
Cloud Climb Operations and Maintenance Manual





WARNING: OPERATORS OF THESE FACILITIES MUST READ THIS GUIDE AND COMPLETELY UNDERSTAND ALL REQUIREMENTS AND ADHERE TO MAINTENANCE GUIDELINES.

The Cloud Climb is a safe, three-dimensional climbing structure, design for children. Operators are responsible for following all applicable regulations regarding the use of the product.

The Cloud climb activities are designed and built in accordance with EN 1176 - Playground Safety Standards.

Before using the Cloud Climb, inspect all equipment daily and replace any part or component that appears damaged, worn, or otherwise fails to pass inspection. Operators are responsible for the proper maintenance of Walltopia products.

If the product is not directly purchased from Walltopia, then the distributor, wholesaler, or retailer is responsible for providing this manual to the customer.



WARNING: Improper use, abuse, and/or lack of proper maintenance increases the risk of serious injury or death and voids any warranty.

If there is any doubt about the safety of an obstacle, immediately stop using the obstacle and contact the manufacturer or authorized representatives.

Table of Contents

Table of Contents	iii
Introduction	5
<i>Audience</i>	5
<i>Models</i>	6
<i>Safety Standards</i>	7
Safety Rules	9
Environment.....	9
Clothing.....	10
Supervisors.....	10
Inspections and Maintenance.....	12
Inspections	13
<i>Daily Inspections</i>	13
Required Items.....	13
To inspect the nets:.....	13
<i>Weekly Inspections</i>	16
Required Items.....	16
To inspect the wire ropes:.....	16
To inspect the bolts, nuts, and shackles:.....	18
To inspect the turnbuckles:.....	19
To inspect the platforms:.....	19
<i>Monthly Inspections</i>	20
Required Items.....	20
To inspect the steel structure:.....	20
<i>Annual Inspections</i>	21
Operation	22
<i>Operating the Cloud Climb</i>	22
Supervising the Cloud Climb.....	22
To greet and start the participants:.....	22
Emergency Procedures.....	23
To manage a minor emergency:.....	23
To manage a major emergency:.....	23
To evacuate in the event of a fire:.....	24
Warranty Claims and Service Requests	25
Forms	26
<i>Walltopia Service Request Form</i>	27
<i>Walltopia Daily Inspection Checklist</i>	29
<i>Walltopia Weekly Inspection Checklist</i>	30
<i>Walltopia Monthly Inspection Checklist</i>	32

Walltopia Service and Maintenance Log 33

Introduction

The Cloud Climb is a multi-story climbing structure, which is a cross between a maze and a jungle gym. It is a three dimensional sculpture specially designed for climbing. Platforms suspended from steel pipes and cables let visitors traverse over, under and through the structure. The thrill of heights can be experienced without any belaying system at all by taking the participant through climbing structure, protected by safety nets.

During operation at the same time is allowed to have one participant on a platform.

Optionally, the Cloud Climb can include a slides and houses with different activities.



WARNING: Climbing the net prohibited!

Audience

This guide describes safety, operations, and inspection procedures for Cloud Climb. It is intended for owners and operators of sports and entertainment facilities and their operating and service personnel.

All personnel operating the Cloud Climb must:

- read and understand the Safety Rules on page 9.
- conduct daily, weekly, and monthly inspections, completing, signing, and dating the inspection checklist before opening the Cloud Climb for operation.
- immediately stop use and notify management when detecting damage to a platform, safety net or structural element.
- notify management of pending routine service for the facility.

Models

- Cloud climb



Enhanced with a slide



Together with an Adventure Trail



Platforms	Plywood
Safety Nets	Stainless steel
Age Group	4 -12 years
Height of the participant	Max 150 cm
Weight of the participant	Max 70 kg
Moment capacity	One child per platform
Required Staff Members	1 staff required
Inspection	You must perform daily, weekly, and monthly inspections.
Intervals	Perform your first weekly inspection no later than 7 days from the installation date. You must perform monthly inspections no later than 30 days from the date of the

Safety Standards

Cloud Climb meet these safety standards:

