



**ROCK
PILLARS**
ENGINEERED FOR CLIMBING



Engineered for climbing

Rock Pillars climbing shoes are tool for sport which enables the climbers to make their performance better, to maintain motivation, and to experience climbing at its best. The story has begun in Siberia. Rock Pillars was found in late 80-ies. Few years later was Evgeni Ovtchinnikov 3rd in the World Cup competing in Rock Pillars. At this time, Pavel Hendrych, Czech engineer and industrial designer has joined. Together with Evgeni and other climbers, they have created shoes conforming needs of sport climbers.

Rock Pillars, engineered for climbing, are being created in atmosphere of high technology and deep user knowledge. Rock Pillars never stop bringing new technological solutions, lasts and rubber compounds. Thanks to precise construction and used materials Rock Pillars breaks the barrier in climbing, and sponsored climbers are the creative base for new solutions. Company producing also climbing equipment Ocún has its own manufacturing facilities in the Czech Republic. Today has around 100 dedicated employees and sells in 44 countries worldwide.



**ROCK
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DIAMOND



OZONE QC



OZONE SLIPPER



TOP GUN LU



TOP GUN QC



PEARL LU



PEARL QC



PEARL SLIPPER



ZEROCKS



STREAM



ZION



ZEAL



STRIKE LU



STRIKE QC



SUMMIT LU



RENTAL



HERO LU



HERO QC



DIAMOND

Art. 00598



Extremely asymmetric shape predicts aggressive climbing shoes for competition and sport climbers. Important features of Diamond are validated by tiniest footholds, edges, and holes, they make the crux workable. The upper is made of combination of natural and synthetic leathers. This complex mixture – elastic and breathable at once – reaches ideal enlacement of the foot. This together with asymmetric lacing system make not only perfect fixation of the foot inside of the shoe, but mainly bring focused power to the tip-toe while keeping great deal of sensibility. Seamless heel has a great comfort. Vibram XS Grip sole gives great friction.

Best for:

Bouldering, rock climbing, overhangs, edges, pockets, heelhooks

- Upper: combined 1,4 mm microfiber synthetic and 1,8 natural leather
- Color: red / light grey
- Lining: semi-lined, PES in front part
- Last: Excentric
- Midsole: Suflex – 3D Fit midsole
- Sole: 4 mm Vibram XS Grip
- Split-hide insole
- Padded airy tongue
- Seamless heel, perforated
- Tensioned heel-band
- Weight : 472 g (7 UK)
- Sizes : 3 - 13 UK

OZONE QC

Art. 00599



Ozone QC are asymmetric, anatomically shaped climbing shoes, sophisticated weapon for fighting gravity, best for competition and sport climbers. Ozone are surprisingly precise on tiniest footholds, edges and holes. Vibram XS Grip sole underlines performance of these shoes. Precise seamless heel gives great comfort. Unique patented 3-Force system provides fixation of the forefoot by reacting against force vector by which the climbing shoes are naturally twisted from the foothold.

Best for:

Bouldering, rock climbing, extreme sport climbing, competitions, overhangs, pockets, edges, toehooks, heelhooks

- Upper: microfiber synthetic leather 1,4 mm
- Color: green
- Lining: PES
- Last: Asymmetrix
- Midsole: Suflex – 3D Fit midsole
- Sole: Vibram XS Grip 4 mm
- Split-hide insole
- Padded airy tongue
- Seamless heel
- Tensioned-heel band
- Rubber patch for toe hooking
- 3-Force patented system
- Weight : 454 g (7 UK)
- Sizes : 3 - 13 UK

OZONE SLIPPER

Art. 00600



Slipper version of Ozone climbing shoes which are winning their popularity not just because of the attractive design but also their performance of course. Unique 3-Force system enables to use slippers where it was not possible to use them before. Tiniest footholds and smears are glued with 3-Force system, bettering what was good before. Combination of new Asymetrix last and cut bring climbing shoes to new level of technicality, being not able only to stand but to actively force your shoes to help you. Vibram XS Grip sole bites any type of rock. Synthetic lined upper stretches exactly according to your foottype. This shoe is not for everybody but when you have it on, you want more of climbing. Simply made in rocks.

Best for:

Bouldering, rock climbing, extreme sport climbing, competitions, overhangs, pockets, edges, toehooks, heelhooks

- Upper: microfiber synthetic leather 1,4 mm
- Color: green
- Lining: PES
- Last: Asymmetrix
- Midsole: Suflex – 3D Fit midsole
- Sole: Vibram XS Grip 4 mm
- Split-hide insole
- Seamless heel
- Tensioned-heel band
- Rubber patch for toe hooking
- 3-Force patented system
- Weight : 420 g (7 UK)
- Sizes : 3 - 13 UK

TOP GUN LU

Art. 00601



The weapon for cruising the hardest sport routes and boulders. Developed in cooperation with world champions Tomas Mrazek and Salavat Rakhmetov, its design plan is simple-performance. The Top Gun LU is made from top-quality materials including a Vibram sole and synthetic leather uppers. The rubber covered toe is designed for maximizing toe hooking and jamming when the going gets steep. The precision toe turns the tiniest footholds into a stairway, and the heelcup grips the heel for maximum pulling.

