

#### Stahlglas Staircase System Basic types of the system elements

Stairs in point design

- Single stair with risers
- Single stair without risers
- Cantilever stair with risers

Stairs in line design

- Single stair with risers
- Single stair without risers
- Cantilever stair with risers



### Stair with risers in point design



Both rail panels are connected with the risers. The connection is carried out mechanically by special fix points – the so-called step brackets. The rail panels and risers are composed of TVG-laminated glass; the risers are reinforced, whereby their load-bearing capacity is increased.



Now the steps are affixed to the risers. In general the steps are glued to the risers. The first stair segment is finished.



Eventually the steel bars will be hinged. For this purpose the steel bars are dowelled to the rail panels through the so-called connectors.



The second stair segment is made in the same way and can be built-on to the first stair segment.



The rail panels are connected to the risers for the landing segment the same way as in the stair segment, and assume the function of a cross bar.



The landing plates are laid across and then connected to the risers.



After mounting the reinforcing steel bars, the landing segment is finished and can be joined to the stair segment. On the landing segment, a further landing panel or stair segment can follow.



#### Stair without risers

Steps of lesser width can be built without risers.



Both rail panels of a stair segment are now connected to one another across the steps.



Now the assembly of the landing segment is also easier – the floor panel is sufficient to connect the rail panels.



# Cantilever stair in point design



With the same load-bearing elements of the system, which are used to support the stair on both sides, projecting stairs can be implemented. For this purpose the position of the steel bars must now be changed.

The first stair segment is affixed to the bearing point at the two entrance posts. The steel bars now lie on the top edge of the rail panels.



The stairs coming from above proceed in the same way. After this the landing section can be attached.





For the line design steps, instead of the lower steel channel section, the u-shaped steel channel section comes into effect. Furthermore, this is the connecting element between the rail panels and the steps and landing plates respectively, which, along with the vertical steel channel section, represent the tension system of the railing walls.

The rail panels are inserted into the u-shaped hollow in the steel channel sections.



The risers are not directly connected to the rail panels, but indirectly across the steel channel sections.



Now the steps are affixed to the risers. In general the steps are glued to the risers. The first stair segment is finished.



## Stair without risers in line design



Steps of lesser width can be built without risers.



For steps without risers, both railing walls are connected to one another by the steps and the landing plates.

# Cantilever stair with risers in line design



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