

Movement by Climbing

Richter Spielgeräte GmbH



Climbing

Climbing is a type of exercise with special characteristics, defined to a great degree by self-determined action. The interaction between desires and aims, the forming of will and decisiveness, right up to the conscious step of grabbing, all make climbing particularly beneficial for development. In addition, it motivates people to get up and exercise in a positive way.

Climbing is fun.

Tackling risk through

looking

understanding and

reacting to things with confidence

makes climbing and the associated playful experience of exercise a particularly important part of learning about life.

Frasdorf, December 2015

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Introduction

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Play images and combination elements

Explanation of following icons



Videos

You can find videos on our website for the equipment marked with this icon.



Young People

The equipment marked with this icon is also especially suited for young people.



Promoting
Sustainable Forest
Management
www.pefc.org

We love nature!
FSC-certified GardaPat 13 Kiara paper was used
for this catalogue.





Licensors and designer: J. Gaier, W. Graubner, P. Hannes, K. Van Gestel

Climbing is contact with
gravity
balance
flexibility

Michael Möckel

Being on top
looking down
looking into the distance
having the overview.

Maria Guggenbichler

Who doesn't remember the lofty favourite place of their childhood, the highest place at the edge of the woods – a place where early in the morning you could go up the platform with Grandad and watch deer and pheasants after climbing up a wobbly ladder with an uneasy feeling. Or the comfortable branch fork in the tree behind the house where you could just hang around and feel like Tarzan.

Karin Bartl

For us people, climbing is movement in two directions.
Back to the developmental beginnings and up above to the unobtainable goal.

Jörg Gaier

Climbing is of itself an extraordinary matter. There are only two opportunities to experience moving freely in a three-dimensional space as a person – other than weightlessness: diving under water and, indeed, by climbing in a tree or on a climbing net.

Andreas Aschmann

When I think about climbing I think of fruit trees with their wild spread of branches which offer a fantastic opportunity for us kids to see the world from above.

Julian Richter Jr.

No risk, no fun - The most important game and its boundaries

Characteristic for the development of children is seeking and accepting challenges. *In the course of a movement such as climbing*, they test all their possibilities. Experience, success and failure are equally necessary for the complete developmental process. The closeness to risks and learning the corresponding self-protective behaviours are a vital part of life.

We make a conscious appeal not to underestimate and restrict the capabilities and the needs of children to experience and tryout things in tricky situations by over-cautious measures. The over-cautiousness that we, as adults, too often practice prevents children obtaining the necessary self-confidence which they need for future life. Courage does you good!

However, the balance between helping and protecting and courage, openness and risk-taking poses a great challenge for all those people who have the responsibility and is one which should under no account be shirked.

Dr. Dieter Breithecker
Federal Institution for Posture and Mobilisation
Support, Wiesbaden, Germany

Climbing Forest

Concept

- Climbing in lofty height or just over the ground
- Climbing trunks and ropes are the basic elements, best if they are 'planted' between large living trees.
- For public accessible and unsupervised areas. The climbing forest is not a high ropes course. Therefore no helmet or safety belt is necessary.

Design characteristics

- individually planned installation with graded difficulty levels for big and small
- logs from 100 – 200 year old oak trees in natural growth form, therefore larger variety of height and span width is possible
- handcrafted with a clear message: „function defines form“

So that we can plan a Climbing Forest we require the following information:

- plan of site with scale, reference measurements, north point
- where necessary, tree register, photos
- details of the position of supply lines in the earth or above it
- if possible, budget guidelines

Safety

The Climbing Forest is delivered according to the up-to-date Play Equipment standard EN 1176-2008.

A safety inspection and safety approval can be carried out following installation on-site.

As laid down in the standard there is no free fall height over 3 m. Over this net tunnels are used.

