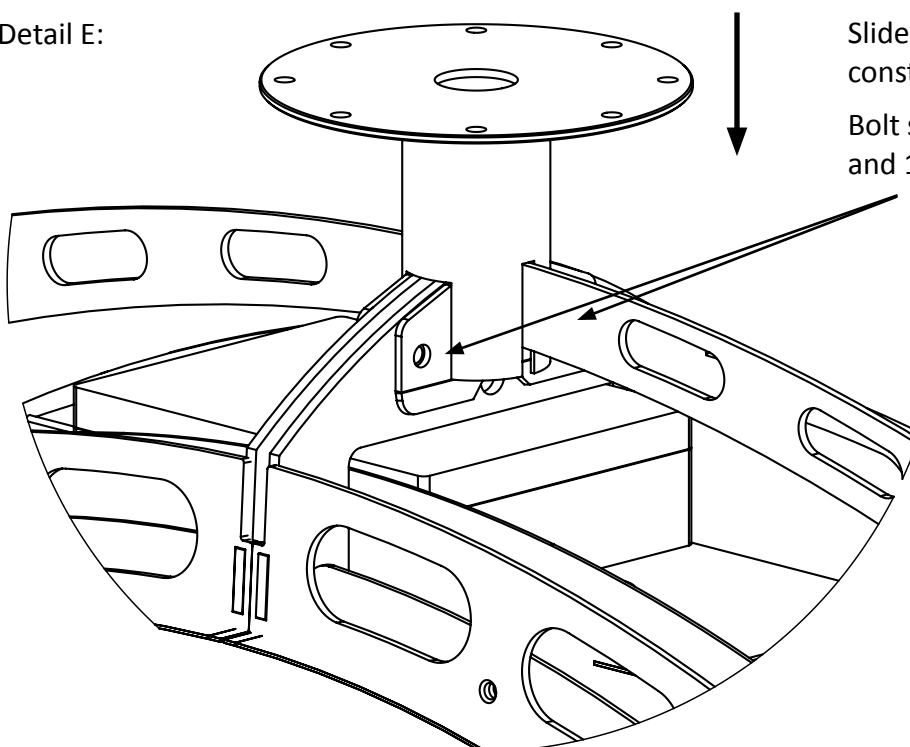
100-274	2 PCS
	
Torque Nut M10	

100-282	4 PCS
	
Washer M10	

199-610	1 PCS
	
AB foot flange	



Detail E:



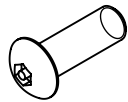
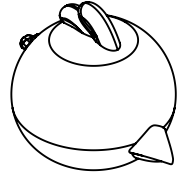
Slide down flange 199-610 on the Sona construction.

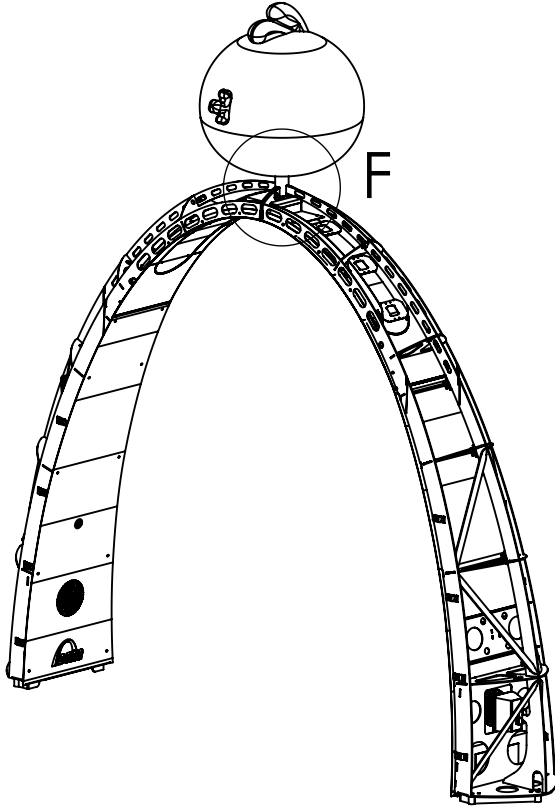
Bolt shut with 100-254 (2x), 100-274 (2x) and 100-282 (4x)

Make sure the power cables go through the middle hole, and do not get stuck!

