

RESIDENTIAL AND COMMUNITY BUILDINGS, HÜNFELD / MUNICH



Refugee housing in Hünfeld / Photo: © Dr. Michael Fladung

NUMBER OF RESIDENTS / MODULAR UNITS

Hünfeld: 90 residents / 2 buildings: Two-story residential building with large modules (15 residents each) and a community building
Munich: 300 residents / 6 buildings

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: Hünfeld, August 2015; Munich, unknown
Construction time: Hünfeld 4.5 months, Munich 1.+2. construction phase 8 months

COMMISSIONED BY

Hünfeld: German League for Human Rights, District of Fulda, and DRK Kreisverband
Munich: The City of Munich

ARCHITECT

trapp wagner_Architekten und Ingenieure, Hünfeld

CONSTRUCTION FIRM

Holzbau Gutmann GmbH

BUILDING METHOD

Timber frame construction

CONSTRUCTION COSTS

Hünfeld: 1,016 Euro/m² GFA (construction costs without optimization, 938 Euro/m² GFA)
München: N/A

LIVING SPACE PER PERSON

Hünfeld: 1,674 m²/GFA for 90 refugees
München: 4.600 m² for 300 people



Exterior view / Photo: © Dr. Michael Fladung



Exterior view / Photo: © Dr. Michael Fladung



Construction site / Photo: © Dr. Michael Fladung

DESCRIPTION

Hünfeld:

A 1-story living module accommodates 15 people. The living modules can be arranged either on top or beside one another. A corresponding access module is incorporated into each living module.

The 1-story community module contains the building facilities, administration and storage rooms, and a common area.

(Excerpt from project description)







Hünfeld: Floor plan, second floor



Munich: Floor plan, two-room apartments with communal kitchen and sanitation area

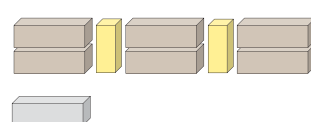


Modulbauweise als Schema

-  1 x Wohnmodul = 15 Personen (1-geschossig)
-  2 x Wohnmodul = 30 Personen (2-geschossig)
-  Erschließungsmodul (variabel)
-  Gemeinschaftsmodul (1-geschossig)

Die 3 Module ergeben eine Einheit und können variabel formiert und gekoppelt werden.

Beispiel - Unterkunft für Flüchtlinge in Hünfeld



Munich: Site plan and diagram of modular building method

APARTMENTS FOR REFUGEES AND THE HOMELESS, OSTFILDERN



Exterior view / Photo © Markus Guhl



Exterior view / Photo © Markus Guhl



Exterior view / Photo © Markus Guhl

NUMBER OF RESIDENTS / MODULAR UNITS

39 residents / 3 buildings

RESIDENTS

Refugees with recognized refugee status, mixed residential base including people with no home

DATE OF COMPLETION / LIFESPAN

Date of completion: February 2015

Lifespan: 40 years

COMMISSIONED BY

Sanierungs- und Entwicklungsgesellschaft Ostfildern mbH, City of Ostfildern

ARCHITECT

u3ba Arge camilo hernandez urban 3 + Harald Baumann baumannarchitects, Stuttgart

CONSTRUCTION FIRM

Weizenegger Objektbau GmbH, Bad Wurzach

BUILDING METHOD

Timber frame construction (visible wooden ceiling beams)

CONSTRUCTION COSTS

Approx. 1,400 Euro/m² GFA (total: 1,400,000 Euro)

LIVING SPACE PER PERSON

21 m² GFA/person



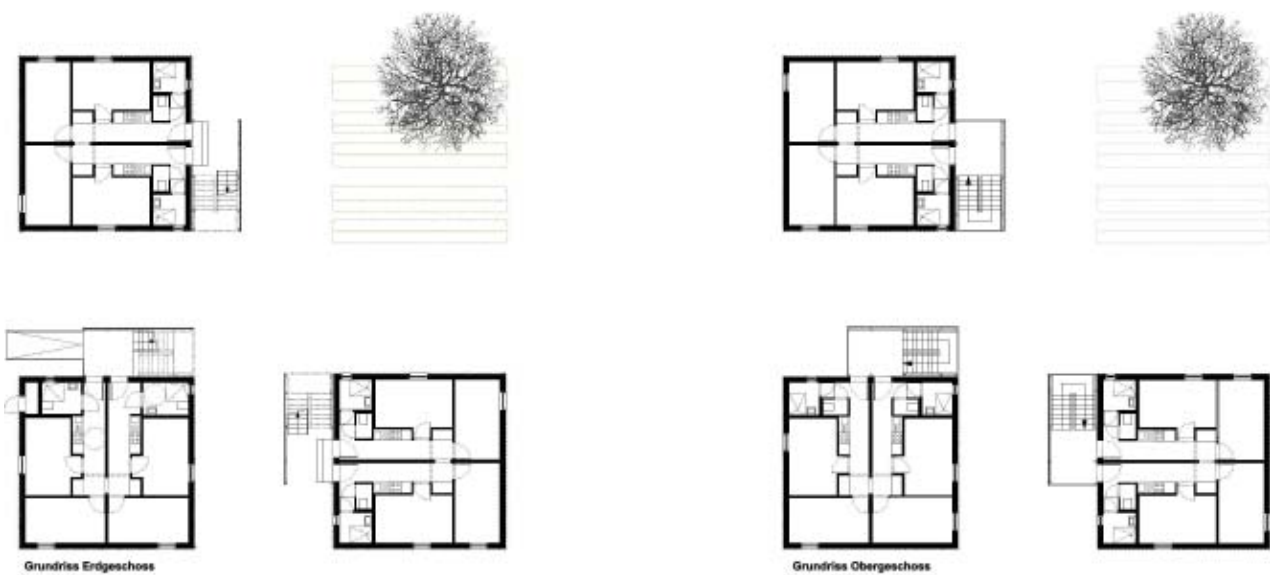
Exterior view / Photo © Markus Guhl

DESCRIPTION

The new building, with 800 square meters GFA, was envisioned to meet all the demands of a modern residential apartment building—particularly when it comes to the energy-efficient building method, flexible apartment partitions, and modular construction. (Excerpt from project description)

