

IP-501 GAME GROUP TECHNICAL SPECIFICATION

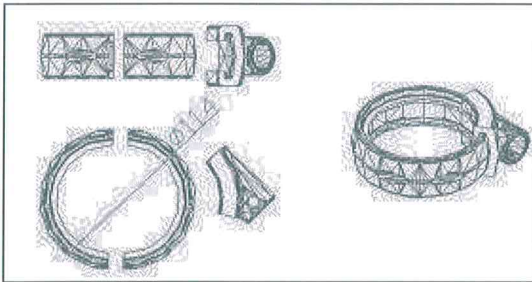
CARRIER CONSTRUCTION

it will be formed from SDM pipe with a diameter of 114 mm and a wall thickness of 2.5mm. horizontal and vertical pipes with a length of 2500 mm and greater will be connected by welding with a special insertion system in such a way that they form right angles to each other. The upper parts of these pipes will be closed with plastic plugs fixed with at least two aluminum rivets in the shape of a hemisphere shaped by injection method in order to prevent water, moisture and foreign substances from entering them. Vertical and horizontal pipes with a diameter of 114 mm will be connected in such a way that they form a right angle to each other. The lower parts of the pipes forming the carrier construction will be joined by welding method with a sheet flange with a minimum size of 150x150x5mm. The pipes will be subjected to sandblasting Process.

ELECTROSTATIC PAINT

All metal parts whose production has been completed should be rinsed by leaving them in a degreasing bath with a 5% concentration at 70 °c for 10 minutes. After rinsing, metals washed with hulasa with a special alloy detergent with phosphate coating property should be subjected to SANDBLASTING process, then polyester-based static powder coating process should be performed and baked in a 200 °C oven for 20 minutes.

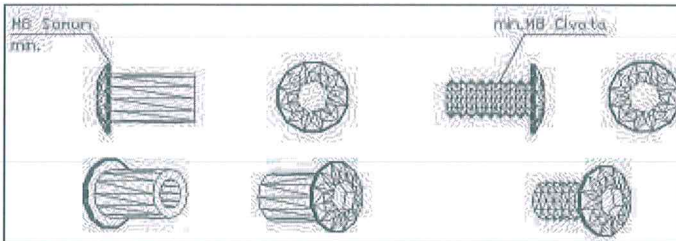
FASTENERS



The carrier clamps can be made on the basis of fiber-based polyemide(nylon 66) made by injection method or by connecting the platform directly to the carrier system. All fasteners must be disassembled and detachable.

Barrier clamps should be polyemide based, made by injection method. The Beam Connections to the rear must be polyemide-based, made by injection method. Connection diameters min. 32 mm. It should be suitable for diameter pipes.

A. All nuts, bolts and washers used in clamps are min. It should be according to the M8 nut and M8 bolt layout.



BOLTS, NUTS AND WASHERS

Such bolts, washers and nuts used in the system must be dachromate coated. And certainly there should be no sharp corner protrusions more than max 3mm.

All nuts should be fiberglass. In this way, the problem of loosening and falling of the nuts due to vibration will be eliminated.

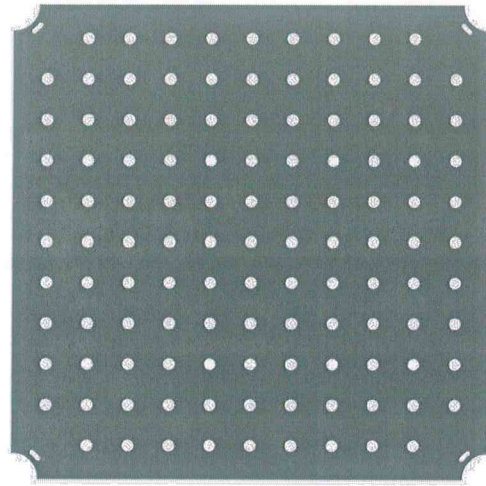
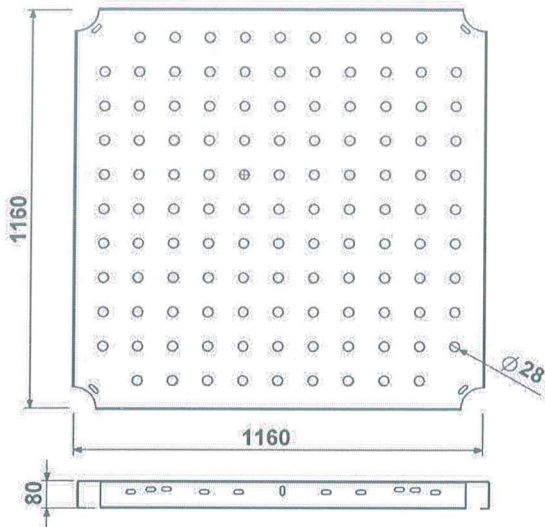
JV Electro galvanized bolts should only be used in places closed with plastic lids. Exposed all bolts and nuts in the places should be dachromate coated.

MUSTAFA DURNA

İNŞAAT ANONİM ŞİRKETİ

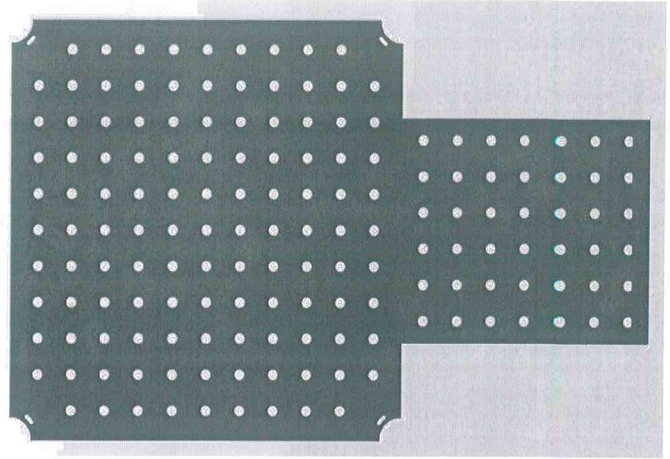
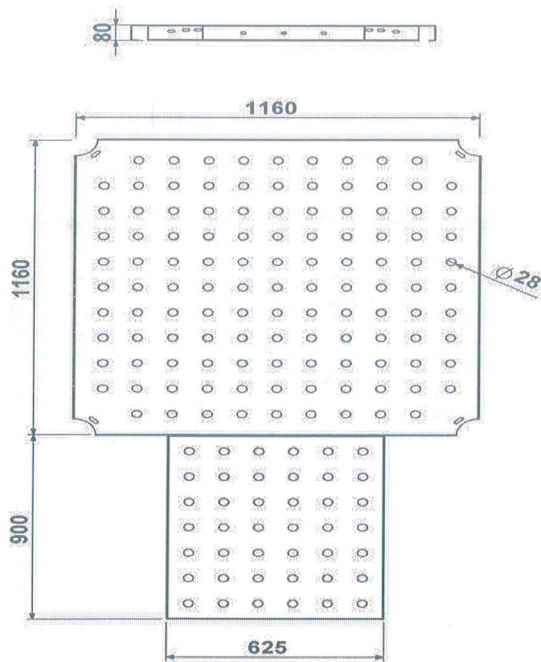
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116X116 cm SQUARE PLATFORM



