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PLANNING

Fascination of climbing

Whether as a child on the playground or as a real pro in a sports centre, climbing is enjoying great popularity - with good cause: climbing is something good for both, the body and the mind! You are not only training your strength, perseverance and agility, but also the ability to calculate proactively and to think creatively. You can instantly grasp particularly complex incidents. Therefore climbing is much more than a mere leisure activity. It is a playful way for you to wisely advance.

Ultimately, however, sport and exercise will only have an effect if you are practising it regularly and permanently. It is fantastic that this alpine sport can now be practised everywhere. A climbing unit may be part of a playground, may enlarge a sports facility, may complete classes at school or may even enrich a public park's design as a free-standing facility. Climbing units are an investment in a wise and modern leisure activity that is popular since many years. And it really does not make any difference whether it is a Boulder unit or a rope climbing unit with a height of up to 20 m.

Concrete® is your specialist for climbing facilities of concrete. Concrete is a functional, durable and versatile material, which makes it particularly suitable for climbing facilities.



MATERIAL: CONCRETE

Material / Planning

Concrete is all but boring and cold. Its many scopes for design are almost unlimited and its surfaces are sophisticated. These are precisely the reasons why this material is so appealing. Its mouldability and its varied ways of expression are welcomed by the planners. Concrete is an environmental-friendly and robust, yet fragile, material. Concrete opens up unexpected dimensions in the world of design.

For outdoor climbing elements concrete offers excellent material properties. All of our climbing elements have double-ply reinforcement and are cast from high quality C₃o/₃7 XC₄+XF₁ concrete. This guarantees a lifespan of several decades and also considerably reduces the running expenses.

Even with regard to safety concrete is the right choice. Injuries by projecting screws or splinters, for example, are impossible.

Furthermore concrete is also highly vandalism-proof. Later repairs with special repair material can be made even in case of severe mechanical damage. Moreover, due to their solid construction concrete climbing elements are absorbing the noise of socializing and playing, which particularly pleases the neighbourhood.

Surfaces

More than just good looks.

Depending on its texture, a climbing element's surface provides a very particular climbing feel. Therefore most of the Concrete® climbing facilities are available in four different surface executions:

Start - even surface

All-round - slightly structured surface

Plus-strongly structured surface

Special – replica of an alpine rock face

As climbing has its origin in nature our »Special« surface is made from a real rock face cast. We even succeeded in preserving a rock's durability with our high quality concrete.

Another important factor is the CREFIX $^{\otimes}$ coating applied to the surface, which always provides the climber with the necessary grip.

Start

ALL-ROUND

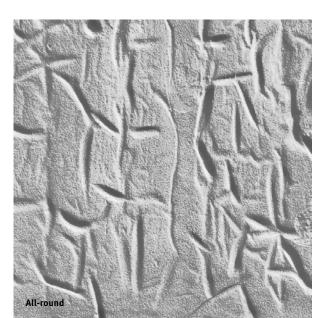
F

PLUS



SPECIAL



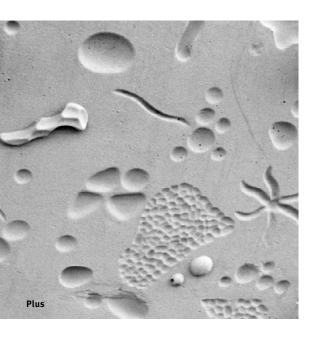


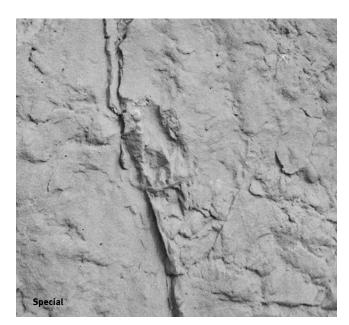
SURFACES AND COLOURS

Colours

Everything is possible

You have free choice for the colour design of your Concrete® climbing facility. Common RAL shades can be recreated in true colours irrespective of the surface execution. A climbing facility's colour can be adapted to an existing colour concept or may be used as a colourful accent for architectural or infrastructural purposes, or simply contribute to a better distinguishability of sports grounds.







Free standing climbing facility

In case existing building walls are not suitable for the fixation of a climbing wall, a free standing climbing wall would be the perfect choice: a solid reinforced concrete construction into which the surface structure is cast in monolithically. The complete construction is extremely solid, vandalism-proof and non-combustible.

Belay points and threaded sleeves for grip fixation are positively anchored. Installation is made on customer's base according to our static calculations.

All solid outdoor climbing walls

For outdoor use it is also possible to produce climbing facilities and elements of high quality concrete. All visible elements such as sleeves for grip fixation, belay points, etc. are made of stainless steel. As all kinds of shapes and surface structures can be made of concrete, we are offering elements with the same surface executions Start, All-round, Plus and Special. If required, we would be pleased to also offer special constructions according to customer's or architect's specifications.

CREFIX® coating

To achieve optimum friction coefficients on the climbing wall's surfaces they are coated with CREFIX®. This CREFIX® coating is weatherproof and provides a perfect climbing surface due to the addition of silica sand. In addition, it can be coloured as you like.

Planning service and consultancy

Prior to deciding about the type and extent of a climbing facility we recommend having an informative planning made to suit your financial situation and needs. Possibilities to upgrade or to extend with other types of sports should be taken into consideration prior to the initial installation. Our planning office would be pleased to prepare suitable drafts for you.

Make use of our service! www.concrete-sportanlagen.de

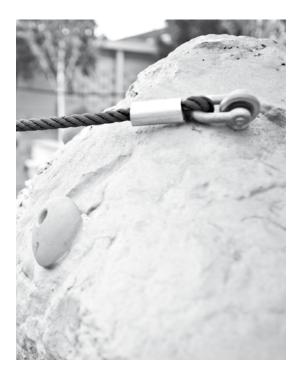
Installation

The large-scale installation units ensure an efficient workflow as no processing is required on site. Depending on the requirement, we will offer either complete installation or installation by customer monitored by one of our supervisors. We recommend a safety test by an independent expert immediately after completion of the installation works in conjunction with the general visual inspection. That way utmost safety with regard to questions pursuant to insurance law also in later climbing operation is ensured.

Warranty

For all elements and climbing facilities we are granting a warranty of 5 years for defects in material and workmanship. It goes without saying that this warranty will cease in case of unauthorized alterations on the supporting construction, or in case of natural wear and tear. Our company has been producing high quality concrete elements for more than 60 years and our quality is constantly monitored. All elements comply with the current standards DIN EN 12572 and DIN EN 1176 for climbing facilities. In addition, our climbing elements are tested by TÜV and have the GS label.





Holds

If requested, we not only offer basic holds equipment of different manufacturers in various qualities, shapes, and colours but also suitable fastening screws that are needed for their installation. These holds can, of course, also be provided and installed by the customer. The versatile user-related selection of holds and their installation is of great importance for a proper operation of the climbing facility.

Additional services and available accessories

In addition, we can offer you a starter package with safety equipment such as carbines, ropes, screws, belts, express kits and webbings, etc. All above mentioned items are CE certified and are available in different executions, sizes and qualities. For such items we do not grant any liability, however. The respective manufacturer is exclusively responsible for possibly faulty material. All mentioned items can be supplied at short notice. The order value has to be at least EUR 150.00. In case it is below this value, we need to charge a handling fee of EUR 25.00.

Additional services (on request)

Not only are we providing reasonable consultancy and compilation of holds assortments, planning and installation of the track for rope climbing facilities by certified experts with excellent expert knowledge, but also instructions by experienced climbers.



SAFETY MEASURES

Safety measures

The DIN EN 12572 standard mainly contains safety requirements. This means that no further definitions or regulations for any other climbing facility's safety requirements are available in writing. Therefore it is up to the manufacturers or operators of such a facility to specify the terms of use. The regulations stipulated in the DIN EN 1176-1 standard (Playground elements parts 1 to 7) which are referred to in the EN 12572 standard, are an exemption, however.

