

REDENSIFICATION BY ADDITION

In the Fritz-Kissel-Housing in Frankfurt, 82 new apartments were created by adding 14 residential building types with one to two floors in wooden module construction. The modules were 80% prefabricated, which requires complex planning and logistics for such projects. KLH® – CLT was used for the construction of the walls, ceilings, and staircases. In the factory, the wall elements were clad with gypsum plasterboard and the floor elements, including all installations, were prefabricated up to the top edge of the dry screed. To improve energy efficiency, a holistic concept implemented that uses regenerative energies such as airwater heat pumps in combination with photovoltaic systems. The addition of more stories to existing buildings with the help of the further development of the modular construction method represents an extremely ecological and efficient method of redensification.

PROJECT INFO

VOLUME OF KLH® – CLT 44.000 m² / 5.000 m³

STORED CARBON 3.970 tonnes (Regrowth time in Austria 83 minutes)



ARCHITECT

Menges Scheffler Architekten www.menges-scheffler.de

TIMBER CONSTRUCTION

LiWood Holzmodulbau AG www.liwood.com

CLIENT

Nassauische Heimstätte Wohnungs- und Entwicklungsgesellschaft mbH Frankfurt

ELEMENT PLANNING

ABA HOLZ van Kempen GmbH www.aba-holz.de

STRUCTURAL DESIGN

Ingenieurgesellschaft mbH www.tsb-ing.de

PHOTOGRAPHY CREDITS

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