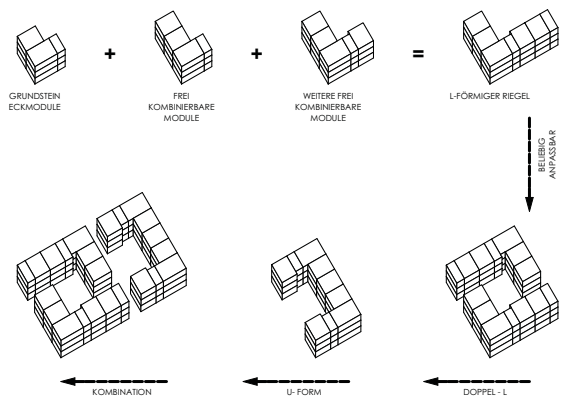


Interior space and stairwell / Photo © Markus Guhl



Floor plan, ground level and second floor

CONTAINER VILLAGES, BREMEN



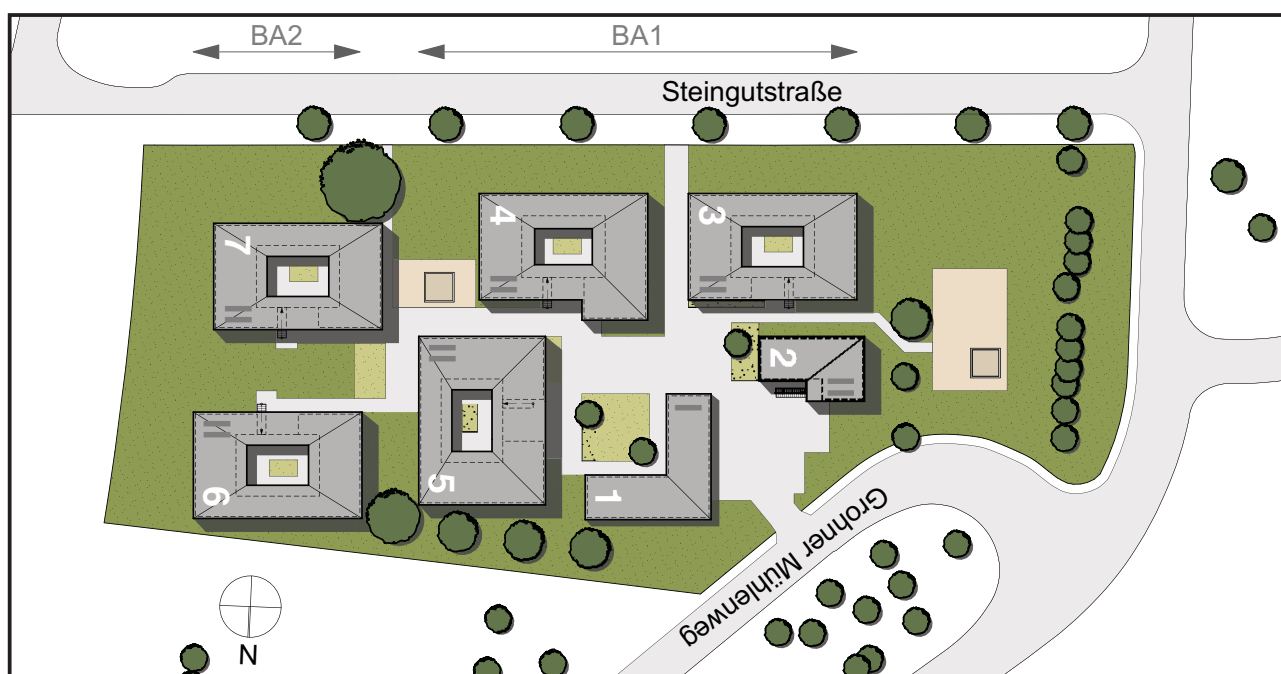
Concept



Grohn: Corridor / Photo: © Feldschnieders + Kister Architekten



Grohn: Containers and interior / Photo: © Feldschnieders + Kister Architekten



Grohn: Site plan

NUMBER OF RESIDENTS / MODULAR UNITS

Hemelingen: 240 residents / 6 buildings

Überseetor: 180 residents / 8 buildings

Grohn: 162 residents / 7 buildings

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: Hemelingen: January 2016;

Überseetor: December 2015; Grohn: November 2015

Lifespan: 5 years

COMMISSIONED BY

Bremen Senator for Social Affairs, Children, Adolescents, and Women (4 locations)

ARCHITECT

Architekten BDA Feldschnieders + Kisters, Bremen

CONSTRUCTION FIRM

Bremen, Hemelingen, and Grohn: Firma Algeco GmbH; Überseetor: Firma G. Ungrund GmbH

BUILDING METHOD

Containers: Steel frame & metal (non-standard dimensions – 3 x 3 x 9 m)

CONSTRUCTION COSTS

Approx. 1,100 Euro/m² GFA

LIVING SPACE PER PERSON

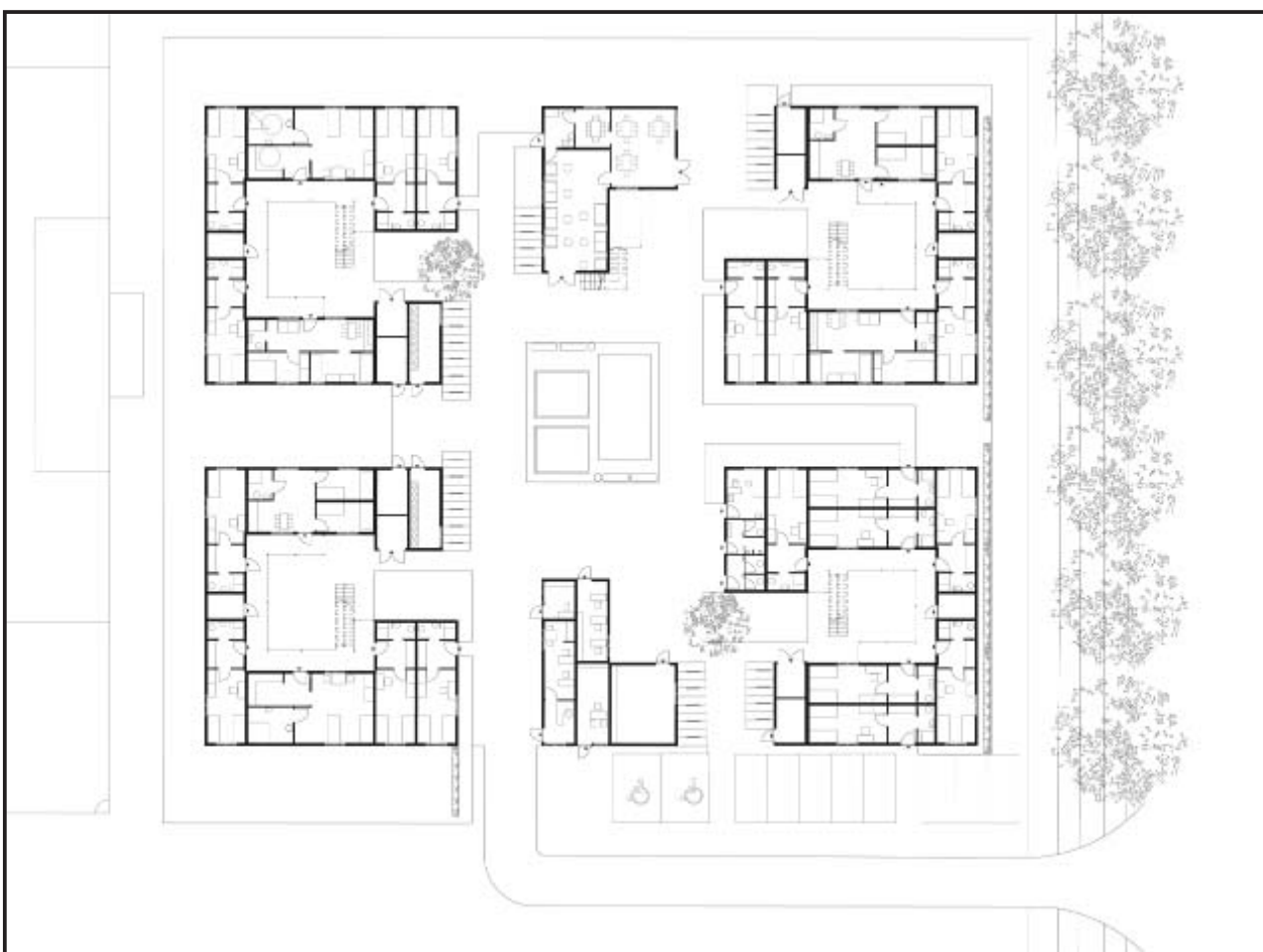
Approx. 12.5 m²/person (not including general management areas / common spaces)



Hemelingen: Interior courtyard / Photo: © Feldschnieders + Kister



Überseetor: Facility / Photo: © Feldschnieders + Kister Architekten



Hemelingen: Floor plan, ground level

DESCRIPTION

Containers in clusters

The temporary homes were constructed on municipal land and approved for five years. An employee from the Muslim community sensitised the planning architects to the residents. The outcome was living units of 24 m² for two persons and 48 m² for four persons, each with bath and kitchen. A maximum of 16 persons live on one level and are self-sufficient. The architects decided against communal showers, as they can lead to problems, especially with Muslim women. Some residents failed to turn off the taps because they found the noise of running water to be soothing, and for this reason water-stop valves had to be installed. The arrangement of the courtyard houses accommodates the need for peace and privacy, creating a layered system of private, semi-private and public areas. The complex has 24-hour security.

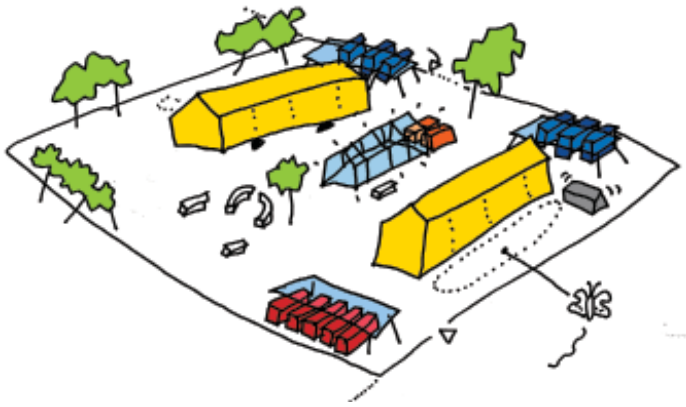
“The Bremen examples also show that once these people have spent a few months in temporary housing they are reluctant to move.” Architect Tobias Kister, who planned the container complexes, concludes: “We must create sustainable, higher-quality and durable residential complexes. It is not the residents who move on, but the social workers and managers who are no longer needed.” Kister is currently planning a housing complex made of wood. “A container is not suitable for permanent living,” he says.

