

ROTTERDAM.CLIMATE.INITIATIVE

Floating pavilion in the centre of Rotterdam

Rotterdam, October 8th – In the Rijnhaven in Rotterdam an eye-catching structure will be erected: a complex consisting of three floating half-spheres. The Mayor and Aldermen of the City of Rotterdam have accepted the proposal for the construction of the floating pavilion. The structure will be 12 metres tall, with a total floor area the size of four tennis courts, and will be fully relocatable. For the first five years, the futuristic pavilion will be moored in the Rijnhaven, serving as an exhibition and reception space.

Alderman Bolsius (responsible for the port, finance, external space and organization) is proud of the plans: 'The pavilion will be a new floating icon for the city. It is climate change resilient, innovative, sustainable, and flexible. This is the first resounding result of our ambitions in the area of floating constructions.' Apart from an exhibition space, the pavilion will accommodate a reception area as well, said Bolsius. 'Perhaps in the future we will add even more modules.'

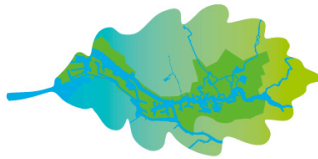
A climate change resilient and prominent landmark

As the water level rises, the floating pavilion will automatically rise accordingly. This makes the pavilion an example of climate change resilient building, a technology for which demand is growing strongly in Rotterdam. The innovative pavilion responds to the collective objectives of Rotterdam to reduce emissions of the greenhouse gas CO₂ by 50% and to ensure that the city remains climate change resilient also in future. With its remarkable shape, the building will be a highly distinctive and prominent feature in the city, a landmark that is visible from the Erasmus Bridge. The floating pavilion is the first result of Rotterdam Climate Proof (part of the Rotterdam Climate Initiative) and its ambition to build climate change resilient constructions in the areas outside the levees.

Innovative and sustainable

Rotterdam has plans to build floating urban districts. Even as early as in this century, floating residential districts will become an important development in the *Stadshavens* area. In these districts, people will live on the water, get their groceries, work and spend their leisure time, all on the water. Rotterdam's ambitions for *Stadshavens* comprise 1600 hectares of sustainable development. The pavilion will be a showcase for the possibilities this innovation offers. After five years, it will be shipped off elsewhere, to be deployed in another part of *Stadshavens*. This flexibility contributes to the convenience of reusing the pavilion, which in turn contributes to its sustainable qualities.

Technology



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The level of sustainability of the pavilion is determined by the materials used, its flexibility, as well as its fittings. For instance, the building's heating and air conditioning systems rely on solar energy and surface water. It contains various climatic zones; the energy is used only in places where it is required at any specific moment. Where power is concerned, the pavilion will largely be self-sufficient. Even the toilet water will be purified by its own system. Whatever is left, can subsequently be discharged into the surface water.

Another special feature is the foil that is used to clad the domes. This so-called ETFE foil is a lightweight foil, approximately 100 times lighter than glass, which makes it eminently suitable for floating structures.

Rijnhaven

The pavilion consists of three interlinked half-spheres, the largest of which will be 24 metres in diameter. The floor area will be 46 by 24 metres. The *Rijnhaven* is a suitable location for the pavilion in view of its moderate swell. Another advantage is the fact that less and less river vessels will be using this particular harbour. Furthermore, the *Rijnhaven* is easily accessible by public transport, even by water.

Design and development

The complex is a design by the design team Deltasync/PublicDomain Architects. It will be constructed by Dura Vermeer. The production of the float system is expected to start in October. Collaborating in this production will be several professional education courses of *Hogeschool Rotterdam* and *Albeda College* which are accommodated in the RDM Campus at Heijplaat. The floating pavilion including basic fittings is planned to be completed in May 2010.

Use

In the pavilion, Rotterdam's ambitions in the field of climate, delta and water technology will be exhibited. In addition, interested groups and individuals will find a warm welcome in the reception area. The structure will contain a lecture theatre seating groups of approximately 150 people. The entire construction is designed to accommodate approximately 500 visitors. The opening hours for the exhibition space are not yet known.

Note to the editors, not designated for publication:

High resolution artist impressions of the new pavilion can be downloaded from the press room at <http://www.rotterdamclimateinitiative.nl/duurzaam bouwen>.

This is also the place where news reports on the pavilion will be kept.