

Project Spotlight



**DC Distripark,
Dordrecht, NL**

Warehouse / Distribution Centre - Twintec® ULTIMATE

Hercuton has constructed a new distribution centre for Crocs Europe BV on one of Holland’s logistic hotspots. With a surface area of over 50,000m2, this distribution centre has been built for storage of both e-commerce goods and their stores’ logistics. A turnkey project.

The main contractor Hercuton has constructed this with the utmost care for the environment. It will have a BREEAM Very Good certificate and it has been completed with sustainable materials. E.G. prefab concrete and wooden beams. The building will be completely electric, no gaz. Situated on the logistic hotspot Distripark in Dordrecht, it is in the perfect location for distribution.

This particular location has all the ingredients for a sustainable, high quality and durable building. This spot is completely gas free, with the basic energy infrastructure of electricity. This makes it possible to be 100% climate neutral in the future, with a hydrogen facility, wind turbines and a solar park an highly climat-friendly environment.

Twintec Nederland was asked to provide a design for the floor for this project. Due to the poor soil conditions it had to be a design on piles. In total an amount of 11,522 HSP piles were necessary to provide a solid subbase for the floor. This, in combination with a Twintec® ULTIMATE floor, was considered the best solution for the end-user. For efficiency in construction and the complete design-build-guarantee concept, Twintec was chosen to design and build a Twintec® ULTIMATE floor.

So what are the benefits for the end-user and contractor in this solution? Firstly, with the use of fibers in combination with traditional mesh, there is an embodied energy reduction of 20%; the Twintec® ULTIMATE floor reduces the CO2 percentage in the construction of the floor suitable for the heavy loads that were going to be asked of the floor. No joints - totally seamless, provides the end-user with the perfect solution for its warehouse logistics, providing savings on the maintenance of the building as well as the MFE vehicles.

For the narrow isles a flatness of DIN15185 was requested and provided, the tolerance of 5% out of 100% was reached at ease, with a 99.5 % overall.

Project Data

Owner:	WDP Nederland BV	Slab Depth:	200mm
Tenant:	Crocs Europe BV		160mm
Contractor:	Hercuton BV	Completion Date:	Dec 2020
Consultant:	Twintec	Flatness:	DIN15185
M2 interior:	47.475 m²	Fibre Dosage	35 kg
M2 exterior:	7.367 m²	Fibre type :	HT 1/50
Pour Days:	35 days	Floor slab on:	11.522 piles



Design: having taken into account the condition of the soil, a pile design was formed in coordination with Vroom. To use the maximum of the strenght of the piles and to optimise the design of the floor, the piling was dimensionend on a 2x2m grid in order to minimize the number of piles as much as possible. To produce the best suited floor slab for its function and required loads, our in-house design engineers decided upont the Twintec® ULTIMATE. This would have a light double layer mesh combined with steel fibres and, compared to traditional floor types, a gain of approximately 2 cm thickness, giving less kilos of reinforcement therefore a reduction in CO2 compared to traditional options.

Guarantee: The Twintec assurance guarantee is provided to all parties in a project. This incorporates insurances, warranties and advisory notes together with Twintec quality guarantees that result from employing professional staff throughout the business, a high level of customer service and a robust aftercare system.

Regional Office: Gutenbergweg 6, 4104BA Culemborg, the Netherlands