## TRANSFORMING WATERFRONT WITH LOAD LOCK™



The silhouette of Kiel is traditionally characterized by large ships and imposing shipyard cranes. With the realization of the project, there is now even more maritime flair in the city center of Kiel. "With this, we are connecting to the history of this place," explains Dipl.-Ing. Jens Neunert, project manager from the Department of Civil Engineering of the state capital Kiel. "Originally, the old town was surrounded by water like a peninsula because until the beginning of the last century, a canal connected the so-called Boat Harbor directly to the fjord and the Kleiner Kiel, a freshwater lake on the edge of the old town. However, this was filled in as part of the city's development. For many years, until the start of the renovation work, a six-lane road ran here, with a bus hub in the middle," says Neunert.

#### **URBAN SPACE BECOMES AN OASIS**

With the "Holstenfleet" project, this has now been reversed. Between the old town and the suburbs, where the city's main shopping areas are located, a series of water basins has been created in place of the former thoroughfare. The urban space designed by the bgmr landscape architects from Berlin has evolved into an oasis in the middle of the city: with reed filtration, rows of Hungarian lime trees and swamp oaks, as well as large beds of grasses and perennials in large planters. Wooden benches and other seating options along the banks invite you to linger. Water features and islands allow for active use of the new facility. In the evenings, the new space is bathed in subtle indirect light with lights under the benches and on the bridge railings.





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### TRUCK MANEUVERING ON PAVED AREAS

Jens Neunert continues: "In the state capital Kiel, we often use the 25-grid pattern for paving public areas. Therefore, we also decided to use the formats of 25 x 25 and 25 x 50 cm for the paving of the approximately 6,000 m<sup>2</sup> concrete paving areas here. With the colors granite-white/gray, granite-natural gray, and granite-anthracite, we were able to create the desired stripe pattern. The surface of the pavement is water-blasted, giving it a very noble and lively appearance. In addition to the visual properties of the pavement, it was also important to us that the paved areas are durable enough to withstand the traffic loads. While the areas are primarily used by pedestrians and cyclists, the stresses generated by daily delivery traffic towards the pedestrian zone should not be underestimated. Not to mention major events like the Kiel Week. When the fairground trucks maneuver on the areas, very high lateral forces act on the paved surfaces. For this reason, we opted for paving with a very special displacement security," says Neunert.

### LOAD LOCK PAVERS

Load Lock pavers have a specific bonding technology that allows a load up to BK 3.2. Responsible for this are bonding elements arranged in pairs in such a way





that a displacement of the stones against each other is prevented. To ensure that the joint necessary for absorbing traffic loads is always maintained, this 14 cm thick pavement has the so-called D-point joint technology. This ensures that during the laying of the stones, there is only a punctual, minimal contact at the stone undersides. Grinding installation is thus avoided, and the necessary joint for absorbing traffic loads is always maintained, ensuring optimal force transmission between the stones. Meanwhile, the Holstenfleet has been awarded multiple times, including an award at the German Landscape Architecture Prize 2021. Even after more than a year of intensive use, the planners note that the paved areas at the Holstenfleet have passed their trial by fire. Jens Neunert adds: "The pavement is still in perfect condition both visually and technically - no damage to the surface is noticeable."