Component	Standards
Facility	<p>EN 1176 -1:2017 – Playground equipment and surfacing – Part 1:General safety requirements and test methods</p> <p>EN 1176 -10:2008 – Playground equipment and surfacing – Part 10: Additional specific safety requirements and test methods for fully enclosed play equipment.</p>
Slide	EN 1176 -3:2017 – Playground equipment and surfacing – Part 3:Additional specific safety requirements and test methods for slides

Steel Supporting
Structure

EN1990 – Basis of structural design

EN1991-1-1: Actions on structures - Part 1-1: General actions - Densities, self-weight, imposed loads for buildings

EN1992-1-1: Design of concrete structures - Part 1-1: General rules and rules for buildings

EN 1992-4-1 - Design of fastenings for use in concrete: Part 4-1: General

EN 1992-4-2 - Design of fastenings for use in concrete: Part 4-5: Post-installed anchors

EN1993-1-8: Design of steel structures

EN1993-1-1: Part 1-1: General rules and rules for buildings (includes Corrigendum AC: 2009) English translation of DIN EN 1993-1-1:2010-12

EN1995-1-1: Design of timber structures - Part 1-1: General - Common rules and rules for buildings - Part 1-8: Design of joints

Safety Rules

Ensure that these instructions are always accessible and keep one set of instructions in the immediate



WARNING: Only use the Cloud Climb as instructed in this guide and only for its intended purpose. If malfunction is suspected, stop operating the Cloud Climb and inspect the facility. The manufacturer is not liable for

vicinity of the Cloud Climb.

Environment

Follow these guidelines to ensure that your Cloud Climb is ready for operation:

- Outdoor Cloud Climb must be closed during rain, snow, thunderstorms, or other adverse weather.
- Only open the Cloud Climb after all regular inspection checks are complete.
- Restrict access to the facility to participants.
- Display the safety requirements for participation (in written and graphic form) and entrance and exit signs where they can be seen clearly by participants.
- Ensure that any protrusions or objects in the vicinity of the facility:
 - Are not in the participant's way.
 - Have no sharp edges.
 - Are marked in a bright color.
- Ensure that your behavior or actions do not threaten the safety or enjoyment of others.
- Please note: Should the need arise, parents may enter Cloud Climb with permission from the staff to assist a child in their care.

Do not allow participants who report having any of the following medical conditions within the last six months to use the Cloud Climb:

- surgery
- fainting or bleeding
- dislocation or fracture of a limb

- heart condition
- high blood pressure

Do not allow participants who are intoxicated, under the influence of drugs, or have any other condition that places them at risk to use the course.

Participants must:

- Listen to supervisors and follow instructions.
- Inform a supervisor if they feel unwell, tired, or cannot complete the route.
- Don't run or jump- just walk / crawl from platform to platform
- Wait on the platform until the previous participant has gone to the next.
- Don't use the net to assist balance
- Don't use the net for climbing

Clothing

Ensure that participants meet these clothing and personal grooming requirements:

- Tie back long hair.
- Suitable shoes must be worn. Flip flops are not recommended.
- Recommend that children wear long sleeves and trousers.
- Clothing with neck cords is not suitable and should not be worn. Wear comfortable sports clothing.
- Possessions such as mobile phones, small toys, coins etc. should not be taken on Cloud Climb
- No dangling jewelry, such as watches, necklaces, or bracelets.
- Food and drink cannot be taken or consumed on Cloud Climb.
- We highly recommend that parents of younger children ensure that the toilet has been visited before Cloud Climb is used! It's a long way down!

Supervisors

Ensure that your supervisors:

- Know, understand, and are physically capable of performing the operating procedures described in this document.
- Are fully trained in the correct use of each obstacle.
- Are at least 18 years of age.
- Are not under the influence of alcohol, drugs, medication, or any substance that alters perception, cognitive ability, awareness, or reflexes.
- Observe participants at all times.



WARNING: Ensure that participants:

- do not run
 - do not jump

Inspections and Maintenance

Only trained personnel can perform daily, weekly, and monthly inspections. If they consider any component worn or faulty, ensure that they know to close that attraction, record it in the log, and report it to the supervisor.

In the event of any damage to a Cloud Climb, stop using the attraction and contact your distributor or manufacturer.