Installation

Installation takes place in three steps:

1. earth and foundation work
2. installation of the logs and evaluation of the
3. installation of the ropes

Quality Criteria

angle cut

vertical support posts with angle cut in the end grain section as constructive wood preservation



Fürstenberg Permadur System

In particular cases such as equipment with a single support and with climbing forest posts we additionally use the Fürstenberg Permadur System.



core-free timber

sawn-timbers are core-free, by that formation of cracks can be reduced



Corocord® rope

special ropes of "Hercules type"

six-strand Corocord® rope of the special "Hercules type", abrasion protected through heating of the six steel strands and melting the polyamide sleeve onto them



Hercules rope

In the manufacture a combination of steel and polyamide yarn for the sleeve. Four or six strands depending on usage.



aluminium swages

double-conical aluminium swages with rounded-off ends



S clamps

rounded Corocord® S clamps made of stainless steel, Ø 8 mm



universal joint

drop-forged and hot-dip galvanised joint yoke; the universal joint insert consists of two swing bearings



rope connection rotating

close fitting connection without dangerous openings, with integrated swivel, the bearing consists of one brass bush



adjustable

no projecting threads after re-tightening due to two-piece bolt connection and therefore easy to maintain



brass bush

for all to and fro movements we use bush bearings which allow for self-lubrication while in use and which can be easily exchanged in case of need



chains

suspended on short-link chains, welded before hot-dip galvanisation (stainless steel chains available on request)



Oak

The oak timber which we use for our play equipment comes mostly from the **common oak (Quercus robur)** also called the pedunculate oak.

The common oak is a up to 40 meter high tree which can have a trunk diameter of up to three meters. It can reach an age of 1000 years, in exceptional cases up to 1400 years.

Oak wood is hard, very durable and good to work with. It can be used in many versatile ways, e.g. as construction timber, in hydraulic engineering, for railway sleepers and for stakes.

The oak wood is officially classed as being particularly resistant to wood destroying insects and fungi. Its durability is only surpassed by a few tropical woods and robinia. To further improve the natural durability of the oak post we additionally use the patented **Fürstenberg Permadur system** in the earth/air zone as a technical wood protective measure.

Alongside these excellent properties it must be noted that due to the higher tannic acid content of oak wood a higher quality, and therefore more expensive, corrosion protection is required for the fastening and fitting parts.

Play value

Thanks to its various degrees of difficulty at different heights, the Climbing Forest is a thrilling challenge for children and adults who love to exercise and enjoy testing their strength and capabilities. As the trunks and ropes provide enough space to accommodate large numbers of adventurers at the same time, the Climbing Forest is well suited for heavily frequented playgrounds



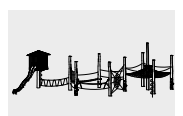
Standard colour of ropes: red.

Climbing Forest

Climbing together, moving hand over hand and balancing require skill and prudence. Children improve their motor skills and their ability to assess risks in a playful manner. Encounters on a rocking rope mean that you have to coordinate what you do with the other person. Having overcome a seemingly impossible obstacle strengthens the children's self-esteem – the proud expression on their faces when they reach the top of the Climbing Forest speaks for itself. The younger and older climbers joyfully experience how concentration and stamina help accomplish great goals.

