



## HERTA MOHR: THE SUSTAINABLE TRANSFORMATION OF CLUSTER ZUID

*Posted on February 6, 2025 by Dima Fadel*



**Categories:** [De Zwarte Hond](#), [Energy and sustainability](#), [expanding design practices](#), [Middle Density](#), [Project](#)

**Tags:** [Adaptive reuse](#), [Architecture](#), [Heritage](#), [heritage integration](#), [Netherlands](#), [old building](#), [Renewal](#), [Renovation](#), [university](#)

## **A Structuralist Landmark Reimagined**

Originally designed by architect Joop van Stigt in the late 1970s for Leiden University's Faculty of Humanities, Cluster Zuid is a remarkable example of structuralist architecture. Its design reflects the 'grain of the city' with a grid of mushroom-shaped concrete columns. Now, the building has undergone a significant renovation and expansion, increasing its size from 7,850 m<sup>2</sup> to 11,400 m<sup>2</sup>. The renewed building accommodates over 700 teaching and self-study spaces, two lecture halls, meeting and study rooms, common areas, and two libraries. It retains its original architectural essence while incorporating contemporary sustainability principles.

Cluster Zuid was initially composed of seven distinct 'houses,' but navigation within the building proved challenging due to its repetitive courtyards, narrow corridors, and limited transparency. To address these issues, the central house was demolished and replaced with a new, spacious main entrance and atrium. This central hall enhances orientation, bringing coherence to the interior while allowing natural light to flood the space. Additionally, the second floor was fully renovated, and an eighth 'house,' clad in anodized aluminum, was added. This new addition aligns with Van Stigt's original vision, as his plans had included a house in this location that was never constructed.

Given the building's protected status within the cityscape, external modifications were kept to a minimum. The prefabricated concrete columns with conical tops, some featuring round balconies, remain fully visible, preserving the integrity of the original design. The entrance seamlessly connects the indoor square with the outdoor plaza, fostering engagement between the building and its urban surroundings.

# urbanNext Lexicon

Herta Mohr: The Sustainable Transformation of Cluster Zuid

<https://urbannext.net/herta-mohr-the-sustainable-transformation-of-cluster-zuid/>



ISSN : 2575-5374



# urbanNext Lexicon

Herta Mohr: The Sustainable Transformation of Cluster Zuid  
<https://urbannext.net/herta-mohr-the-sustainable-transformation-of-cluster-zuid/>



ISSN : 2575-5374



## **Sustainability and Circular Renovation**

The renovation prioritizes sustainability, exceeding building regulations by implementing 72% more sustainable measures than required. Herta Mohr has earned a BREEAM Excellent certification due to its high-quality, low-emission materials, additional insulation, solar panels, and an advanced heat/cold storage system. New, efficient installations were integrated to meet stringent sustainability standards. However, the existing structure could not support these updates,



# urbanNext Lexicon

Herta Mohr: The Sustainable Transformation of Cluster Zuid

<https://urbannext.net/herta-mohr-the-sustainable-transformation-of-cluster-zuid/>

necessitating the removal of the second floor and the construction of a new structural framework. This transformation has unified the separate 'houses' into a cohesive whole, with fully integrated technical systems.

A major achievement of the renovation is the extensive reuse of original materials. Three concrete columns from the demolished central house were repurposed for the extension, while old Sequoia redwood ceiling panels were meticulously reworked into wall cladding for the atrium. These wooden slats were processed, stripped of nails, and milled in collaboration with the social workshop BWRI. The prefabrication of these elements ensured minimal waste.



ISSN : 2575-5374



## **A Balance of Past and Future**

The renovation of Cluster Zuid enhances and respects Van Stigt's original design while adapting the building for modern use. It now serves as a benchmark for circular architecture, ensuring its place in Leiden's collective memory. This transformation, led by De Zwarte Hond and commissioned by Leiden University, represents a fusion of historical respect and contemporary sustainability.