Inspections

Supervisors must perform daily, weekly, and monthly inspections before opening the Cloud Climb for use.



WARNING: If you detect a fault in a platforms or nets, immediately

Perform all inspections outside normal operating hours.

Daily Inspections

Supervisors must perform the daily inspections before opening the Cloud Climb for daily operation and enter the results in the [Daily Inspection Checklist](#). Retain all daily inspection checklists in your [Service and Maintenance Log](#).



WARNING: You must perform all inspections on schedule.

Do not skip or overlook any step described in this section. Failure to

Print the [Walltopia Daily Inspection Checklist](#) and post in an obvious place for completion by your supervisors.

Required Items

- Digital camera
- Measuring tape

To inspect the nets:

1. Inspect each net.
 2. Photograph the following issues and notify the manufacturer:
 - wear or tear of the nets
 - loosen knot / loosening of the rope lay
 - excessive abrasion
-

- broken strands
- kinks
- wear or tear of the lashing ropes around the supporting structure

To inspect the combined ropes:

- Inspect each rope.
- Photograph the following issues and notify the manufacturer:
 - distortion of the connection such as bent automatic dead-end bails or bolts, or broken wires
 - excessive flattening
 - excessive abrasion
 - loosening of the rope lay
 - breaking in the inner strands
 - corrosion (evidence of rust pitting or flaking)
 - kinks
 - exposure of the wire core between the external strands

Weekly Inspections

Supervisors must perform the following inspections every seven days starting from the date of commissioning of the Walltopia Cloud Climb and after performing the regular daily inspection. Enter the results in the [Walltopia Weekly Inspection Checklist](#). Retain all weekly inspection checklists in your [Service and Maintenance Log](#).

WARNING: Perform monthly inspections on schedule:



- No later than 7 days from the installation date.
- No later than 7 days after each weekly inspection.

Do not skip or overlook any step described in this section. Failure to perform these inspections can result in serious injury or even death.

Print the [Walltopia Weekly Inspection Checklist](#) and post in an obvious place for completion by your supervisors.

Supervisors must inspect the platforms and the cables weekly before opening the Walltopia Cloud Climb for daily operation.

Required Items

- Digital camera
- Wrench 16/17 for bolts M10
- Measuring tape

To inspect the wire ropes:

1. Inspect each rope.

See Figure for typical rope defects.

2. Photograph the following issues and notify the manufacturer:

- distortion of the connection such as bent automatic dead-end bails or bolts, or broken wires
- excessive flattening
- excessive abrasion
- loosening of the rope lay
- breaking in the inner strands

- corrosion (evidence of rust pitting or flaking)
- kinks
- exposure of the wire core between the external strands



Figure 6. Typical steel cable damages



Figure 7. Damage to Aluminum Ferrule

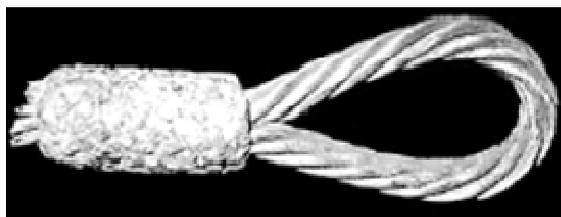


Figure 8. Corroded Aluminum Ferrule

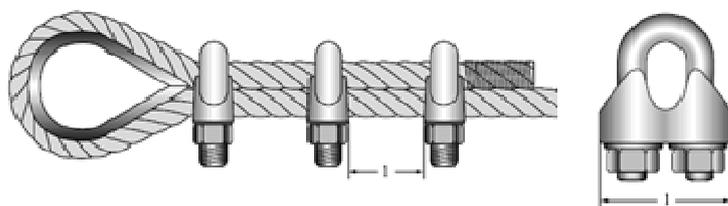


Figure 9. Correct Orientation for Rope Clips

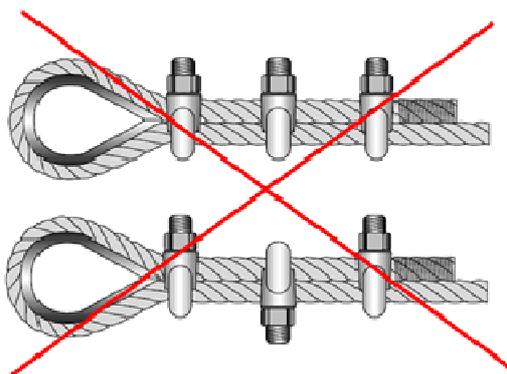


Figure 10. End Connection with Incorrectly Fitted Rope Clips

To inspect the bolts, nuts, and shackles:

