

WALLTOPIA

Outdoor Premium Climbing Walls

Technical Data Sheet



CopenHill, Copenhagen, Denmark
The highest climbing wall in the world at 80m

Panel specification

PANEL MATERIAL



- **20 mm plastic reinforced composite** climbing panel with sand textured surface for optimal friction and durability.
- **Panel joints** are designed without sealing systems between panels.

ALTERNATIVE PANEL OPTION AVAILABLE:

- **10-12mm fiberglass** panels

OUTDOOR PANELS MATERIAL COMPARISON TABLE

	Outdoor Premium Panels	Fiberglass Panels	Exterior Plywood Panels
Durability	●●●●●	●●●●●	●●●●●
Impact Resistance	●●●●●	●●●●●	●●●●●
Water Resistance	●●●●●	●●●●●	●●●●●
Infiltration Resistance	●●●●●	●●●●●	●●●●●
Fire Resistance	●●●●●	●●●●●	●●●●●
Heat Resistance	●●●●●	●●●●●	●●●●●
Reaction to Fire according to EN 13501-1	B-s1, d0	B-s1, d0	D-s1, d0
Quality Management System	ISO 9001:2015	ISO 9001:2015	ISO 9001:2015
Compliance with EN 12572 Climbing Walls Standard	✓	✓	✓
Stainless Steel T-nuts	✓	✓	✓
Hot Dip Galvanized Steel Support Structure	✓	✓	✓
Type of Panels	Flat	Flat, Curved, Rocktopia	Flat
Easy Screwing of Volumes	●●●●●	●●●●●	●●●●●
Production Speed	●●●●●	●●●●●	●●●●●
Production Precision with CNC Machines	●●●●●	●●●●●	●●●●●
Production Color Consistency with Automatic Robot Painting	●●●●●	●●●●●	●●●●●
Installation Speed & Precision	●●●●●	●●●●●	●●●●●
Maintainence	●●●●●	●●●●●	●●●●●

Panel specification

PANEL COLOR OPTIONS

Off-white	Pebble	Lagoon	Flamingo	• RAL 9003 Off-white	• RAL 6018 Grass Green
Light Grey	Yellow	Turquoise	Violet	• RAL 7001 Silver Grey	• RAL 6016 Dark Green
Silver	Melon	Fresh Green	Sky Blue	• RAL 1014 Beige	• RAL 5018 Turquoise
Graphite	Orange	Grass Green	Indigo	• RAL 1020 Olive	• RAL 5015 Sky Blue
Black	Red	Brazilian	Capri Blue	• RAL 1018 Yellow	• RAL 5002 Indigo
				• RAL 2003 Orange	• RAL 4005 Violet
				• RAL 8004 Brown	• RAL 7043 Graphite
				• RAL 3020 Red	• RAL 9005 Black

**slight color variations are possible due to texturing process*

PANEL SIZE

- **Thickness:** 16 mm
- **Dimensions:** Project-specific; the standard panel format is 1500 x 1500 mm

PANEL STRENGTH

- **Elastic Ultimate Strength:** >80 Mpa
- **Tensile Strength:** >60 Mpa
- **Density:** >1.35 g/cm³

