

High-voltage quarantine area

A safe space for damaged high-voltage batteries and vehicles

High-voltage vehicles can – just like ordinary cars – self-ignite even some time after an accident has occurred. Vehicles which were involved in an accident should generally be monitored in an area where damage is limited in case of fire.

Good advice to bear in mind

When creating a high-voltage quarantine area, car dealerships and workshops face all sorts of requirements. Of course, the regulations issued by the vehicle manufacturers and by health and safety authorities must be adhered to, just like the fire protection rules and any general legal requirements. With this leaflet we would like to complement them and provide additional orientation.

“No special requirements. However ...”

The German statutory accident insurance makes no special demands with regards to monitoring spaces for high-voltage or hybrid vehicles involved in an accident. However, no-one may be put in danger by spreading fires or any resulting damages. Any unauthorised access to the vehicle in question must be prohibited. Make sure suitable restrictive measures are at hand, at least use a barrier tape.

The quarantine area must be large enough to accommodate even the largest vehicle repaired in your workshop. Therefore it should be at least 6 x 4 m in size.

How to design your high-voltage quarantine area

1. In the open air

- The lithium-ion batteries used in high-voltage vehicles may emit poisonous gases. Therefore your quarantine space must be well aired.
- An area out in the open air is best. You might want to consider using any existing parking spaces for accident vehicles. Do avoid flammable grounds.
- The area should be protected from strong sunlight and high temperatures, dust and excessive humidity.

2. At a distance but easily accessible

- Your quarantine space should be at least 5 m away from the nearest structure in order to prevent a fire from flashing over to the dealership building. Make sure there is enough distance to other cars and any combustible items.
- The quarantine area should be directly accessible from the high-voltage repair area in the workshop.
- The path leading to the quarantine area should be suitable for heavy loads: no steps, use a smooth road surface.

3. Help the firefighters, protect the environment

- The fire brigade must be able to reach the area via a spacious, clearly signposted road access.
- Do not allow any contaminated water to soil the groundwater. A suitable collecting basin can significantly reduce any damage to the environment caused by leaking electrolyte.
- The fire brigade will be grateful for a fire hydrant nearby.

4. Safety equipment

- Provide easy access to the first-aid kit and the defibrillator.
- Keep a fire blanket ready.

5. Be discreet

- Create your quarantine space outside your customers' visual range.
- Choose large enough visual screening measures.
For fixed structures like porter cabins, make sure to speak to your building authorities first.

Useful contacts:

- Explain your plans to your property insurance to ensure a smooth processing.
- Get in contact with your local fire brigade.
Different regulations apply regionally.

This leaflet makes no claim to be complete. In any case the local authorities, e.g. for health and safety and fire protection, must be involved.