Text: Friederike Meyer

from: *Stadtbauwelt* 48.2015

<http://www.bauwelt.de/artikel/Container-2480270.html>

LIGHT-FRAME CONSTRUCTION HALL EMERGENCY PROGRAM, MUNICH



Sketch



Aerial view / Photo: © Guido Helmschmid



Interior, light-frame hall / Photo: © Michael Heinrich



Construction of light-frame hall / Photo: © Jan Schabert

NUMBER OF RESIDENTS / MODULAR UNITS

230 people / 3 light-frame construction hall + containers

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2015

Lifespan: 2 years

COMMISSIONED BY

Project Management: State Capital of Munich, Municipal Department, Buildings and Construction Department

ARCHITECT

Jan Schabert (günther & schabert Architekten), Munich

CONSTRUCTION FIRM

Eschenbach Zeltbau

Containers: IQ-box, Filippi, Finsterwalder

Interior assembly: Zimmerei Höfle, Die Huber-Schreiner

BUILDING METHOD

Light-frame construction; Storage and shipping containers

CONSTRUCTION COSTS

N/A

LIVING SPACE PER PERSON

Approx. 9 m²/person



Interior, light-frame hall / Photo: © Michael Heinrich

DESCRIPTION

Winter-proof lightweight halls are a part of the City of Munich's crash programme to relieve the accommodation crisis. Almost 20 halls in various parts of the city are currently planned or have already been built, in addition to the use of barracks and other existing buildings in which a major part of the 20,000 refugees received in Munich are now living. The office of g nther & schabert has prepared feasibility studies for the City of Munich for 17 locations, and at three locations it was commissioned with the work. The main concern of the architects was to avoid a rigid camp character. "We don't want to build a good German camp." says Jan Schabert, "Despite the time restriction of two years, we attach importance to the quality of space, urban planning and interiors."

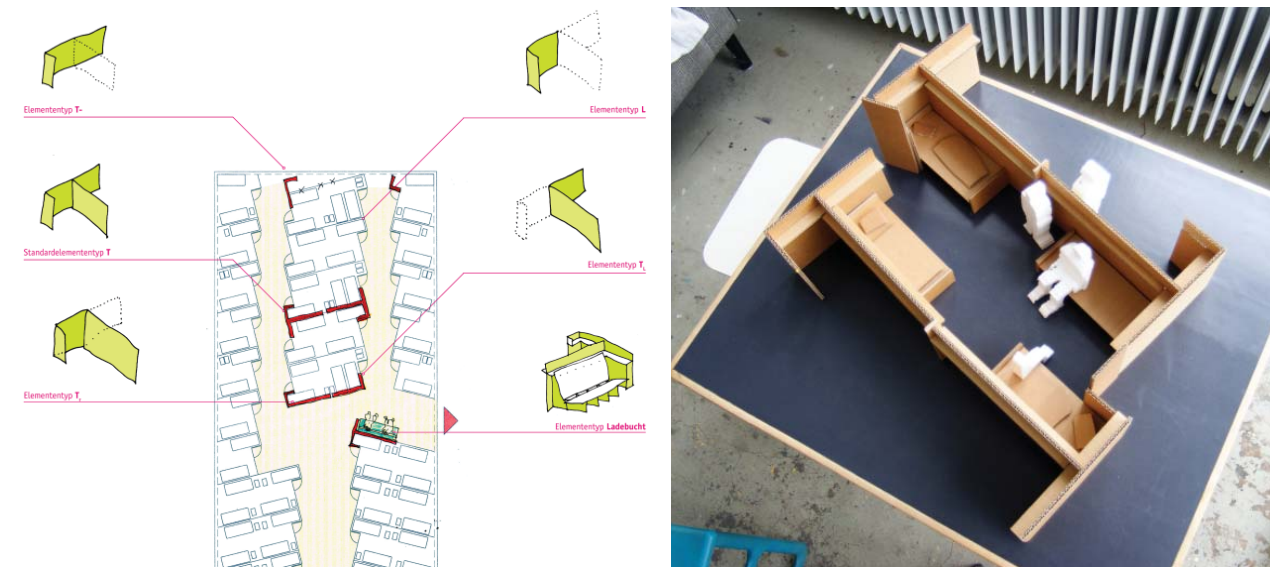
Three snow load halls and 42 containers have been set up at the Max-Pr bstl-Stra e site in the city's Daglfing suburban district. Two "living and sleeping halls", each with 116 beds, adjoin a "catering hall"; 15 sanitary containers with a doctor's practice dock directly onto the halls; office and storage containers are arranged along the street front. The conversion of the halls for living purposes proved to be a feat of strength: the 17.5 by 51 metre system buildings are normally used as marquees without floors or windows suitable for living accommodation. The architects planned an insulated floor made of wooden planks with foam glass gravel fill, canopies connecting to the sanitary containers and floor-to-ceiling glass doors to a create a visual reference to the outside - details which repeatedly led to disputes with the profit-motivated hall manufacturers, who were intent on short construction times.

The interior design also differs significantly from other locations: a system of 1.60 metre high wooden panels was used to separate off areas for two, four and five beds. The offset arrangement formed entrance niches and avoided monotonous hallways. The main meeting places are the "loading bays" opposite the glass doors, wide sofa benches on the outsides of the sleeping areas, where mobile phones and other devices can be charged at numerous sockets. To enable the residents a maximum level of participation, on moving in they were invited to select from various curtain colours as doors to the sleeping compartments. The walls and floors made of three-ply sheets were constructed by a carpenter who is currently working under intense pressure to produce the element system for further halls: the role model is being copied. The project demonstrates how costly it is to implement a temporary location when architects insist on halfway acceptable housing. At other locations lightweight halls had to be demolished because they were unable to withstand the elements.

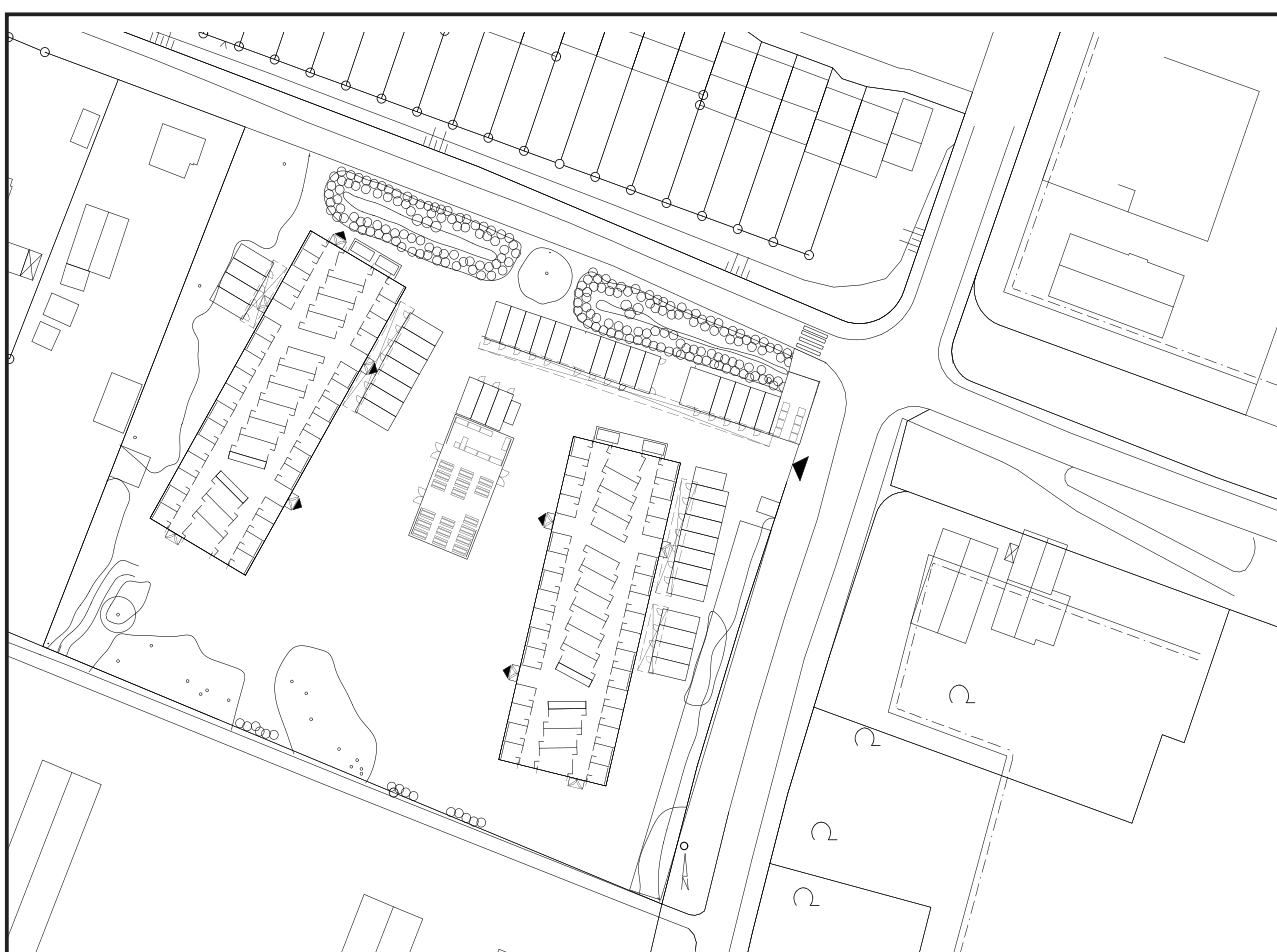
Text: Doris Kleilein

from: Stadtbauwelt 48.2015

<http://www.bauwelt.de/themen/bauten/Sofortprogramm-Leichtbauhallen-2480290.html>