Reaction to fire according to EN 13501-1:2018 Standard

- **Standard:** C-s1,d0
- **Also available in:** B-s1, d0

FIBERGLASS PANELS

		LS FIRE TESTING INSTITUTE S.p.A. Via Regione, 11 20121 Segrate (MI) - Italy Tel. 02/57 80 00 00 - Fax 02/57 80 00 01 Email: info@lsfire.it - Website: www.lsfire.it
Organismo notificato n° 2479 - Notifica CE 2013/53		
ATTESTAZIONE DI CLASSIFICAZIONE STATEMENT OF CLASSIFICATION per i prodotti da costruzione / for construction products secondo le procedure descritte in / according to procedures defined in EN 13501-1:2018		
(Certificazione di base dei prodotti a base di polimeri inorganici - Base 1 - Classificazione in base ai risultati delle prove di reazione al fuoco) (Fire classification of inorganic polymer-based construction products - Base 1 - Classification based on the results of fire reaction tests)		
1. Introduzione Introduction Questo rapporto di classificazione definisce la classificazione assegnata a WALLTOPIA FIBERGLASS PANELS secondo le procedure indicate nella norma EN 13501-1:2018. This classification report defines the classification assigned to WALLTOPIA FIBERGLASS PANELS in accordance with the procedures given in EN 13501-1:2018.		
Proprietà del prodotto: Prodotto da: Organismo notificato n°: Indirizzo base, Via: Nome del prodotto: Prodotto come: Rapporto di classificazione n°: Classificazione report No.: Numero di revisione: Data di emissione: Data di ritiro:	WALLTOPIA AD 111V Tangarolite stone brick, 800 x 780 mm E - N Fire Testing Institute Srl via della Bonifica, 4 I - 48019 Castiglione (TE) 2479 WALLTOPIA FIBERGLASS PANELS LS FIRE / NC 11042 01 04.04.2019 04.04.2019	Classificazione / Classification Classificazione di reazione al fuoco: Reaction to fire classification:
		B - s1, d0

Class B-s1, d0 [View Certificate](#)

Panel specification

T-NUT INSERT



- Available in both stainless steel and galvanized steel
- Available in self-guided option upon request
- Available in metric and imperial version
- Light and thicker flange
- Complaint with EN 12572-1:2017 standard for Artificial Climbing Structures
- Fixed with two 8.8 hardness galvanized screws for wood to prevent from turning the climbing holds



Walltopia T-nut TUV certified

T-nut Density:

- 25 T-nuts per sqm for rope walls
- 36 T-nuts per sqm for boulders
- Speed Wall T-nut density is higher according to World Climbing official speed wall certification
- Other custom T-nut grids and densities are available upon request

ROPE PROTECTION



- Metal strips on sharp edges according to EN 12572-1:2017 standard for Artificial Climbing Structures
- Extends the life of the rope
- Protects the protruding angles from the rope friction
- Made of smooth stainless steel preventing rope abrasion
- Sleek, unobtrusive design: no visible screws

Structural specification

SUBSTRUCTURE MATERIAL

Bolted hot dip galvanized steel structure. Pre-manufactured. No welding is done in situ.

STEEL SIZE

- Subject to project-specific structural engineering.
- Typically constructed from rectangular steel profiles with adjustable telescopic arms ranging from 200 to 1600 mm. Main columns are spaced approximately 1.2 m apart.



INDIVIDUAL PROTECTION POINTS

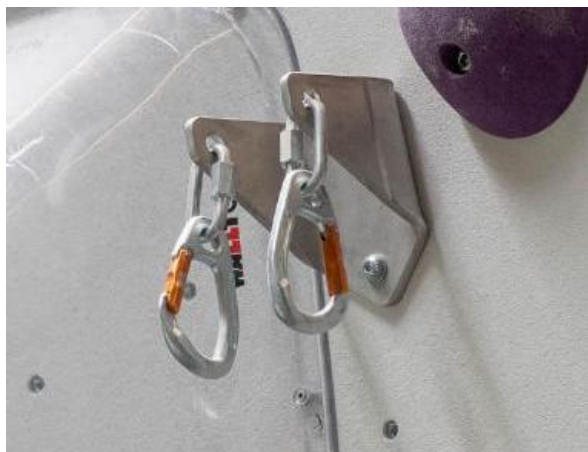


- Stainless steel
- Preserves the quick link
- Prevents the risk of unexpected unscrewing
- Safety for the climber: no sharp edges
- Complaint with EN 12572-1:2017 standard for Artificial Climbing Structures
- TÜV Germany certified: 36.9 kN (axial) / 31.7 kN (radial) .

