

# Univers

## Lunia M Product Specifications



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### Lunia M

Big dreams, big freedom – our new Lunia makes climbing wishes come true. It is available in three different sizes, from 9 metres to a height of almost 12 metres. The spatial net inside can be reached via different ascent possibilities, such as Climbing Plates or Rope Ladders. For even more fun in the three-dimensional climbing net, Flubber or Pendulum Seats can be added. Despite the large play volume, the play structure has a small foot print.

The textile membrane is dirt-repellent, 100 % recyclable and resistant to UV light. In addition, it protects the little climbers from the sun. Lunia can be used as a hot air balloon with basket or without a basket with the design of your choice. The membrane of the balloon is protected from vandalism by a safety grid surrounding the three-dimensional netting.



## 90.135.001

 Product Family	<b>Univers</b>
 Length x Width x Height (m) Length x Width x Height ("'-")	<b>4,7 x 4,7 x 9,0</b> <b>15-3 x 15-3 x 29-7</b>
 Protective Surfacing Area acc. to DIN EN 1176 (m) Protective Surfacing Area acc. to ASTM/CSA (m) Protective Surfacing Area acc. to ASTM/CSA ("'-")	<b>7,9 x 7,9</b> <b>6,7 x 6,7</b> <b>21-10 x 21-10</b>
 Fall Height acc. to EN 1176 (m) Fall Height acc. to ASTM/CSA ("'-")	<b>2,89</b> <b>9-6</b>
 Age	<b>5</b>
 Minimum Space required acc. to DIN EN 1176 (m <sup>2</sup> ) Minimum Space required acc. to ASTM 1487 (ft <sup>2</sup> )	<b>48.2</b> <b>374.4</b>
 Number of Foundations	<b>1</b>
 Concrete Volume C20/C25 (m <sup>3</sup> )*	<b>2.1*</b>
 Number of skilled Installers required	<b>3</b>
 Installation Time without Foundation	<b>24 hours</b>
 Dimensions of largest Part (m)	<b>0.6 x 0.6 x 6.4</b>
 Weight of heaviest Part (kg)	<b>850</b>
 Shipping Volume (m <sup>3</sup> )	<b>On request</b>
 Total Weight (kg)	<b>On request</b>
 Spare Part Guarantee	<b>Lifelong</b>

The dimensions of the equipment and protective surfacing area have been rounded up to one decimal digit.

\* The foundation size refers to a project in wind zone 3 according to EN 1991-1-4.

### Technical Data

Technical changes are reserved. The following text can also be used for tenders.

#### Central Mast:

A steel post with a diameter of Ø 273 mm (10 ¾") and a wall thickness of 20 mm (13/16").

#### Tubes:

A combination of Frameworx® steel tubes with diameters of Ø 60.3 mm (2 ¾"), Ø 48.3 mm (1 7/8") and Ø 26.9 mm (1 1/16") are used in the entrance area, ascent and balloon.

#### Support Structure:

Hollow steel profiles measuring 80 x 80 mm (3 1/8" x 3 1/8") and steel sheets with a thickness of 10 mm (3/8") form the support structure.

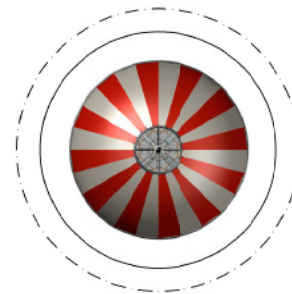
#### Balloon Rings:

The three balloon rings for tensioning the membrane are made of stainless-steel tubing with diameters of Ø 60.3 mm (Ø 2 ¾") and Ø 48.3 (Ø 1 7/8").

#### Balls:

The Frameworx®-aluminium ball connectors with a diameter of Ø 250 mm (9 13/16") are in combination with spatial nets equipped with the internal, patented AstemTT® tensioning system. They are all securely closed with durable EPDM caps.

**The mast, tubes, support structure and balls are colour powder-coated in a solvent-free epoxy-polyester stoving process and partially thermally galvanised.**



#### Ropes:

U-Rope®-round strand ropes with galvanised steel cores and diameters of Ø 16 mm (5/8"), Ø 18 mm (13/16"), and Ø 20 mm (13/16"). The external strands are covered with high abrasion-resistant and UV-resistant polyester-yarn (no Polypropylene).

#### Spatial Net:

The net structures are fixed at the rope crossing points by durable aluminium parts such as cloverleaf ring, forged ball knot, T-connectors and barrel-ferrule (no plastic). Spatial nets are low in follow-up costs due to individually replaceable rope strands.

#### Planar Nets:

The narrow- and wide-mesh planar nets are permanently fixed at the rope crossing points by durable, drop-forged aluminium ball knots (no plastic) and fastened to the main structure with aluminium pipe clamps.

#### HPL:

HPL panels with a thickness of 18 mm (11/16") and anti-slip surface are used in the access and ascent areas. They are attached with aluminium panel clamps.



**Safety Nets & Grid Frames:**

The stainless-steel safety nets in the access area are made of steel cable with  $\varnothing$  1.5 mm ( $\frac{1}{16}$ " ) and mesh size of 40 x 75 mm ( $1 \frac{1}{16}$ " x  $2 \frac{15}{16}$ " ). They are connected to the corresponding tubes by wrapping. The stainless-steel wire of the mesh frames in the balloon area has a thickness of 4 mm ( $\frac{3}{16}$ " ) and mesh size of 40 x 40 mm ( $1 \frac{1}{16}$ " x  $1 \frac{1}{16}$ " ). They are fixed with cast aluminium pipe clamps.

**GRP Rods:**

Round rods made of glass-fibre reinforced plastic are used to brace the balloon skin. The diameter is  $\varnothing$  16 mm ( $\frac{5}{8}$ " ).

**Textile Membrane:**

UV light and wind load resistant membrane fabric made of high technology mesh fabric – printable, stain resistant and recyclable.

**Rope Ladder:**

Ropes with a diameter of  $\varnothing$  16 mm ( $\frac{5}{8}$ " ) and black rungs made of durable polyamide round material with  $\varnothing$  40 mm ( $1 \frac{1}{16}$ " ).

**Climbing Rope:**

Rope with a diameter of  $\varnothing$  18 mm ( $\frac{11}{16}$ " ) is equipped with climbing knots made of durable hard rubber (not plastic). These are fixed with aluminium press clamps.