Study of wall partition elements and model / Photo: © Jan Schabert



Site plan

REFUGEE ACCOMMODATION, MUNICH



Construction site / Photo: © Oliver Elser



Production of room modules / Photo: © Michael Heinrich



Overview / Photo: © Michael Heinrich

NUMBER OF RESIDENTS / MODULAR UNITS

300 Residents/ 4 interconnected lines of buildings

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: March 2016

Time to implement: 5 months

Lifespan: 5–10 years

COMMISSIONED BY

Municipal Government, State Capital of Munich,
Baureferat Hochbau (Project management)

ARCHITECT

Gerstberger Architekten GmbH, Munich

CONSTRUCTION FIRM

LiWood, Munich

BUILDING METHOD

Prefabricated wooden room modules (production on site)

CONSTRUCTION COSTS

-

LIVING SPACE PER PERSON

Gross internal area: 9.8 m² (including washroom, kitchen, recreation room, resident's room, storage, laundry room, etc.)

GFA: 4,820 m²



Assembly of room modules / Photo: © Michael Heinrich

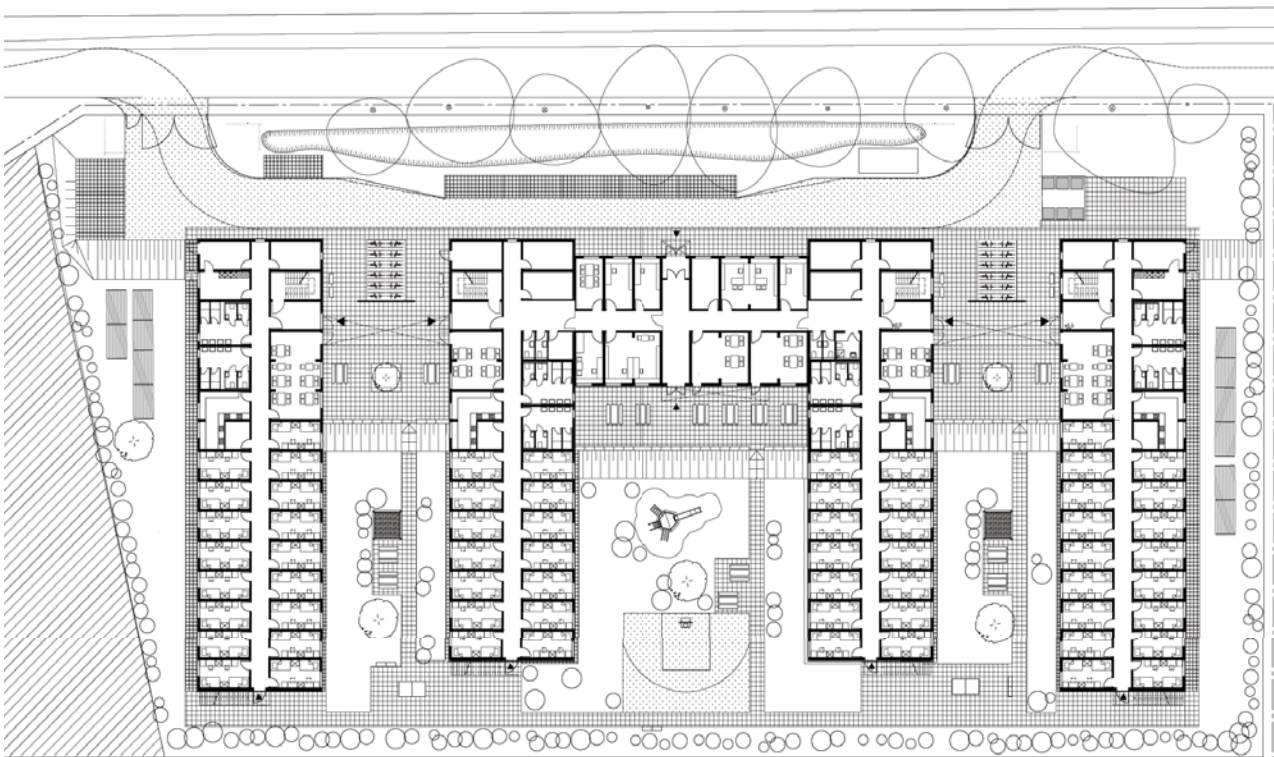
DESCRIPTION

The shared accommodation is part of the City of Munich's "Sofortprogramm" (Emergency Program). The primary goal was to build housing as quickly as possible; the spatial program corresponds closely with the guidelines set by the Bavarian state government.

(Excerpt from project description)



Transportation of room modules / Photo: © Michael Heinrich



Site plan



Elevations

REFUGEE RESIDENCE, HANOVER



Complete facility / Photo: © Olaf Mahlstedt, Hannover (www.olafmahlstedt.de) - Images may only be published by agreement with the author and the architect



Delivery of the modules / Photo: © Olaf Mahlstedt, Hannover (www.olafmahlstedt.de) - Images may only be published by agreement with the author and the architect



Producing the modules in Vorarlberg / Photo: © MOSAIK Architekten BDA

NUMBER OF RESIDENTS / MODULAR UNITS

96 residents / 3 two-story residential rows

RESIDENTS

Asylum seekers, refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Date of completion: Beginning of 2016

Useful life: minimum of 20 years

Possible subsequent use as student dormitory

COMMISSIONED BY

Building Department, State Capital of Hanover

ARCHITECT

MOSAIK Architekten BDA, Hanover with Drewes + Speth (loadbearing structure planning), Hanover Riedel + Partner (TGA), Hanover, trinity consulting, Uetze (energy consulting), CRP, Hanover (fire safety) Recreation space planning: LINNEA Landschaftsarchitektur, Hanover

CONSTRUCTION FIRM

Plot preparation (TGA): TGW Planungsgesellschaft mbH, Laatzen with ezs Planungsgesellschaft mbH General contractor: Kaufmannbausysteme GmbH, Vorarlberg (AT) with Ecotec, Bremen (TGA) and Merz, Kley + Partner, Vorarlberg (AT), (loadbearing structure planning), Dekra, Hamburg (fire safety)

BUILDING METHOD

Prefabricated wooden room modules

CONSTRUCTION COSTS

Approx. 1,600 Euro/m² GFA (building and engineering costs)

LIVING SPACE PER PERSON

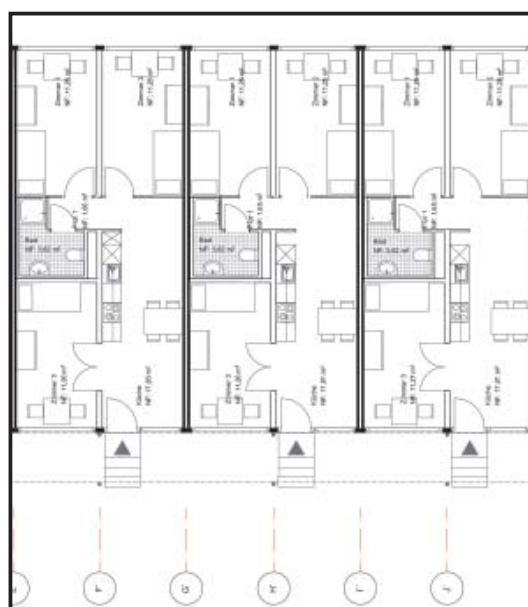
Approx. 17 m²/person



Housing units, exterior view / Photo: © Olaf Mahlstedt, Hannover (www.olafmahlstedt.de) - Images may only be published by agreement with the author and the architect



Interior view: Kitchen and bedroom / Photo: © Olaf Mahlstedt, Hannover (www.olafmahlstedt.de) - Images may only be published by agreement with the author and the architect



Site plan and floor plan, ground level

DESCRIPTION

Affordable living in wooden modules. Steigertahlstraße, Hannover

Kaufmann Bausysteme, a modular building giant based in Vorarlberg, has been in the prefabrication business for countless years. Its commitment in Hannover is attributable to a pan-European invitation for tender in May 2015 in which the company underbid the competition. The local office of Mosaik Architects has planned three housing complexes with wooden modules at various different sites in Hannover. Proposed for long-term use, in addition to being quickly built, the living units should also conform to ecological and urban planning standards. According to architect Kay Marlow, the Linden district, where the first complex is to be completed by the end of December, is Hannover's Prenzlauer Berg, where the refugees are being welcomed with open arms.