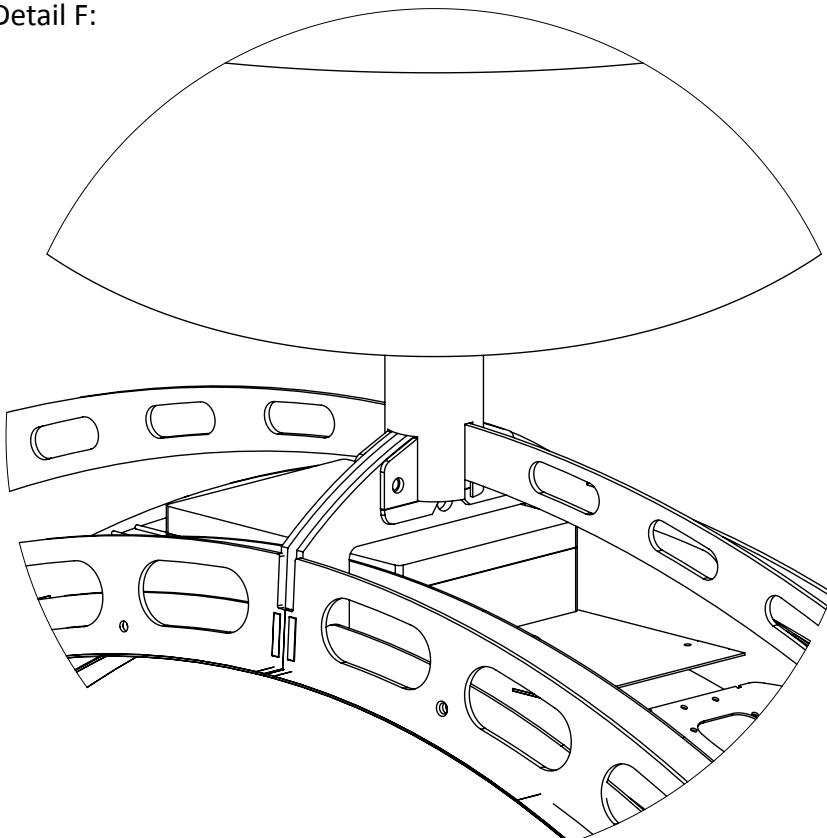
Angry Birds version - installation

AB2. Bolt the AB figure in place with 100-213 (4x).
Caution! Do not use electric machine!

100-213	4 PCS	904803	1 PCS
			
Bolt secured M10x30		AB figure	

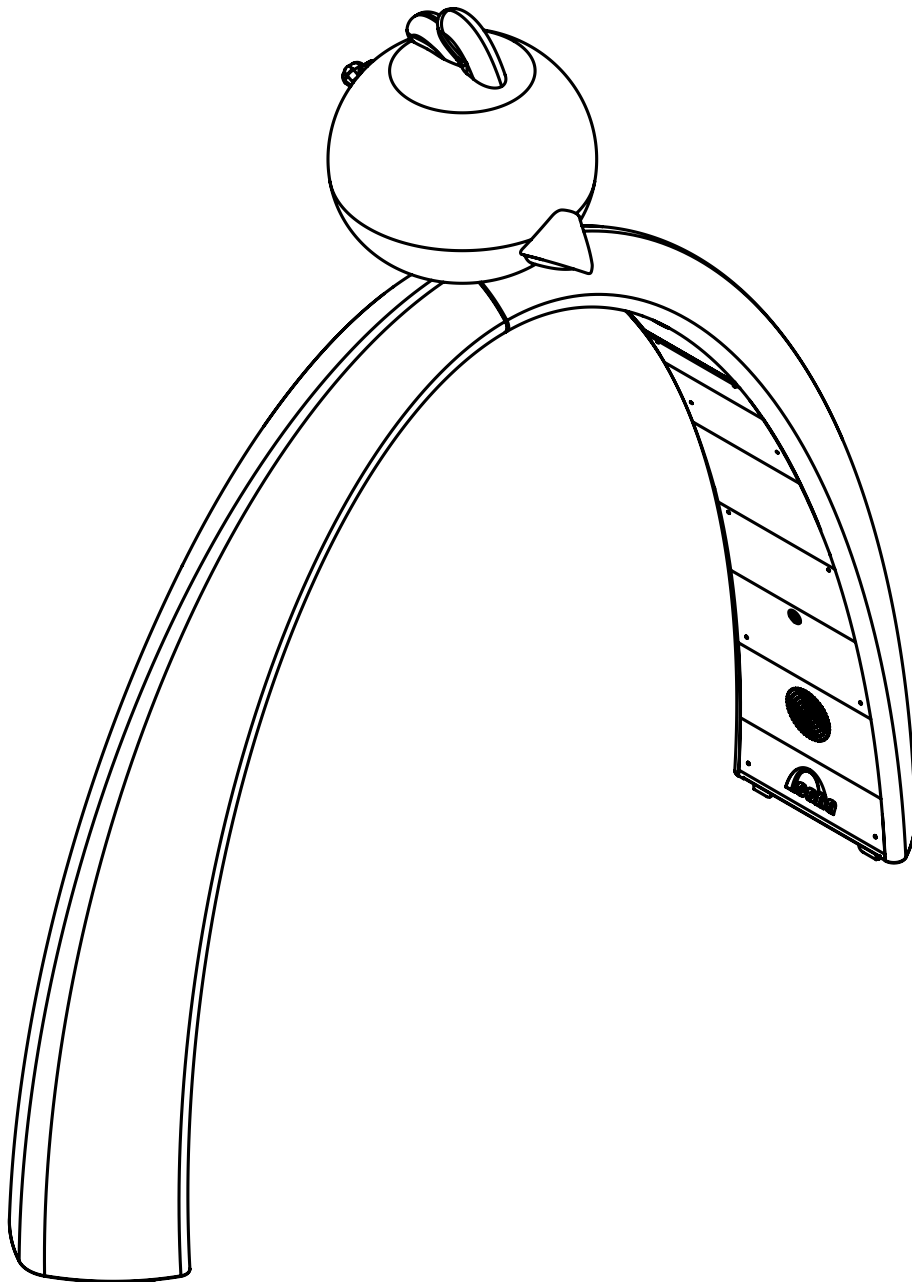
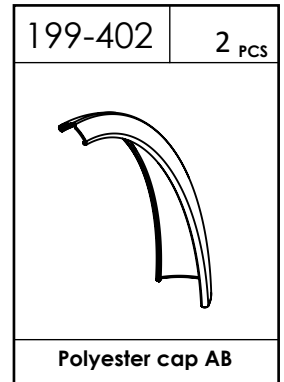