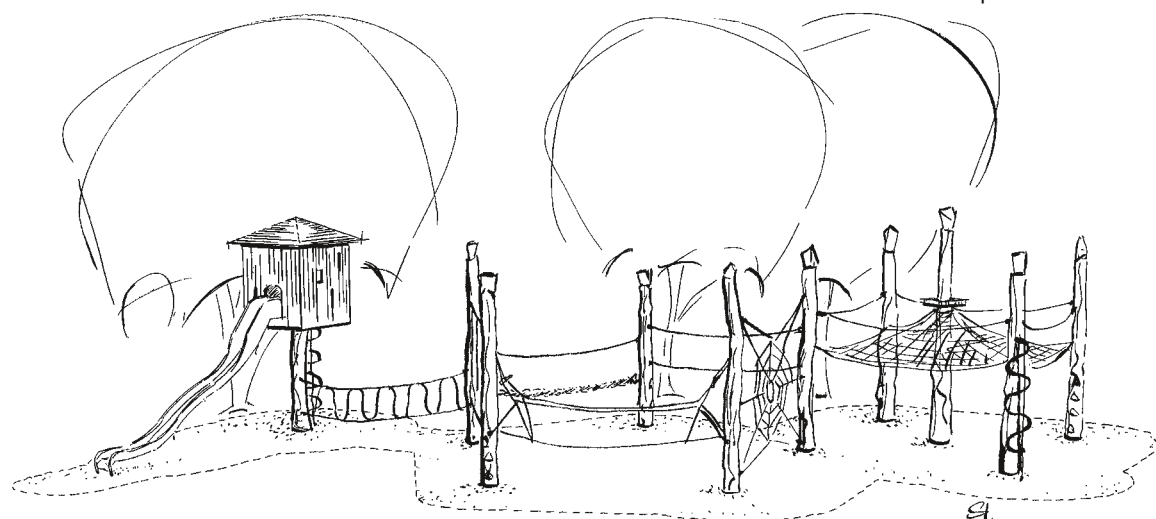
Suitable

- for children from 6 years and teenagers
- for leisure areas
- youth centres
- schools
- sports grounds
- parks



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Design example 01



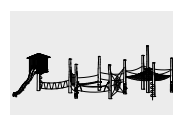
required space

approx. 25.90 x 14.30 m

Components

- 10 trunks
- 1 tree house
- 1 stainless steel slide with wave and higher sides Order No. 3.63225
- 1 parallel rope, length 5.00 m
- 1 walk rope with 3 grip ropes
- 1 Nepalese rope bridge, length 5.00 m
- 1 spider's web, width 5.00 m
- 1 coconut rope with hand rope
- 1 walk rope with hand rope
- 1 horizontal square net on lookout with 4 rope handrails
- 2 Indian ladders

peg out plans and rope plans



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Technical information

posts of oak, milled whereby the bark, cambium and sap wood is removed

angle cut

vertical stand posts with angle cut in the end grain section as constructive wood preservation



Please refer to the price list for a more detailed explanation of the quality characteristics.

core-free timber

sawn timbers core-free, thus decreasing occurrences of cracking



Fürstenberg Permadur procedure

as protection against rot



Corocord® rope

special ropes of "Hercules type" six-strand Corocord® rope of the special "Hercules type", abrasion-protected through heating of the six steel strands and melting the polyamide sleeve onto them, standard colour red



aluminium swages

double-conical aluminium swages with rounded-off ends



S-clamps

rounded Corocord® S-clamps made of stainless steel, Ø 8 mm



Hercules type ropes

combined from steel and polyamide yarn for the sleeve, 4 or 6 strands depending on usage



universal joint

drop-forged, hot-dip galvanised joint yoke; the universal joint insert consists of two swing bearings



Installation information

Surfacing requirements corresponding to a fall height of ≤ 3.00 m (please refer to price list for more detailed information)

Foundations approx. 100 x 100 x 130 - 100 x 100 x 230 cm

brass bush

for all to and fro movements we use bush bearings which allow for self-lubrication while in use and are easy to exchange if required



chains

suspended on short-link chains, welded before hot-dip galvanisation (stainless steel chains available on request)



rope connection rotating

close fitting connection without dangerous openings, with integrated swivel, the bearing consists of one brass bush



adjustable

easy to maintain, no projecting threads after re-tightening due to two-piece bolt connections



Concept

- Climbing in lofty heights or just above the ground
Climbing trunks and ropes are the basic elements, ideally 'planted' between large living trees.
- For publicly accessible and unsupervised areas; The climbing forest is not a high ropes course. Therefore, no helmets, safety belts, or supervisory personnel are necessary!

Design characteristics

Individually planned installation with graded difficulty levels for big and small

- Logs from 100 to 200 year old oak trees in natural growth form, therefore larger variety of height and span width is possible
- Handcrafted with a clear message: "function defines form"



Standard colour of ropes: red.