The architects' plans call for 96 single rooms in three two-storey buildings grouped around a courtyard with a community house, sport and recreation areas. At present the rooms are double-occupied by refugees, but in the long term students and families with low income will be accommodated here. The floor plans dispense with hallways: the dwelling units are accessed through the kitchen. Three or five rooms can be connected to form a unit with one or two baths. For this purpose a double door was factory-installed in the room adjoining the kitchen/living room. The complex is modelled on the Danish Tinggård housing developments to the south of Copenhagen dating back to 1978, with their striking individual staircases leading from the first floor apartments directly to the garden. In Hannover the garden stairs had to be omitted in favour of a second escape route; instead, a wide access gallery connects the upper units.

At 2.7 by 12 metres the dwelling units correspond to the maximum truck haulage dimensions. All the modules – including installations, heating, bath, kitchen and façade panels – were made at the factory and set on strip footings in Hannover. Only the access balconies, steel stairways and outer wood panelling were assembled at the site. The massive timber construction is made of plywood conforming to EnEV. The quality of living promises to be significantly higher than in steel containers, alone due to the wood-faced inside walls. Parallel building modules of steel were prescribed for the construction in Steigertahlstraße, and these proved to be significantly more expensive. Eight months lapsed between the opening day of tenders and completion. Construction of the second refugee accommodation with 150 rooms in Dorotheenstraße started in January. Here the wooden modules are to be stacked in three layers.

The City of Hannover, which in the past year took in 4,000 refugees, has opted for a "Three pillar model" with dormitories, housing projects and apartments. In 2016 Hannover is expecting 300 further refugees per month; 16 locations for modular structures and 13 residential projects with "contingents" for refugees are at the planning stage. Following an amendment of the Building Code in November 2015, construction is to be permitted on sites for which no land-use plan exists.

Text: Doris Kleilein

Aus: Stadtbauwelt 48.2015

<http://www.bauwelt.de/themen/bauten/Bezahlbares-Wohnen-in-Holzmodulen-2480053.html>

FIRST ADMITTANCE FACILITY, ESSEN



Delivery of the first modules on 28 Apr 2015 / Photo: © GVE



Living modules / Photo: © KLEUSBERG Modulares Bauen-Fotograf Rüdiger Mosler (www.architecfoto.de)



Aerial view / Photo: © GVE

NUMBER OF RESIDENTS / MODULAR UNITS

800 residents / 10 buildings (6 buildings with 100 residents each; 4 buildings with 50 residents)

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: January 2016

Construction time: 14 months

Lifespan: 25 years

COMMISSIONED BY

The City of Essen

ARCHITECT

GVE Grundstücksverwaltung Stadt Essen GmbH

CONSTRUCTION FIRM

Residential and administrative buildings: KLEUSBERG GmbH & Co. KG

Common area and facilities building: ADAMS

Holzbau-Fertigbau GmbH

BUILDING METHOD

Residential and administrative buildings: Prefabricated room modules: I-beams and roughcast plaster on exterior insulation finishing system (EIFS)

Common area and facilities building: Timber frame construction

CONSTRUCTION COSTS

Total cost: 35,183,000 Euro

LIVING SPACE PER PERSON

6 m²/person (not including adjoining and common areas)

Total area: 14,500 m²

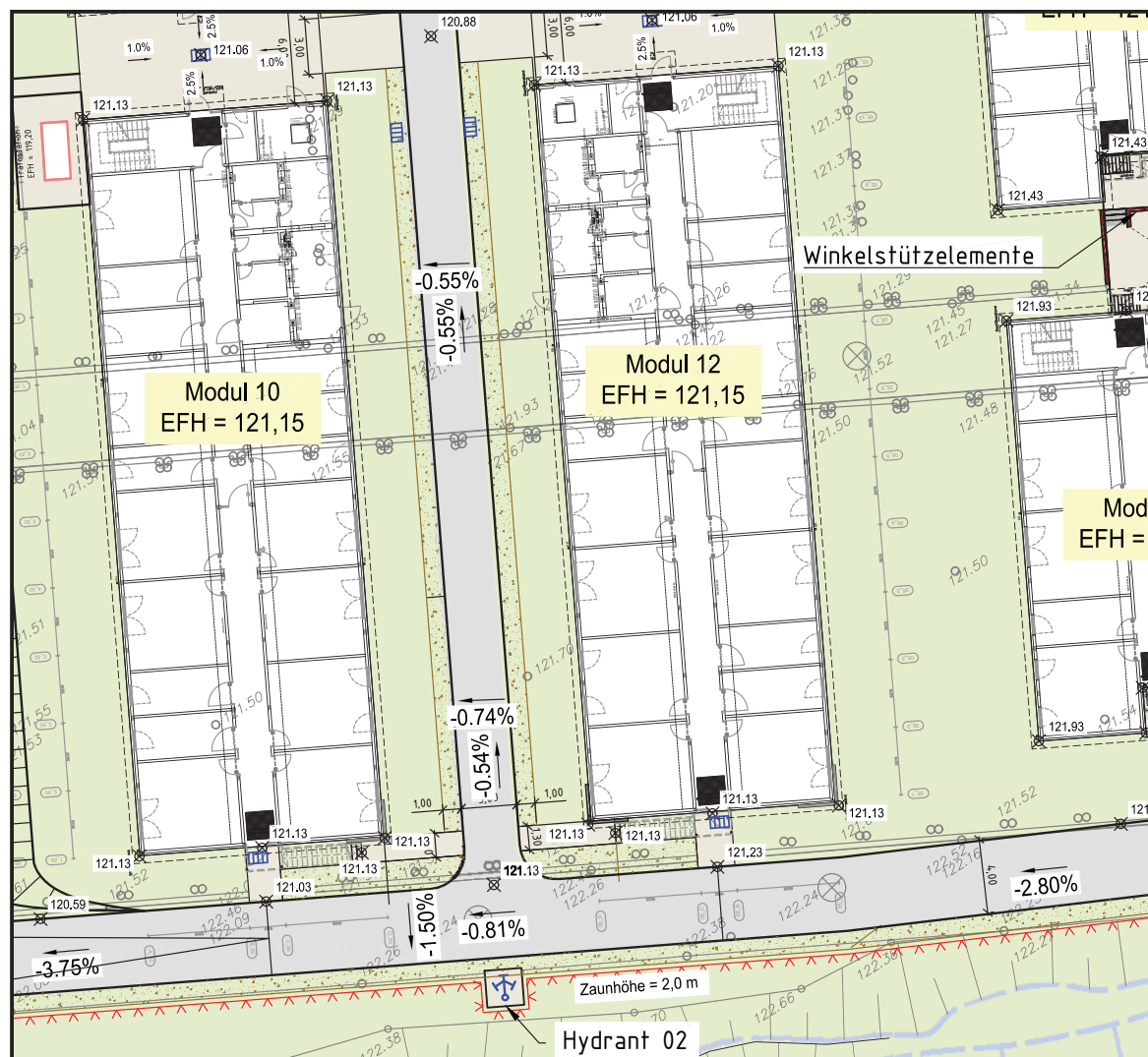
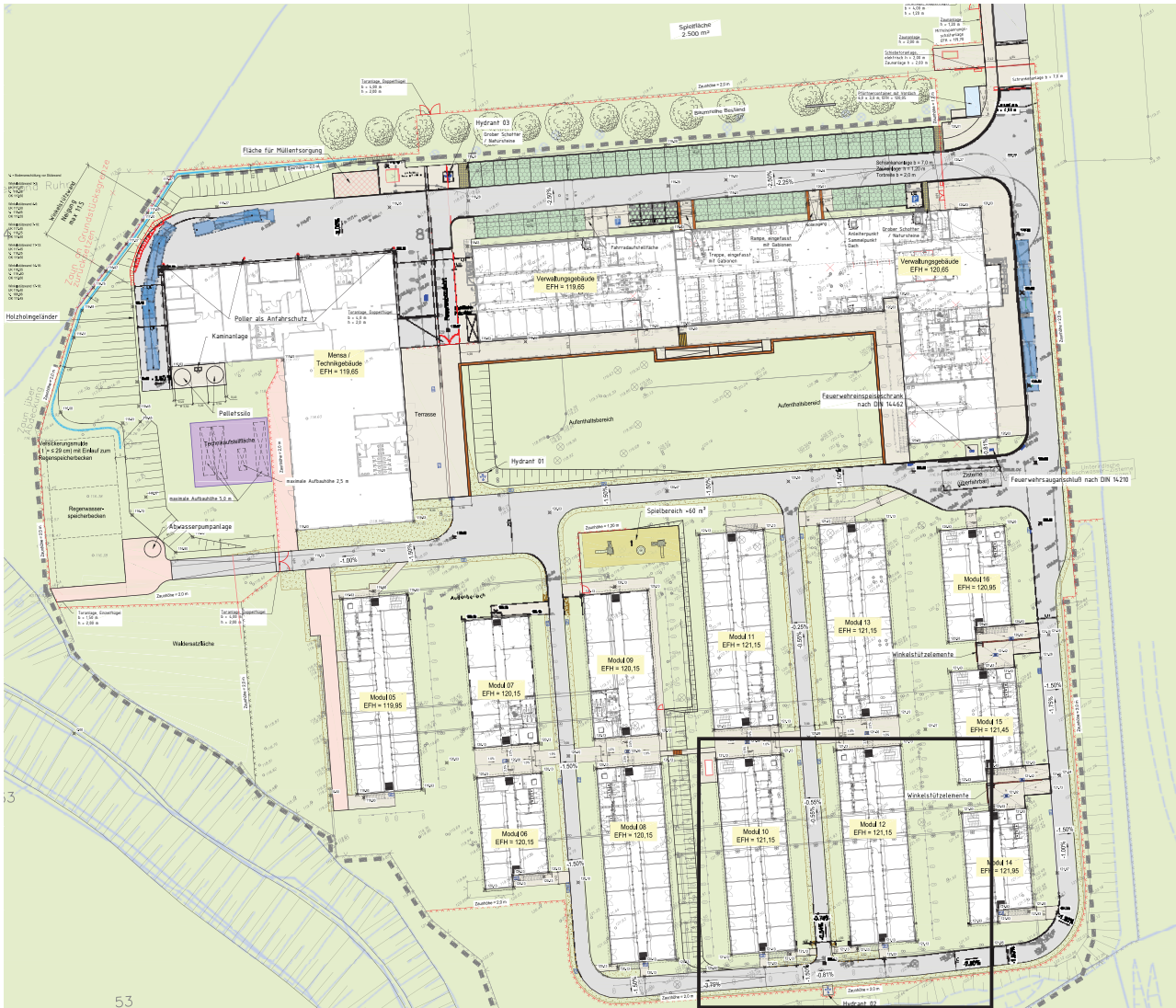


