WALLTOPIA

Outdoor Premium Climbing Walls

Technical Data Sheet



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

General Info

APPLICABLE STANDARDS

- **EN 12572-1:2017** *Artificial climbing structures - Part 1: Safety requirements and test methods for ACS with protection points*
- **EN 12572-2:2017** *Artificial climbing structures - Part 2: Safety requirements and test methods for bouldering walls*
- **EN 1993 (Eurocode 3)** *Design of steel structures*
- **EN 1991-1-1:2025** *Actions on structures - Part 1-1: General actions - Densities, self-weight, imposed loads for buildings*
- **EN1991-1-3:2025** *Actions on structures - Part 1-3: General actions - Snow loads*
- **EN1991-1-4:2026** *Actions on structures - Part 1-4: General actions - Wind actions*

PRODUCTION STANDARDS

- **ISO 9001:2015** *for design, engineering, production, sales, installation and after-sale servicing of Artificial Climbing*


Certificate

Standard: ISO 9001:2015

Certificate Holder: WALLTOPIA AD

Scope: Design, engineering, production, installation and after-sales service of rope course, adventure facilities, Rollglider, artificial climbing structures. Production of rope course, adventure facilities, Rollglider, artificial climbing structures.

Validity:

2024-08-02

Walltopia ISO 9001 Certificate


Certificate

WALLTOPIA AD

ISO 50001:2018

Walltopia ISO 50001 certificate


Welding Certificate

Walltopia TUV Welding Certificate


Certificate

Conformity of the Factory Production Control

Structural components and kits for steel structures Execution Class up to EXC3 according to EN 1090-2

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



- **RAL 9003 Off-white**
- **RAL 7001 Silver Grey**
- **RAL 1014 Beige**
- **RAL 1020 Olive**
- **RAL 1018 Yellow**
- **RAL 2003 Orange**
- **RAL 8004 Brown**
- **RAL 3020 Red**
- **RAL 6018 Grass Green**
- **RAL 6016 Dark Green**
- **RAL 5018 Turquoise**
- **RAL 5015 Sky Blue**
- **RAL 5002 Indigo**
- **RAL 4005 Violet**
- **RAL 7043 Graphite**
- **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



ATTESTAZIONE DI CLASSIFICAZIONE
STATEMENT OF CLASSIFICATION

EN 13501-1:2018

WALLTOPIA AD
111V Tsarigradsko shose blvd.
BG - 1784 Sofia

L. S. Fire Testing Institute Srl
via della Bonifica, 4
I - 64010 Controguerra (TE)

2479

WALLTOPIA FIBERGLASS PANELS

LSFIRE / NC 11042

01

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





Walltopia T-nut TUV certified

- 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

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
- Protectc 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



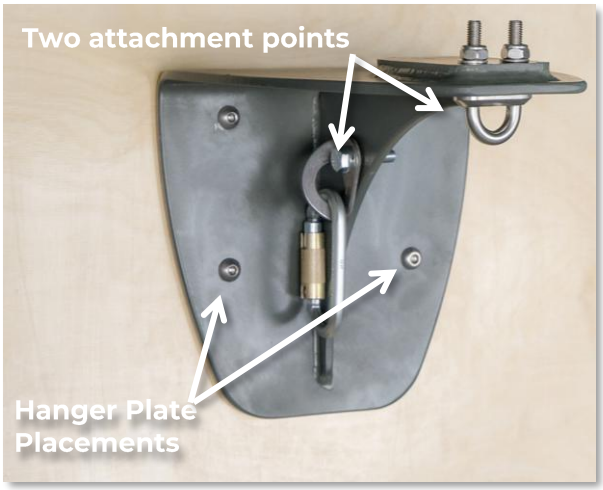
- Stainless Steel
- Keeps the carabiners and the rope at a distance from the wall
- No friction between the rope and the wall texture
- Carabiners and maillons are replaceable
- Good for both lead and top rope climbing
- Available for indoor and outdoor use
- Suitable for any wall inclination including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