Best for:

Bouldering, rock climbing, sport climbing, competitions, cracks, edges, heelhooks, toehooks

- Upper: microfiber synthetic leather 1,8 mm
- Color: black
- Last: Optimal
- Midsole: Suflex
- Sole: Vibram XS Grip 4 mm
- Split-hide insole
- Quick lace-up system
- Seamless heel
- Perforated heel
- Tensioned-heel band
- Rubber patch for toe hooking
- Ventilated, padded tongue
- Weight : 438 g (7 UK)
- Sizes : 3 - 13 UK

TOP GUN QC

Art. 00595



The concept of Top Gun started with an idea of creating sport climbing shoe which can still be very comfortable. Right mixture of materials, cut and rubber made it work on this quick closure shoe. It can be used on overhangs, slabs, multi pitches as well as indoors or bouldering. Stiff midsole makes it possible on micro footholds. Practical rubber foil toe-box cover enables toe hooking in its best. Sticky Vibram XS Grip as usual proves unbeatable on any time of rock.

Best for:

Bouldering, rock climbing, sport climbing, competitions, cracks, edges, heelhooks, toehooks

- Upper: microfiber synthetic leather 1,8 mm
- Color: black
- Last: Optimal
- Midsole: Suflex
- Sole: Vibram XS Grip 4 mm
- Split-hide insole
- Seamless heel
- Perforated heel
- Tensioned-heel band
- Rubber patch for toe hooking
- Ventilated, padded tongue
- Weight : 454 g (7 UK)
- Sizes : 3 - 13 UK

PEARL LU

Art. 00594



Developed in conjunction with Tomas Mrazek (several time World Champion and numerous 9a routes) the Pearl is manufactured to be a very light and close-fitting shoe. It's made out of high quality micro-fiber based synthetic leather. The shoe is lined with a comfortable polyester fabric. Its Vibram sole allows you to stick to overhangs, tiny edges, and small pockets. The special cut gives it the right stiffness yet maintains excellent sensitivity. The fast lace-up system, the lined tongue and the raised heel with two pull straps make it very easy and comfortable to put on. With its asymmetrically shaped last "Radical", the downward pointing toe, and tight heel, the Pearl gives the feeling of wearing high caliber guns on feet. Upper: 1,8 mm microfiber leather

Best for:

Rock climbing, sport routes, competitions, multi-pitch, edges

- Upper: microfiber synthetic leather 1,4 mm
- Color: light grey
- Lining: PES
- Last: Radical
- Midsole: Suflex
- Sole: Vibram XS Grip 4 mm
- Seamless heel
- Padded airy tongue
- Quick lace-up system
- Tensioned-heel band
- Weight : 390 g (7 UK)
- Sizes : 3 - 13 UK

PEARL QC

Art. 00592



PEARL SLIPPER

Art. 00591



ZEROCKS

Art. 00589



Pearl QC model is built from the same foundation as its lace-up cousin. It provides all the precision and performance as the lace up, but with the convenience of a quick closure system. Pearl QC is ideal for shorter sport routes, boulders, training in the gym, or any other situation where easy on and off is required.

Best for:

Rock and indoor climbing, sport routes, competitions, multi-pitch, edges

- Upper: microfiber synthetic leather 1,4 mm
- Color: light grey
- Lining: PES
- Last: Radical
- Midsole: Suflex
- Sole: Vibram XS Grip 4 mm
- Seamless heel
- Padded airy tongue
- Tensioned-heel band
- Weight : 410 g (7 UK)
- Sizes : 3 - 13 UK

The last member of the Pearl family fulfills the requirements for hard bouldering. We put the stress to its comfort and all-around climbing use. The asymmetric cut of the instep and the special shape of the shoe toe makes toe hooking very easy. The three pull loops make certain that the shoes can be put on even if worn very tight.

Best for:

Bouldering, indoor climbing, training, slabs, pockets, cracks, toehooks

- Upper: microfiber synthetic leather 1,4 mm
- Color: light grey
- Lining: PES
- Last: Anatomic
- Midsole: Suflex
- Sole: Vibram XS Grip 4mm
- Split-hide insole
- Seamless heel
- Tensioned-heel band
- Rubber patch for toe hooking
- Weight : 406 g (7 UK)
- Sizes : 3 - 13 UK

The second generation of Zerocks are definitely one of the best all-around rock shoes on market. The use of Anatomic last provides a bit more space in the toe box. This brings much more precision while standing on very tiny footholds. The synthetic micro fiber uppers allow you the user to get a comfortable, precise, tight fit. Deeper heel, provides outstanding confidence for hard heel hooking and second evolution of Grippin rubber formula (which is 30% more adhesive than the first one) provides perfect friction.

Best for:

Rock climbing, bouldering, multi-pitch, overhangs, pockets, edges, heelhooks

- Upper: combined natural leather 1,8 mm and microfiber synthetic leather 1,4 mm
- Color: orange/grey
- Lining: PES in front part
- Last: Anatomic
- Midsole: Suflex
- Sole: Grippin E 4 mm
- Split-hide insole
- Seamless heel
- Padded airy tongue
- Perforated heel
- Tensioned-heel band
- Weight : 432 g (7 UK)
- Sizes : 3 - 13 UK

STREAM

Art. 00587



Stiffness
soft mid hard

GRIPPIN'E
ROCK PILLARS

Simple, yet technically perfect construction focused on comfort provides the Stream all the expected features. Top level semi-lined shoe with enough space for toes, anatomic deep heel for precise heel hooking, comfortable ventilated padded tongue, quick closure system for effective on and off are the main features of Stream. All is underlined by the new evolution of Grippin sole that provides incredible friction on all rock surfaces. Stream is universal shoe that balances comfort with performance without sacrificing either one.