- ❖ A Minimum of 20x40x1.5 mm on the carcass made of box profiles, the dimensions of the platform, which will be formed by attaching a 2 mm wall thickness sheet metal with frequent points, will be 116x116 cm. The connection holes of the platform will be opened in advance. The number of supports placed under the platform is 6 pieces and the platform dimensions will be 8 cm.
- ❖ The upper surface of this platform will be coated with PVC (Plastisol) with -60 $\pm$ 5 shore A hardness, 1 gr/cm³ density, at least kg/cm² breaking strength, 650-700% break elongation and 100 m³ (max) abrasion property by HOT DIPPING METHOD with anti static material mixture. The PVC thickness will be at least 1 mm at each point.
- ❖ These platforms will be connected by clamping by means of galvanized bolts and nuts on special cut ears existing in the carrier construction (attached at the manufacturing stage).

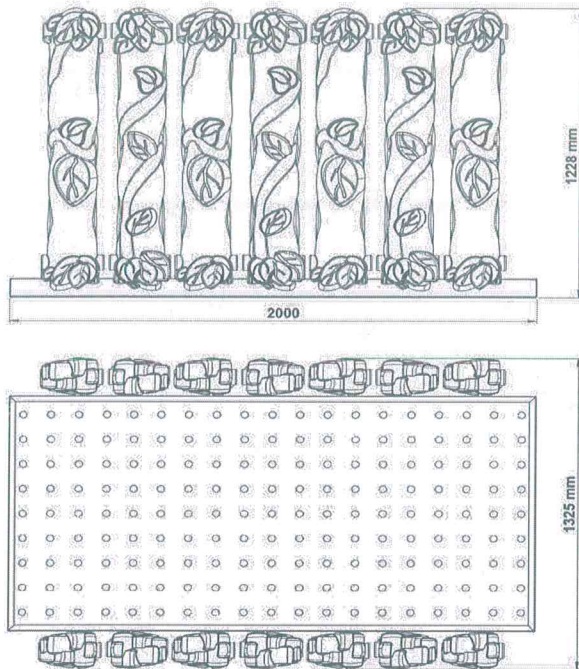
116x116 cm SQUARE PLATFORM WITH SPIRAL EXTENSION



- ❖ The Min. the dimensions of the platform, which will be created by attaching a 2 mm wall thickness sheet metal with frequent points to the carcass made of 20x40x1.5 mm box profiles, will be 116x206 cm. The connection holes of the platform will be opened in advance.
- ❖ The upper surface of this platform will be coated with PVC (Plastisol) with -60 $\pm$ 5 shore A hardness, 1 gr/cm³ density, at least 90 kgf/cm² breaking strength, 650-700% break elongation and 100 m³ (max) abrasion property by anti static material mixed HOT DIP METHOD. The PVC thickness will be at least 1 mm at each point.
- ❖ A. These platforms will be connected by clamping by means of galvanized bolts and nuts on special cut flanges existing in the carrier construction (attached at the manufacturing stage).