The Climbing Forest is a modular system made of strong oak trunks and rope climbing connections. The elements may be arranged in a vast number of ways, for example to form a circuit or a swerving path around existing trees. We will design an individual arrangement according to your terrain and the available space. You will find an overview of our individual elements on the following pages.

Climbing Forest

Planning information

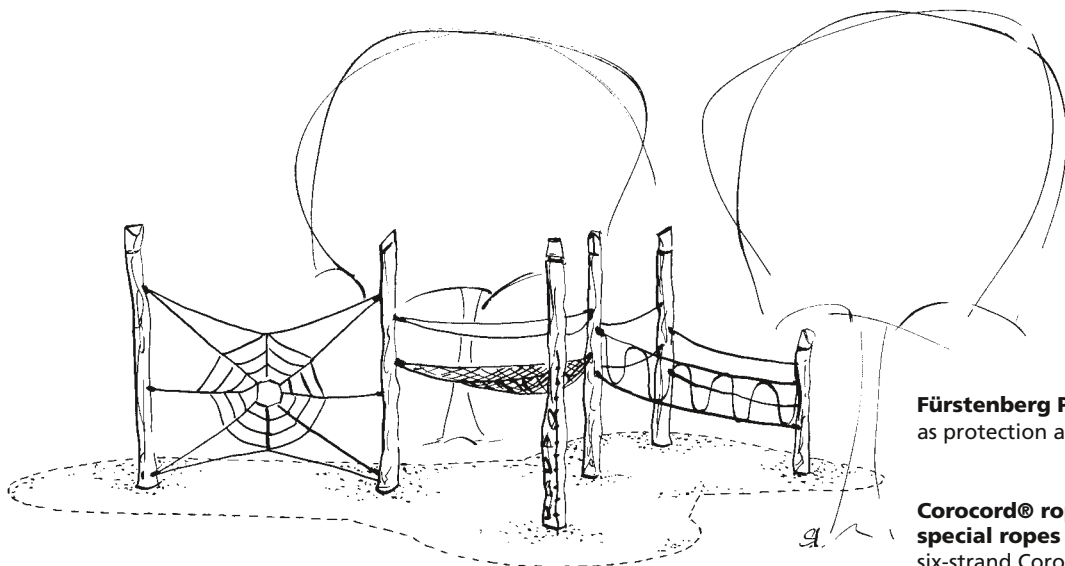
So that we can plan a climbing forest we require the following information:

- plan of site with scale, reference measurements, north point, height details
- where necessary, tree register, photos
- details of the position of supply lines in the earth or above it
- budget



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Design example 02



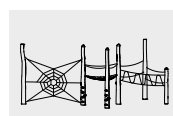
required space

approx. 15.90 x 10.20 m

Components

- 6 trunks
- 1 spider's web, width 5.00 m
- 1 horizontal triangular net with 3 rope handrails
- 1 parallel rope, length 4.00 m
- 2 walk ropes with hand ropes
- 1 knot rope

peg out plans and rope plans



10.80002

Installation information

Surfacing requirements corresponding to a fall height of ≤ 3.00 m (please refer to price list for more detailed information)

Foundations
approx. 100 x 100 x 130 -
100 x 100 x 230 cm

Technical information

posts of oak, milled whereby the bark, cambium and sap wood is removed

angle cut

vertical stand posts with angle cut in the end grain section as constructive wood preservation



Fürstenberg Permador procedure
as protection against rot



Corocord® rope
special ropes of "Hercules type"
six-strand Corocord® rope of the special "Hercules type", abrasion-protected through heating of the six steel strands and melting the polyamide sleeve onto them, standard colour red



aluminium swages

double-conical aluminium swages with rounded-off ends



S-clamps

rounded Corocord® S-clamps made of stainless steel, \varnothing 8 mm



Hercules type ropes

combined from steel and polyamide yarn for the sleeve, 4 or 6 strands depending on usage



universal joint

drop-forged, hot-dip galvanised joint yoke; the universal joint insert consists of two swing bearings



rope connection rotating

close fitting connection without dangerous openings, with integrated swivel, the bearing consists of one brass bush



adjustable

easy to maintain, no projecting threads after re-tightening due to two-piece bolt connections



brass bush

for all to and fro movements we use bush bearings which allow for self-lubrication while in use and are easy to exchange if required



chains

suspended on short-link chains, welded before hot-dip galvanisation (stainless steel on request)



Please refer to the price list for a more detailed explanation of the quality characteristics.