Best for:

All-round climbing, rock climbing, bouldering, multi-pitch, indoor

- Upper: natural leather 1,8 mm
- Color: yellow
- Lining: Cotton in front part
- Last: Optimal
- Midsole: Suflex
- Sole: Grippin E 4 mm
- Split-hide insole
- Seamless heel
- Padded airy tongue
- Perforated heel
- Tensioned-heel band
- Weight : 472 g (7 UK)
- Sizes : 3 - 13 UK

ZION

Art. 00590



Stiffness
soft mid hard

GRIPPIN'E
ROCK PILLARS

Zion has an optimal anatomic shape and perfect sticky rubber formula. Both models are produced on Anatomic last which resulted from never ending development and a long search for the perfect synergy between foot and shoe. Another very important result of this development is the second generation of Grippin sticky rubber, which provides excellent friction and durability. And to give these specially developed shoes the right flavor, we have marinated them in fresh orange juice. Zion is the right choice for those, who prefer to have all-around climbing shoes for wide range of climbing activities from bouldering to bigwalls and who prefer lace up system.

Best for:

Rock climbing, intermediate sport routes, technical pockets, edges, multi pitch routes

- Upper: natural leather 1,8 mm
- Color: grey
- Lining: Cotton
- Last: Anatomic
- Midsole: Suflex
- Sole: Grippin E 4 mm
- Split-hide insole
- Seamless heel
- Padded airy tongue
- Quick lace-up system
- Perforated heel
- Tensioned-heel band
- Weight : 440 g (7 UK)
- Sizes : 3 - 13 UK

ZEAL

Art. 00588



Stiffness
soft mid hard

GRIPPIN'E
ROCK PILLARS

Not only is the Zeal a powerful combat shoe, but also a universal shoe for all kinds of climbing and all kinds of rock. It is an ideal shoe for climbers with intermediate to advanced climbing skills. Zeal was the first model made on the "Radical" last, offering a double layer rand and innovative construction of the toe box of the shoe. The fast lace-up system, breathable tongue, lined toe box, Grippin rubber sole, and perforated heel are special features that have been part of this shoe since 2000. Sometimes, one must work hard to be popular and that is what Zeal knows how to do. The union of modern and classic, in materials and design - that is the objective of Zeal.

Best for:

Rock climbing, sport routes, multi-pitch, edges, cracks, toehooks

- Upper: natural leather 1,8 mm
- Color: grey
- Lining: Cotton in front part
- Last: Radical
- Midsole: Suflex
- Sole: Grippin E 4 mm
- Split-hide insole
- Seamless heel
- Padded airy tongue
- Perforated heel
- Quick lace-up system
- Tensioned-heel band
- Rubber patch for toe hooking
- Weight : 464 g (7 UK)
- Sizes : 3 - 13 UK

STRIKE LU

Art. 00602



Stiffness
 ○ ○ ●
 soft mid hard

GRIPPIN' D
 ROCK PILLARS

Strike LU are lace up version of unbeatable Strikes. Combination of fully lined synthetic leather, Basic last, and precise cut sets new standards in comfort of climbing shoe. Quick lace up system make your start even easier. If you want multi-pitch usability, sport route preciseness and indoor gym durability, Strike LU is your choice. Manufacturing standards push this shoe to the front lines of climbing with thousands satisfied users.

Best for:

Indoor climbing, rock climbing, multi-pitch, slabs

- Upper: microfiber synthetic leather 1,4 mm
- Color: light grey
- Lining: PES
- Last: Basic
- Midsole: Suflex
- Sole: Grippin D 4 mm
- Quick lace-up system
- Padded airy tongue
- Tensioned-heel band
- Weight : 386 g (7 UK)
- Sizes : 3 - 13 UK

STRIKE QC

Art. 00603



Stiffness
 ○ ○ ●
 soft mid hard

GRIPPIN' D
 ROCK PILLARS

Strike QC are comfortable and well-fitting climbing shoes. Base for these shoes are quality materials and precise construction. Flat-type last, soft padded airy tongue, relaxed seamless heel and quick closure (QC) system strengthen their comfort and practicality. The result are Strike QC climbing shoes purposed for both rock and gym climbing. You can climb and boulder all-day-long in them. They bring great value also in multi-pitch climbs.

Best for:

Indoor climbing, rock climbing, multi-pitch, slabs

- Upper: microfiber synthetic leather 1,4 mm
- Color: light grey
- Lining: PES
- Last: Basic
- Midsole: Suflex
- Sole: Grippin D 4 mm
- Padded airy tongue
- Tensioned-heel band
- Weight : 402 g (7 UK)
- Sizes : 3 - 13 UK

SUMMIT LU

Art. 00000

NEW



Stiffness
 ○ ○ ●
 soft mid hard

GRIPPIN' D
 ROCK PILLARS

Summit LU are new lace up shoes in the entry-level category. Combination of natural split leather, Basic last, and precise cut shows how comfortable climbing shoe can be. Reinforced lace up system, round toe-box, comfortable heel, hard midsole are the key points for extra durable and versatile shoes. If you want multi-pitch usability, single-pitch sensitivity, and indoor gym durability, Summit LU has all. Manufacturing standards with tough quality control and typical Czech preciseness make this shoes top in the terms of elaboration.

Best for:

Indoor climbing, rock climbing, multi-pitch, slabs, pockets, edges

- Upper: natural leather 1,8 mm
- Color: yellow
- Lining: Cotton in front part
- Last: Basic
- Midsole: Suflex
- Sole: Grippin D 4 mm
- Seamless heel
- Perforated heel
- Weight : 450 g (7 UK)
- Sizes : 3 - 15 UK

RENTAL

Art. 00596



Stiffness
soft mid hard

GRIPPIN[®]
ROCK PILLARS

HERO LU

Art. 00579



Stiffness
soft mid hard

GRIPPIN[®]
ROCK PILLARS

HERO QC

Art. 00580



Stiffness
soft mid hard

GRIPPIN[®]
ROCK PILLARS

Comfortable climbing shoes constructed specially for gyms, renting purposes, and climbing courses. Rand rubber is made from 2 layers. If you see bottom grey colored rand layer through the top one, it is time to change, or repair the pair. This together with 5 mm extra durable sole make the lifetime of the climbing shoes longer. On the back of the shoes is clearly indicated UK size. For easier handling, and stocking purposes the shoes are equipped by buttons for joining the pair together. Rental are comfortable climbing shoes mainly for beginner climbers, or for those who search economical, yet durable model for random climbing trips.