FLAT BRIDGE WITH 200 cm FENCE

FIGURE

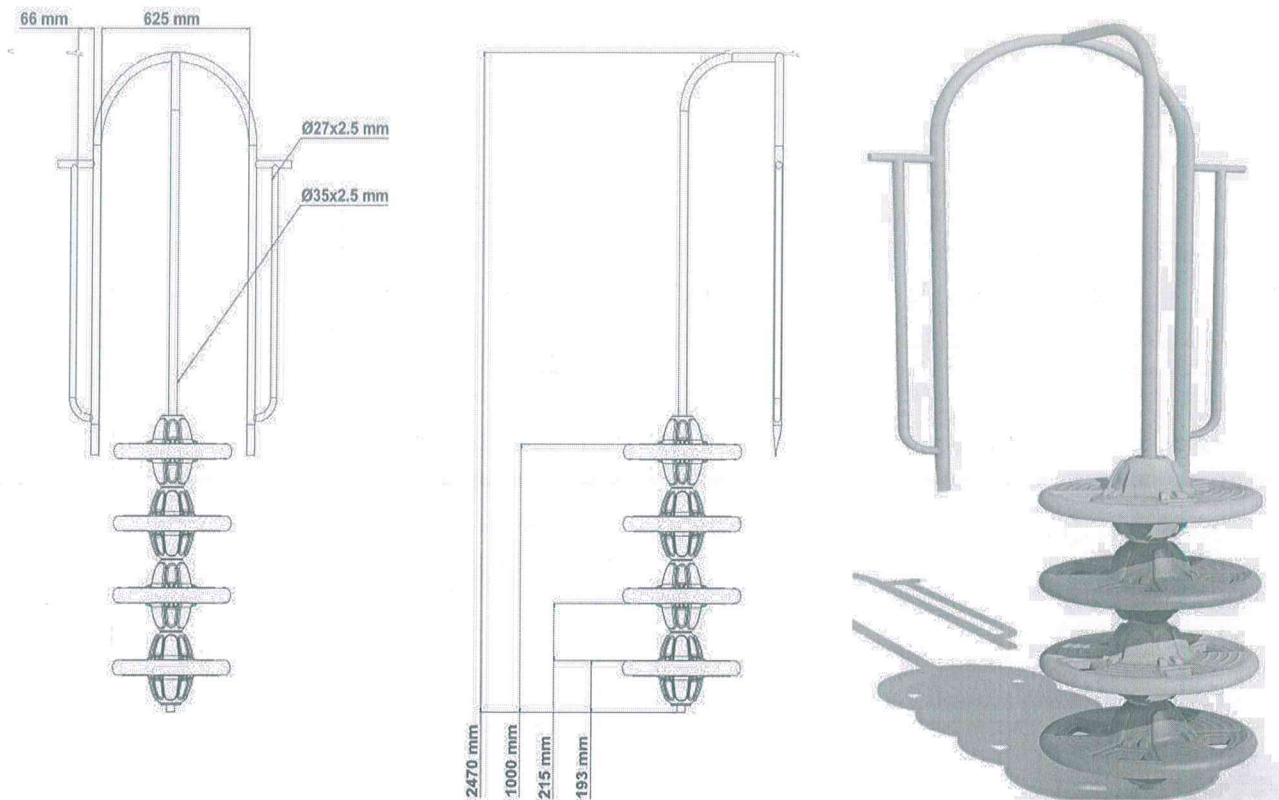


- ❖ A Minimum of 20x40x1.5 mm on the carcass made of box profiles, the dimensions of the flat bridge to be formed by attaching 2 mm wall thickness sheet metal with frequent points will be 200x116 cm. The connection holes of the flat bridge will be opened in advance. The dimensions of the flat bridge will be 8 cm.
- ❖ The upper surface of this platform will be coated with PVC (Plastisol) with -60 $\pm$ 5 shore A hardness, 1 gr/cm³ density, at least kg/cm² breaking strength, 650-700% break elongation and 100 m³ (max) abrasion property by HOT DIPPING METHOD with anti static material mixture. The PVC thickness will be at least 1 mm at each point.
- ❖ Each bridge railing should be designed to be mounted in relation to each other and thus a strong structure should be created.
- ❖ The Bridge Bridge railings will be fixed to the main structure with the help of 186 cm galvanized pipe and clamp system with a diameter of $\varnothing$ 27 mm and a wall thickness of 2 mm from the upper and lower sides with the help of screws.
- ❖ During installation, all openings, tunnel or bridge dimensions (width, height) must be in accordance with international safety and security norms. Dec.
- ❖ The polyethylene bridge railings must be manufactured as disassembled and can be produced in the same or different colors upon request.
- ❖ Bridge railings will be manufactured from powdered self-colored LLDPE raw materials with rotation technology in such a way that they will be double-walled. The dyestuffs used in coloring will be in accordance with the children's health and food regulations.



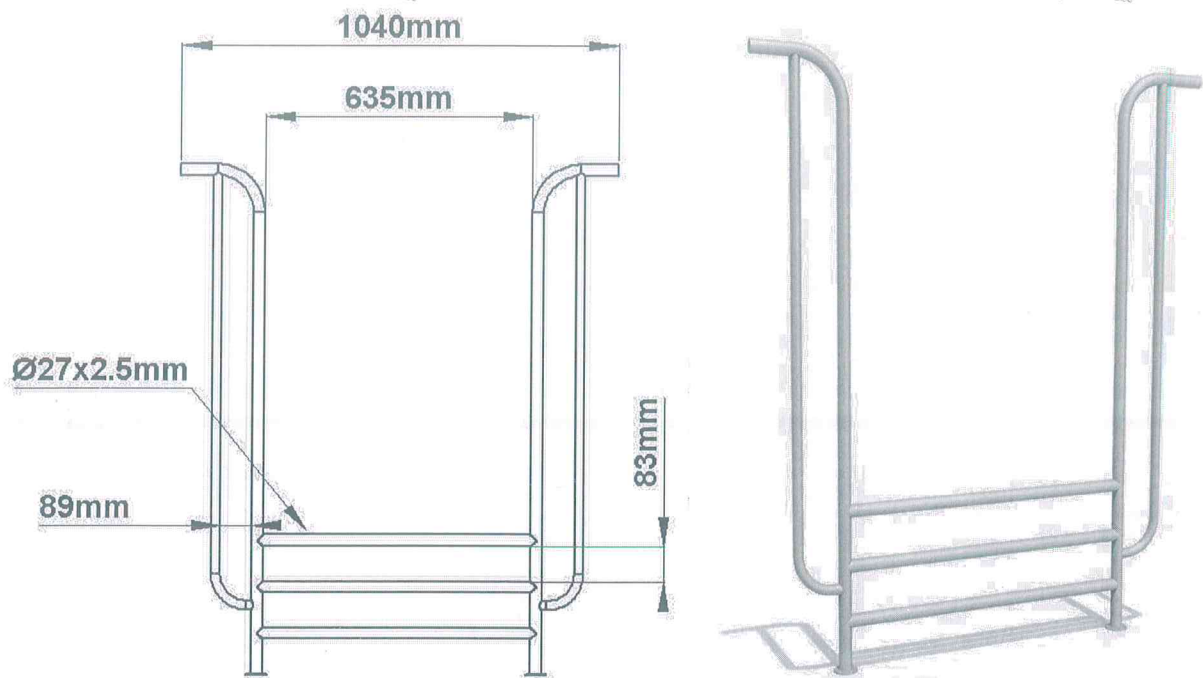
- ❖ The Access Stairs will be manufactured as one piece from dkp sheet with a wall thickness of 2 mm so that they can reach a height difference of 100 CM from the ground to the platform.
- ❖ The step height of the stairs will be minimum 13 cm, maximum 20 cm. Stair railing minimum 70 cm, maximum 85 cm height 2 pieces will be manufactured for each stair group.
- ❖ The stair treads will be coated with PVC (Plastisol) BY HOT DIPPING METHOD with mixed antistatic material mixed with -60 ± 5 share A hardness, 1 gr/cm³ density, at least kg/cm² breaking strength, 650-700% break elongation and 100 m³ (max) wear property. The PVC thickness will be at least 1 mm at each point.
- ❖ The edges of the ladder railing will be made of a minimum of 32x2.5 mm pipe, the railings will be made of a minimum of 27x2.5 mm pipe. The maximum Decoupling between the bars on the stair railing will be 85 mm.
- ❖ The stair railings will be painted with polyester-based electro-static powder coating after sandblasting.