The following rules apply:

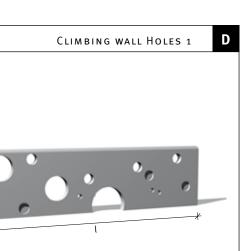
- ① Unsecured climbing is only allowed up to a falling height of 3 m at the most (in relation to the standing surface). For facilities that are open for everyone the operator should therefore take suitable measures to prevent climbers from climbing beyond this height.
- ② It is necessary to create a falling zone of approx. 3 m to all sides at the foot of each facility. When located outdoor a gravel heap of a minimum height of 40 cm could be used, for example. If gravel is used, use a grain size as small as possible (we recommend 4/8).
- 3 The operator shall attach the climbing rules to the facility in a clearly visible way.
- 4 An impact protection shall be attached to areas with protruding corners and edges, or a suitable safety clearance toward the climbing wall of at least 2.5 m shall be provided.
- (5) All belay devices such as carbines, ropes, belts, etc. are wearing parts that have to be checked by the operator for damages in regular intervals.

6 Distances of belay points

The belay points for the intermediate belays' straps shall be installed in the following distances (or shorter): 1st point beyond a height of 250.00 cm,

- 2nd point beyond a height of 312.50 cm,
- 3rd point beyond a height of 375.00 cm,
- 4^{th} point beyond a height of 437.50 cm,
- 5th point beyond a height of 500.00 cm.

Any other upward points at a distance of 125 cm. All belay points' safety straps may only be attached by an M12 screw with a strength of 10.9. Only screwed connections, which are directly connected to the substructure, may be used as belay points.



ITEM NO.

LENGTH

EFFECTIVE HEIGHT

KWH01

600 cm

160 cm

Incl. CREFIX® coating and holds on the front. Surcharge for holds on the rear side. Surface only available in Start execution. Base provided by customer or already factory-installed on the element against surcharge. Element of high quality solid C $_{\rm 30/37}$ concrete.

Design: realgrün, Landscape architects.

Start

CLIMBING WALL HOLES 2

F

ITEM NO.

LENGTH

EFFECTIVE HEIGHT

KWH02

600 cm

160 cm

Incl. CREFIX® coating and holds on the front. Surcharge for holds on the rear side. Surface only available in Start execution. Base provided by customer or already factory-installed on the element against surcharge. Element of high quality solid C $_{30/37}$ concrete.

Design: realgrün, Landscape architects.

Start



CLIMBING WALL HOLES 3

F

ITEM NO.

LENGTH

EFFECTIVE HEIGHT

KWH03

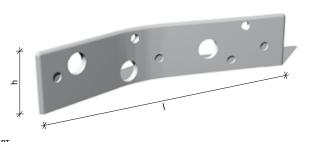
800 cm

160 cm

Incl. CREFIX® coating and holds on the front. Surcharge for holds on the rear side. Surface only available in Start execution. Base provided by customer or already factory-installed on the element against surcharge. Element of high quality solid C $_{30/37}$ concrete.

Design: realgrün, Landscape architects.

START

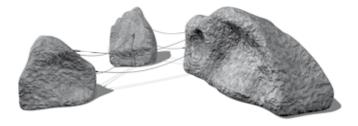




i

Stones

Strong, individual and unique – Stones by Concrete® show a natural rock's radiance.

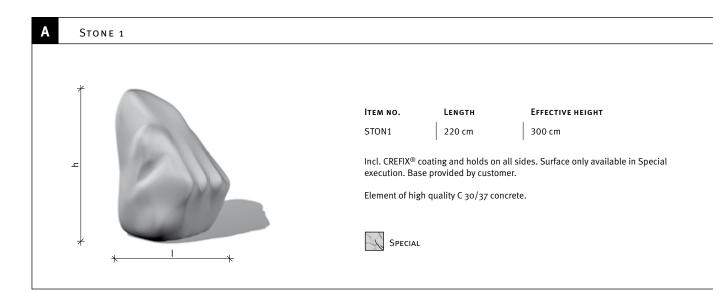


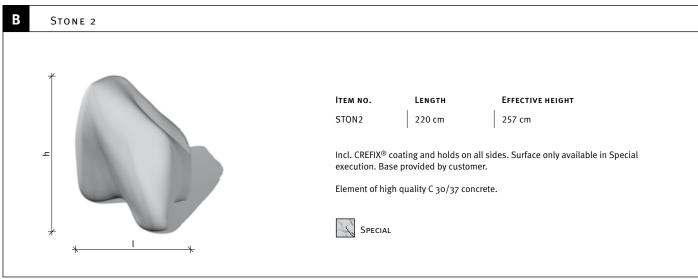


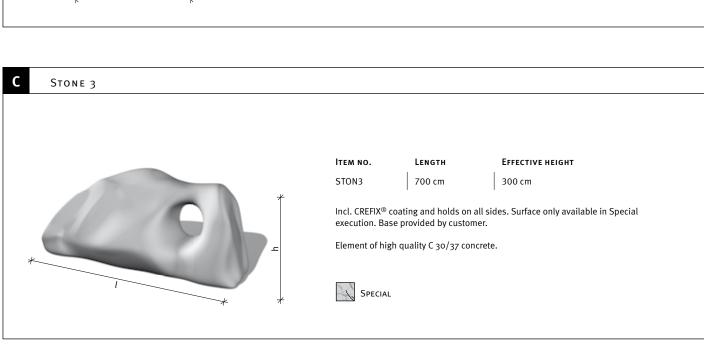


STONE climbing stones all have a natural and organic design. The »Special« surface is made of an original solid rock's mould and provides climbing options with new tracks also away from the installed holds. For playgrounds of any size STONE climbing stones are also a formal enrichment. Strong, individual and unique – this is a natural rock's radiance.

Five STONE types allow for countless combinations, whether free standing or linked with climbing ropes. With overhangs, cavities and passageways STONE climbing rocks will always be exciting for the little mountaineers – either as a free standing unit or as a combination. And with regard to the weather and vandalism, STONE climbing stones are just like solid rock – durable, solid and strong.









STONE 4

D

ITEM NO.

LENGTH

EFFECTIVE HEIGHT

STON4

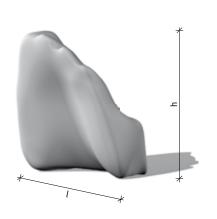
260 cm

253 cm

Incl. $\mathsf{CREFIX}^{\otimes}$ coating and holds on all sides. Surface only available in Special execution. Base provided by customer.

Element of high quality C 30/37 concrete.





STONE 5

E

ITEM NO.

LENGTH

EFFECTIVE HEIGHT

STON5

140 cm

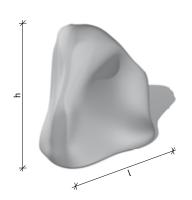
160 cm

Incl. ${\sf CREFIX}^{\circledcirc}$ coating and holds on all sides. Surface only available in Special execution. Base provided by customer.

Element of high quality C 30/37 concrete.



SPECIAL



STONES COMBINATION

F

ITEM NO.

LENGTH

EFFECTIVE HEIGHT

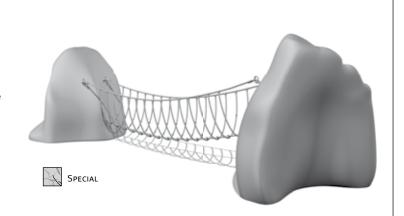
STON7

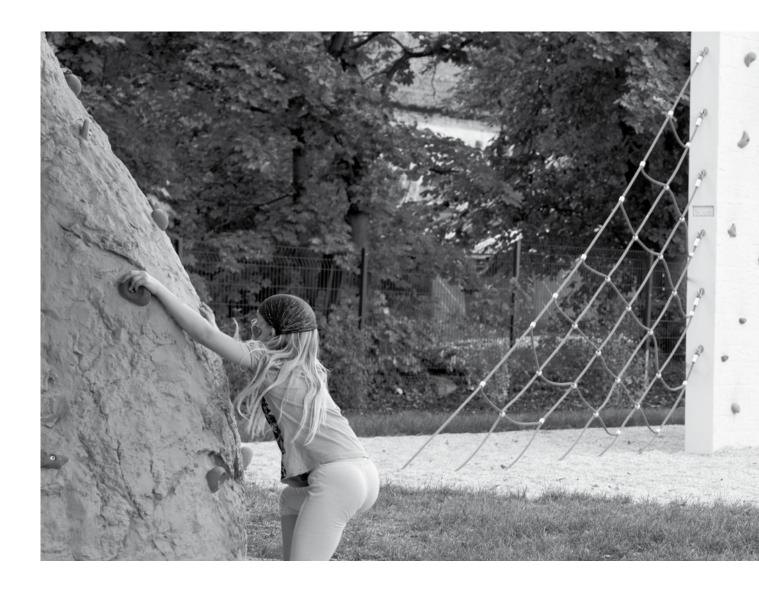
830 cm

253/160 cm

Stones combination, consisting of Stone 4 and Stone 5, incl. rope climbing bridge. Incl. $CREFIX^{\oplus}$ coating and holds on all sides. Surface only available in Special execution. Base provided by customer.

