

ICE SCREWS

Can the ice screw tips come loose when you take the ice screws out of the ice?

No, not if they have been tightened correctly on fitting. The original tips are screwed on with a force of 10Nm (N·m) which is equivalent to a force of 10kg applied by hand, using another screw, which gives a leverage of 10cm, as a wrench. The tips of the screws are highly polished and have a Teflon finish to reduce friction against the ice to a minimum. The tips are also attached with a dry adhesive, which ensures an extra strong bond and prevents oxidation.

What are the ice screws made of which makes them so light?

The tube is aluminium 7075. The tip, head and winding arm are made of a steel alloy, Cromole. The knob on the winding arm is plastic so that you can hold the screw in your mouth without it sticking to your lips.

Are the ice screws strong enough, being aluminium?

All our screws (except the KLAU0 and KLAU1 which are only suitable for progression and not adapted to hold a long fall) easily pass the European Standard EN568, which guarantees 1000kg in a fall. However, as for all types of ice screws, it is essential that the screw be placed in good ice with the entire tube screwed.

Won't an ice screw with such a fine screw thread come out of a roof?

No, not if the ice is hard. Ice screws work due to the leverage they create, so the size of the screw thread does not affect their performance directly. When placed on a vertical surface, with the load applied at a point much lower than the axis of the screw, the force over the first few centimetres of surrounding ice and the screw itself is greatly reduced.

Can I sharpen the tips?

Yes, if you are a skilled craftsman. If not you will only achieve the best results using original replaceable screw tips "KLAU-TIP" sold in packs of four.

Can I knock the ice screw thread to clean out the ice?

No, as with steel ice screws, you should never bang the screw thread. To remove the ice from inside the screw you can gently tap the head and winding arm, which are made of the steel alloy, Cromole. The useful lifetime of your screws depends on how you treat them.

How do I change the tip?

It's easy. The winding arm on all the ice screws has a built in wrench designed to help change the tip. Hold the damaged ice screw firmly in one hand and with the other, press towards the tube to avoid the tip escaping, and twist the tip sharply anti-clockwise. When you fit the new tip you should screw it on with a minimum force of 10 kN (Some 10kg of force if you use another E-Climb ice screw to do it).

Can I take the tips on and off?

No. If you do that the dry adhesive will lose its effectiveness. Only change the tips when they are damaged.

Why are ice screws sold without tip protectors?

Although we admit that protecting tips is important, the use of tip protectors stops the air circulating around the tips and inside the ice screw. As screws are often damp this can greatly speed up corrosion. Use the plastic net cover provided to protect the ice screw thread.

Why doesn't the KLAU0 and KLAU1 ice screw carry the European Standard?

Despite being manufactured in exactly the same way as the other models, the KLAU0 and KLAU 1 does not pass the resistance test in the case of a 10Kn fall because, being so short, the surrounding ice will not resist the leverage force created. Remember that the resistance of a screw is always conditioned by the structure of the surrounding ice and the spot where it has been placed.

Why do the ice screws have coloured marks?

Colours enable you to easily identify the length of ice screws while ice climbing.

Why is the tube of the ice screw in two colours?

The two colours are two different materials and treatments. The great advantage of the tip being a different colour is that it helps you avoid dropping an ice screw on removal. When you get to the differently coloured tip you know the ice screw is nearly out.

Can I change the tips while ice climbing?

It is not recommended but if you are really desperate, do it. The one problem is that the dry adhesive only sets thoroughly after 6 hours at 20°C. Screw the tip on tight and it will set later.

How can I get the best performance from the ice screws?

The best advice is treating them carefully, as if they were made of glass. Banging the ice screws together can cause chips in the screw thread, which increases friction when you place them. Any lubricant will help reduce this friction.