#### Darmstadt



Arbeitswelt von Alnatura in Darmstadt © Fotografie Brigida González

#### With the Alnatura working world, an architectural milestone has been reached in terms of sustainability, material efficiency, openness and modern working methods arose.

The building on the site of the former Kelley-Barracks, where hardly any reminiscent of a conventional office building, offers space on three floors for up to 500 employees. For the 55000 square meter Alnatura Campus the former barracks area was comprehensively renatured: Sealed areas were broken open and the resulting material was used in the open spaces. With a gross floor area of 13500 square meters, the simple construction is the largest office building made of clay in Europe. The buildings are constructed using rammed earth technology. Walls do not only contain clay from the Westerwald and lava gravel from the Eifel, but also recycled material from the tunnel excavation of the railway project Stuttgart 21. The Alnatura working world follows the principles of an integrated, sustainable architecture, which is expressed among other things in the DGNB certification in platinum. It is a high performance house with low energy consumption and optimized interior comfort, which conserves resources by using natural materials and and recycled materials. The use of ecological fharmless building materials leads to a reduction of the costs associated with the construction and significantly improves the ecological balance of a building.

#### Special requirements for room acoustics

The open-plan building design also presented the planners with special challenges in terms of good room acoustics. In addition to the topics of architecture, sustainability and material efficiency, care had to be taken to ensure that the working environment for the employees meets the high requirements for good office acoustics. Amongst other things, this is achieved by allowing for the Sorp 10® sound absorber to be embedded in the concrete ceiling as strips. On the one hand, Sorp10® sound absorbers contain a sound-absorbing core of recycled waste glass and, on the other hand, the sound



#### Type of building:

Clients and Developers: Alnatura Produktions- und Handels GmbH www.alnatura.de

Architect: Martin Haas Architekturbüro Haas-Cook-Zemmrich Studio 2050

Engineers/ Specialist Planners: Campus 360 GmbH Transsolar KlimaEngineering

Completion: 2019

Project link: https://www.alnatura.de/de-de/ueberuns/alnatura-campus

#### Darmstadt

absorbers themselves can be recycled on a long-term basis which underlines the sustainability of this product. Sorp 10® also has a minor effect on thermal efficiency. As a result, thermal comfort is ensured in the concrete core activated building in addition to the acoustic comfort and thus contributes further to energy efficiency.





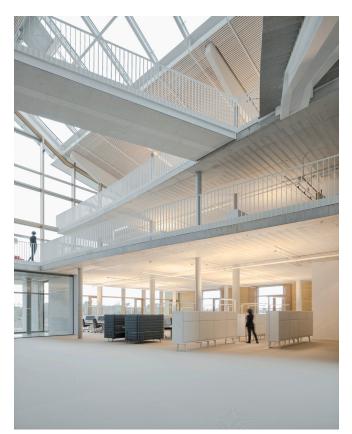
### Darmstadt

### **Products used:**





Alnatura working world in Darmstadt © Fotografie Brigida González



Open Atrium with Sorp 10  $\ensuremath{\mathbb{8}}$  sound absorber  $\ensuremath{\mathbb{C}}$  Fotografie Brigida González





Open meeting rooms furnished with Sorp 10  $\ensuremath{\mathbb{8}}$   $\ensuremath{\mathbb{C}}$  Fotografie Brigida González



Raw building with Tubbox  $\ensuremath{\mathbb{B}}$  and Sorp 10  $\ensuremath{\mathbb{B}}$  C Alnatura - Fotograf Marc Doradzillo



**COMMON GROUND** 

BUILDING MAX FRANK

Sustainbability - largest clay building in europe  $\ensuremath{\mathbb{C}}$  Alnatura - Fotograf Marc Doradzillo



Two floors with Tubbox® circular columns © Alnatura - Fotograf Marc Doradzillo



Tubbox® column formers and Sorp 10® absorber already stripped. © Alnatura - Fotograf Marc Doradzillo



Concrete core activated components with Sorp 10  $\ensuremath{\textcircled{}}$  © Alnatura - Fotograf Marc Doradzillo

### Darmstadt



Rammed clay technique and concrete core temperature contral  $\ensuremath{\mathbb{S}}$  Alnatura - Fotograf Marc Doradzillo



Smooth finish mit Tubbox® column formers © Alnatura - Fotograf Marc Doradzillo



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Exposed concrete finish © Alnatura - Fotograf Marc Doradzillo



Bottom view Sorp 10® sound absorber for thermally activated components © Alnatura - Fotograf Marc Doradzillo