Element of high quality C 30/37 concrete.





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Obligatory supervision? Children and young people neither have to be supervised nor safeguarded when climbing on Boulder elements. Only the requirements for dimensioning and the execution of the falling protection zone have to be met.

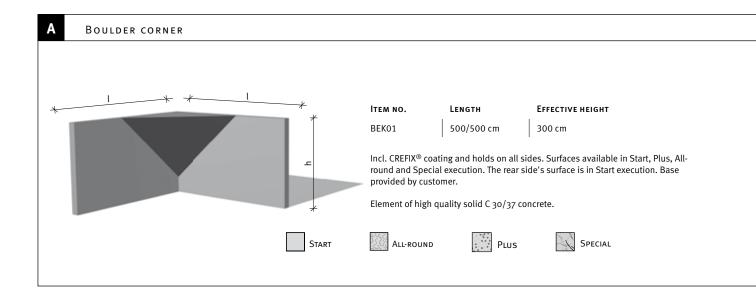


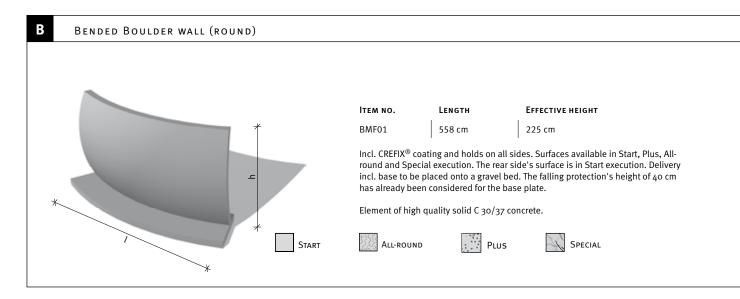


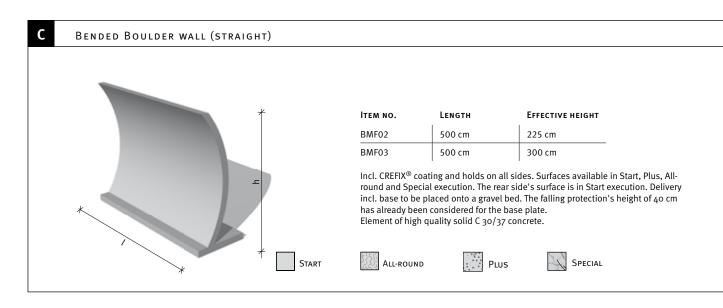
0/00

Boulder walls offer lots of advantages. The most important one surely is that neither prior knowledge nor belay devices or special equipment is required for climbing. This basically means that absolutely everybody can climb a Boulder wall! The holds on a Boulder wall can be arranged so that small and tall people can climb up while the track still is varied. Never mind if you fail the next hold! Just jump down from a low height and try again! This is why Boulder facilities are ideal for public facilities such as playgrounds and schoolyards, also from a safety point of view.

You can freely combine the Boulder elements in different arrangements and structures. Usually our Boulder elements, incl. falling protection cover height, are not higher than 3.40 m. The amount of holds is considerably higher than for rope climbing walls. The top riser height may be 3 m at the most. Boulder walls may be executed either as filled-up bulkheads or as free standing elements.







BUCKLED BOULDER WALL (STRAIGHT)

ITEM NO. LENGTH EFFECTIVE HEIGHT BMF04 500 cm 225 cm BMF05 300 cm 500 cm

Incl. $\mathsf{CREFIX}^{\circledast}$ coating and holds on all sides. Surfaces available in Start, Plus, Allround and Special execution. The rear side's surface is in Start execution. Delivery incl. base to be placed onto a gravel bed. The falling protection's height of 40 $\,\mathrm{cm}$ has already been considered for the base plate. Element of high quality solid C 30/37 concrete.

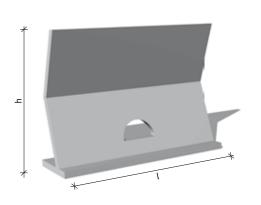




ALL-ROUND



SPECIAL



BUCKLED BOULDER WALL (ROUND)

D

ITEM NO. LENGTH **EFFECTIVE HEIGHT** BMF06 562 cm 225 cm

Incl. $\mathsf{CREFIX}^{\circledcirc}$ coating and holds on all sides. Surfaces available in Start, Plus, Allround and Special execution. The rear side's surface is in Start execution. Delivery incl. base to be placed onto a gravel bed. The falling protection's height of 40 cm has already been considered for the base plate.

Element of high quality solid C 30/37 concrete.



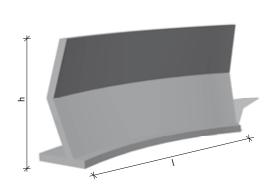


All-round





SPECIAL



SLOPING BOULDER WALL (ROUND)

LENGTH EFFECTIVE HEIGHT ITEM NO. BMF07 586 cm 220 cm

Incl. CREFIX® coating and holds on all sides. Surfaces available in Start, Plus, Allround and Special execution. The rear side's surface is in Start execution. Delivery incl. base to be placed onto a gravel bed. The falling protection's height of 40 cm has already been considered for the base plate. Element of high quality solid C 30/37 concrete.

START

All-round

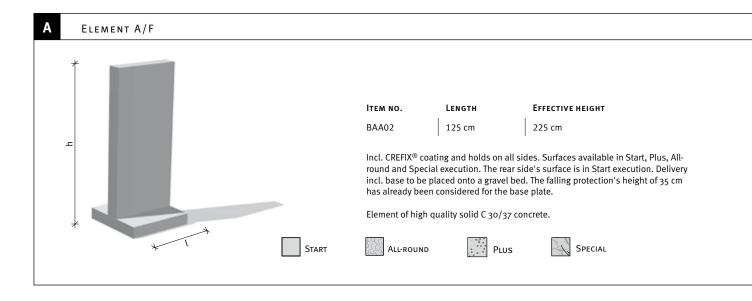


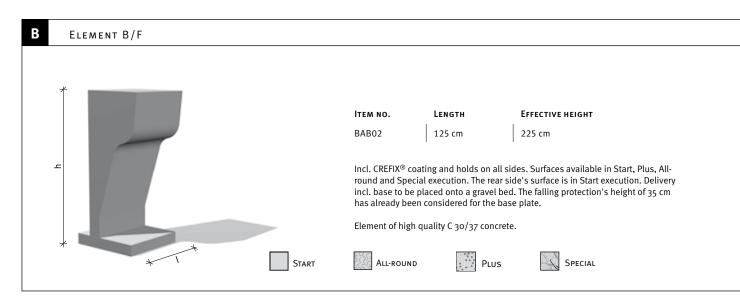
PLUS

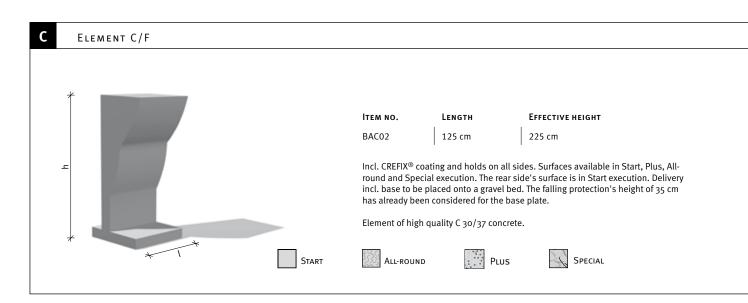


SPECIAL











ELEMENT D/F

D

ITEM NO.