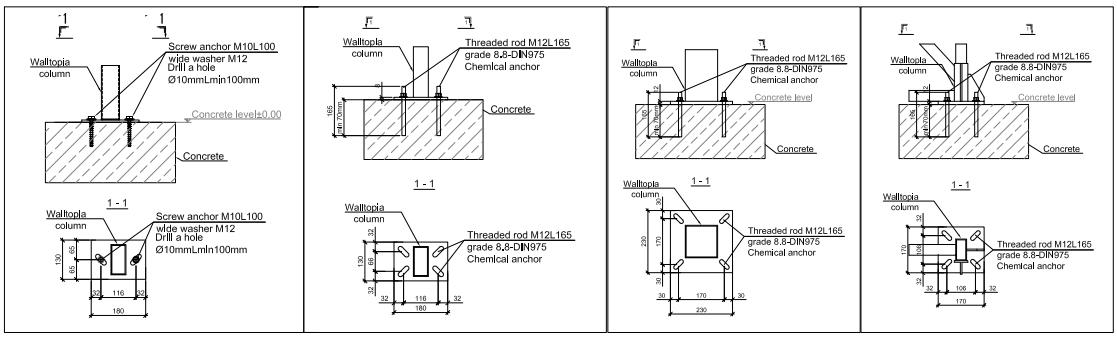
AUTO BELAY TOP PLATE



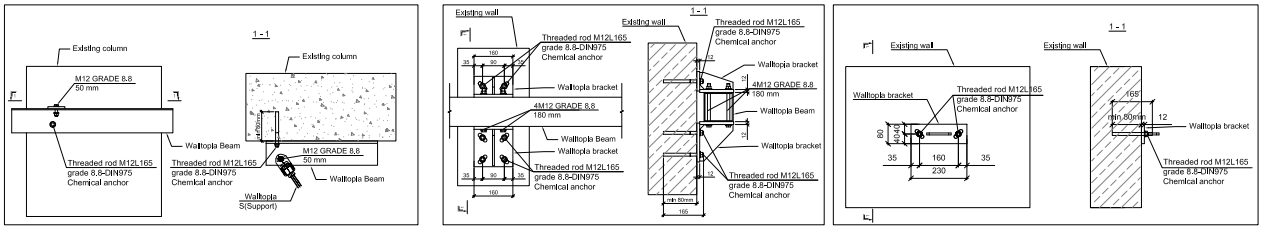
- Specially designed for auto belays
- Dual redundancy according to standards and requirements of auto belay manufacturers
- Option to add carabiners for top rope climbing during the annual auto belay inspection or when route setting

Structural attachment

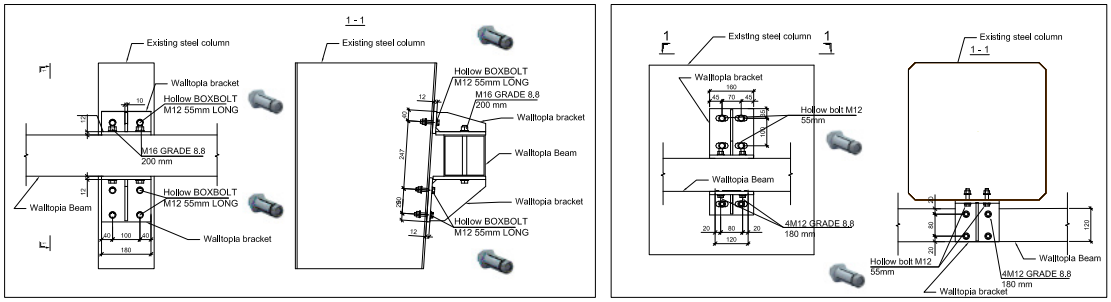
Concrete floor



Concrete wall



Steel column



Steel beam

