

## GRP Hand Railing

Lichtgitter GRP handrails are produced from GRP profiles reinforced with glass fibre. Their defining characteristic is their good resistance to corrosion. The ease of installation and on-site customisation also impress.

Our GRP standard handrails are composed of:

- Square tube posts: 60 x 60 x 4.5 mm
- Handrail: ergonomically shaped
- Knee rail(s): tube 38 mm
- Kick plate: 150 mm high trapezoidal shaft profile

The post bases for GRP handrails can be attached to concrete, clips attached by the building contractor and substructure profiles. We would be happy to provide you with further details adapted to your construction plans.

We can provide post bases in various materials on request. The maximum distance between posts should be 1200 mm at a horizontal load of 500 N/m and 1500 mm at a horizontal load of 300 N/m.

The standard colours for the GRP profiles are signal yellow, similar to RAL 1003 or grey, similar to RAL 7001.

Lichtgitter GRP handrail profiles can be delivered as 6000 mm standard lengths. We can tailor the posts to the lengths you require and insert holes for the knee rail. We would be happy to deliver GRP handrails pre-assembled and provide assembly and working instructions. We can also provide assemblies and assembly assistance if needed.



Some safety requirements for handrails in the vicinity of machinery are described below. The majority of the following design requirements for new fixed handrails near machinery are essentially stipulated in DIN EN ISO 14122-3.

- Service platforms and means of access to working areas such as staircases are to be secured with fixed handrails if the fall height exceeds 500 mm.
- The handrails must be at least 1100 mm high.
- If there is a distance of more than 200 mm between a service platform or staircase and a neighbouring wall or machine, a handrail must be installed. A toe plate is already required if the distance exceeds 30 mm.
- To avoid people falling through the gap beneath the handrail, it must have a knee rail or a similar protective structure. The clearance between the handrail and knee rail, the knee rail and the toe plate and between two knee rails if necessary may be not more than 500 mm.
- Toe plates should prevent people slipping under handrails or objects falling from the walkway onto working places or transportation routes below and endangering people. Toe plates must be at least 100 mm high. If there is a gap between the toe plate and walkway, this may measure a maximum of 10 mm.
- If there is a gap in the handrail, the gap between two handrail sections may be no smaller than 75 mm and no larger than 120 mm. If the gap is any larger, a self-closing barrier for the passageway should be used.