LENGTH

EFFECTIVE HEIGHT

BAD02

125 cm

225 cm

Incl. CREFIX® coating and holds on all sides. Surfaces available in Start, Plus, All-round and Special execution. The rear side's surface is in Start execution. Delivery incl. base to be placed onto a gravel bed. The falling protection's height of 35 cm has already been considered for the base plate.

Element of high quality C 30/37 concrete.





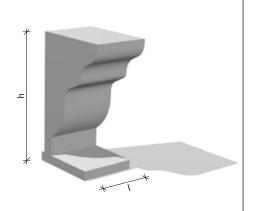
ALI-ROUND



PLUS



SPECIAL



ELEMENT E/F

E

ITEM NO.

LENGTH

EFFECTIVE HEIGHT

BAE02

125 cm

225 cm

Incl. CREFIX® coating and holds on all sides. Surfaces available in Start, Plus, All-round and Special execution. The rear side's surface is in Start execution. Delivery incl. base to be placed onto a gravel bed. The falling protection's height of 35 cm has already been considered for the base plate.

Element of high quality C 30/37 concrete.



Start



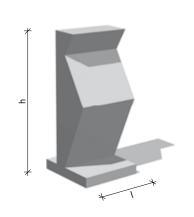
All-round



PLUS



SPECIAL



ELEMENT F/F

F

ITEM NO.

LENGTH

EFFECTIVE HEIGHT

BAF02

400 cm

225 cm

Incl. CREFIX® coating and holds on all sides. Surfaces available in Start, Plus, All-round and Special execution. The rear side's surface is in Start execution. Delivery incl. base to be placed onto a gravel bed. The falling protection's height of 35 cm has already been considered for the base plate.

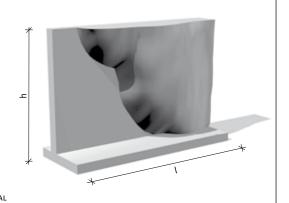
Element of high quality C 30/37 concrete.