Safety

The Climbing Forest complies with the currently applicable playground equipment standard, EN 1176 Safety inspection and safety approval can be carried out following installation on-site. As laid down in the standard, there is no free fall height over 3 m. Above this height, net tunnels can be used or nets can be installed at intermediate levels.

Delivery and assembly (on-site)

take place in 3 steps:

1. earth and foundation work

2. first part of delivery

assembly of trunks and rope elements with fixed lengths; determination of the lengths of the customised rope elements

3. second part of delivery

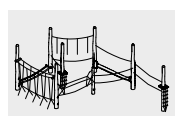
assembly of customised rope elements



Standard colour of ropes: red.

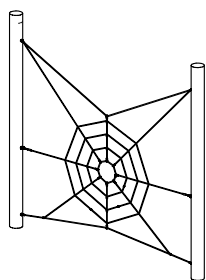


Climbing Forest Combination Elements

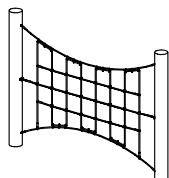


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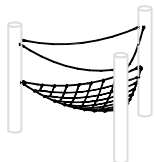
The following section shows you the individual elements from which our Climbing Forest can be combined. We would be pleased to create plans for your individual Climbing Forest.



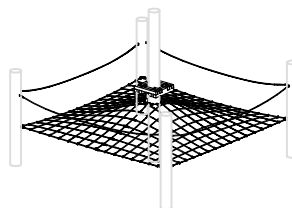
Spider's Web



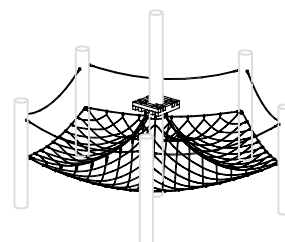
Vertical Climbing Net



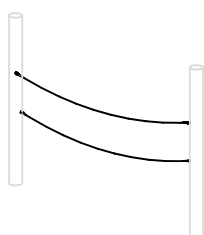
Horizontal Triangular Net



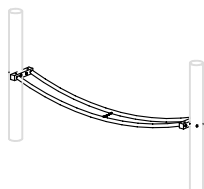
Horizontal Square Net



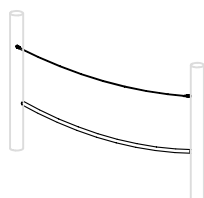
Horizontal Pentagonal Net



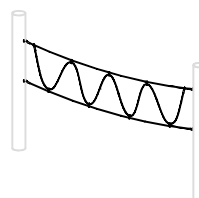
Walk Rope with Hand Rope



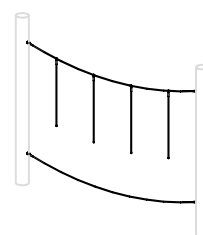
Double Coconut Rope



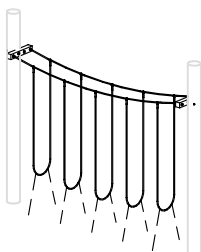
Coconut Rope with Hand Rope



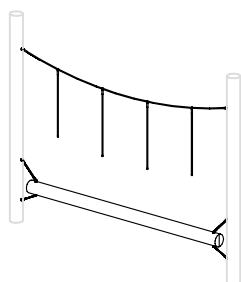
Parallel Rope



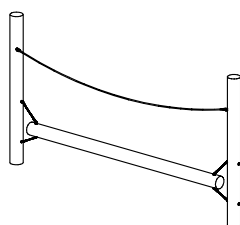