Canteen and bedroom / Photo: © GVE

DESCRIPTION

On commission from the City of Essen, ten residential buildings and other multi-function buildings were built to register and administer health screenings to refugees. Costs have been covered by a 25-year rental agreement with the state of North Rhine-Westphalia. Only 14 months elapsed between the decision to build the structure and its completion. After a probably stay of a few weeks, asylum seekers are then assigned to individual municipalities. To achieve the best possible administrative synergy, the site also features a registration office (REG) and a branch of the Federal Office for Migration and Refugees (BAMF).

(Excerpt from project description)



Site plan and floor plan for living units

REFUGEE HOUSING, FREIBURG



Gundelfinger street: exterior view / Photo: © Miguel Babo, Freiburg



Gundelfinger street: exterior view / Photo: © Miguel Babo, Freiburg



Gundelfinger street: interior views / Photos: © Miguel Babo, Freiburg

NUMBER OF RESIDENTS / MODULAR UNITS

Gundelfinger Str: 300 residents

Tiengen: 100 residents

RESIDENTS

Asylum seekers, Refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Tiengen: April 2016

Gundelfinger Str: June 2016

Merzhauser Str.: 2016

COMMISSIONED BY

City of Freiburg im Breisgau, Building Management

ARCHITECT

ARGE Architekten Freiburg: FranzundGeyer Freie Architekten BDA dwb, stocker dewes architekten bda, jochen weissenrieder architekten bda

CONSTRUCTION FIRM

ARGE Holzmodul-Wohnheim

BUILDING METHOD

Prefabricated wooden room modules: Solid wood panels

CONSTRUCTION COSTS

1,250 Euro/m² GFA

LIVING SPACE PER PERSON

Tiengen: 21.5 m²/person (GFA: 2.150 m²)

Gundelfinger Str: 14.1 m²/person (BGF: 6.998 m²)



Gundelfinger street: Delivery of the modules / Photo: © Yohan Zerdoun

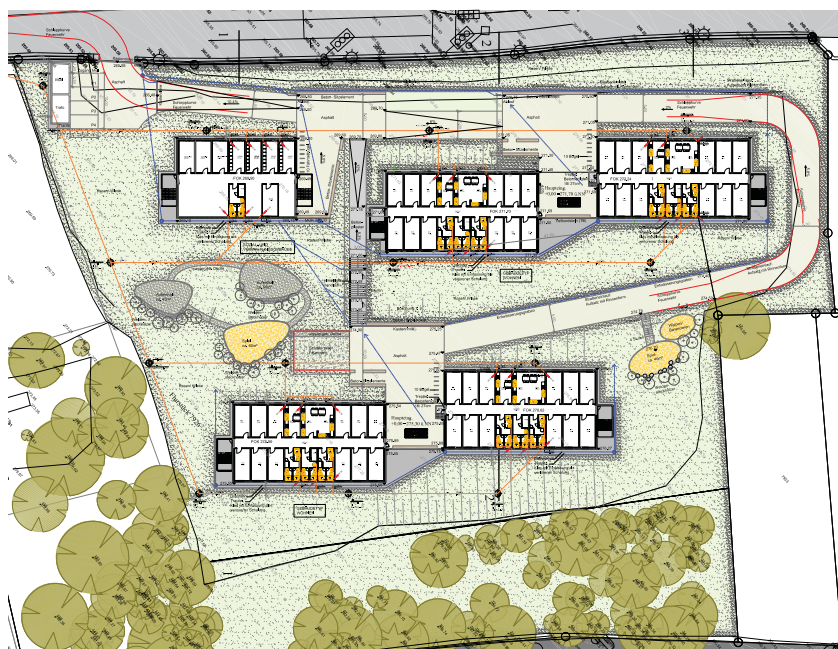
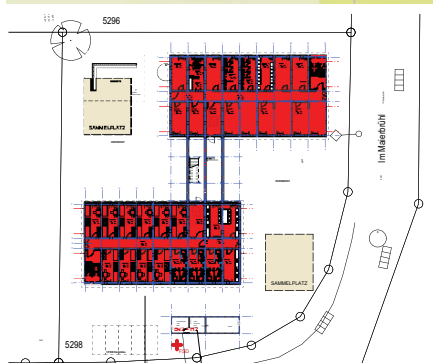
DESCRIPTION

Within a very short timeframe, temporary refugee shelters commissioned by the City of Freiburg will be built at three locations. ARGE Architekten Freiburg have developed a modular system using wood for mass-wall construction as an alternative to the established method using steel containers. Untreated materials, flexible re-use, and the promotion of a regional supply chain will stimulate the population's acceptance of the housing project.