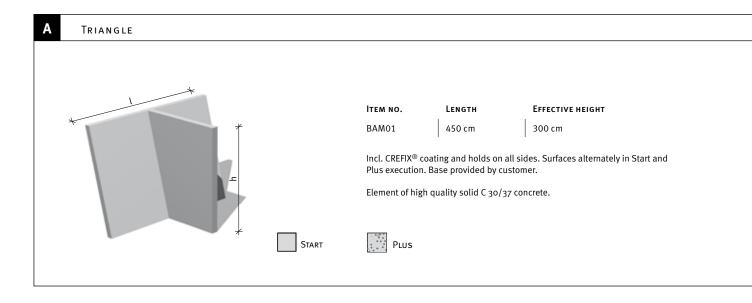


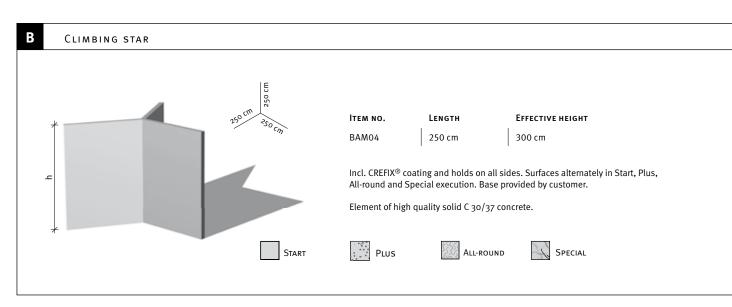
ALL-ROUND

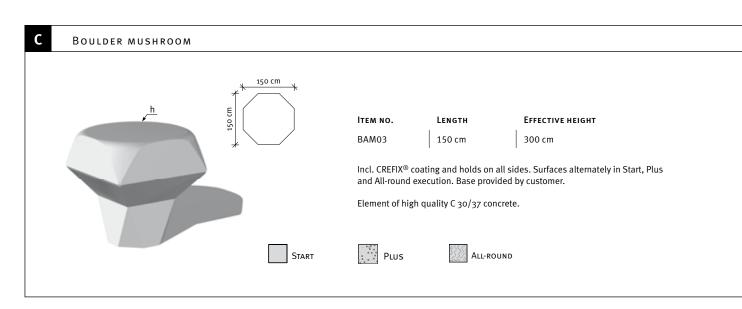


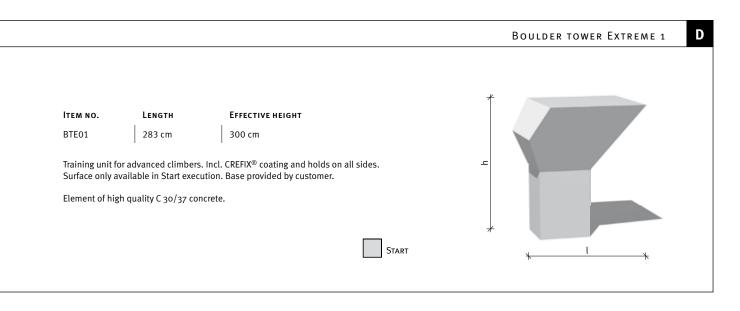
SPECIAL

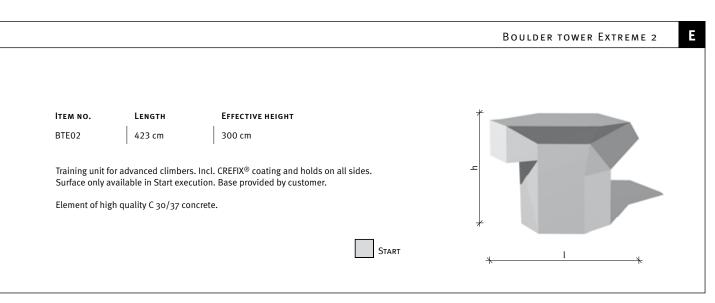


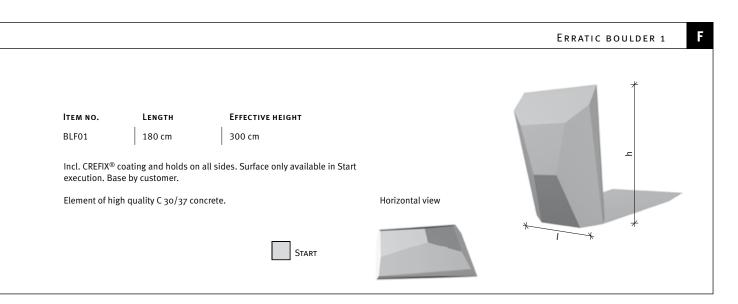


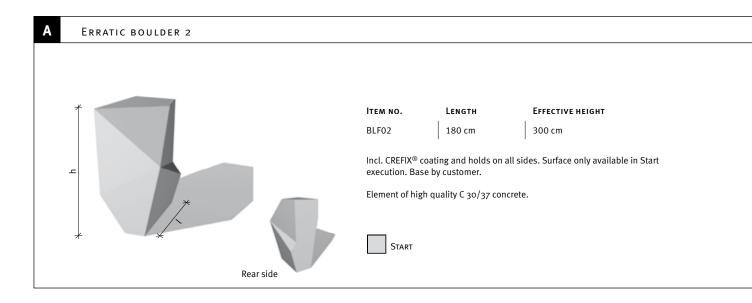


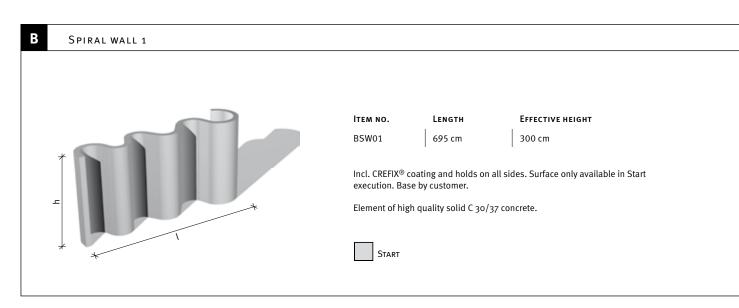


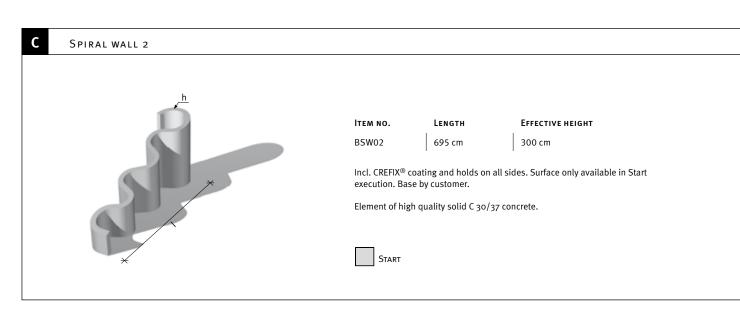


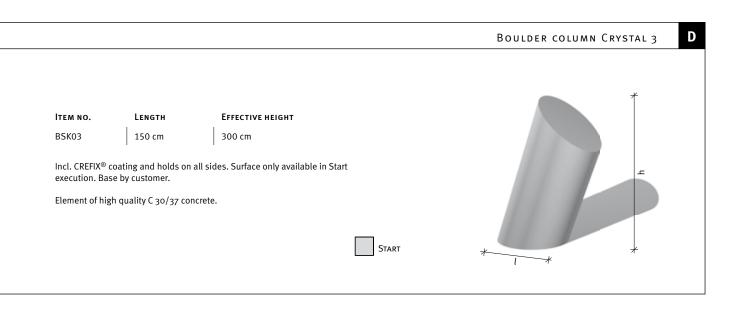


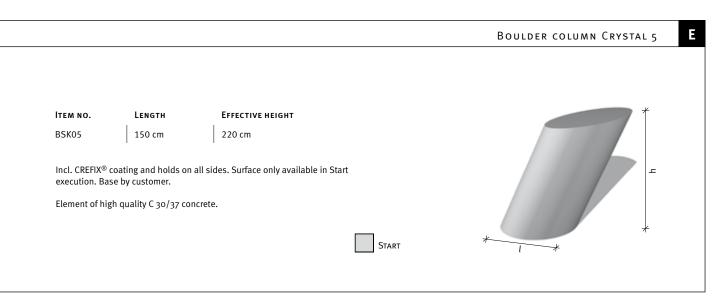


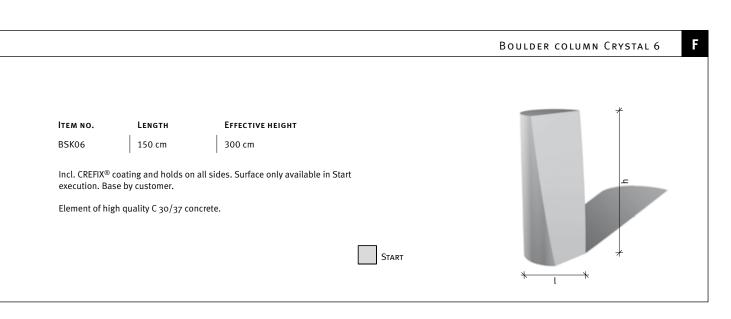


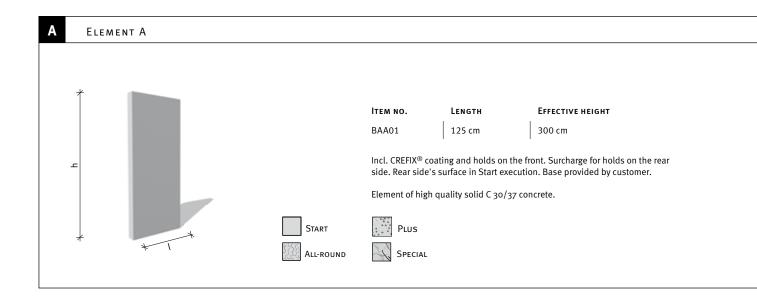


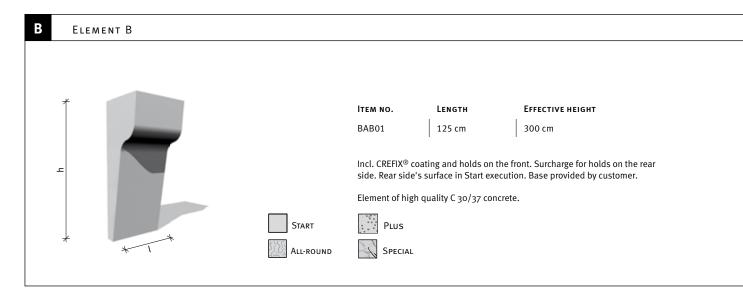


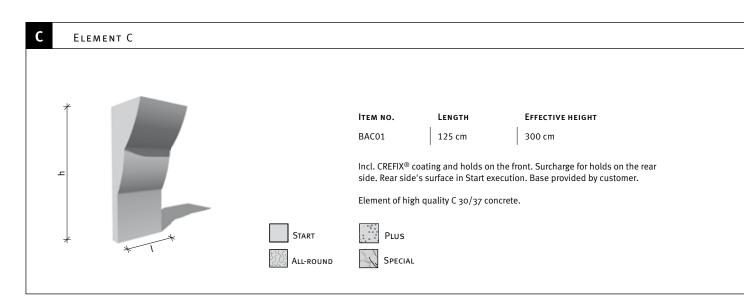


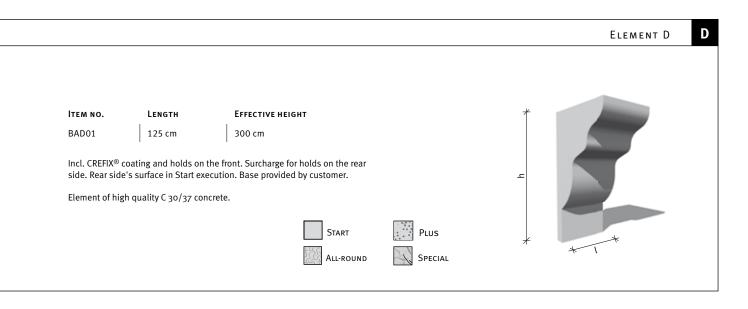


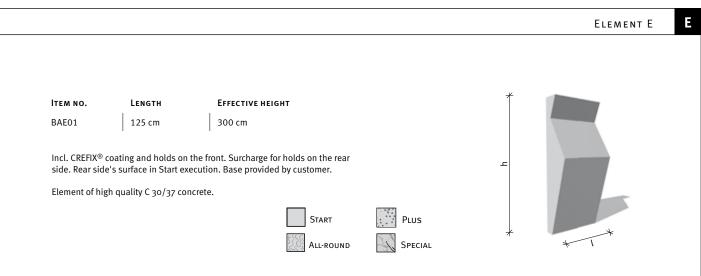


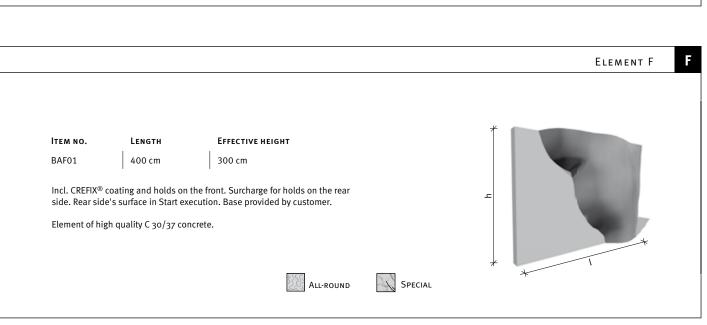


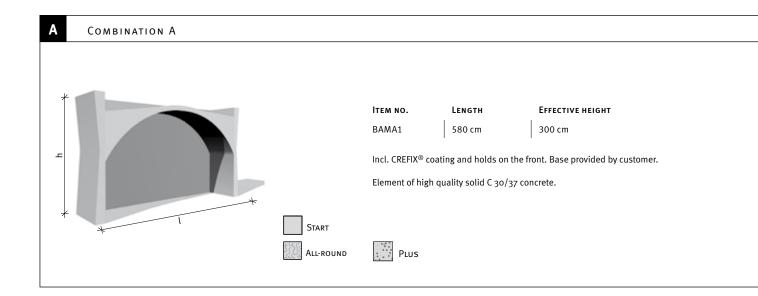


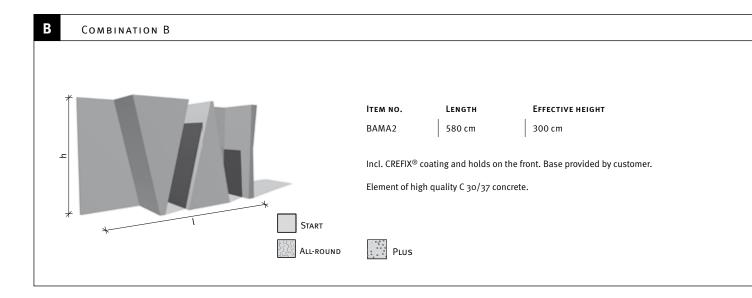


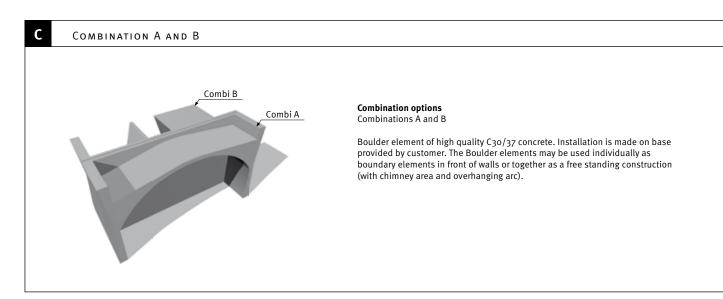


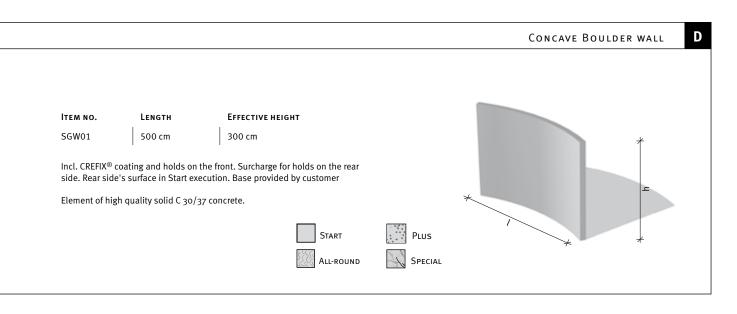


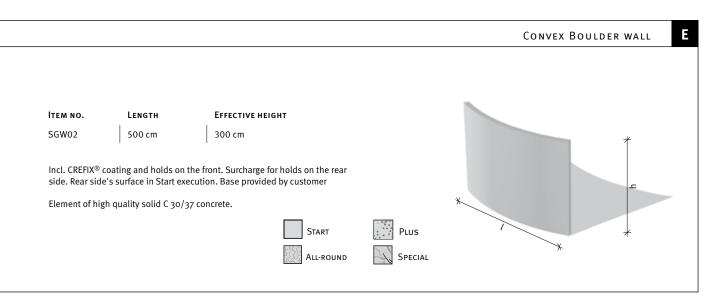