[Walltopia Load Testing
Protection Points
EN12572](#)

Top belay stations

STANDARD: TOP ANCHOR



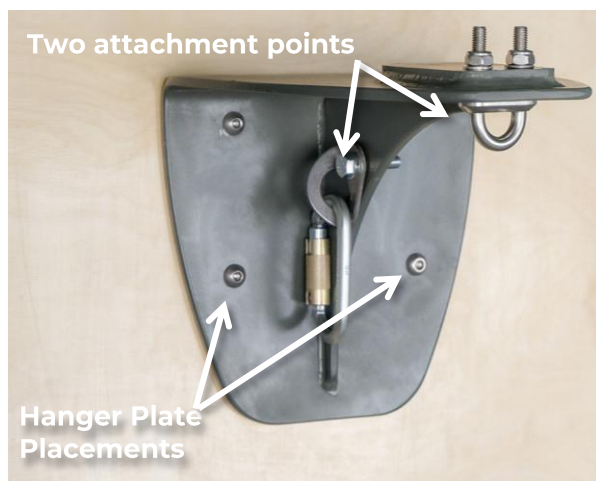
- Stainless Steel
- Keeps the carabiners and the rope at a distance from the wall
- No friction between the rope and the wall texture
- Carabiners and maillons are replaceable
- Good for both lead and top rope climbing
- Available for indoor and outdoor use
- Suitable for any wall inclination including big overhangs and roofs as well as slabs.

BELAY BAR



- Doubles the life of the ropes
- Reduces the effort in the process of belaying
- Has two carabiners to serve as a top station for lead climbing
- Curved sides allow movements that require an offset to the left or right of the climbing line
- Made of stainless steel – suitable for indoor and outdoor use

AUTO BELAY TOP PLATE



- Specially designed for auto belays
- Dual redundancy according to standards and requirements of auto belay manufacturers
- Option to add carabiners for top rope climbing during the annual auto belay inspection or when route setting

Figure 1 consists of three diagrams labeled (a), (b), and (c) showing the details of the test specimens. Diagram (a) is a side view showing a rectangular specimen with a width of 100mm and a height of 100mm. It features a central vertical reinforcement bar (labeled 'Steel anchor M16, 100') and a horizontal reinforcement bar (labeled 'Steel anchor M12, 100'). The specimen is supported by a base (labeled 'Concrete'). Diagram (b) is a top view showing a rectangular specimen with a width of 100mm and a height of 100mm. It features a central vertical reinforcement bar (labeled 'Steel anchor M16, 100') and a horizontal reinforcement bar (labeled 'Steel anchor M12, 100'). The specimen is supported by a base (labeled 'Concrete'). Diagram (c) is a cross-section showing a rectangular specimen with a width of 100mm and a height of 100mm. It features a central vertical reinforcement bar (labeled 'Steel anchor M16, 100') and a horizontal reinforcement bar (labeled 'Steel anchor M12, 100'). The specimen is supported by a base (labeled 'Concrete').

[illegible][illegible]

Figure 1: Schematic diagram of the experimental setup. The diagram is divided into two sections: 'EXPOSURE UNIT' and 'EXPOSURE UNIT' (likely a typo for 'EXPOSURE UNIT' or 'EXPOSURE UNIT'). The 'EXPOSURE UNIT' section shows a 'Thickened and AlTi2Si3' layer (100 nm) on a 'Chemical substrate' (200 nm), with a 'Wafer' (300 nm) and a 'Wafer' (300 nm) below it. The 'EXPOSURE UNIT' section shows a 'Thickened and AlTi2Si3' layer (100 nm) on a 'Chemical substrate' (200 nm), with a 'Wafer' (300 nm) and a 'Wafer' (300 nm) below it.

Figure 1 consists of two diagrams illustrating the correct and incorrect installation of the 1000 Series LED strip. The top diagram, labeled "Correct installation", shows the LED strip mounted vertically. It includes labels for "Working Power", "Working Voltage", and "Working Current". The bottom diagram, labeled "Incorrect installation", shows the LED strip mounted horizontally, which is incorrect. Both diagrams include labels for "Working Power", "Working Voltage", and "Working Current".

Figure 1 consists of two schematic diagrams, (a) and (b), illustrating the geometry of the test specimens. Both diagrams show a cross-section of a specimen with a base width of 100 mm and a thickness of 10 mm. The top section has a width of 10 mm. Diagram (a) shows a specimen with a 10 mm wide base, 10 mm thick, and a 10 mm wide top section. Diagram (b) shows a specimen with a 100 mm wide base, 10 mm thick, and a 10 mm wide top section. The diagrams are labeled with dimensions and material properties.

[illegible]