(Excerpt from project description)



Tiengen: exterior view, corridor and bedroom / Photos: © Yohan Zerdoun



Site plans: Gundelfinger street, Merzhauser street, Tiengen

REFUGEE ACCOMMODATION, LANGENBACH-FREISING



Exterior view / Photo: © Reinhard Fiedler



Exterior view / Photo: © Reinhard Fiedler



Interior views: Recreation room and central axis / Photo: © Reinhard Fiedler

NUMBER OF RESIDENTS / MODULAR UNITS

78 residents / 1 building

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Beginning of construction: November 2015

Date of completion: February 2016

Subsequent use possible on short-term notice with slight modifications

COMMISSIONED BY

Adldinger Bauwerk GmbH

ARCHITECT

Fiedler + Partner, Freising

CONSTRUCTION FIRM

Adldinger Bauunternehmen e.K., Kranzberg

BUILDING METHOD

Timber frame construction

CONSTRUCTION COSTS

Approx. 2,000 Euro/m²

Total: approx. 2,000,000 Euro

LIVING SPACE PER PERSON

8 m²/person not including common rooms

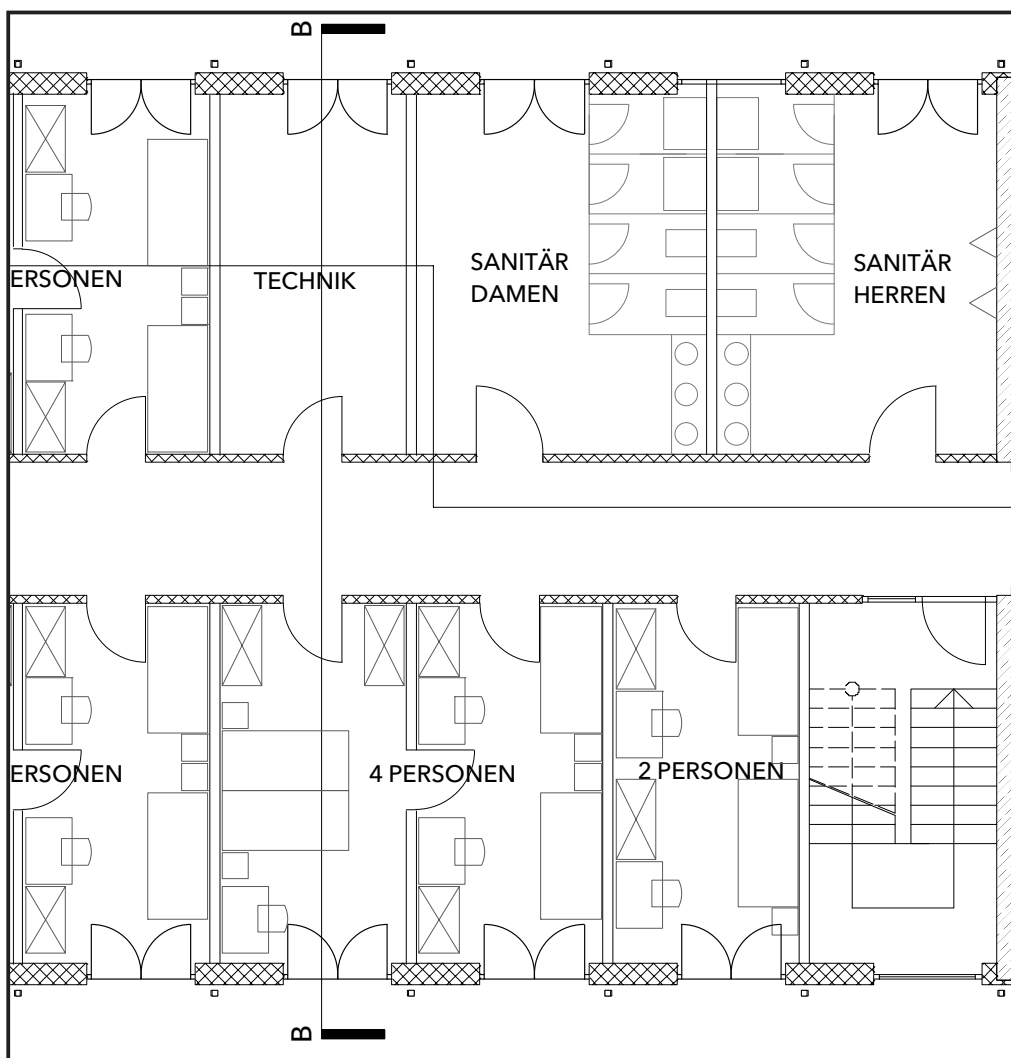


Rendering

DESCRIPTION

This refugee accommodation in Langenbach is a two-story timber frame structure that can house up to 78 refugees. In addition to 15-square-meter rooms designed for two people, the facility also includes a central axis, showers, bathrooms, shared kitchens, and recreation rooms. Each room features “French windows” (combination window/doors) that connect to a wraparound balcony. The design of the facade is defined by its use of blue and green fiber cement siding. The outdoor facilities include a football field and a beach volleyball court usable by both refugees and locals. Thanks to the use of easily removable dry-wall for the interior walls, the building can be adapted to different uses later. Such subsequent uses could range from a kindergarten, homeless shelter, student dormitory, offices, to the site of a community college or music school.

(Excerpt from project description)



Site plan and Floor plan, ground level

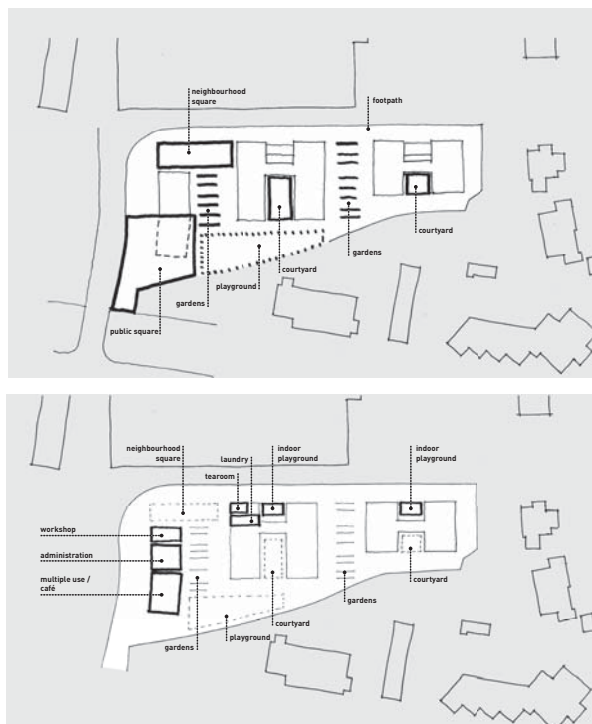
FOLLOW-UP ACCOMMODATION AFTER FIRST ADMITTANCE, KASSEL



Exterior View / Photo: Jörg Lantelmé / GWG Kassel – Gemeinnützige Wohnungsbaugesellschaft der Stadt Kassel mbH



Complex and Courtyard / Photos: © Jonathan Scheder, Kassel



Schematic diagram, design



NUMBER OF RESIDENTS / MODULAR UNITS

182 residents / 36 apartments

RESIDENTS

Refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Date of completion: September 2016

Lifespan: 7 years

Construction time: 5 months

Subsequent use possible as conventional social housing possible

COMMISSIONED BY

GWG Kassel – Gemeinnützige Wohnungsbaugesellschaft der Stadt Kassel mbH

ARCHITECT

ARGE Wohnen Bunsenstraße (Kassel): Baufrösche Architekten und Stadtplaner GmbH, foundation 5+ architekten BDA, fondation 5+ landschaftsarchitekten und planer, HHS Planer + Architekten AG, Clemens Kober Architekt BDA, Reichel Architekten BDA, Spöth Architekten

CONSTRUCTION FIRM

ARGE GU: Emmeluth Baugesellschaft mbH, Hermanns HMS-Bau GmbH

BUILDING METHOD

Mass-wall construction: Exterior walls of plastered autoclaved aerated concrete (no exterior insulation finishing system). Floor slabs of reinforced concrete

CONSTRUCTION COSTS

1,610 Euro/m²

LIVING SPACE PER PERSON

9.7–12.9 m²/person



Exterior View / Photo: © Jonathan Scheder, Kassel

DESCRIPTION

In principle, refugee accommodation should aim to meet the same domestic needs as housing for anyone else: private space to retreat, manageable group sizes, well-positioned common rooms, and a variety of differentiated and distinct free spaces for developing a good community.