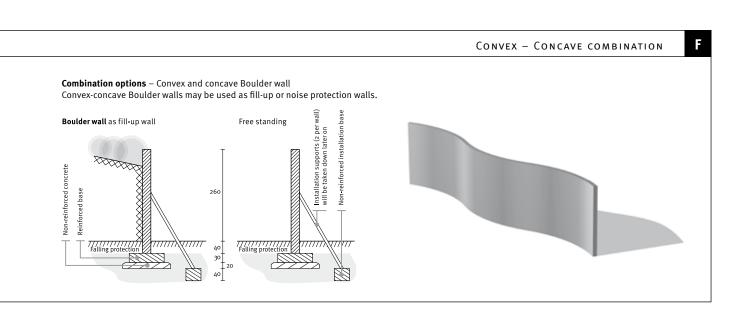


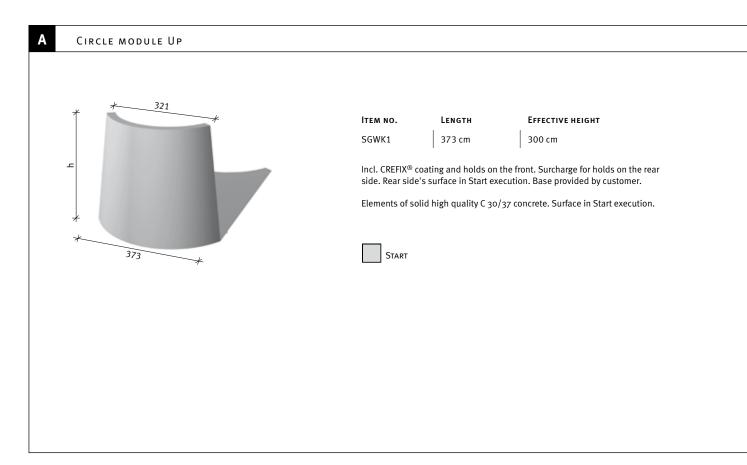


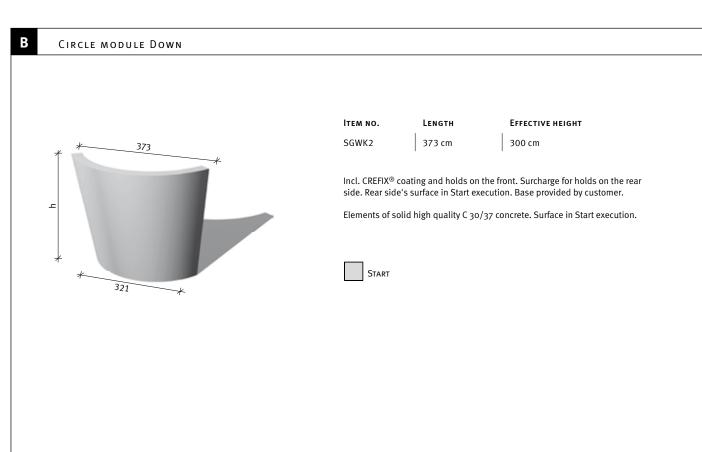














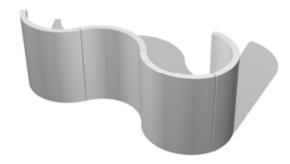
UP AND DOWN COMBINATIONS



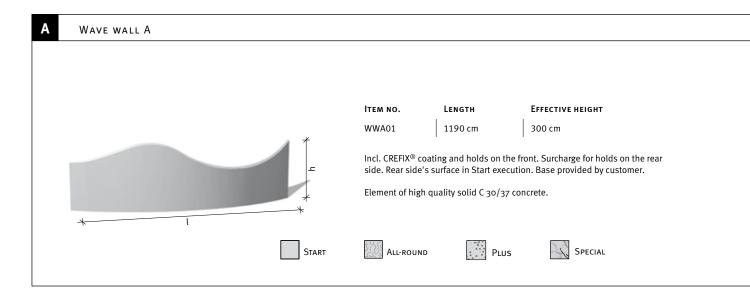
COMBINATION EXAMPLE FOR CIRCLE MODULE

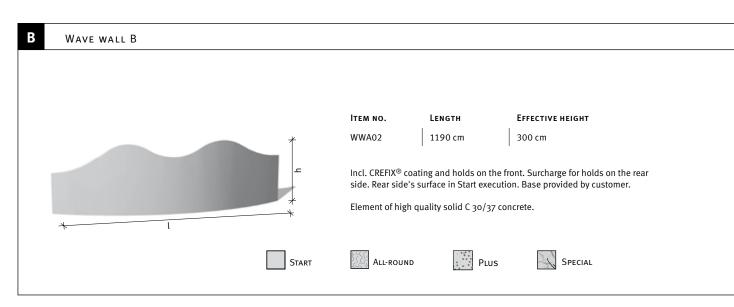


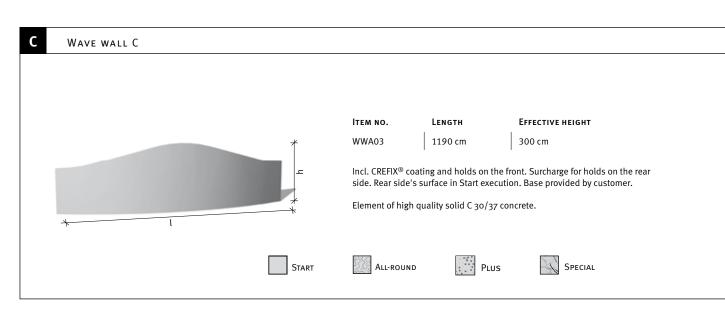
COMBINATION EXAMPLE FOR CIRCLE MODULE

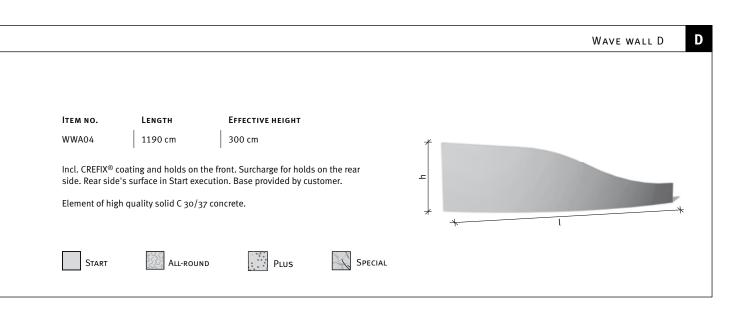


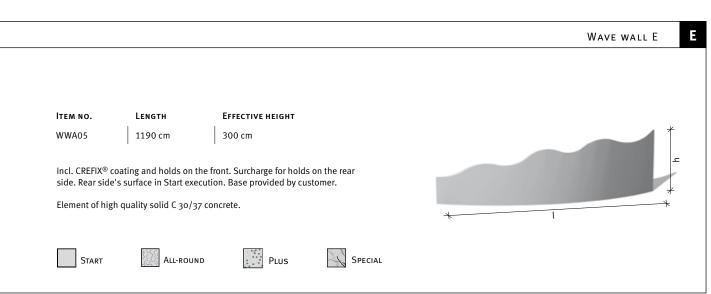
COMBINATION EXAMPLE FOR CIRCLE MODULE

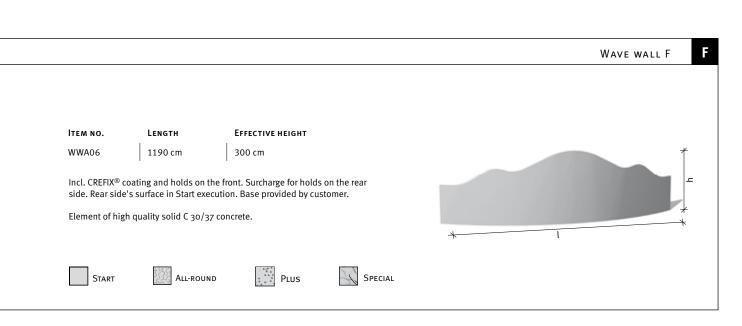


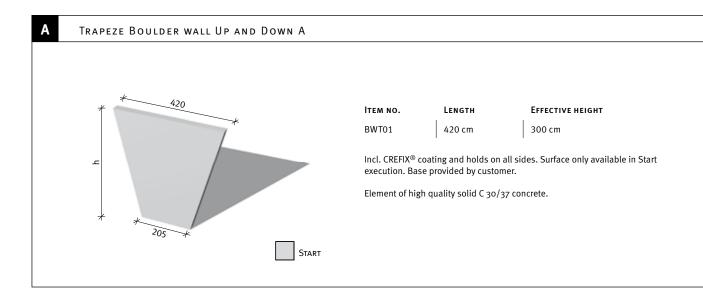


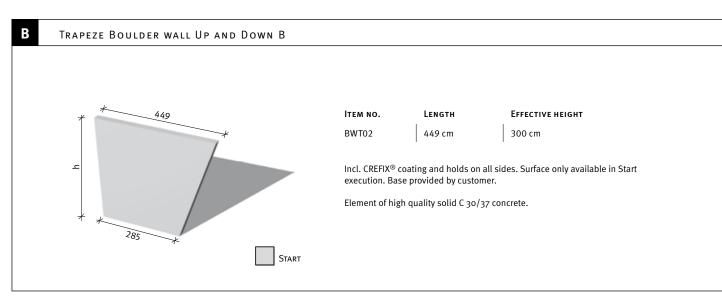


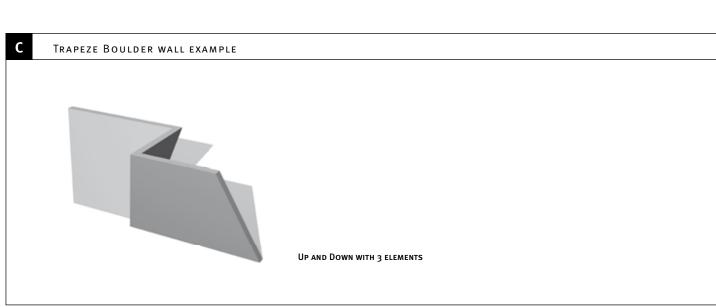


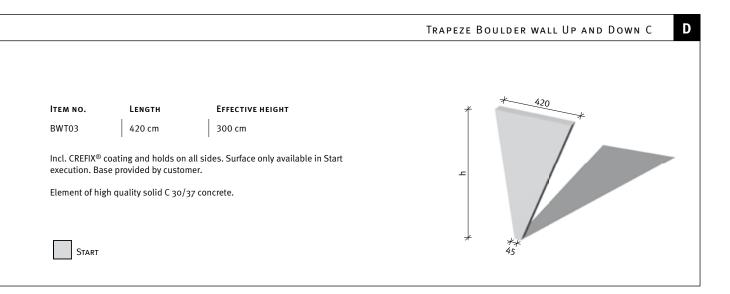


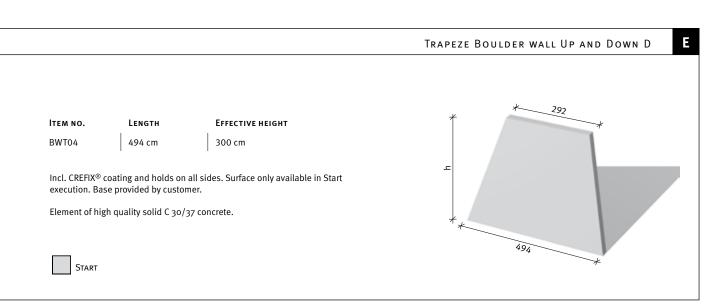


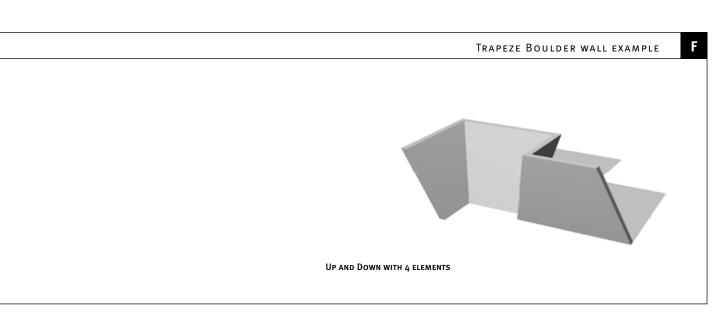


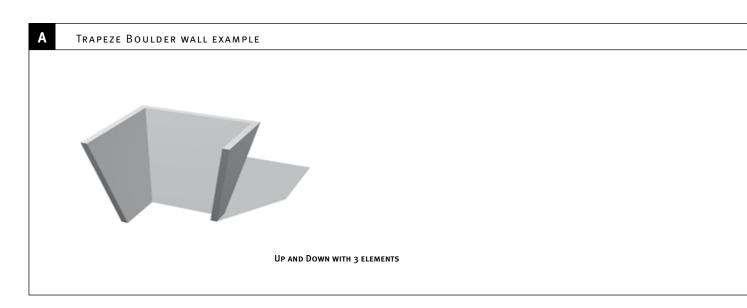


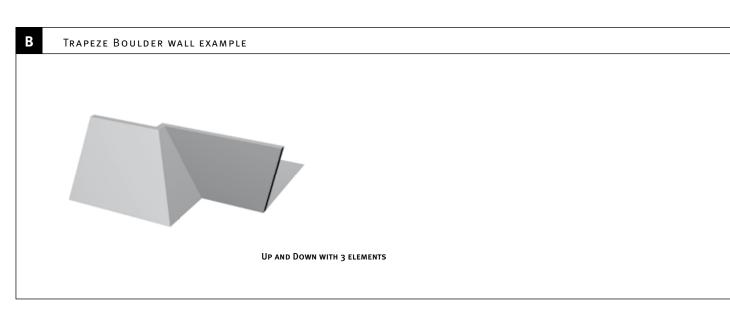


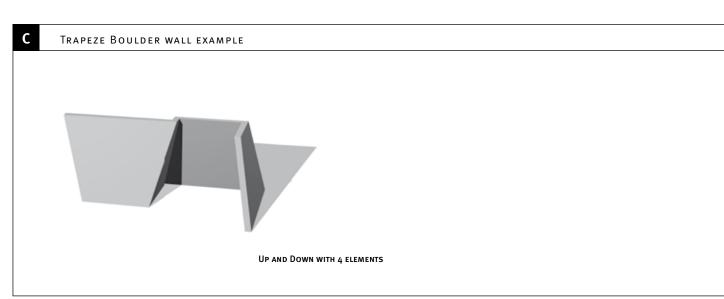












 $\Box\Box\Box$

 ITEM NO.
 LENGTH
 EFFECTIVE HEIGHT

