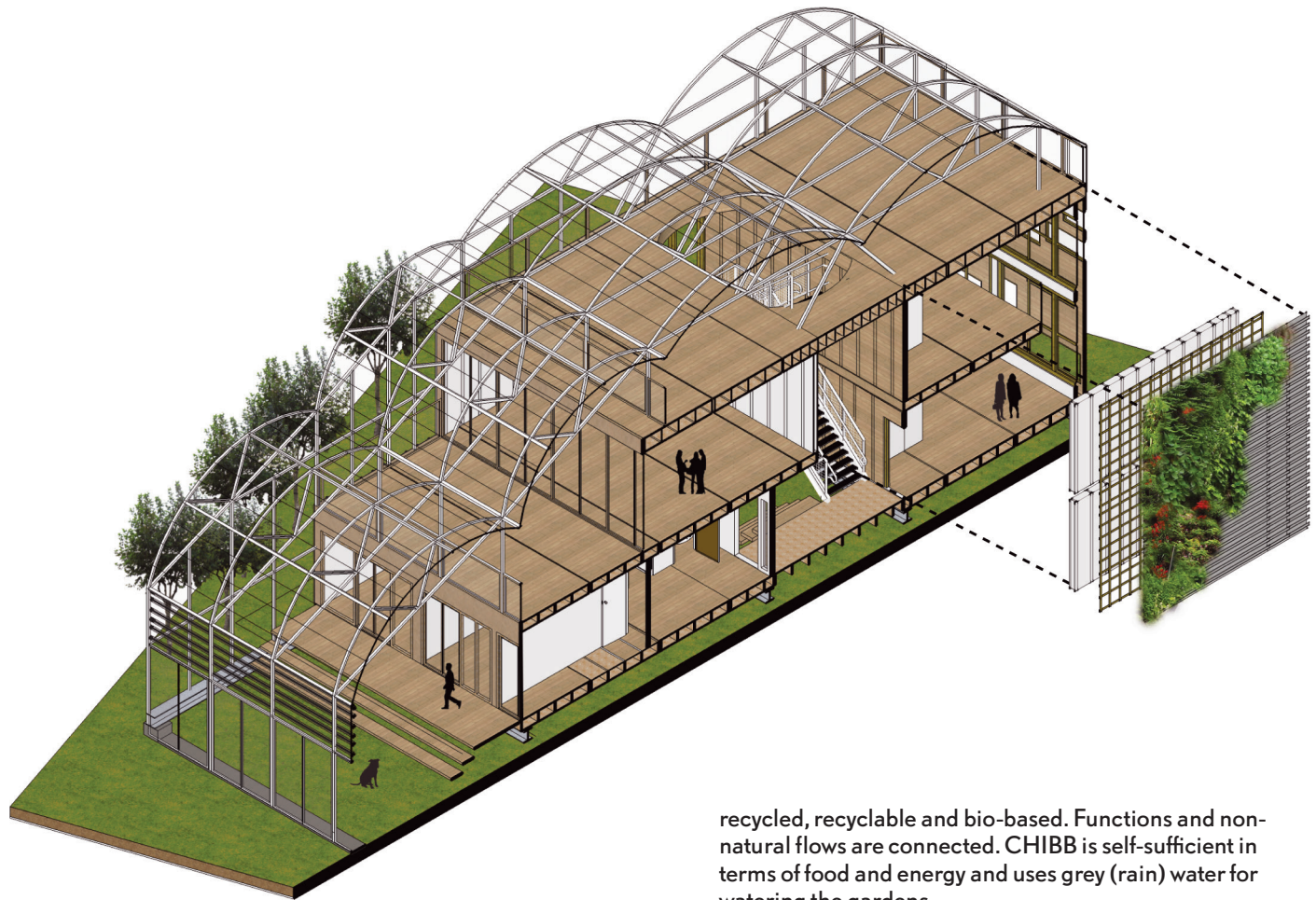


CHIBB (Concept House IBB) is an initiative of the Lectureship in Sustainable Building Technology, launched by Rotterdam University's Sustainable Building Technology minor programme. This prototype housing symbolises sustainability and innovation by combining living, working, recreation and environmentally friendly concepts. It is sustainable not only in terms of minimal energy consumption, but for all aspects of sustainability during the entire life cycle: resources, C2C, living environment, water management systems, ecology and mobility. Rotterdam University students are in charge of developing CHIBB, and both higher professional education (HBO) students and intermediate vocational education (MBO) students will implement CHIBB.