1. Inspect the bolts, nuts, and shackles.

2. Photograph the following issues and notify the manufacturer:

- deflection or distortion under load
- bent or distorted eye bolts
- nicks, gouges, or cracks
- wear or abrasion
- pitting due to corrosion
- evidence of heat damage and discoloration (for example, from a lightning strike or fire)

To inspect the turnbuckles:

1. Inspect the turnbuckles.

2. Photograph the following issues and notify the manufacturer:

- deflection or distortion under load
- bent jaws and bolts
- cracks
- pitting due to corrosion

3. Tighten any loose nuts.

4. Tighten any steel-threaded jaws that have become unscrewed from the turnbuckle body.

To inspect the platforms:

1. Inspect the platforms.

2. Photograph the following issues and notify the manufacturer:

- cracks longer than the width of the element or deeper than 30% of the element
- excessive wear on the surfaces
- broken pieces or sharp edges or protruding elements
- pockets of decay

Monthly Inspections

Supervisors must perform the following inspections every thirty days starting from the date of commissioning of the Walltopia Cloud Climb and after the regular daily and weekly inspections. Enter the results in the [Walltopia Monthly Inspection Checklist](#). Retain all monthly inspection checklists in your

WARNING: Perform monthly inspections on schedule:



- No later than 30 days from the installation date.
- No later than 30 days after each monthly inspection.

Do not skip or overlook any step described in this section. Failure to perform these inspections can result in serious injury or even death.

[Service and Maintenance Log](#).

Print the [Walltopia Monthly Inspection Checklist](#) and post in an obvious place for completion by your supervisors.

Required Items

- Digital camera
- Measuring tape
- Wrench 24 for bolt M16
- Various sizes of brushes with natural bristles for cleaning

To inspect the steel structure:

1. Inspect the steel structure.
2. Photograph the following issues and notify the manufacturer:
 - deflection or deformations in structural elements
 - cracks in steel members
 - cracked or broken welds
 - rust pitting or flaking due to corrosion
3. Replace missing nuts, bolts, and washers.
4. Check torque marks, tighten loose nuts, and reapply the torque marks.
5. Clean the entire facility using brushes with natural bristles.

Annual Inspections

Walltopia authorized personal or a certified institution must inspect the facility every 12 months from the



WARNING: Failure to inspect and maintain the attraction at the required time intervals can result in serious injury, property damage, or even death and may be prosecutable as a criminal or regulatory offence

date of installation.

The scope of the annual inspection includes:

- Nets
- Cables
- Supporting Structure
- Slide

Operation

Operating the Cloud Climb

The Walltopia Cloud Climb must be supervised by trained personnel. Complete [daily inspections](#) before opening the facility



WARNING: Only trained personnel can supervise the Walltopia Cloud Climb.

Supervising the Cloud Climb

Welcome participants, check their measurements and clothing and start them on the Cloud Climb

To greet and start the participants:

1. Welcome the participant and gather the following information:
 - Age
Participants must be at least 4 years old.
 - Height
Max 150cm
 - Weight
No restrictions
 - Health
Ask if the participant has a heart condition, high blood pressure, or had recent surgery.
For more information, see the [safety rules for participants](#).
2. Brief the participant about the structure.
 - Explain how to use the slide according to document “SLIDE MAINTENANANCE MANUAL-1”
 - Explain what to expect at the end of the Cloud Climb.
3. Observe the participant’s progress and provide advice or assistance if necessary.



