

Text: Henk Geist | Image | FRESCH: Real Estate

New concept for corporate housing

THE ROBUST ATMOSPHERE OF A HARBOUR SHED

The new concept for commercial housing STOCK is getting off the ground at more and more locations in the Netherlands. In 2019, Amsterdam was the first municipality where 34 prefab concrete business premises with a special architecture were delivered. This year Haarlem followed with 32 almost identical units, now 26 units are under construction in The Hague and then Utrecht is on the roll.



The building has a robust concrete base, but with a structure that can differ per location.



The buildings have the appearance of a sturdy and industrial port shed. (Image: Nanopixel)

The inspiration for fresch Real Estate's STOCK concept was found in port areas. "The robust appearance and quality of old port sheds really appeals to me," says Guido Schmitt, director of FRESCH in The Hague. "If you want to accommodate other functions in such an old building, one of the biggest challenges is to find solutions for things like light entry, energy management and insulation. Those buildings are very beautiful, but such adjustments also make such a project expensive."

CONTEMPORARY, FLEXIBLE AND CHARACTERISTIC COMPANY BUILDINGS

His search for an affordable alternative to an old port shed or crane track resulted in the STOCK concept: contemporary, flexible and characteristic company buildings. Buildings of two or three storeys high, with the appearance of a sturdy and industrial port shed. Schmitt: "But at the same time with the quality and 'look and feel' of a house thanks to the transparency of the facades, which are completely open on the ground floor. Certainly not a pipe drawer with too much concrete or a

boring industrial hall with a roller door. The units, with a size from 230 m², can be flexibly arranged and can easily be connected to each other. By making an opening in the masonry intermediate walls, spaces can be easily connected. I am very proud of the result."

That result would not have been achieved without the intensive collaboration with Byldis, specialist in sustainable and innovative building concepts, and architect Dennis Hauer of Urban Climate Architects in Delft. Byldis is responsible for the engineering, production

and assembly of the business units. "The start of our collaboration with FRESCH took place in 2019 for the construction of STOCK Amsterdam. Initially, I didn't see a business case in it so quickly. A STOCK building is actually too small for good prefabricated production," says Thomas de Gruijter, commercial director at Byldis. "We are originally good at high-rise buildings, this is something completely different. Thanks to Schmitt's enthusiasm, we persevered; it was the start of a long-term and pleasant collaboration." ➤



According to De Gruijter, Byldis had to invest a lot of money and energy in the engineering in the preparation. "This has led to a concept that can be built in the same form in several places. Then you still get a good business case. We have invested together to make the project feasible." Schmitt: "Along the way, we discovered how many units are needed to get the project off the ground."

ENGINEERING, PRODUCTION AND ASSEMBLY FIT IN SEAMLESSLY

The prefabricated concrete façade elements of a STOCK building have been engineered by Byldis in collaboration with the architect, constructor and contractor. De Gruijter: "We have developed a mould for the façade elements that can be used at multiple locations. These are sandwich panels with a finished concrete inner wall and outer façade and an insulation layer in between. The outer façade consists of white decorative concrete of a special mixture. The adjustment frames have also already folded in the inner layer. We produce 60 to 70 percent of the project ahead, most of the construction actually takes place in the factory. It is a streamlined process under conditioned conditions. Engineering, production and assembly fit together seamlessly with us. And with that we guarantee a perfect realization within a project planning. We build super fast. First digitally, then in our factories and finally on location. As a result, we are a lot faster than traditional construction methods. This



time saving pays off twice over. Not only in the costs, but also in a fast delivery time."

As a result, for a STOCK project at Byldis, a whole stock of façade elements is ready for transport to the construction site at the right time. As soon as the foundation is ready at the site, the façade elements are delivered to the construction site with a continuous stream of trucks. The building is assembled at a breakneck pace like a meccano box, in 2 or 3 weeks' time. All façade elements must therefore be on the construction site quickly. The aluminium fronts still have to be installed on the

spot. De Gruijter: "A STOCK building does not need to involve an architectural contractor. That's pretty special. On the construction site you have to deal with a compact and well-organized team of people. For the assembly of the prefab façade elements, you only need a few men. And we don't have to build or dismantle scaffolding." Schmitt: "The interior and exterior façade no longer need to be finished. There's profit in that. The time to take months is not there. It was a real challenge to get that done. It requires good mutual coordination, everyone must be attuned to that. That certainly took some getting used to in the beginning."



STOCK project in Haarlem.



SLIGHT VARIATIONS

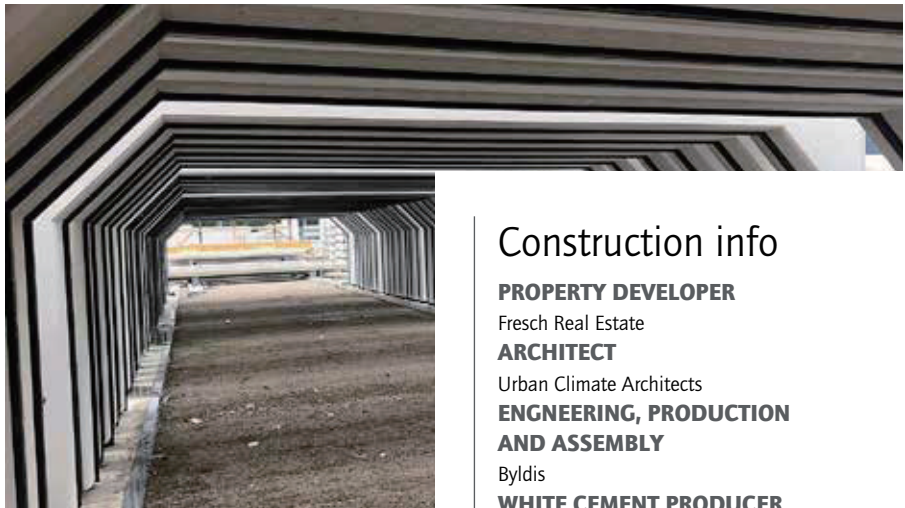
The architectural concept designed by Urban Climate Architects can be adapted to local conditions with small variations. "We investigated what type of business space is needed now," says Hauer. "What size should the spaces be, how deep, and how many layers? It has also been a search for how you can best build the facades with the sandwich elements. The architecture is basically the same everywhere."



STOCK project in Amsterdam.

ROBUST CONCRETE BASE

The building has a robust concrete base, but with a structure that can differ per location. It is possible to respond to the specific situation in different cities. For example, in Amsterdam the units are set up in a long row, but in Haarlem it concerns 2 times 16 units on either side of an inner courtyard. The beech size or the depth of the units can be adjusted, depending on the urban situation. Hauer: "We had to wait and see how it would work in different cities, but the concept has so far been enthusiastically received in all 4 cities. Also because of the prosperity. Self-employed people can go there, but also other types of companies. A very wide variation is possible. The mix we had devised in advance also appears to work in practice." ■



Series of façade elements, ready for transport.

Construction info

PROPERTY DEVELOPER

Fresch Real Estate

ARCHITECT

Urban Climate Architects

ENGINEERING, PRODUCTION AND ASSEMBLY

Byldis

WHITE CEMENT PRODUCER

Aalborg White® Cement