Best for:

Indoor climbing, renting purposes, climbing courses

- Upper: microfiber synthetic leather 1,4 mm
- Color: red
- Lining: PES
- Last: Basic
- Midsole: Suflex
- Sole: Grippin D 5 mm
- Quick lace up system
- Tensioned-heel band
- UK size marking at heel part
- Push-button joint system for easy storage
- Weight : 384 g (7 UK)
- Sizes : 3 - 13 UK

Everyone must start sometime. For those who start very early we developed a model that will let the youngsters keep up with Mum and Dad, or whoever their climbing hero may be. The "Baby" last was developed with emphasis on the comfort of the child's foot. The fully lined microfiber leather and the elastic heel fit really well.

Best for:

Kids

- Upper: microfiber synthetic leather 1,4 mm
- Color: red
- Last: Baby
- Sole: GRIPPIN D 4 mm
- Elastic heel part
- Weight : 186 g (31 EUR)
- Sizes : 27-35 UK

For those who don't know how to lace up yet, but love the freedom of climbing, there is in this elegant model Hero QC with quick closure system.

Best for:

Kids

- Upper: microfiber synthetic leather 1,4 mm
- Color: white/red
- Lining: PES
- Last: Baby
- Sole: Grippin D 4 mm
- Elastic heel part
- Weight : 172 g (31 EUR)
- Sizes : 27-35 UK

Climbing shoe construction



Upper construction materials and lining

The Rock Pillars climbing shoes are made either of natural leather or synthetic leather or a combination of both.

Traditional material for climbing shoes upper production is split suede leather. It brings comfort and is enough hygienic and breathable. For reduction of elasticity and technological strengthening it is reinforced by cotton lining. Modern and technologically advanced material is its synthetic imitation from PES microfiber. This material has far better parameters of elasticity and dimensional stability. It gives the shoes partial elastic features. Also lining is customized to respect this elasticity and that is why absorbent PES knit is used. In hygienic parameters synthetic materials are behind natural leather but this can be balanced by washing.

Padded airy tongue

Airy tongue glued-up of three layers of permeable materials - absorbent lining, perforated foam and 3D Mesh knitted fabric - provides permanent ventilation of the shoe.

Seamless heel

Since 1994, Rock Pillars has been using a special upper-cut construction, where no snip goes through the heel area, so it means that the heel is without any seams. Such a heel is much more comfortable compared to other shoe constructions (especially in case of climbing shoes which have pre-stressed heel-band and the heel is more pressed).

Midsole

Midsole is very important component in the climbing shoe construction. The midsole gives stiffness of the shoe. It significantly affects constructional reinforcement and shape stability. According to used material, its thickness and manufacturing technology, the midsole gives to the shoes important features which define sensitivity and stability for climbing on edges. Modern technologies use thermo molding of flexible materials which have shape memory. These features significantly affect efficiency in climbing. Rock Pillars use 3D Fit system.

3D Fit midsole

Construction of thermo-molded midsole of convex shape provides support for toes and constructional stiffness for a good transference of forces. It is made of thermo-active and flexible, shape-stable materials.

Rands, rubber patch and power distribution

Besides upper material features, its construction and last is composition of all rubber parts including sole one of the most essential factors which give the shoes final features. These parts are not only to cover and protect the upper from heavy use in rocks, they are also important construction point contributing largely to correct function of the climbing shoes - foot stability. Correct force distribution based on foot anatomy knowledge and tension requirements of the construction used by specific climbing techniques, defined correct shape of rubber parts and main features of rubber. Handmade completion and correct pre-stress are unique alchemy of our craft. New patented 3-Force system is example of our neverending effort in „engineered for climbing“.

Tensioned heel-band

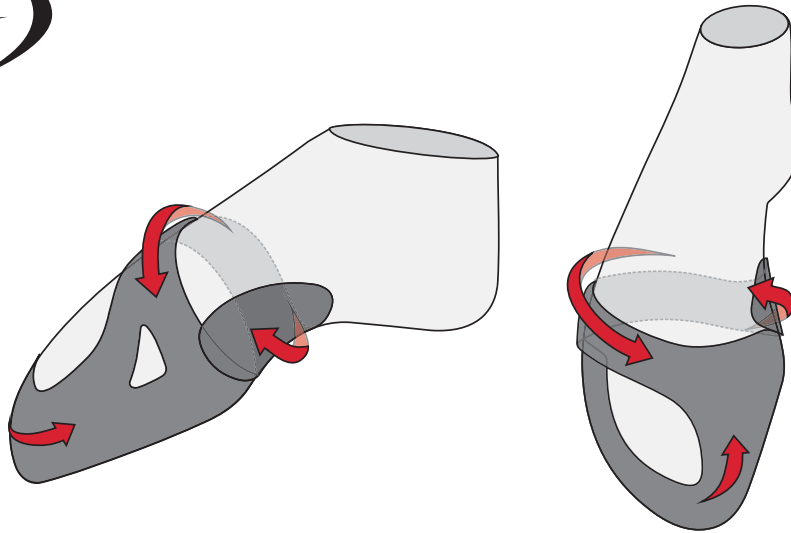
Pre-stressed heel band provides firmer fixation of the heel and adequate pressure in the toe direction. Optimum tension of this shoe part is constructively defined. Pre-stressed heel band is made of special DURARAND rubber, which has optimum parameters for transference of forces.

