

# How to build a via ferrata



1. Find and mark the **ideal line** to define distances.
2. **Determine the drill diameter.** The drill diameter should always be at least 5 mm above the specified steel thickness.

For example:

( $\varnothing$ 20 mm Anker [MÖG20/300] →  $\varnothing$ 25mm Bohrer [Hammerbohrer 25/400mm])



3. The **drill hole depth** should always be at least 150 - 200 mm. However, this must be adapted to the quality of the rock and drilled deeper if the rock is "bad".
4. **Cleaning:** The drill holes are cleaned with a steel brush [Bürste mit Griff 24-25mm] to remove the accumulated dust. This is then removed from the borehole using a blower ([FIS ABG AUSBLÄSER] or mini compressor). The process should be repeated several times to ensure a good bond between steel and rock.



5. **Gluing process.** Fill the drill hole from back to front with via ferrata adhesive [H-300, H-470 epoxy Injektionsmörtel] and turn the clean anchor into the drill hole using directional movements to ensure a continuous bonding bridge between the rock and the anchor. Pay attention to alignment and overhangs to avoid bending the anchors.



**If you have any questions, please feel free to contact our HZI team.**

6. **Additional anchors.** More anchors. When setting additional anchors, make sure to avoid sharp changes in direction, as these can lead to high directional forces and damage to the rope and anchor.



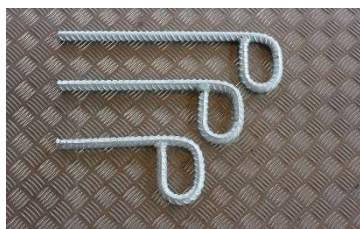
7. **Steel rope.** Wait until the injection mortar has fully hardened before you start installing the rope. Use a steel cable with a diameter of 14 -18 mm [Klettersteig Stahlseil 14 mm]. The thickness of the steel cable should be adapted to the difficulty of the via ferrata.



8. **Rope clips.** Only use rope clamps that are adapted to the rope diameter in order to achieve an optimal clamping effect [Klettersteig Stahlseil Ø14 mm verzinkt → DKV 0513]. When tightening, make sure that the nut is tight (after completing the via ferrata, check all clamps again and tighten if necessary) If you connect two ropes with one clamp, always make sure that the U-bolt is on the unloaded end of the rope and the clamping jaw (“saddle”) on the stressed rope. (Never saddle a dead horse)



9. **Connecting lines.** Connecting lines. If the distance is more than 50m, it is necessary to overlap the two rope ends so that correct rehanging is guaranteed at all times.



10. The globally valid **UIAA via ferrata standards** must be always adhered to.

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