H:100 CM UFO CLIMBING



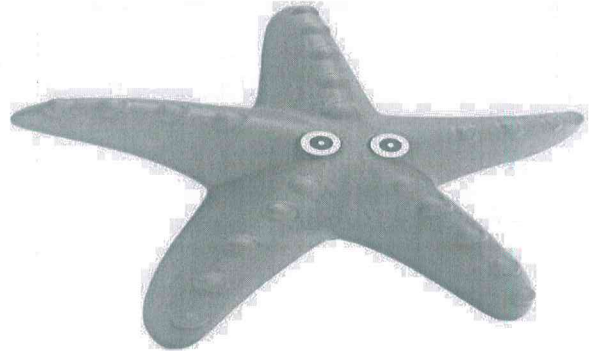
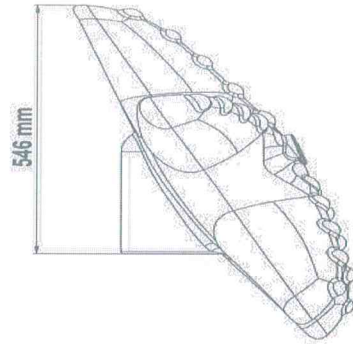
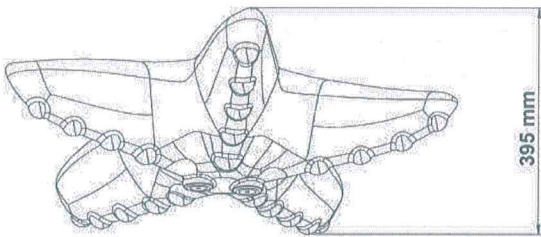
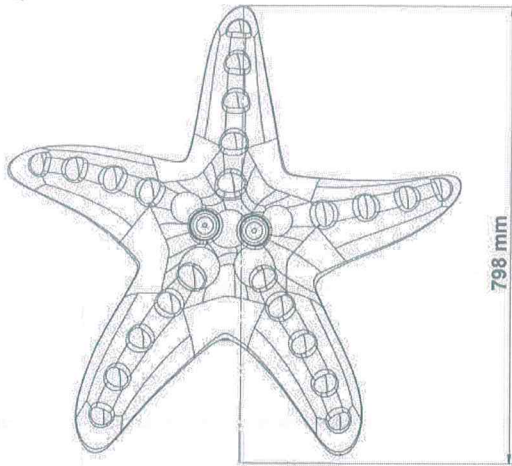
- ❖ Ufo climbing figures; They will be manufactured with rotation technology with double walls made of powdered self-colored LLDPE raw material. The dyestuffs used in coloring will be in accordance with the children's health and food regulations.
- ❖ The number of Decals will be standard figures taking into account the anthropometric measurements of the respective user group between each UFO climb. (H:100 cm; it should consist of an average minimum of 4 Polyethylene ufo climbing figures.)
- ❖ The course will be designed in such a way as to allow children to access the 0 - 100 / (± 10 cm) high platform by climbing and to support them to enter the playgroup safely.
- ❖ The ufo climbing figures should be manufactured as disassembled, optionally in such a way that they can be produced in the same color or different colors.
- ❖ For convenience during exit and entry to the platform, a railing will be used from pipes with a wall thickness of 2.5 mm Ø35 mm to axis the ufo climbing figures, as well as pipes with a wall thickness of 2.5 mm Ø27mm to regulate the entrance to the platform and connect to the holding pipe for convenience.
- ❖ The UFO climbing will be fixed to the main construction with the help of a clamp system from the upper side and to the platform with the help of a screw from the lower side.
- ❖ · weight min. 20 KG.

H:50 INTERNAL STAIRS



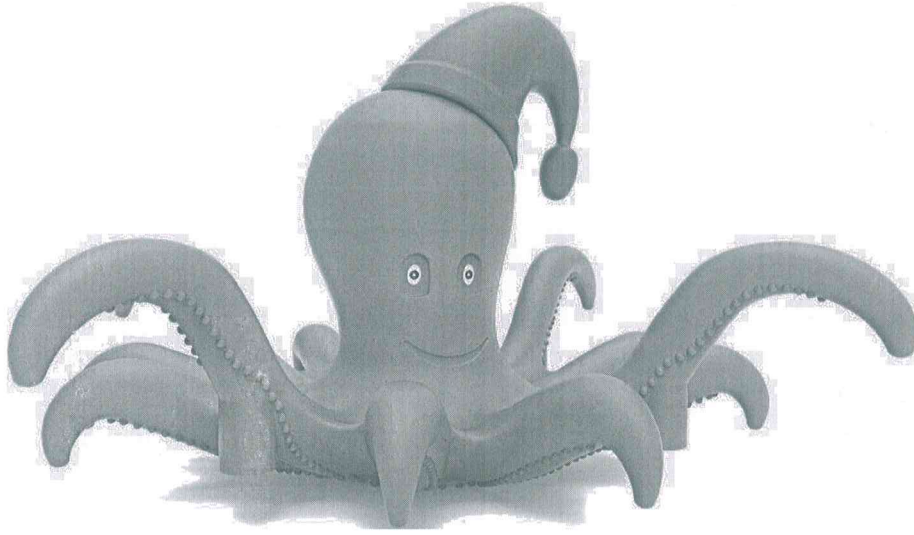
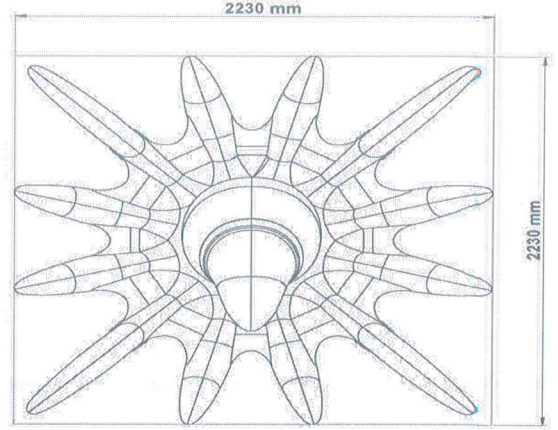
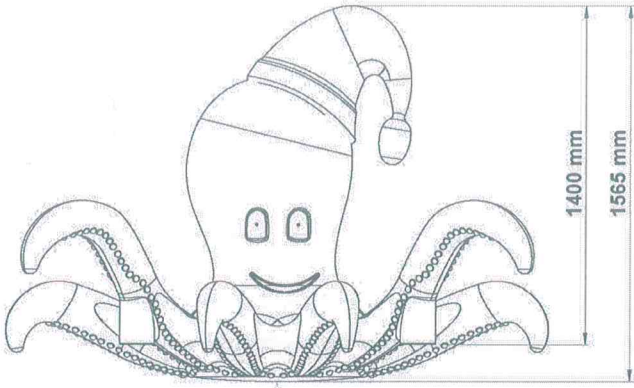
- ❖ H:50 internal stairs The main body and climbing pipes will be made of 27x2.5 mm pipe.
- ❖ The maximum gaps on the sides of the ladder will be 89 mm.
- ❖ A:The 50 cm internal staircase will be painted with polyester-based electrostatic powder coating after sandblasting or degreasing.
- ❖ Prel H:50 The internal staircase must be manufactured in accordance with the technical drawing above.
- ❖ The matters not specifically specified in the specification will be carried out according to TSE EN 1176-1 standards.

THE STARFISH FIGURE



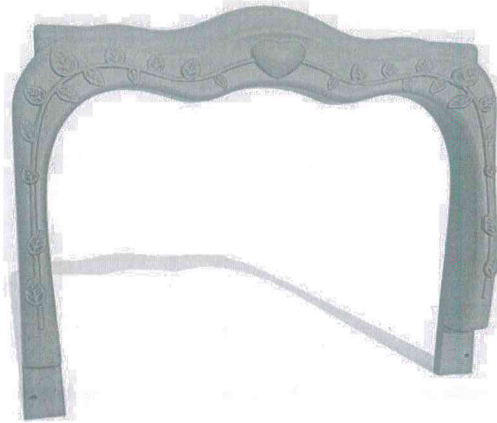
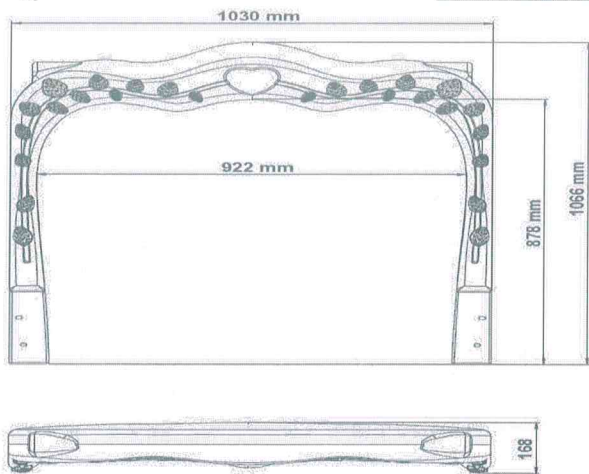
- ❖ The starfish figure shall be made of self-colored polyethylene in accordance with the specifications specified in the technical specifications and designs, to be fixed with a bolt and nut connection by passing 10 cm into the Ø114 mm pipe, to be at least 125 cm above the platform or standing level.
- ❖ The rear Sea star figure will be manufactured in such a way that it will be double-walled.
- ❖ The figures will have the strength and necessary cross-sections to bear the weight of the children when the children are hung.
- ❖ The first Sea star figure will be manufactured with rotation technology from powdered self-colored LLDPE raw material. The dyestuffs used in coloring will be in accordance with the children's health and food regulations.