WARNING: Ensure that participants:

- do not run
- do not jump

Emergency Procedures



WARNING: All staff members must be familiar with the emergency

A minor emergency is an incident that does not involve a life-threatening situation and can usually be dealt with by a member of staff trained in first aid. A major emergency involves a serious injury or life-threatening situation. In the event of a major emergency, immediately stop all activities in the facility and contact emergency services.

It is recommended that at least one staff member with certified first aid training is on site during operating hours.

To manage a minor emergency:

1. Request a member of staff to cover your duties while you deal with the incident.
2. Notify other supervisors and team members of the incident.
3. Notify the Duty Manager as soon as possible.
4. Provide first aid or other appropriate assistance.
5. Complete an [Incident/Accident Report Form](#).
6. Return to duty when the incident is over.

To manage a major emergency:

1. Notify the Duty Manager immediately and stop all current activities.
2. Notify other supervisors and team members of the incident.
3. Initiate a rescue operation or first aid as necessary.
4. Prevent a crowd from gathering around the casualty.
5. The Duty Manager must:
 - Instruct a member of staff to call emergency services.
 - Designate a member of the staff to meet the emergency personnel at the entrance and usher them directly to the incident.
 - Complete an [Incident/Accident Report Form](#).
 - Notify the facility manager.

- Collect written witness testimony if possible and if necessary.

To evacuate in the event of a fire:

1. Activate a fire alarm.
2. Notify other staff members.
3. Call emergency services.
4. Request members of the public to evacuate immediately in an orderly manner, while being cautious not to cause panic.
5. Guide members of the public to the assembly point.
 - Do not allow members of the public to collect personal items from other areas of the facility.
 - Do not allow members of the public to enter the facility.
 - Do not enter the facility until instructed to do so by the Fire Officer/Duty Manager after the evacuation is complete and the emergency is over.
6. The Duty Manager must:
 - a. Determine the zone where the alarm was activated.
 - b. Switch off electricity, excluding lighting.
 - c. Direct staff to carry out facility evacuation.
 - d. Check that all staff and visitors are present and accounted for.
 - e. Take all relevant lists from Reception for cross checking at the assembly point.
 - f. Provide all relevant information to emergency services:
 - zones cleared
 - zones not cleared
 - staff members and participants not at the assembly point.



WARNING: If someone is suspected to be still in the facility, DO

Warranty Claims and Service Requests

To file a warranty claim or if you need service, complete the request form for the service or repair and send with all mandatory documents listed on the form to:

Walltopia Customer Service
111V Tsarigradsko Shose Boulevard
1784 Sofia
Bulgaria
E-mail: customerservice@walltopia.com

A warranty claim service must be performed as approved by Customer Service. Replacement hardware systems, components, or parts supplied under warranty are furnished freight prepaid. Any labor costs are limited to the amount of the original purchase price of the system and components. Products or parts replaced under warranty become the property of Walltopia and must be returned to Customer Service freight prepaid, unless prior arrangements have been made.

Forms

This section contains all Walltopia forms and checklists

Walltopia Service Request Form

Customer:	
Date:	
Location:	
Supervisor Name:	
Phone Number:	
Email:	
Model:	

This request is for:

Repairs and/or technical service

Replacement parts

The unit is:

Under warranty

Not under warranty

The operator is aware of the Operations Manual, understands its contents, and is familiar with the operations of the Walltopia Cloud Climb.

The problem is with:

Safety net:

Description of problem:

Submit copies of the following documents:

- Original signed Warranty card
- Service and Maintenance Log with entries for the last 3 months
- Last monthly checklist

So that we can provide the best service, complete this form and submit all required information and documents. Include photos of the problem.

- Last two weekly checklists
- Daily checklist for the last 14 days of operation

Walltopia Daily Inspection Checklist

Facility/Location:

Inspection performed by: (print name clearly) Date:

.....