CHIBB

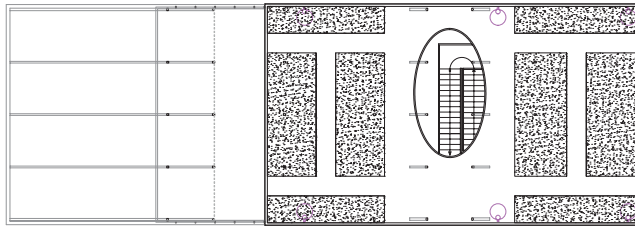
The CHIBB prototype will be built in Concept House Village. The idea behind this model village is to develop, test and demonstrate in an urban environment innovative living concepts, building concepts and products, which improve sustainability in housing. Various consortiums will develop the prototype houses that will be constructed and tested in Heijplaat, near RDM Campus.

The CHIBB concept strives to achieve the optimal form and approach, including the optimal use of sun, light, air and greenery. Optimal form involves limiting transmission loss (TL) and using materials efficiently. The materials are

recycled, recyclable and bio-based. Functions and non-natural flows are connected. CHIBB is self-sufficient in terms of food and energy and uses grey (rain) water for watering the gardens.

Sustainability and comfort complement one another in CHIBB. Using innovative systems we can achieve optimal ventilation with the minimum expenditure of energy and by applying the proper resources in the proper scales, we can achieve optimal thermal, acoustic and hygric comfort.

The CHIBB project will be completed in the coming year. The house has been designed so that it can be moved to another location and used for another purpose. CHIBB is working as a source of inspiration and as a test case with lecturers and students using it to study the many and various aspects of sustainable design and use. The results of this test case may be used for CHIBB+, a larger building of which CHIBB will form one part.



ROOF GARDEN 134M²



1ST FLOOR, LIVING AREA 47.2M², OFFICE 32.6M²



GROUND LEVEL, LIVING AREA 72.5M², OFFICE 44.8M²

The entrance to CHIBB is an atrium, which provides access to the living area, the office and roof garden. The spacious hall gives access to the bathroom, toilet, bedrooms and living space on the first storey. All rooms face the south-oriented garden and the roof garden. The greenhouse functions as an open roof, resulting in an exceptionally comfortable living environment.

The bathroom, toilet, utilities room, and kitchen are all compact and set near each other, leading to less cabling and materials to minimise energy consumption. A French balcony on the upper floor interacts with the atrium and offers a wonderful view of the grape-covered façade of the office.

The staircase from the atrium leads up to the roof garden. The roof of the atrium is an eye-shaped skylight that fills the space with daylight. The roof garden is designed as an 'edible' roof — a greenhouse. It also contains six reservoirs for rainwater, used to flush the toilets and for watering the plants.

The office is separate from the rest of the house and faces north. The hallway and other rooms are situated along the warm, blind south-facing façade that insulates the rest of the house. The office space along the north façade receives lots of daylight.

DEVELOPED BY

ASSOCIATE LECTURESHIP SUSTAINABLE BUILDING TECHNOLOGY
ROTTERDAM UNIVERSITY, RESEARCH CENTRE SUSTAINABLE SOLUTIONS RDM

REALISATION

ROTTERDAM UNIVERSITY, ALBEDA COLLEGE, PARTNERS AND SPONSORS

CONTACT

CHIBB-studio RDM Campus

Klinknagelstraat 4

3089 JP Rotterdam

The Netherlands

+31 (0)6 317 961 72

chibb@hr.nl

FOR MORE INFORMATION, SEE

WWW.CHIBB.NL

Arjan Karssenbergh, Annette Detzel, Kees van Kranenburg, Johan van den Brink, Steve Abraham-Reynolds, Wouter van den Berg, Jeroen den Boer, Engin Bozdag, Willem Brandenburg, Marc Delemarre, Nasja Geertjens, Jelle de Graaf, Willem Huisman, Andreas Karger, Madina Karim, Danny Kegel, Anne Krens, Dave Maliepaard, Ferry Nitzsche, Mark van den Ouden, Paul van Rijen, Gertjan Schoneveld, Laurens Taal, Stefan Verberk, Marten Verhaar, Rick van Vliet, Rutger Vroom, Mats Wentholt, Stephan Wuntke



GRAPHIC DESIGN: MEDAMO

CONCEPT HOUSE VILLAGE

CHIBB

