

Usage of firmly fixed anchorage systems for rope access

Backup systems

All ABS Safety anchorage connectors can – without exception – be used as a backup system, just in combination with the correct usage of PPE. This is also true for the usage of adjustable lanyards as part of rope access.

When using a lifeline system or other deformable anchorage connectors, there is a possibility of misuse in the course of rope changing. It must be ensured to not load those products statically. Care must be taken to ensure that only suitable anchor devices are subjected to static loads. We recommend the use of different coloured ropes to avoid unwanted deformation of the anchoring devices.

The next section describes the requirements for products that are explicitly suitable for static loads as part of the main system in rope access.

Main systems

When using ABS Safety products as a fixed anchor within a main system, the anchorage connector is controlled, statically loaded. This is a special requirement in the context of rope access. Therefore, the main system is expected to carry a static load of 3kN per user. This static load results in plastic deformation for many products, especially on roofs. Plastic deformation is a defect that must be evaluated by a competent person.

Anchor devices which are to be used in the main system of rope access must not deform under the conditions described or must only deform elastically.

An overview of suitable ABS products can be found on the next page.

General information

- all products are tested with a static load of 3kN – without a plastic deformation
- those aforementioned anchorage connectors are only to be used for personal safety and not for load transport
- in order to increase the lifetime of your anchorage connectors, you may pay special attention to the suitable substrate or other fixation background in place
- the inspection of ABS products must be done by a certified, competent person
- the inspection of any anchorage connector is due every twelve months after the initial installation and mandatory to be documented
 - according to the individual risk assessment it sometimes can be recommended those inspection intervals to be shorter in time
- movable or rotatable parts are exposed to a high usage
 - this is why those parts in particular need to be checked thoroughly

Usage of firmly fixed anchorage systems for rope access

ABS products certified for rope access.

anchorage point	length	wall mounting	ceiling mounting	roof mounting
Lock III-B	0 mm	+	more than 125 mm thread	+
Lock III-ST	0 mm	+	+	+
Lock III-R-B/ST	0 mm	lateral loads only	X	lateral loads only
Lock X-SR-B-AS	350 - 700 mm	lateral loads only	X	lateral loads only
Lock X-SR-B/ST	200 mm	+	+	+
Lock X-Durch including new variants	0 mm	+	+	+
Lock X-Klemm	0 - 500 mm	up to 150 mm / with support tube up to 300 mm	+	up to 150 mm / with support tube up to 300 mm
Lock T (Max)	-	X	+	+
Lock I & II	-	+	+	+
Lock III-H	150 mm	lateral loads only	X	lateral loads only
RunBeam2	-	X	+	X

ABS products with certification for high frequently rope access, training and education (e.g. training centers, fire department training tower DIN14092).

anchorage point	length	wall mounting	ceiling mounting	roof mounting	max. load
Lock III-B	0 mm	+	more than 125 mm thread	+	25 kN
Lock III-ST	0 mm	+	+	+	25 kN