OCTOPUS ROOF



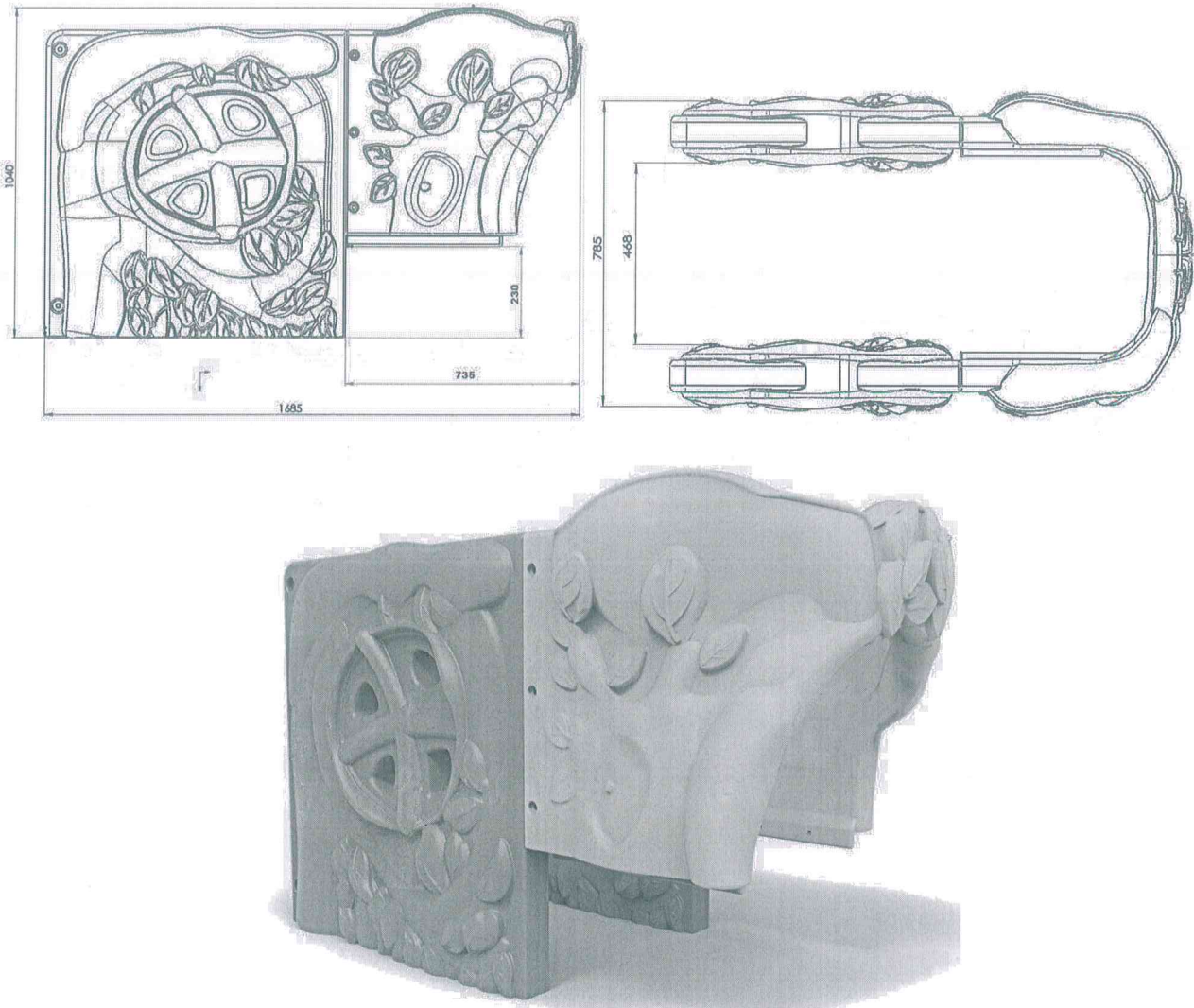
- ❖ The Octopus Roof has a diameter of 223 cm. It will be manufactured in the form of a minimum height of 156.5 cm and will consist of 2 pieces with hats on it.
- ❖ The Octopus Roof must be connected directly to the Ø114 pipes that make up the carrier pipes of the system at the place where it is connected. A separate fastener should not be used Decoupled from time to time.
- ❖ Ö Octopus Roof; It will be manufactured by rotation technology from powdered self-colored LLDPE raw material. The dyestuffs used in coloring will be in accordance with the children's health and food regulations.
- ❖ Weight Min.55 KG.

DOUBLE FLAT SLIDE ENTRANCE



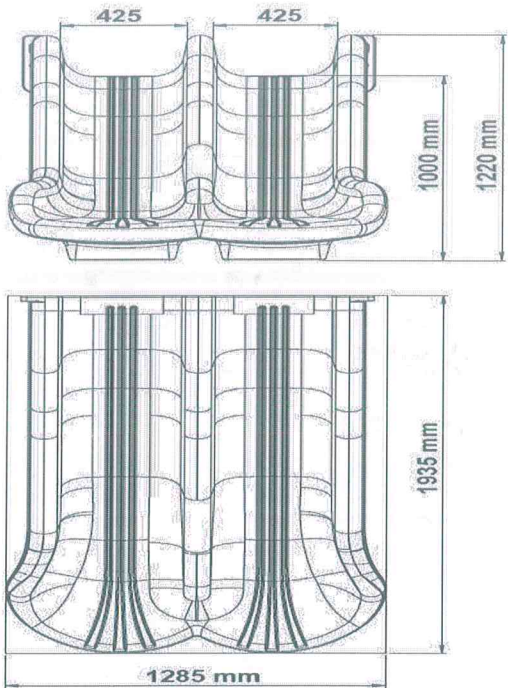
- ❖ The entrance of the Flat slide with Double sides will be manufactured with double walls made of polyethylene, designed in one piece on the top and both sides in order to ensure the safe passage of children to the slide.
- ❖ Double Double Flat slide entrance has dimensions of 103x106 cm, the entrance part is min. it will be designed and manufactured with a width of 92 cm.
- ❖ The ladder will be fixed to the main construction with the help of a 100 cm galvanized pipe and clamp system with a diameter of Ø27 mm and a wall thickness of 2 mm from the upper side of the double Flat slide entrance, and to the platform with the help of a screw from the lower side. Ø27x2 mm galvanized pipe will be passed through the polyethylene entrances as a whole. pipes shorter than 100 cm will not be used.
- ❖ Polyamide-based self-colored plastic clamps shaped by injection method, through which galvanized pipe with a diameter of Ø27 mm can pass, will be used at the junction points of the terminal pipes with the entrance to the slide.
- ❖ · weight min.6 KG