Grip Ropes with Walk Rope



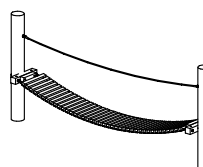
Noose Steps



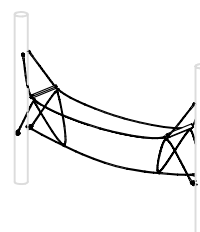
Balancing Beam with Grip Ropes



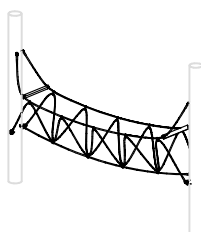
Balancing Beam with Hand Rope



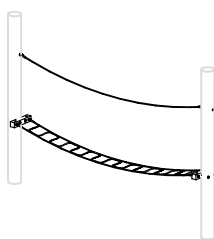
Suspension Bridge with Hand Rope



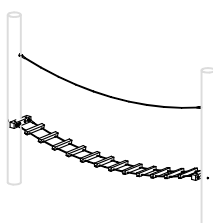
Nepalese Rope Bridge



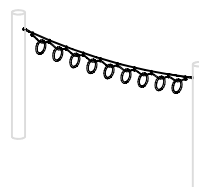
3-Rope Bridge



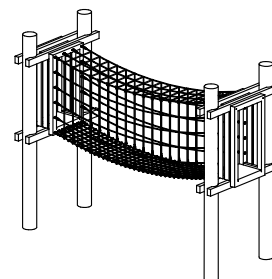
Wobbly Bridge with Hand Rope



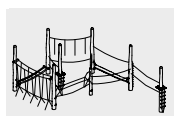
Ladder Bridge with Hand Rope



Grip Rings



Net Tunnel Bridge



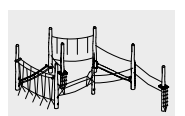
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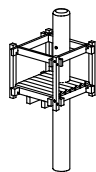
Standard colour of ropes: red



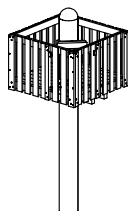
Climbing Forest Combination Elements



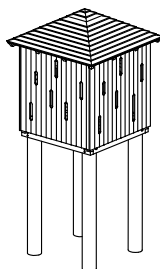
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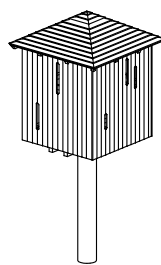
Small Crow's Nest



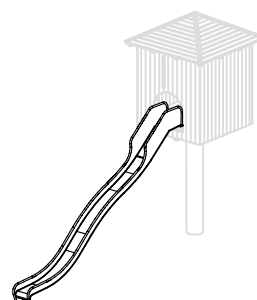
Large Crow's Nest



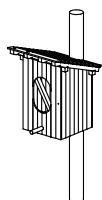
Tree House
incl. 4 trunks



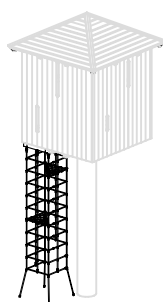
Tree House
incl. 1 trunk



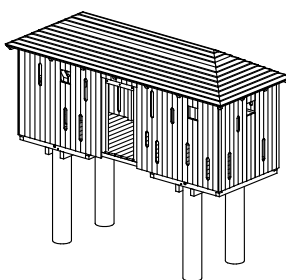
Slides



Nest Box



Net Tunnel
as Ladder



Long Tree House



Hammock



Swing



Whisk



Double Hammock Seat



Rope Bar



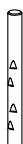
Horizontal Bar



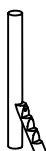
Lookout
Rope Ladder



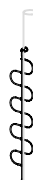
Trunk



Trunk with Steps



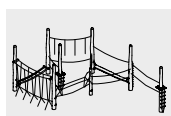
Climbing Trunk



Indian Ladder



Knot Rope



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