Perforated heel

Thanks to the perforation, gets the heel part better shape-flexibility and higher friction for heel-climbing techniques. For these purposes, the heel part is made of very flexible, high-friction rubber STICKYRAND.

Rubber patch for toe hooking

In the area of toe joints, especially big-toe area is the upper material protected by smaller piece of special rubber foil in thickness 0,9 mm. This rubber foil is produced from special sticky compound. This construction protects the climbing shoe upper and enables tip of the shoe to transfer forces better into toe-hooking in overhang or technically demanding routes.



3-Force patented system

Original solution by Rock Pillars from 1994 enables to use rubber foil in the construction of front toe-box. It was improved by our new 3-Force system. 3-Force uses connection of 3 points which enabled controlled inner force distribution in order to maintain better torsion stability. Inner rand rubber in the place of big toe stabilizes standing on edge and protects the big toe while toe-hooking, it continues in periphery of toe-joints to outer edge. By this it stabilizes this periphery and with slight tension it circuits inner foot arch where is in the space of big toe's joint fixed in a way of perforated ending tongue. This support softly this joint and prevents from horizontal movement from the tip-toe. Final effect can be described as:

3-Force patented system:

- Stabilizes inner edge while standing on small edges by force contra-reaction from inner foot arch.
- Stabilizes front part of the slipper construction in the area of toe joints.
- Stabilizes big-toe position from horizontal movement from the tip-toe.

The closure system

System of shoe closure is very important construction point. It influences both comfort and overall stability of the upper part of foot. Often it influences also technique of climbing. We use 4 different systems: classic lace-up and quick lace up system (LU), quick closure (QC) system for fast and precise fixation of the foot and a high quality elastic for fast and easy put on and off.



Lace-up (LU)

Though the lace-up system may seem to someone to be less comfortable, it is a good choice for those, who have not a typical foot shape. The lace-up system helps to make the shoe really close-fitting. The classic LU system maybe less practical, but when carefully laced, the shoe should not have to be re-laced.



Quick closure (QC)

The quick closure solution with velcro stripes guarantees comfort and fast and easy fixation of the foot. It is practical especially for training when the climber needs to put the shoe on and off constantly.



Quick lace-up (LU)

Quick LU means that the laces run through leather channels and can be adjusted just with a single pull.



Slipper

Slipper shoes are fitted with high quality elastic in the instep part. The slipper is ideal for climbers who do not want to bother with any kind of lacing. Nevertheless, a slipper shoe cannot be adjusted.

Friction theory and climbing forces transference

Friction applies to two smooth parallel materials sliding against one another. Friction depends on the true contact area of the two objects. In climbing, there are several factors that have some impact on friction.

Weather

Temperature: Affects physical parameters of the materials, suitable conditions for best adhesion of rubber are temperatures between 5 - 15 °C. Climbing shoe manufacturers design their shoe rubber to work best in a specific temperature range (0-5 °C), below this temperature the rubber is harder and won't mould well to the shape of the rock and above this the rubber will be too soft and will deform too easily. This is why climbing shoes work best in the cold.

Humidity: Air humidity as well as humidity inside of the rock reduce rubber adhesion.

Rock

Slopes: Coefficient of friction is dependant on the angle of rock slope and that is why smaller rock slope secures higher friction.

Surface structures: Structure and rock surface texture have direct effect on friction. On grain structure are important shape and sharpness of the grain. Fine and sharp texture makes best condition for friction, on the other way rough and smooth texture is less favourable as in the contact place between rubber and rock will be less interface.

Climber

Pressure: Specific pressure caused by the climber on rock makes effectively the real interface between rubber and rock because this pressure causes rubber surface deformations which will increase the interface.

Surface area: The bigger the standing interface area is, the bigger the friction is. Correct foot technique as well as balance feeling have great effect on friction.

Shoes

Stiffness: If the rock climbing sole construction is enough soft to make best surround of the rock surface, the bigger the interface area will be. But certain constructional stiffness is required as the shoe must secure standing on the small edges where stability plays its role.

Rubber: Climbing rubber with correct parameters is one big alchemy. Parameters are defined by various components. Rubber has to have correct hardness and adhesion but mainly correct viscoelastic parameters which enable penetration of the rubber into rock structure. Softness allows rubber to mesh with rock and its rough surface. Rubber needs to be soft to allow it mould to the rock but if it's too soft the rubber will deform and slip. Softness of rubber also varies with temperature. Sticky rubber which gets easily penetrated by rock microstructure and is enough hard to transfer this enlarged interface area into friction, is the correct climbing rubber compound. And the rubber also determines resistance against wear which affects the lifetime of the shoe.

Development and parameters of rubber compounds are for the efficiency and sport results of climbing shoes same important as for Formula 1 cars. To maintain perfect force transference by friction during contact of climbing shoes with rock requires scientific research in the field of physical theory of friction and chemical development of new compounds. Rock Pillars has this development for more than 20 years. Science cannot be without real life and testing. We are working many years on constant improvement together with our specialized suppliers, such as Vibram and also laboratory developing compounds Grippin. For specialized rubber compounds which are used for climbing shoes, the physical features play always such role for which the rubber is purposed.



Vibram XS Grip

Is the latest rubber compound from VIBRAM®, it is used on our performance and extreme models in 8c and 9a range. It is working stable on edges, smears and pockets, delivering maximum friction

in all temperatures. Softer compound aimed mainly on extreme sport climbing on overhang rock where every bite counts.