SPIRAL SLIDE ENTRANCE AND DASHBOARD



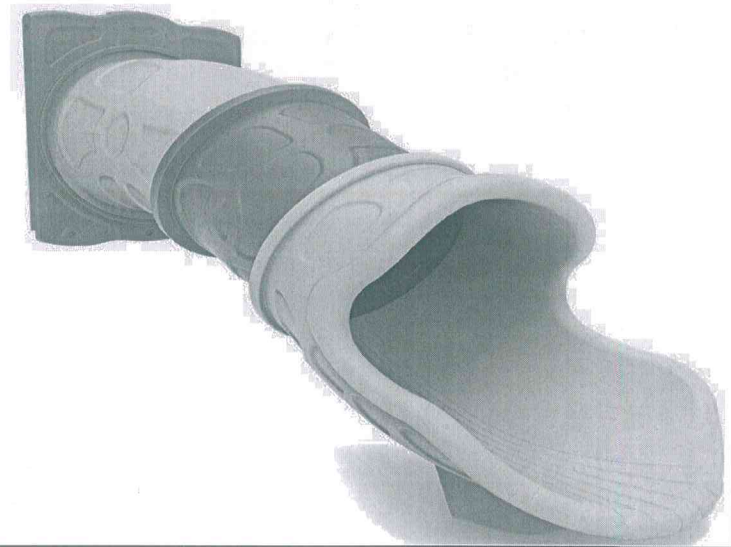
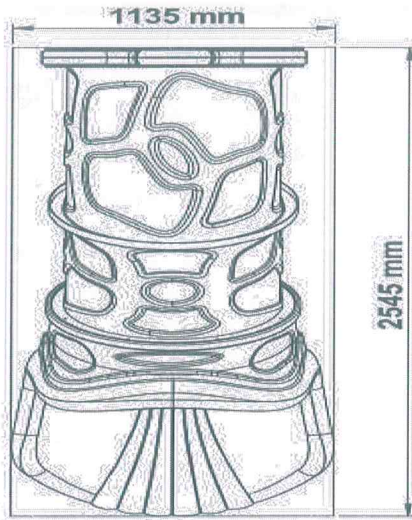
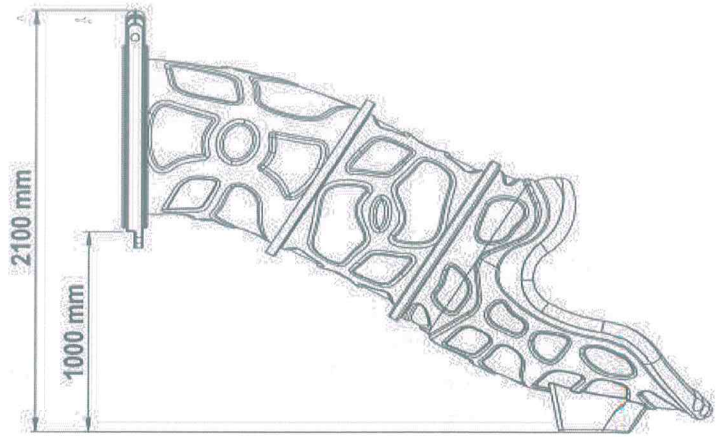
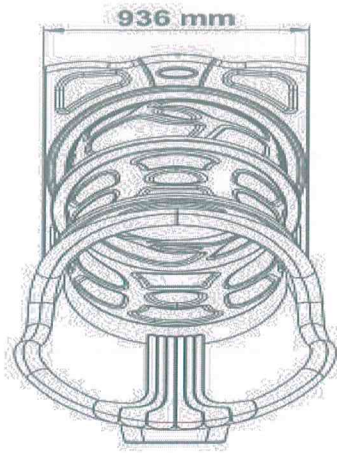
- ❖ Subject Technical drawing-these are barriers made of metal pipe or polyethylene in order to provide safe entry to the spiral slide used in the game group, provided that they adhere to the measurements and safety rules.
- ❖ When the entrance barrier is used as polyethylene, the installation will be completed with metal railings on the right and left along the platform.
- ❖ The bottom will be fixed with the help of bolts and nuts with metal railings from the polyethylene product end with the platform from the bottom to grasp the slide entrance section; joints without hidden details will be hidden with plastic covers.
- ❖ All of the entrance and handrails can also be used from polyethylene materials to ensure safe entry for spiral slides. In this case, the polyethylene entrance barrier and railings will be manufactured from self-colored LLDPE raw material with double walls with rotation technology. The dyestuffs used in coloring will be in accordance with the children's health and food regulations. The entrance and railings must weigh a minimum of 21 kg.

