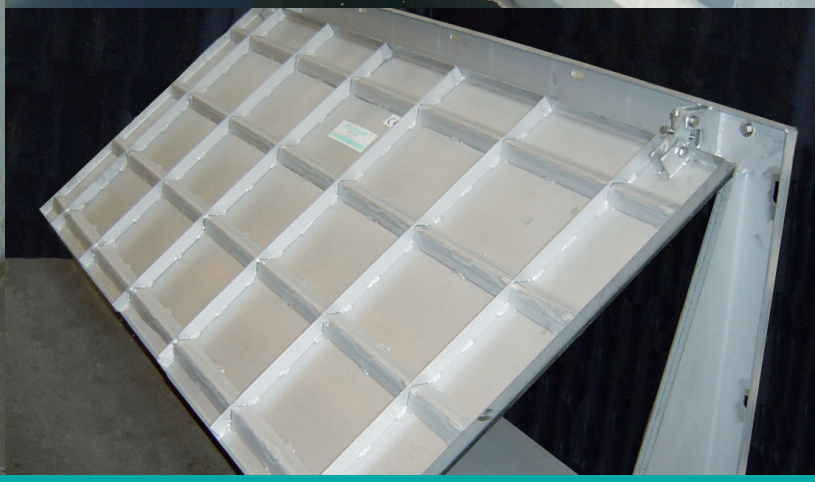
Steinhardt HYDROLATCH®
FLOOD GATES



HydroLatch® Flood gates

Reliable flood protection for sewerage and watercourse systems

Steinhardt®
Water Technology Systems

HydroLatch® Flood gates

Reliable flood protection for sewerage and watercourse systems

The Challenge

Flood protection is also necessary underground so that flood water does not come through the "back door", i.e. through the sewer, to flood streets and houses. Streams and rivers overflow their banks more often, more intensively and faster due to large impermeable areas and loss of flood plains. The warning and reaction times are shorter; sand bag barriers and manually-operated valves are time-consuming and labour intensive.

The Way

All overflow weirs, inlets and outlet sewers in combined and stormwater networks can be secured with **HydroLatch® flood gates** to prevent flooding of the sewer network. The flood gates work automatically and without electricity. The **HydroLatch® flood gates** also allow a safe overflow from combined and stormwater networks during rain. Even if the **HydroLatch® flood gates** are flooded, drainage occurs as long as the water pressure in the sewer network is higher. The special **Steinhardt®** seal is reliable and durable. All **HydroLatch® flood gates** are project-designed so that the gate cover is light (low resistance = large flow-rate) but heavy enough to prevent lifting by flow velocity.

The Products

The top-hinged HydroLatch® flood gates Model HLA-HK can be applied wherever there is sufficient head difference. They are designed as rectangular or circular flood gates and can be installed to protect overflow/outfall pipework from surcharging. They are designed with a smooth-opening cover to enable opening for low discharge flows; this is achieved by extra weights or the angle of inclination of the flap.

Bottom-hinged HydroLatch® flood gates Model HLA-FK can be applied wherever the water level difference is very small. The flood gates are designed as floatable fish-belly gates. They can be adjusted exactly to the floating-up point by filling counter weight water inside by means of filling and emptying nozzles. The fish-belly gates have the advantage of low losses and are installed protected in overflow chambers.

Selection diagram HLA-HK hanging/top hinged

B_{innen} [mm]	500	600	700	...	2800
H_{innen} [mm]	Model HLA-HK...				
100	100/500	100/600	100/700	...	100/2800
200	200/500	200/600	200/700	...	200/2800
300	300/500	300/600	300/700	...	300/2800
...					
1000	1000/500	1000/600	1000/700	...	1000/2800

All date are approximate, frame width approx. 100 mm, keep installation space for brackets

Selection diagram HLA-FK floating/bottom hinged

B [mm]	1000	1500	2000	...	3500
H [mm]	Model HLA-FK...				
300	300/1000	300/1500	300/2000	...	300/5500
400	400/1000	400/1500	400/2000	...	400/5500
500	500/1000	500/1500	500/2000	...	500/5500
...					

All data are approximate, intermediate sizes upon request.

The Advantages

- robust, stainless steel
- no electricity
- high operational reliability
- easy and fast to install
- with fixing materials, frames, sealing and cover
- durable, reliable flood gate sealing
- open with smallest water pressure
- angle of inclination optional
- weights optional
- warning system optional

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