Durand

Is special rand rubber compound for rands and pre-stresses bands used for climbing shoes construction. Resistance to wear - durability, and elastic features important for force distribution were the main criteria in development of this compound.

Recommended for rands where durability and constructional distribution of forces are needed.



Grippin Edge

Was developed by our laboratory for maximum edging power, combination of friction and grip but still with great edging stability. Thanks to an improved resistance to plastic distortion, it keeps its shape even after hours of use. It was mixed for superior durability. Great choice for our 7b range.



Grippin Dura

Was designed for extreme durability. This compound combines important features

of friction, edging and stability. Due to balanced mixing of all we have come up with great rubber with universal features and long-lasting lifetime. Correct choice for our 6a and Explorer lines.

Recommended in case where all-round use and lifetime are priority.

Stickyrand

Is special high-friction rubber compound with reduced stiffness which is suitable for special use on climbing shoes where sensitivity and friction play their main role. This compound is used on heels and toe-boxes - those parts which are used for hooking.

Recommended for upper and rand parts where sensitivity and friction are preferred.

Lasts and anatomy

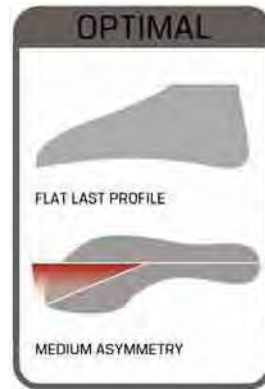
Last gives the climbing shoes shape and correct volume. Development of lasts and its molding is long-term evolution based on deep knowledge and new information synergy, which come with development of sport climbing. It is a precisely constructed climbing shoe that supports the foot to stand on the rock properly and helps to reduce the stress of sole muscles. Developers of climbing shoes have to be experts in foot anatomy, because every typical foot shape needs a suitable shoe model. To connect anatomical features and capabilities of foot with climbing technique is a must which Rock Pillars fulfill for many years hand in hand with creation of new lasts. Also requirements of comfort and recreational climbing must be satisfied by our lasts. That is why we use nowadays 7 different lasts with different characters, which suit different feet and different performance requirements.



Excentric

Very bent last with concave shape for support of pressed toes. Extremely asymmetric shape with orientation on two front toes. Front is anatomically modeled for more stresses toes with enough space for all toes. Width of last is for normal to wide foot with anatomical medium heel. Last was constructed for peak performance in pre-stressed shoes.

Models: Diamond



Optimal

Slightly bent last with medium asymmetry. Front is modeled for moderate stressed toes with enough space for all types of toes. Width of last is for normal to wide foot with large volume heel. This shape of last comes from study of majority foot shape with optimized parameters for performance climbing.

Models: Top Gun LU, Top Gun QC, Stream



Asymmetrix

Slightly bent last with radically shaped front, and concave shape for support of pressed toes. Very asymmetric shape with big-toe orientation. Front is anatomically modeled for more stressed toes. Width of last is for normal to wide foot with anatomical medium heel. Last was constructed for peak performance in overhang routes.

Models: Ozone QC, Ozone Slipper



Basic

Flat last with slight asymmetry. Front is modeled for comfort of all toes while keeping technicality of shoes on high level. Width of last is for normal to wide foot with medium to large heel. Last was constructed as universal for all-round climbing purposes with respect to all needs for construction of high quality climbing shoes.

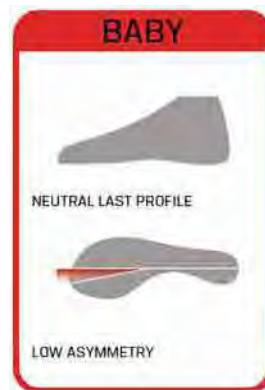
Models: Strike LU, Strike QC, Summit, Rental



Radical

Bent last with radically shaped front, medium asymmetric. Front is constructed for moderate stressed toes with enough space for all toes. Last is suitable for normal to narrow foot with small volume heel. Last comes from study of feet of skinny, bony archetypes which frequently appear in performance climbing.

Models: Pearl LU, Pearl QC, Zeal



Baby

Flat last with slight asymmetry. Front is modeled for comfort of all toes while keeping technicality of shoes on high level. Width of last as well as heel correspond with orthopedic requirements of children shoes.

Models: Hero, Hero QC



Anatomic

Medium bent last, medium asymmetric, constructed for moderate stressed toes in the tiptoe. Shape of the last is very anatomical, coming from long-term studies of the foot anatomy. Best for normal width of the foot and medium sized heel.

Models: Pearl Slipper, Zerocks, Zion

Sizes and optimal fit

Correct choice of last, resp. climbing shoe model is not the only parameter in choosing a climbing shoe. Everyone has unique foot and relevant volume. Size choice is then determined by toughness of construction and our performance requirements. Generally we can say that optimal size for performance climbing is smaller than recreational or multi-pitch size. While working with recommended size charts it is necessary to know your standard walking shoe size and size of the foot in mm.

