

Preventive flood protection

Shafts and catch basins for precipitation and surface water or, in the vicinity of the sea, storm water

Frequently Asked Questions (FAQ's)

Q1: What is the purpose of such a system?

A1: To take the destructive force out of an emerging flood event.

Q2: How does a system work?

A2: Depending on its size and volume, the system absorbs water and reduces the water level in the event of a flood. In the best case, the shafts and basins are sufficient to completely remove the water masses from a hazard area.

Q3: What happens to the collected water?

A3: It is removed from the system with large pumps.

Q4: Can the collected water be used?

A4: It depends on whether there are impurities. If it is analytically harmless, then of course you can use it.

Q5: Why build a system if you can't completely prevent flooding?

A5: Rapidly rising water levels also mean rapidly rising flow velocities with enormous force. The resulting degree of erosion depends on the flow velocity and mass of the water. Simply defined, the higher the level, the greater the mass and thus the degree of destruction.

Q6: Why are rising levels so dangerous during water diversions?

A6: In the case of diversions in streams, rivers and canals, the water flows faster in its outer curve than in its inner curve and therefore has an erosive effect, i.e. carries away soil and washes it away with the water. These masses of mud and water then pour downstream.

Q7: Why should you plan preventively?

A7: As climate change is ongoing forwards and any action taken now will not have an effect for many decades. Until then, flood events are likely to increase year by year. Destructions mean significantly higher impacts and also pose a great danger to the people affected.

Q8: What does a system consist of?

A8: From reinforced concrete hollow blocks, closure plates, seals, pumps, sensors, IDoT chips, control units, etc.

Q9: How does the water get into the system?

A9: The inlet can be designed in many ways. For example, via gutters, gullies or a flap system. In any case, according to need.

Q10: Why are the blocks built in concrete?

A10: Concrete is a natural material and consists of water, sand, gravel, limestone, clay, iron ore and gypsum. Concrete is therefore a sustainable building material and recyclable. Its strength, behaviour and service life speak for this building material.

Q11: Who are the systems interesting for?

A11: Planners and architects are provided with a simple and flexible system with almost unlimited possibilities in the design of shafts and catch basins. Investments and infrastructure can be protected, thus relieving public budgets and insurance companies. Political decisions on population protection can be implemented in a plannable manner.

Q12: Can flood events be excluded with such a system?

A12: Natural events cannot be ruled out. We can only try to counteract them.