H: 100 FLAT DOUBLE SLIDES



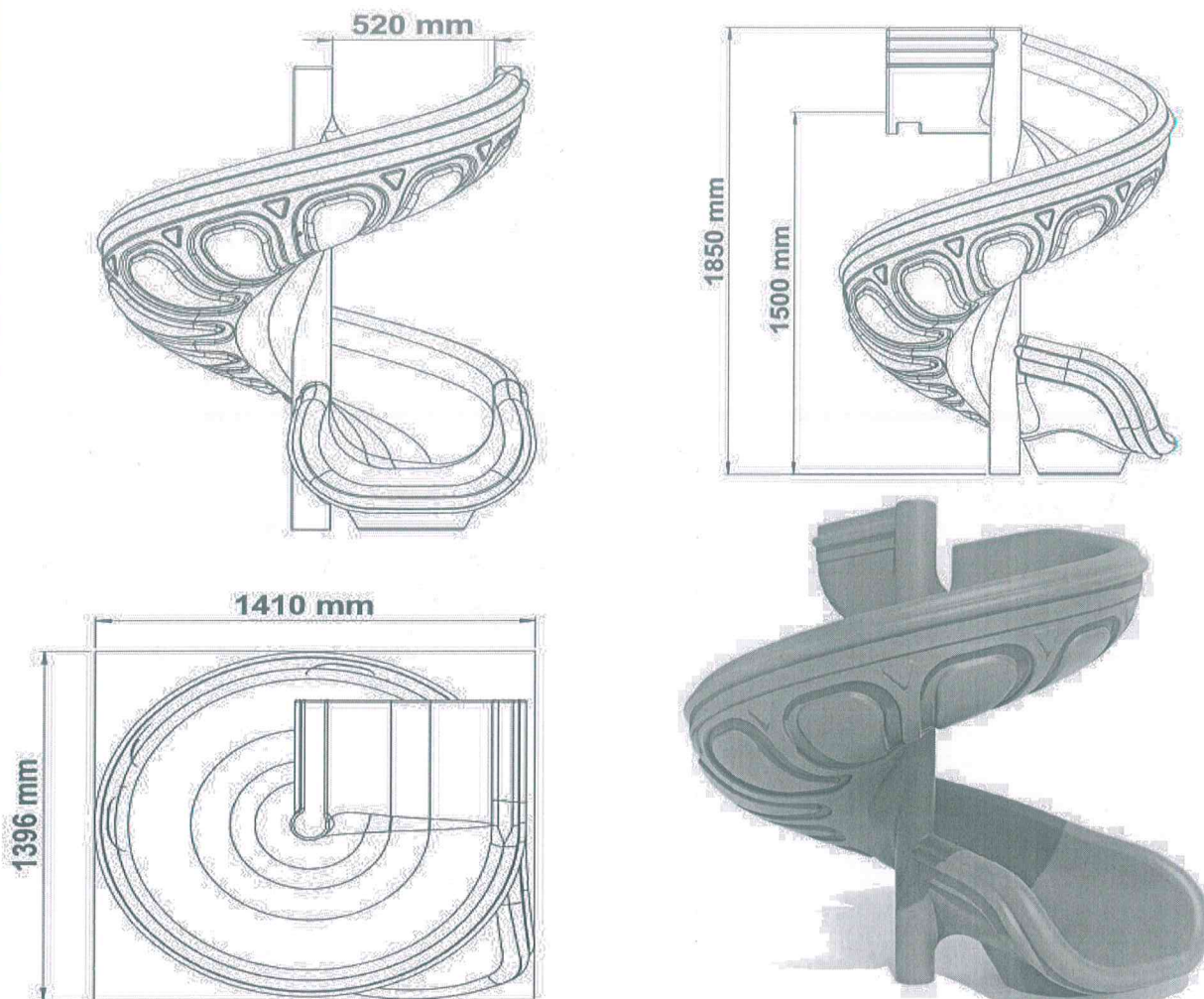
- ❖ For double Flat slides connected to a 100 cm high platform, the slope angle of the sliding section with the bed will be manufactured as a double-walled and single piece, so that the maximum 40° is measured according to the height axis of the slide.
- ❖ The height of the side parts of the entrance section of the Double straight slide shall be at least 20 cm. The width of the sliding section of the double flat slide will be at least 40 cm.
- ❖ The exit section of the slide will be at least 128 cm and will be buried in the ground with an anchor and concreted.
- ❖ The Roller Slides will be manufactured with rotation technology from powdered self-colored LLDPE raw materials. The dyestuffs used in coloring will be in accordance with the children's health and food regulations.
- ❖ TS EN 1176-3 / 04.02.2010 It is obligatory to have the expression 'MULTI-CONNECTED SLIDE' within the Scope of the Document.
- ❖ · weight min.45 KG.

H: 100 cm FLAT TUBE SLIDE (WITH MOUNTING)



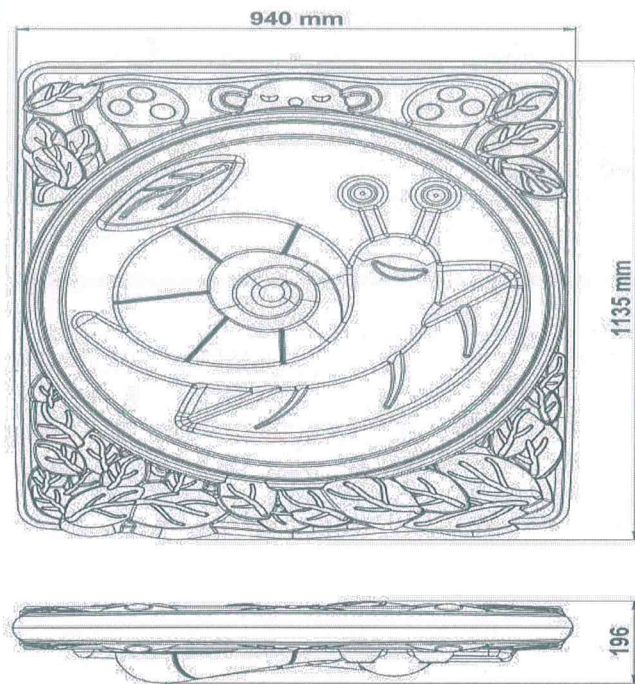
- ❖ The parts forming the Decking tube slide; The entrance panel and the tube exit part will be made of powdered self-colored LLDPE raw material with double walls, the spacers will be made with single walls with rotation technology. The dyestuffs used in coloring will be in accordance with the children's health and food regulations.
- ❖ A:H: It will be designed to descend a maximum of 40 slopes from platforms with a height of 100 (± 10) cm. It should be in accordance with the shape in the technical drawing. The inner diameter of the cylindrical slide will be 75 cm.
- ❖ A polyethylene barrier and a minimum of 145 angled elbows will be manufactured monolithic on the top of the slide to ensure the safe entry of children to the slide. The entrance railing will be 100 cm (± 10) high from the platform. There will be an angled exit bracket at the bottom to reduce the speed.
- ❖ The connection of the three parts of the inner tube slide is brought side by side and after face-to-face pressing, connection will be provided with the condition of using galvanized coating imbus bolts, nuts and washers as a result of 8 holes to be drilled on each tube part with a diameter of 10 mm. These connection nuts will be protected with plastic caps.
- ❖ There will be a metal foot connection place to be fixed to the ground at the bottom. These will be fixed by throwing concrete on the ground with metal legs according to their height.
- ❖ In order for the surface of the final product to be smooth, it is necessary that the surface of the mold made of aluminum or equivalent material has been sandblasted and manufactured by undergoing a teflon coating process for surface gloss.
- ❖ · weight min. 71 KG.