Size range and correct size choice

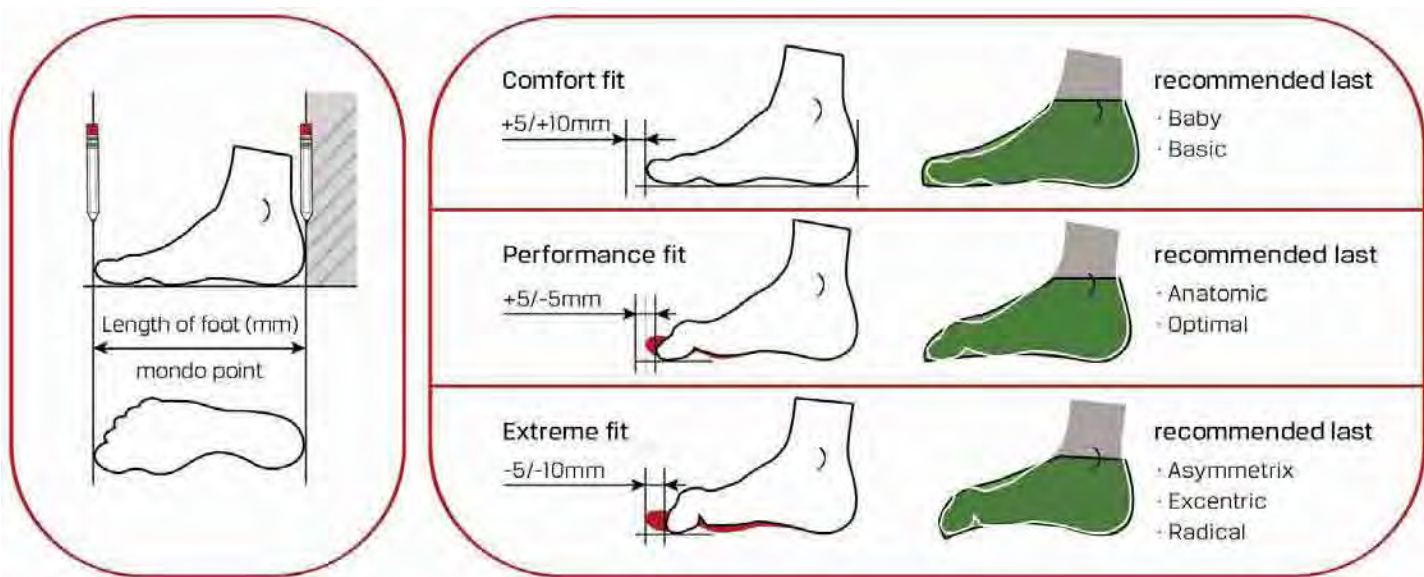
Correct transfer of sizes between individual size systems and recommendation of climbing shoe sizes are neverending topics for discussions. We have realized this fact from the very beginning and that is why we have chosen Mondo Point system from the beginning for Rock Pillars climbing shoes. Whole collection is produced on lasts which are sized in metrical range. This has its great advantage as everybody has metrical device, pen and paper and therefore easily figures out his/her foot-length. Length of the foot in mm is Mondo size. Standard marking of Rock Pillars climbing shoes than reflects sizes for PERFORMANCE FIT, meaning that sizes of lasts are already customized to performance climbing by which the bent position of big-toe is normal.

Correct procedure while choosing the size:

1. Measure footlength.
2. Choose how tight it should be according to performance (Comfort, Performance, Extreme).
3. Make size correction according to recommended chart.

Example of how to choose Rock Pillars:

Foot-length is 26,5 cm (alternative transfer to UK is $2+6+0,5-1 = 7,5$ UK)
 265 mm or 7,5 UK is recommended size as per our chart (see chart) which will ensure Performance Fit by Rock Pillars climbing shoes.
 When you prefer more comfort which resembles Comfort Fit, choose climbing shoes 5 to 10 mm larger. This transfers to 0,5 UK, resp. 1,0 UK size. In our case 8 to 8,5 UK. This size corresponds to our regular walking or trekking shoes.
 In case you are looking for extreme difficulty and very short climbs, your choice of size will be 0,5 to 1,0 UK smaller. Thus 6,5 to 7 UK. Extreme Fit could be, especially in newly bought shoes, quite painful and in case of wide feet it is not suitable. Using this size also puts great demand on materials and could end in early damage or even tearing of the shoes.



Conversion table (all shoes are produced in metric scale)

mm	220	225	230	235	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325
UK	3	3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	8 1/2	9	9 1/2	10	10 1/2	11	11 1/2	12	13	14	15
EUR	35	36	37	37 1/2	38	38 1/2	39	40	41	41 1/2	42	42 1/2	43	44	45	45 1/2	46	46 1/2	47	48	49	50

Rock Pillars model	Last	Toe type			Foot type		
		 Egyptian	 Greek	 Cube	 Normal	 Wide	 Narrow
Diamond	Excentric	●	●	◐	●	◐	●
Ozone QC	Asymmetrix	●	◐	○	●	○	●
Ozone Slipper	Asymmetrix	●	◐	○	●	○	●
Pearl LU	Radical	●	●	◐	●	◐	●
Pearl QC	Radical	●	◐	○	●	○	●
Zeal	Radical	●	●	◐	●	◐	●
Pearl Slipper	Anatomic	●	◐	○	●	◐	●
Zerocks	Anatomic	●	◐	○	●	◐	●
Zion	Anatomic	●	◐	○	●	●	◐
Top Gun LU	Optimal	●	●	●	●	●	◐
Top Gun QC	Optimal	●	●	●	●	●	◐
Stream	Optimal	●	●	◐	●	◐	◐
Summit	Basic	●	●	●	●	●	◐
Strike LU	Basic	◐	●	●	●	●	◐
Strike QC	Basic	◐	●	●	●	●	◐
Rental	Basic	◐	●	●	●	●	◐
Hero LU	Baby	●	●	●	●	●	●
Hero QC	Baby	●	●	●	●	●	●

- suitable
- ◐ less suitable
- unsuitable

Climbing activities

There are several different disciplines and every discipline has different requirements for functional qualities of the shoe.



