

Exiting and climbing over work platforms and work cages

Exiting the device in a raised position, e.g. elevating work platforms, crane work cages, multi-functional equipment etc.

Exiting and climbing over the work cage of an elevated work platform onto adjacent structure parts is **generally prohibited**.

The elevated work platform is a work place and not a climbing support, lift, or crane!



1 Exiting a work cage is a safe alternative to climbing a truss 85 m up to the framework intersection of the arch construction

Basic situation:

- The personal fall protection and fall arrest equipment in the cage is up to date.
- The manufacturers' operating instructions only provide for entering or exiting the work cage on the ground.

Exception:

- Exiting the device in an elevated position with the associated additional risks is only permitted, if a special written hazard evaluation proves that this is the most secure and suitable method to reach the workplace.
- If climbing up, out of, or leaving the cage is unavoidable due to assembly operations, construction conditions, etc., and all other methods prove more dangerous, an exception can be made under the following conditions.

D-A-CH-S is an international group of Experts from Switzerland, Germany, Austria and South Tirol (Italy) whose aim is a transnational harmonization of rules and regulations on the use of fall protection equipment at elevated workplaces.



Minimum requirements for accessing and exiting

- The method of accessing and exiting work platforms shall not produce additional dynamic forces. (Example: Jumping etc. during exiting and accessing may cause a telescopic work platform to fall over → whiplash effect.)
- The appointed personnel is instructed and trained for the situation based on special operating instructions:
 - Use of machinery according to the relevant standards
 - Use of personal fall protection equipment and rescue systems according to the relevant standards
 - Instruction on the method of exiting and accessing work platforms based on the project specific requirements.
- The device is available exclusively to those using it and must not be moved during exiting and accessing.
→The device controls must be secured at all times!
- A second person always remains in the cage and supervises the worker outside the cage. He/she ensures the worker reenters the cage from the same position! (Beware of whipping when fully extended!)
- Rescue equipment is stored in the work cage in order to ensure a self-contained rescue.
- Efficient communication between ground personnel and those working at a height must be ensured.
- During exiting and accessing: worker must be secured with fall protection equipment, e.g by using a two-strand fastener with shock absorber at an anchor point with sufficient load capacity (> 6 kN) on the building / structure (not the cage!).
- The area around the elevating work platform must be free from vehicle traffic.



2 Alternative: Accessing the truss via a cherry picker

Additional hazards:

(Consideration of additional risks resulting from the climbing-out process)

- Risk of injury from a fall arrest while working outside the cage
(The fall clearance and rescue methods required for a fall arrest must always be taken into consideration.)
- Risk of falling through open gates
- Pinching points, sliding off the platform, getting frightened due to sudden movement of the device (e.g. by exiting the cage while the telescopic arm is fully extended).
- Falling material or tools.

Selecting a suitable device

- The device must be equipped with anchor points as specified by the manufacturer of the fall protection equipment.
- The device must have sufficient reach and load capacity (required workload= two person minimum plus tools and equipment).
- Recommendation:**
 1. Work platforms with inward opening doors
 2. Elevating work platforms with pivoting work cages that can align to an optimal exiting position.

Additional requirements:

- The vertical distance between the work platform and any adjacent structures should always be at least 12 cm.
(Crushing hazard due to load rebound on exiting the cage)
- The supervisor should specify a suitable anchor point on the structure (building, construction work etc.).



3 Team work for complex steel construction assembly

D-A-CH-S is an international group of Experts from Switzerland, Germany, Austria and South Tirol (Italy) whose aim is a transnational harmonization of rules and regulations on the use of fall protection equipment at elevated workplaces.



Process of accessing and exiting:

1. The worker exiting secures him/herself to an anchor point above head level outside the work cage (e.g. supporting structure /point according to EN 795)
2. He/she releases him/herself from the anchor in the work cage
3. Worker gets out to carry out the work, the supervisor always stays in the cage
4. Worker reenters the work cage at the same position
5. He/she reattaches him/herself to the anchor point in the work cage
6. Worker releases him/herself from the anchor point outside the work cage

A fall arrest on the work cage must be avoided as it may cause the device to fall over.



Relevant Standards and Regulations

- EN 363 Personal fall protection equipment - Personal fall protection system
- EN 280 Mobile elevating work platforms
- BGI 720 Sicherer Umgang mit fahrbaren Hubarbeitsbühnen
- BGG 966 Ausbildung und Beauftragung der Bediener
- BS 8460 Safe use of MEWPs, Annex B

4 Multifunctional device with pivoting work cage and suitable inward opening access gate.