 PGAT2
 150 cm
 208 cm

Incl. $\textsc{CREFIX}^{\textcircled{o}}$ coating and holds on all sides. Surface only available in Start execution. Base provided by customer.

Element of high quality C $_{30}/_{37}$ concrete. Design: GAT®-Design.



START



EXAMPLE PRISM GAT® 2 IN DOUBLE FORMATION



•

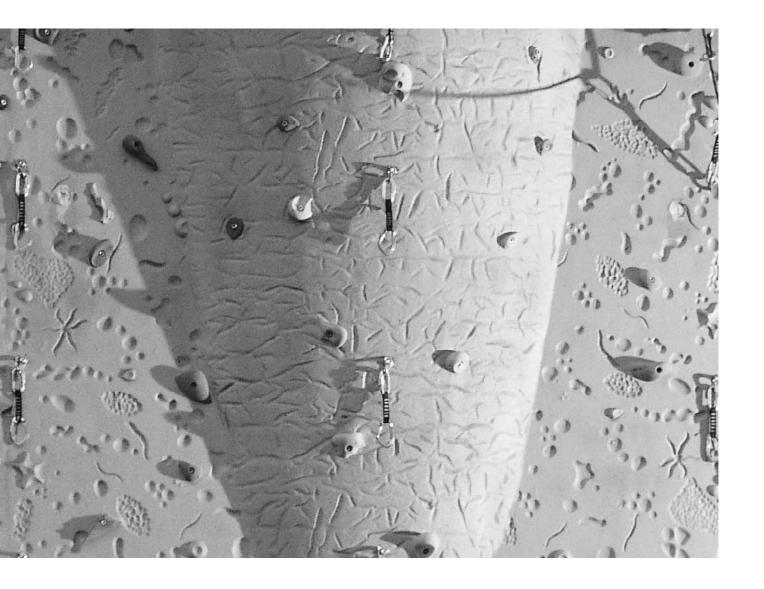
For rope climbing facilities we recommend a minimum height of 6.25 m, or even better, of 10 m.

We can, of course, also provide you with facilities of a height of more than 10 m. Our experts would be pleased to give you advice on this for your project. Just get in contact with us:

www.concrete-sportanlagen.de

① Safety measures: Utilization of a rope climbing device is based on proper safeguarding.



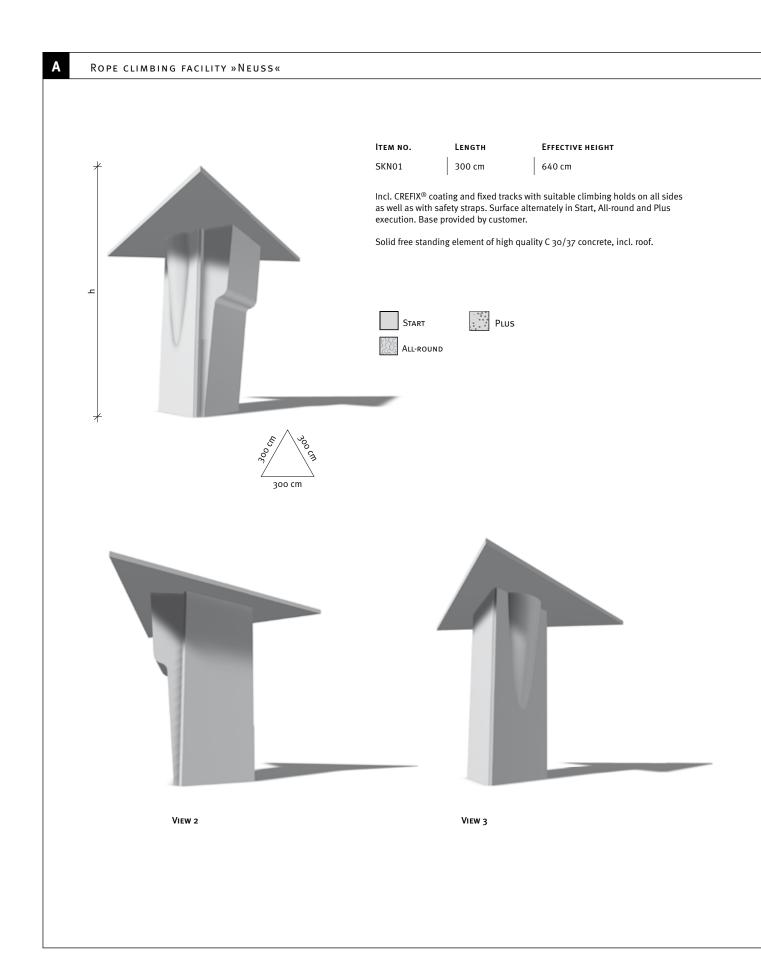




Rope climbing has always been fascinating. However, only the option to exercise rope climbing without the often far away mountains opened up this sport for everyone. To this day, rope climbing did not lose its attractiveness. Climbing is booming, not only because of the fun factor but also because of its many positive side effects: your coordination, body control and condition are trained and your muscles and your psyche are vitalized and strengthened. You can benefit from all of this also by using a rope climbing facility the next time you do not have a mountain nearby.

Just as with the Boulder facilities you can also develop your custom-made rope climbing facility from a multitude of different modules so that people of all ages would be able to improve their individual ability.







ROPE CLIMBING FACILITY »FRANKFURT (ODER)«

ITEM NO.	LENGTH	EFFECTIVE HEIGHT
SKF01	418 cm	990 cm
SKF02	234 cm	600 cm

Incl. CREFIX® coating and fixed tracks with suitable climbing holds on all sides as well as with safety straps. Surface only available in Special execution. Base provided by customer.

Solid free standing element of high quality C $_{30}/_{37}$ concrete. Design: ${\rm GAT}^{\tiny \textcircled{\tiny 0}}\text{-}{\rm Design}.$

