ATELIER PRO

Opdrachtgever
Gemeente Midden-Groningen

Locatie
Boomgaard 37
Hoogezand
Netherlands

Project type
architecture

Functies
education, renovation & re-use

3.667 m^2

Project status
completed

Periode
2012 - 2019

Oplevering
2020

beeld: atelier pro

Vosholen Child centre, Hoogezand

The bold red building of Vosholen Child centre is located in a park-like landscape in Vosholen, Groningen. This new residential neighbourhood is located near Hoogezand and Sappemeer, villages once important for peat extraction. This cultural heritage was the starting point of the development of the neighborhood. On the site is an old boiler house with a brick chimney – a municipal monument – that stands as a reminder of a time when greenhouses occupied the site. For atelier PRO, this was an important element to incorporate into the design of the child centre.

Agricultural heritage
The exterior recalls the agricultural heritage of the surroundings. It comprises two connected volumes, with the boiler house and chimney in the middle. It appears as a robust ensemble with red-orange masonry facades and barrel tiles. The fold in the tiled roof gives the building a more distinguishable profile in the park-like landscape. A palette of rust and red lead tints together with masonry details complement the basis of the building, contributing further depth and character.

Multiple use and flexibility
The building houses two primary schools, a day care centre, after school care centre, play group space and a sports hall. The users themselves – who as the clients were part of the entire process – chose an outward-orientated arrangement whereby each user functions independently with its own entrance, playground, layout and colour palette. Internally, the shared functions can be well accessed and are easily interchangeable (for example centrally-located classrooms can be used by different schools each year) thanks to well-planned routing. Alongside, spaces are cleverly shared with the after school care centre. In other words, the building is flexible to accommodate both growth and downscaling if necessary.

Earthquake-resistant
The realization of the building took longer than expected. The first contractor went bankrupt during the implementation. When construction could resume with a new contractor, the schools had already grown and a number of classes had to be added.
In addition, because the school is located in an earthquake zone, the building had to be made earthquake-proof as a result of more stringent regulations. This is where the strength of the design emerged: with limited modifications, the building could be expanded with the new classrooms. The construction has been reinforced and made more rigid for earthquake resistance.

Ontwerpteam
project architect
Dorte Kristensen, Joke Stolk, Martijn de Visser

projectleider
Coen Bouwmeester

design team
Allard de Goeij, Constanze Knüpling, Jannetta Roozendaal, Ron Bruin, Wendy Braun-Popma, Wesley Wijnands

costs consultant
John Koks

Projectteam
acoustics consultant
MoBius consult

physics consultant
MoBius consult

structural engineer
Bartels ingenieursbureau

sustainability consultant
MoBius consult

services engineer
MoBius consult

project manager

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Future proof
The pared-back interior features a palette of white complemented by lively accents. Skylights ensure a beautiful quality of light inside the compact square building volumes. The planning and design of the spaces facilitate different educational needs. The size of the classrooms and adjacent outdoor space gives flexibility for teachers to conduct classes as they wish, for example with children assembled as a large group, working in smaller groups inside or outside or individually. Classrooms all have wide sliding glass doors and large built-in cupboards equipped with a sink inside. While the building has a sturdy basis (structure, installations, corridors, stairs), it has a flexible interior with light partitions. Hence this flexible shell can easily accommodate any future changes. The connection between the two building halves and the boiler house is a unique space; this transparent multipurpose core is the showcase and heart of the complex, further emphasised by the chimney.

Passive building principle
Smart and sustainable, the building's design is inspired by passive house techniques, from the orientation to the technical measures. The building is recognised with a Frisse Scholen label B for liveability. The building comprises two very compact, well-insulated volumes (R_c facade 5, R_c roof 6, triple glazing, EPC 0,76). Group spaces have low temperature heating with radiators and localised floor heating. In each space the balanced ventilation system responds to CO_2 levels. While daylight and views are abundant throughout the building thanks to generous windows and skylights, solar heat gain is limited. Furthermore, the energy-efficient lighting can be controlled depending on the level of daylight and many windows are openable.

Material choices were determined by maintenance, ease of cleaning and repair. With these measures, the low operating costs (energy and maintenance) are in line with the concept of life cycle costing. With the children's center, the Vosholen neighborhood was given a building that will grow beautifully old and will invite all kinds of activities far into the future.

Publications
Il giornale dell'ARCHITECTURA.com
Archello