

CombiNation

Monheim Product Specifications



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Monheim

Monheim am Rhein has its own jungle.

The goal of this project was to create as many exciting possibilities for play and movement as possible. Just like Tarzan, children can now climb up into the heights via various types of climbing and balancing apparatus, a suspension bridge and two tree houses, and discover the seemingly dangerous jungle world.

The new playground's main attraction is a combined play structure from Berliner's Greenville product line. Up the children go, via the central mast play structure's spatial net, held by a five-way tensioning system, into tree house Boo, which is attached to the central mast play structure 4,5 metres up in the air.

90.293.480

 Product Family	CombiNATION
 Length x Width x Height (m) Length x Width x Height ('-")	20,2 x 17,1 x 6,6 66-3 x 56-1 x 21-5
 Protective Surfacing Area acc. to DIN EN 1176 (m) Protective Surfacing Area acc. to ASTM/CSA (m) Protective Surfacing Area acc. to ASTM/CSA ('-")	23,5 x 20,4 24,3 x 21,0 79-8 x 68-9
 Fall Height acc. to EN 1176 (m) Fall Height acc. to ASTM/CSA ('-")	2,99 9-10
 Age	5
 Minimum Space required acc. to DIN EN 1176 (m ²) Minimum Space required acc. to ASTM 1487 (ft ²)	216,95 2563
 Number of Foundations	22
 Concrete Volume C20/C25 (m ³)	16
 Number of skilled Installers required	4
 Installation Time without Foundation	20 hours
 Dimensions of largest Part (m)	8,7 x 1,0 x 0,9
 Weight of heaviest Part (kg)	200
 Shipping Volume (m ³)	On request
 Total Weight (kg)	4675
 Spare Part Guarantee	Lifelong

Technical Data

The following text can also be used for tenders.

Included Products

- Trii.3 with Slide and Ladder
- Net Tunnel
- Tetraquii 5350
- Transition Net
- Triangular Net with Handrail
- Foldet Net with Handrail
- Spider's Web
- Wasp's Nest
- HDPE-Motifs

Posts:

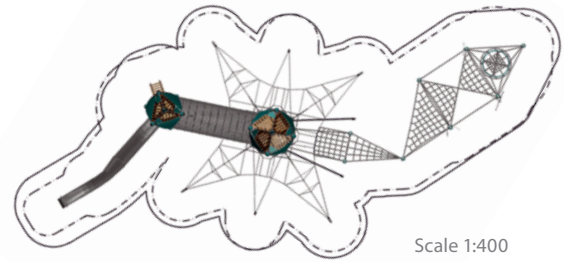
Steel posts with a diameter of Ø 133 mm (5 1/4") and a wall thickness of 5 mm (3/16") - 10 mm (3/8"), watertight sealed with rounded aluminium-tops or -balls. Anti-corrosion treatment and colour finish: sandblasting and solvent-free epoxy-/polyester-process.

Tubes:

A partial combination of straight and curved Frameworx® stainless steel tubes with a diameter of Ø 60,3 mm (2 3/8"), connected via Frameworx® aluminium balls.

Balls:

Frameworx®-aluminium ball connectors with a diameter of Ø 250 mm (9 13/16"). Anti-corrosion treatment and colour finish: sandblasted and powder-coated, securely closed with durable EPDM- caps.



Scale 1:400



Central Mast Climbing Structure:

A fourfold suspended climbing net with suspension cables (rope diameter Ø 20 mm (13/16")) including a spatial net (rope diameter Ø 18 mm (11/16")) and a central steel mast. The tensioning devices with encapsulated clamping system are mounted on the surface of the outer foundations.

Central Mast:

The central mast is made of galvanised steel and has a diameter of Ø 133 mm (5 1/4") and a wall thickness of 5 mm (3/16"). Powdercoating is also available.

Outer Clamping Points:

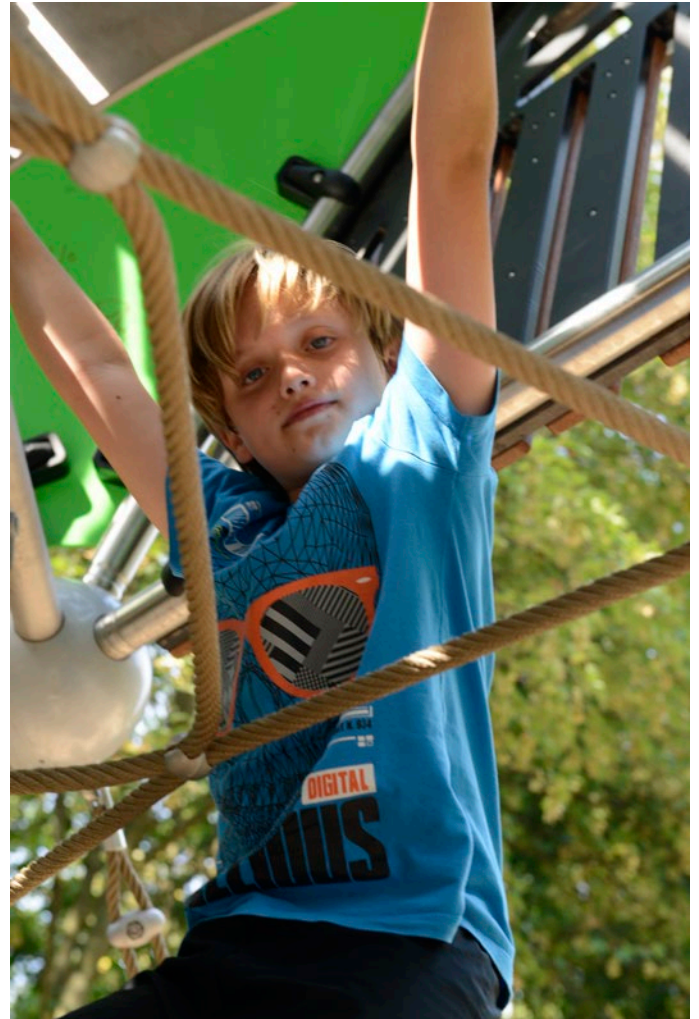
Steel posts with a diameter of Ø 101,6 mm (4") and 4 mm (3/16") thick on steel plates 787 x 300 x 12 mm (31" x 11 13/16" x 1/2") including the guying devices for the central mast and additional ones on steel plates with 500 x 500 x 12 mm (19 11/16" x 19 11/16" x 1/2") for the guying of the playhouse. Anti-corrosion treatment and colour finish: sandblasting and solvent-free epoxy-/polyester-process.

Center Supporting Point:

A steel post Ø 88,9 mm (3 1/2") and a wall thickness of 4 mm (3/16") on a steel base plate 500 x 500 x 12 mm (19 11/16" x 19 11/16" x 1/2"). Anti-corrosion treatment and colour finish: sandblasting and solventfree epoxy-/ polyester-process.

Terranos Clamps:

The two-part Terranos® aluminium clamps are used in conjunction with the Frox connection for the height-adjustable connection of the ropes to the steel posts. When connecting stainless steel chains and steel posts, the clamps with Chrox connection are used.



Ropes:

U-Rope®-round strand ropes with galvanised steel cores and diameters of Ø 16 mm ($\frac{5}{8}$ "), Ø 18 mm ($1\frac{1}{16}$ ") and Ø 20 mm ($1\frac{3}{16}$ "). The external strands are covered with high abrasion-resistant and UV-resistant polyester-yarn (no Polypropylene).

Spatial Nets + Planar Nets:

The rope crossing points are localised with durable, forged aluminium-alloy cloverleaf rings, aluminium-alloy ball-knots, T-connectors and barrel-ferrule (no plastic connections) in situ-replaceable rope strands.

Net tunnel:

Net tunnel with in situ-replaceable square rungs comprised of stainless steel profile AISI304 (DIN 1.4301) and aluminium end caps with a Rope diameter of Ø 16 mm ($\frac{5}{8}$ ") and a mesh size of at least 120 x 120 mm ($4\frac{3}{4}$ " x $4\frac{3}{4}$ "). The rope crossing points are localised by durable, drop forged aluminium ballknots (no plastic).

Safety Net Frames:

Stainless steel tube frame with Ø 26,9 mm ($1\frac{1}{16}$ ") and a thickness of 2 mm ($\frac{1}{16}$ "), filled with stainless steel safety nets made of steel rope with Ø 1,5 mm ($\frac{1}{16}$ ") and a mesh size of 40 x 75 mm ($1\frac{3}{8}$ " x $2\frac{13}{16}$ "). The frame is fastened with cast aluminium clamps to the respective tubes in the main frame.

HDPE Roof and Wall Panels:

Dyed HDPE panels with a thickness of 19 mm ($\frac{3}{4}$ ") for the roofs and straight, 2-coloured walls and 10 mm ($\frac{3}{8}$ ") for the bent side walls. The surface is grained and all edges are rounded. The attachment is made by cast aluminium pipe clamps to the tubes in the main frame.

Bamboo Panels:

Bamboo strips 90 mm ($3\frac{1}{2}$ ") mounted on HDPE-panels with rounded edges, attached to the tubes of the framework with aluminium plate clamps.

Climbing Ropes:

Ropes with a diameter of Ø 18 mm ($1\frac{1}{16}$ ") and climbing knots made of durable hard rubber cylinders. The distance between the cylinders is approx. 300 mm ($11\frac{13}{16}$ "). The climbing knots are fixed to the rope by aluminium press clamps.

HDPE-Motifs:

Shaped design elements made from coloured HDPE panels with a thickness of 19 mm ($\frac{3}{4}$ ").

Ladder:

The ladder flanges are made out of stainless steel 60 x 30 mm ($2\frac{3}{8}$ " x $1\frac{3}{16}$ ") with steps of Bamboo strips with a width of 90 mm ($3\frac{1}{2}$ ").

Slide:

The tubular slide is made of stainless steel. The side walls are welded with stainless steel tubes, ground and polished, fastened with cast aluminium plate clamps to the respective tube in the main frame.