

Mobile Flood Defence System

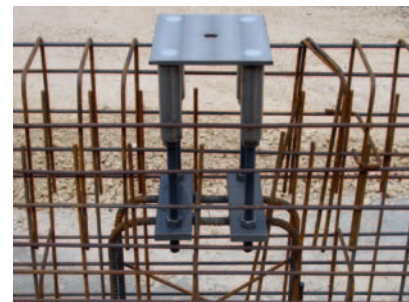
Anchor Plate Assembly



Assembly on sheet piling



Assembly on sheet piling with cantilever for height compensation



Assembly on construction joint with binder made of concrete reinforcement steel



Assembly in recess



Assembly on subbase



Assembly on subbase with cantilever for height compensation

The requirements for the mounting tolerances of the anchor plates depend on the particular centre post heights. The higher the post the more an inclination of the anchor plate will affect the situation at the top of the centre post. The inclination of the anchor plate should result in less than ± 10 mm of deflection at the top of the post. The displacement of the anchor plate from the system axis should not be more than ± 3 mm. Within these tolerances unlimited operability of the mobile system is guaranteed. The afore mentioned tolerances are simple geometric relations that are generally independent from the system type.

The installation team has to take care that the mounting tolerances of the anchor plates are more precise than common constructional tolerances. This means that, depending on the mounting situation, 6–15 anchor plates can be installed per day.

Furthermore the precise positioning of the anchor plates has to be guaranteed during the reinforcement,

sheeting and concrete works. The auxiliary construction for mounting the anchor plates has to be fixed to a structural component to hold the anchor plate in the required position during the reinforcement and concrete works (see pictures).

Only in exceptional cases and with low flood heights the anchor plate can be fixed to the sheeting using an assembly construction. To assess the costs for the installation there has to be considered the time consuming installation on the one hand and the loss of material for the assembly construction on the other hand.

The auxiliary construction for mounting the anchor plates is solely used to ensure the right position of the anchor plate during the construction and concreting process. The auxiliary construction is not used for the load transfer. The load transfer in case of operation results from the anchored steel parts of the anchor plates in the reinforced concrete structure.