Detail F:



Angry Birds version - installation

AB3. Cover the AB Sona with the special polyester caps with cutout for the foot flange.



Warranty

1. Warranty time period:

For defects in structural strenght, material and production

Funky floor: conditions of the supplier)	8 years (according to the warranty
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Metal construction	5 years
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Polyester caps	5 years
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Plastics:	5 years
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Electronics	3 years, descending 1st year: 100% coverage 2nd year: 66% coverage 3rd year: 33% coverage
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2. Warranty Conditions

The warranty covers the free delivery of spare parts to the warehouse of the retail dealer in question. Faulty parts have to be replaced by Lappset components. The inspection of delivery has to be done before installation and possible damages have to be informed immediately. The delivery time for spare parts is one week from the factory.

4. Application of warranty:

Warranty will only apply under the condition that the product has been installed and maintained correctly according to the instructinos administered by Lappset.

5. Exclusion of warranty

Teh warranty does not cover normal wear and tear, surface corrosion of the metal parts, discolored surfaces, light splitting or deformation of the wood, other cosmetic issues, and faults induced by inappropriate use or vandalism. The warranty does not cover the change of faulty parts (dismantling and installation costs).

Safety certificate

Certificaat

KEURMERKINSTITUUT

Certificate of approval issued by Keurmerkinstituut (appointed by ministerial disposal of 8 June 2004, number VGB/P&L 2478562).

Certificate number:	2008.323
File number:	6145.04
Playground equipment:	Sona
Serial number:	--
Owner/keeper:	Yalp
Address owner/keeper:	Nieuwenkampsmaten 12 7472 DE Goor The Netherlands
Equipment type:	Interactive sound play equipment with floor made of artificial turf, and arc construction
Manufacturer:	Yalp
Year of production:	2008
Supplier:	Yalp
Date of approval:	2 December 2008

Keurmerkinstituut, Groeneweg 2, Zoetermeer The Netherlands, hereby declares that the here mentioned playground equipment conforms to the requirements of Warenwetbesluit attractie- en speeltoestellen (Staatsblad 474, 27 September 1996), EN 1176-1: 2008 and EN 1177: 2008.



drs. W. van Weperen
director

Environment

Responsibility is in our DNA

Sustainability is not a trend, but a must to keep the world livable. Lappset is committed to sustainable business practices, values and standards are of paramount importance. The social commitment begins with our employees, but also in dealing with you. As a supplier of toys and sports products, we are aware of the social role that we play: play, sports and exercise for everyone.

People, Planet, Profit

Corporate social responsibility means that Lappset takes responsibility on the core themes of ISO 26000 in the economic (profit), environmental (planet) and social (people) These themes run like a red line through the organization. Lappset shows his professionalism and appreciation for the company through the necessary certificates, if they are available in this area.

The best information is not delivered by the means of certificates, but through personal contact. We gladly invite you to our office, so you can get a good impression of our organization, our products and our employees.

Lappset has as its motto: "Responsibility is in our DNA" and that we carry it for a reason.