Rock climbing

In general, the quality of rock climbing shoe depends on its construction and rubber. Rock climbing offers quite a wide range of climbing terrains. There are slopers, holes, edges, slabs, and cracks and of course several kinds of rock with various difficulty.

To make one universal shoe usable for rock climbing as such would not be possible without some compromise. That is why we produce several models also with different anatomic features. Some shoes may be better for holes, edges and tiniest foot holds and some for slabs and friction.



Indoor climbing

Qualities of a shoe for indoor climbing depend mostly on performance level of the climber himself. Beginners need to have a comfortable shoe with the stress on its durability. It is not that simple to classify shoe for advanced climbers, there are many

individual aspects to be taken into consideration. In principle, who wears climbing shoes just for one route, prefers quick closure system and can wear shoes very tight. Real sport climbers need extremely tight fit of the shoe and great stability on edges, small footholds are important for difficult competition routes.



Bouldering

In bouldering depends on millimeter stepping precision, body loading and balance in order to solve a bouldering problem. The shoe has to be very stable and sticky on the tiniest footholds, edges or slabs. The shoe must not twist from the foothold

and needs to have a tight fit with a great sensibility in the tip-toe. The climber needs also a shoe workable for heel- and toe-hooks. Only a perfect construction and high quality rubber make a real shoe for bouldering.



Multi-pitch climbing

The shoe suitable for multi-pitch climbing with several rope lengths should be comfortable, stable on holds and lace-up system is preferred. For more difficult routes, tight fit and edge-stable shoes are important. Then the tight fit with quick closure

system is better, but climbers need to take the shoes off while staying on belay point. Those who want to compromise have either to loose some precision and choose more comfortable shoe or to stand some pain.

Climbing techniques

As we already mentioned in the previous text, there are not only several different climbing disciplines, but also number of different climbing techniques, which requires a special footwork. Every climbing technique benefits from the specific features of a climbing shoe. Well done shoe is a mighty weapon for fighting gravity. With a right shoe, a climber has chance to push his limits further. In Rock Pillars product range, you find the right model for every purpose.



Pockets

In the smallest pockets, there is often only enough space for the tip-toes, sometimes the pressure can be increased by raising the heel. Shoes which are strongly

asymmetrical, pre-tensioned and with downturned toe bring the best performance in pockets.



Cracks

Wedging the foot sideways in the crack or jamming across the crack, this is the way to increase friction so that the shoe holds. Climbing cracks in too soft shoes hurts. Solid

leather with lining and raised rubber rand increases durability of the shoe and improves its comfort.



Edges

On edges the inner or the outer side of tip-toe is used to step onto the foothold. It would be unfavourable, when a soft shoe would twist around the foot and rotate from the

foothold. A firm shoe with a stable midsole but sensible enough makes the transfer of energy much easier.



Heel hooks

This kind of movement helps climber to pull himself over a steep piece of terrain like overhang, or to get balance or to take a rest. The heel can be hooked on ledges,

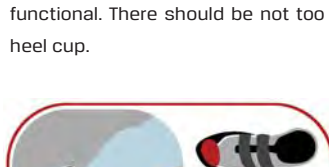
pockets, around corners. Raised heel rubber protects the leather and adds the necessary friction, while a tensioned heel prevents the shoe from pulling off. The construction of the heel is important to make the heelhooks functional. There should be not too much and ideally no free space in the heel cup.



Slabs



















Slabs have minimum edges or any kind of small footholds, just subtle dents and waves. On slabs climbing, the heel is rather low and good movement in the ankle joint is

needed. It is friction what makes it possible to keep the position of the foot. The climber stands on the rock with the whole front part of the sole. The right shoe for slabs climbing should have flexible midsole, good sticky rubber and must be sensitive enough.



Toe hooks

Toe hooks are even more refined than a heel hook and helpful in overhangs. Reinforced rubber toe-box cover is really practical here, because it increases friction and of course protects the leather.

Which shoe is the right one		Bouldering	Rock climbing	Multi-pitch	Indoor	Slabs	Pockets	Cracks	Edges	Heelhooks	Toehooks	Beginner	Intermediate	Performance	High Performance
DIAMOND		••	•••		••	•	•••	•	•••	•••	••		•	••	•••
OZONE QC		•••	•••		•••	•	•••	•	•••	•••	•••		•	••	•••
OZONE SLIPPER		•••	••		•••	••	•••	••	•••	••	•••		•	••	•••
TOP GUN LU		••	•••	•	••	••	••	•••	•••	•••	•••		••	•••	••
TOP GUN QC		•••	••	••	•••	••	••	••	••	••	•••		••	•••	••
PEARL LU		•	•••		••	••	••	••	•••	••	•		•••	••	•
PEARL QC		•	••		•••	••	••	•	••	••	•		•••	••	•
PEARL SLIPPER		•••	••	••	•••	•••	•••	•••	•	••	•••		•••	••	•
ZEROCKS		••	•••	••	••	••	•••	•	•••	•••	••	•	•••	••	•
STREAM			••	••	••	••	••	•	••	•		••	•••	•	
ZION			••	••	•	•	••		••	•		••	•••	•	
ZEAL			••	••	•	••	•	•••	•••	•	•••	•	•••	•	
STRIKE LU		•	••	•••	••	•••	•	••	••			•••	••	•	
STRIKE QC		•	•	•••	•••	•••	•	•	••			•••	••	•	
SUMMIT			•	•••	••	••	••	•	••	•		•••	••	•	
RENTAL					•••	••	•		••			•••	••	•	
HERO LU			•		••	•••	•	•	•			•••			
HERO QC			•		••	•••	•	•	•			•••			



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