H: 150 cm SPIRAL SLIDE



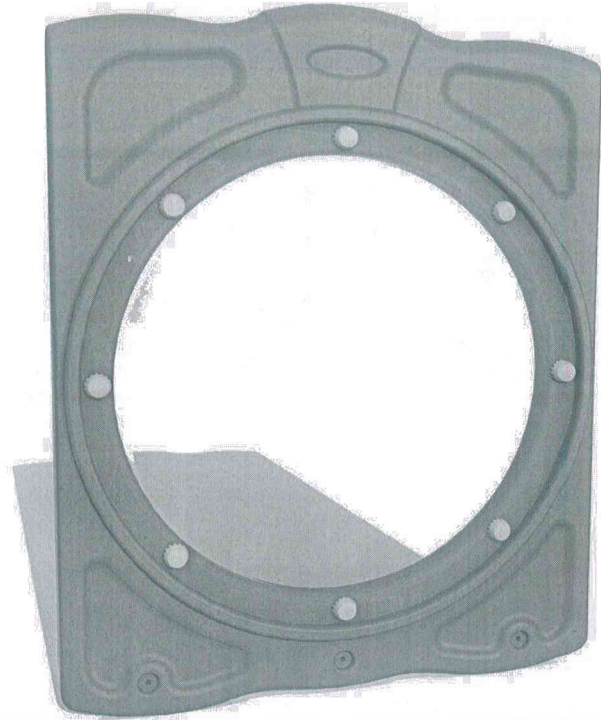
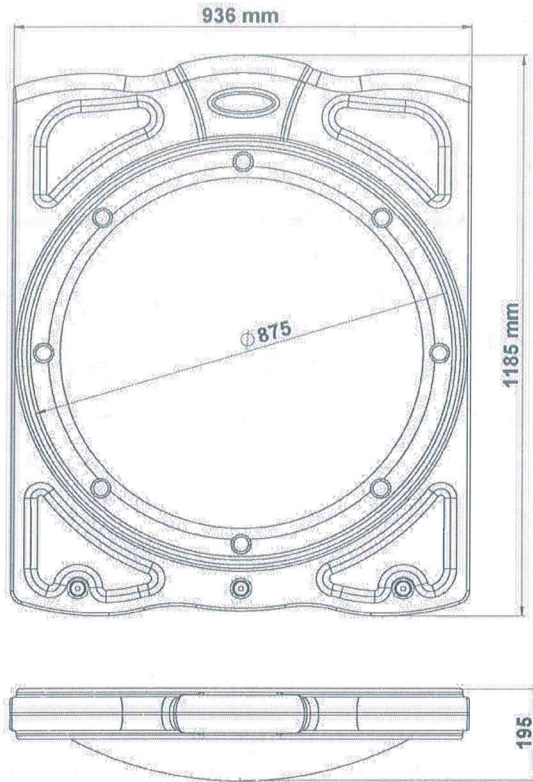
- ❖ The SPIRAL slides connected to the 150 cm high platform will be manufactured as a double-walled and single-piece, and the exit part will be designed to be 90 ° to the left side of the entrance part.
- ❖ The height of the entrance section side parts (depth) of the slide shall be at least 25 cm. The width of the sliding section of the slide will be at least 50 cm.
- ❖ The spiral slides will have an exit section (deceleration plane) that will reduce the sliding speed, and the length of the sliding section will be at least 55 cm, the length of the exit section will be at most 10°, the exit radius will be 50 mm.
- ❖ The exit section of the slide will be concreted by embedding into the ground with an anchor.
- ❖ In the middle part of the spiral slides, there will be a slot in the spiral way that allows the Ø89 pipe to be installed in the section.
- ❖ The Roller Slides will be manufactured with rotation technology from powdered self-colored LLDPE raw materials. The dyestuffs used in coloring will be in accordance with the children's health and food regulations.
- ❖ article TS EN 1176-3/ 04.02.2010 It is obligatory to have the expression 'SPIRAL SLIDE' within the Scope of the Document.
- ❖ · weight min.47 KG.

PLATFORM BOARD WITH SNAIL FIGURE



- ❖ Snail shaped panels will be manufactured with rotation technology with double walls made of powdered self-colored LLDPE raw material. The dyestuffs used in coloring will be in accordance with the children's health and food regulations.
- ❖ The panels with the Attached snail figure are designed with dimensions of at least 94x113 cm, manufactured as 2 pieces so that the outer body and the panel consist of an inner figure, and the inner figure of the panel will be mounted on the outer body.
- ❖ The panels with a Horizontal Snail Figure will be fixed to the main construction with the help of a 100 cm galvanized pipe and clamp system with a diameter of $\varnothing 27$ mm and a wall thickness of 2 mm on the upper side, and to the platform with the help of a screw on the lower side. $\varnothing 27 \times 2$ mm galvanized pipe will be passed through the polyethylene panels as a whole. pipes shorter than 100 cm will not be used.
- ❖ Polyamide-based self-colored plastic clamps shaped by injection method, through which the pipe with a diameter of $\varnothing 27$ mm can pass, will be used at the junction points of the connecting pipes with the panel.
- ❖ · weight min. 11 KG.

FANUS PLATFORM BOARD



- ❖ The fan panels will be manufactured with rotation technology with double walls made of powdered self-colored LLDPE raw material. The dyestuffs used in coloring will be in accordance with the children's health and food regulations.
- ❖ Internal Fan panels are designed with dimensions of at least 93x118 cm, manufactured as 2 pieces with a transparent fan with a diameter of at least 75 cm inside the panel, and the transparent part inside the panel will be mounted on the outer body.
- ❖ The fan panels will be fixed to the main construction with the help of a 100 cm galvanized pipe and clamp system with a diameter of Ø 27 mm and a wall thickness of 2 mm on the upper side, and to the platform with the help of a screw on the lower side. Ø27x2 mm galvanized pipe will be passed through the polyethylene panels as a whole. pipes shorter than 100 cm will not be used.
- ❖ Polyamide-based self-colored plastic clamps shaped by injection method, through which the pipe with a diameter of Ø27 mm can pass, will be used at the junction points of the connecting pipes with the panel.
- ❖ · weight min. 11 KG.

PLATFORM BOARD WITH CLOWN FIGURE



- ❖ The panels with a clown figure will be manufactured with rotation technology with double walls made of powdered self-colored LLDPE raw materials. The dyestuffs used in coloring will be in accordance with the children's health and food regulations.
- ❖ The boards with the clown figure will be designed with dimensions of at least 94x113 cm, manufactured as 2 pieces so that the outer body and the panel will consist of an inner figure, and the inner figure of the panel will be mounted on the outer body.
- ❖ The panels with clown figures on the back will be fixed to the main construction with the help of a 100 cm galvanized pipe and clamp system with a diameter of $\varnothing 27$ mm and a wall thickness of 2 mm on the upper side, and to the platform with the help of a screw on the lower side. $\varnothing 27 \times 2$ mm galvanized pipe will be passed through the polyethylene panels as a whole. pipes shorter than 100 cm will not be used.
- ❖ Polyamide-based self-colored plastic clamps shaped by injection method, through which the pipe with a diameter of $\varnothing 27$ mm can pass, will be used at the junction points of the connecting pipes with the panel.
- ❖ · weight min. 11 KG.

OCEAN IP-501 PLAYGROUP PARK INSTALLATION AREA AND TOWER HEIGHTS