Inspection Check	Circle Answer	Action if Answer is YES	Contact Manufacturer
Nets			
Wear or tear of the safety net	Y / N	Send photo to manufacturer.	Yes
Loosen knot / Loosening of the rope lay	Y / N	Send photo to manufacturer.	Yes
Excessive abrasion	Y / N	Send photo to manufacturer.	Yes
Broken strands	Y / N	Send photo to manufacturer.	Yes
Kinks	Y / N	Send photo to manufacturer.	Yes
Wear or tear of the lashing ropes along the path	Y / N	Send photo to manufacturer.	Yes
Combined ropes			
Distortion of connection (bent automatic dead-end bails or bolts, or broken wires)	Y / N	Send photo to manufacturer.	Yes
Excessive flattening	Y / N	Send photo to manufacturer.	Yes
Excessive abrasion	Y / N	Send photo to manufacturer.	Yes
Loosening of the rope lay	Y / N	Send photo to manufacturer.	Yes
Breakage of the inner wires	Y / N	Send photo to manufacturer.	Yes
Rust pitting or flaking due to corrosion	Y / N	Send photo to manufacturer.	Yes
Kinks	Y / N	Send photo to manufacturer.	Yes
Exposure of the wire core between the external strands	Y / N	Send photo to manufacturer.	Yes

Walltopia Weekly Inspection Checklist

Facility/Location:

Inspection performed by: (print name clearly) Date:

Inspection Check	Circle Answer	Action if Answer is YES	Contact Manufacturer
Wire ropes			
Distortion of connection (bent automatic dead-end bails or bolts, or broken wires)	Y / N	Send photo to manufacturer.	Yes
Excessive flattening	Y / N	Send photo to manufacturer.	Yes
Excessive abrasion	Y / N	Send photo to manufacturer.	Yes
Loosening of the rope lay	Y / N	Send photo to manufacturer.	Yes
Breakage of the inner wires	Y / N	Send photo to manufacturer.	Yes
Rust pitting or flaking due to corrosion	Y / N	Send photo to manufacturer.	Yes
Kinks	Y / N	Send photo to manufacturer.	Yes
Exposure of the wire core between the external strands	Y / N	Send photo to manufacturer.	Yes
Swaged Eyes			
Cracks or splits in the ferrule	Y / N	Send photo to manufacturer.	Yes
Rust due to corrosion	Y / N	Send photo to manufacturer.	Yes
Broken wires near the ferrule (more than two wires)	Y / N	Send photo to manufacturer.	Yes
Broken wires on the inside of the eye (more than two wires)	Y / N	Send photo to manufacturer.	Yes
Wire breaks which might occur in the contact area between the rope lines near the clips	Y / N	Send photo to manufacturer.	Yes
Loose nuts on wire rope clips	Y / N	Tighten.	No
Bolts, Nuts, and Shackles			
Deflection or distortion under load	Y / N	Send photo to manufacturer.	Yes
Bent or distorted eye bolts	Y / N	Send photo to manufacturer.	Yes
Nicks, gouges, or cracks	Y / N	Send photo to manufacturer.	Yes
Wear or abrasion	Y / N	Send photo to manufacturer.	Yes
Pitting due to corrosion	Y / N	Send photo to manufacturer.	Yes
Evidence of heat damage and discoloration	Y / N	Send photo to manufacturer.	Yes

Inspection Check	Circle Answer	Action if Answer is YES	Contact Manufacturer
Platforms			
Cracks longer than the width of the element or deeper than 30% of the element	Y / N	Send photo to manufacturer.	Yes
Wear of the surfaces	Y / N	Send photo to manufacturer.	Yes
Broken pieces or sharp edges or protruding elements	Y / N	Send photo to manufacturer.	Yes
Pockets of decay	Y / N	Send photo to manufacturer.	Yes
Loose hardware due to wood shrinkage	Y / N	Tighten.	No

Walltopia Monthly Inspection Checklist

Facility/Location:

Inspection performed by: (print name clearly) Date:

.....

Inspection Check	Circle Answer	Action if Answer is YES	Contact Manufacturer
Steel Structure			
Deflection or deformations in structural elements	Y / N	Send photo to manufacturer.	Yes
Cracks in steel members	Y / N	Send photo to manufacturer.	Yes
Cracked or broken welds	Y / N	Send photo to manufacturer.	Yes
Rust pitting or flaking due to corrosion	Y / N	Send photo to manufacturer.	Yes
Missing nuts, bolts, and washers.	Y / N	Replace.	No
Misaligned torque marks	Y / N	Tighten loose nuts. Reapply torque marks.	No

