

6 TRICKS TO GET YOUR ICE SCREWS TO STAY IN PLACE

1. Only use double or half ropes (7.8-9mm) for leading unless you are confident that you won't take falls. Skinny ropes have many advantages over
2. The more rope you have out the less impact force on the screw, meaning that if you use long screws with screamers low down on a pitch you can use shorter screws higher up where the impact force of a fall is less. It's important that the leader understand impact forces and what they mean. Leading with a single 10.5 rope seems like it will be a good idea but the impact force of the fall transfers more force onto the protection if the rope is thicker. A thicker rope generally has less stretch and elongation than a thinner rope that will absorb the force of the fall more by stretching greater.
3. Keep your screws extra sharp and save the ones that are in the best shape and the sharpest for the steepest and most difficult part of the climb.
4. Use screamer quickdraws, they do make a difference both actual and psychological. Last year a friend of mine took a 40 foot fall while attempting to surmount an overhang on The Upper Weeping Wall in Canada.. The dangler he was on snapped and he only had three screws in, the last two with screamers attached. The very last screw caught him but 90% of the bartacks ripped out and the screw stopped him from hitting a ledge and doing more serious damage to his body. He wacked his head on impact and the soft helmet he was wearing cracked but his thick skull was fine. We retreated and drove to the nearest pub.
5. Place ice screws frequently. Whenever you stop to catch your breath and the terrain above looks steep, place a screw. In the old days when placing ice screws were so much work and took so much of the energy out of leading the runouts, the distances between ice screws was sometimes 40 feet or more. Modern ice screws go in faster and better so put them in and save yourself!
6. Understand the difference between good ice (solid and reliable) and bad ice (not so solid and unreliable). Temperature plays a huge part in the solidity of ice and the best ice is usually found when the temps are around 20-30 degrees Fahrenheit. Above this temp you get surface thawing which will reduce the strength of an ice screw tremendously. Colder temps make the ice more brittle and more fragile. Putting screws in cold, Canadian ice takes more work because the ice is more dense and therefore more likely to shatter when forces are applied to it. Screamers are recommended in this instance.

If you can remember these simple guidelines then your leading will be safer and more relaxing. You'll be climbing harder stuff in no time with a greater margin of safety.