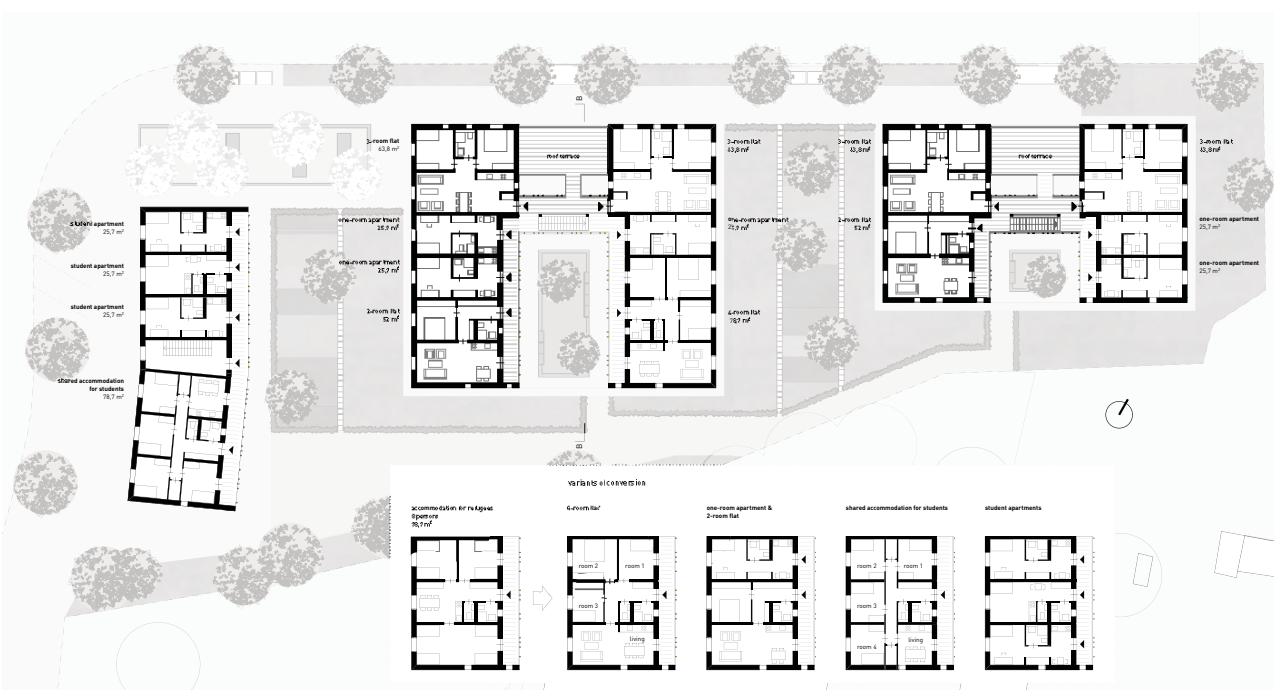
Here in Bunsenstrassen, “entirely normal” and cost-efficient apartments are under construction. Initially, their primary use will be collective housing; in the future, however, in the same form, they can be rented out as social housing. They can also be transformed into student apartments with a few simple tweaks.

Planning process: After a November 2015 workshop hosted by the City of Kassel featuring representatives from the construction industry, city government, Caritas Association, and various architects, a decision was made to avoid building provisional housing, despite the enormous time pressure, and instead construct classic housing.

(Excerpt from project description)



Floor plan, ground level



Floor plan, third floor, and plans for conversion

REFUGEE HOUSING, GÖTTINGEN



Exterior view: inner courtyard / Photo: © Bernhard Boy



Exterior view: corridor / Photo: © Bernhard Boy



Exterior view: south side / Photo: © Bernhard Boy

NUMBER OF RESIDENTS / MODULAR UNITS

180 residents / 3 Buildings

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: September 2015

Lifespan: 5 Years

COMMISSIONED BY

City of Göttingen, Department of buildings

ARCHITECT

City of Göttingen, Department of Structural Engineering, Climate Protection, and Energy, Bernhard Boy, Göttingen

CONSTRUCTION FIRM

Firma Gerlach Schlüsselfertigbau GmbH & Co. KG, Einbeck

BUILDING METHOD

Prefabricated room modules : steel frame

CONSTRUCTION COSTS

1,503 Euro/m² GFA

Total costs: approx. 1,400,000 Euro net

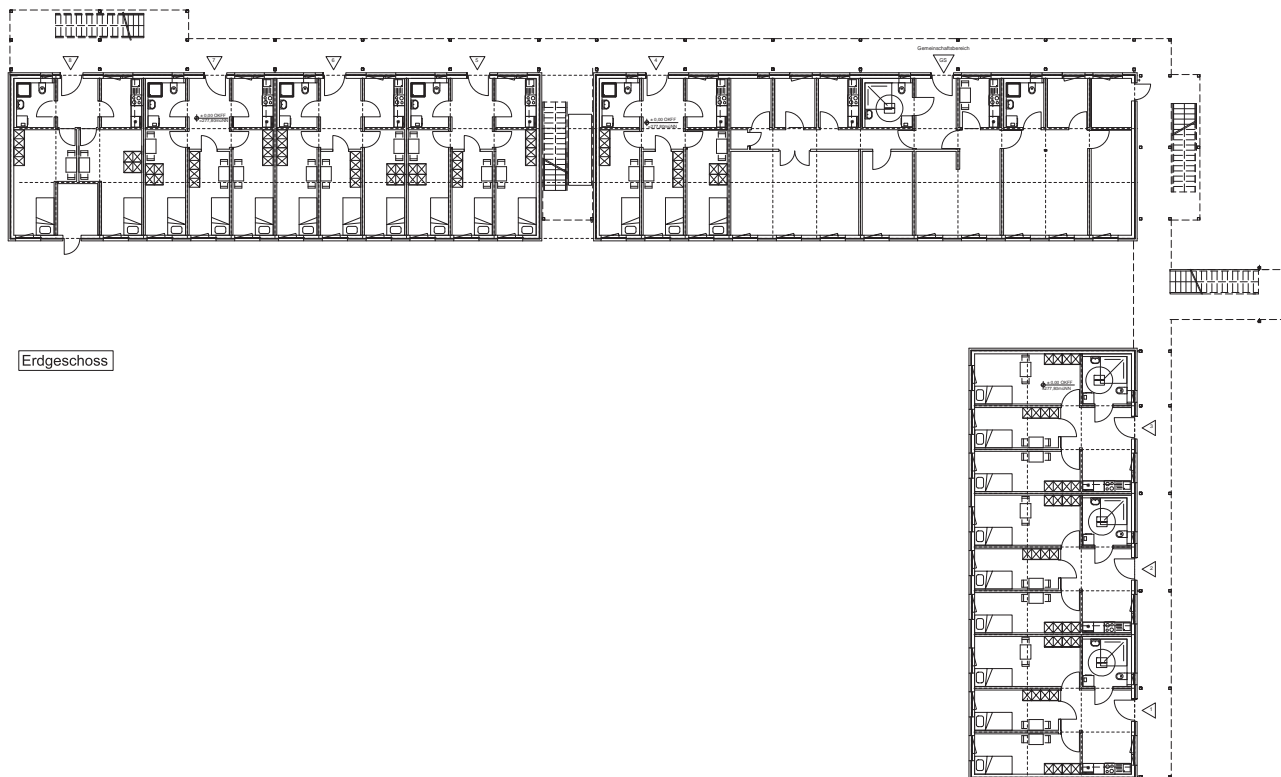
LIVING SPACE PER PERSON

11.5 m²/person / 2.909 m² GFA

Total living space: approx. 1.992,57 m²



Exterior view: street side / Photo: © Bernhard Boy



Floor plan, ground floor



Site plan

DESCRIPTION

The City of Göttingen has built a new refugee accommodation center on a municipal lot to house 180 people for a 5-year period. To ensure a quick implementation, a modular steel-frame design was used. The three 3-story wings of the building, connected by exterior stairs and corridors, accommodate 30 apartments and a common area.

The apartments are suitable for 6 people each, and consist of 3 rooms, a kitchen, bathroom, and hallway. 7 of the apartments as well as the common area are handicap accessible. The modular design allows for a high degree of prefabrication on the production end. The modules were then put together quickly on foundations that had already been laid on-site, where they were assembled into a finished building.

The individual modules are insulated steel-frame structures that conform to the F30 fire-safety standard. All the surfaces were prefabricated. The interior doors have a solid chipboard core and a laminate surface, and the apartment entry doors are insulated metal doors. The bathroom walls and floors, as well as the floors of the kitchens, are tiled, while living rooms and hallways have linoleum flooring. The windows are made of synthetic material and have aluminum roller shutters on the outside. The kitchens were each fitted with a built-in kitchenette. Each bathroom has a washing-machine connection. The facility is heated via district heating; the hot water supply is decentralized, with a water heater in each apartment.

The complex is rounded out by outdoor facilities like walkways, driveways, parking, and green areas. The green outdoor space features seating areas, children's play toys, and a ball court. The exterior lighting comes from lampposts and wall lamps. A neighboring sports club has made a covered sports area available, which allows for a wide variety of recreation, athletic, and social activities.

(Excerpt from project description)

MODULAR ASYLUM SEEKER ACCOMMODATION, BAD SODEN



Corridor / Photo: © Olaf Rigoll

NUMBER OF RESIDENTS / MODULAR UNITS

-

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

-

COMMISSIONED BY

The Kreisausschuss Main-Taunus-Kreis – Hochbau- und Liegenschaftsamt, Hofheim

ARCHITECT

rigoll architekten, Wiesbaden

CONSTRUCTION FIRM

Schneider Fertigbau GmbH, Stimpfach

BUILDING METHOD

Timber frame

CONSTRUCTION COSTS

-

LIVING SPACE PER PERSON

-



Interior courtyard / Photo: © Olaf Rigoll



Back side / Photo: © Olaf Rigoll

DESCRIPTION

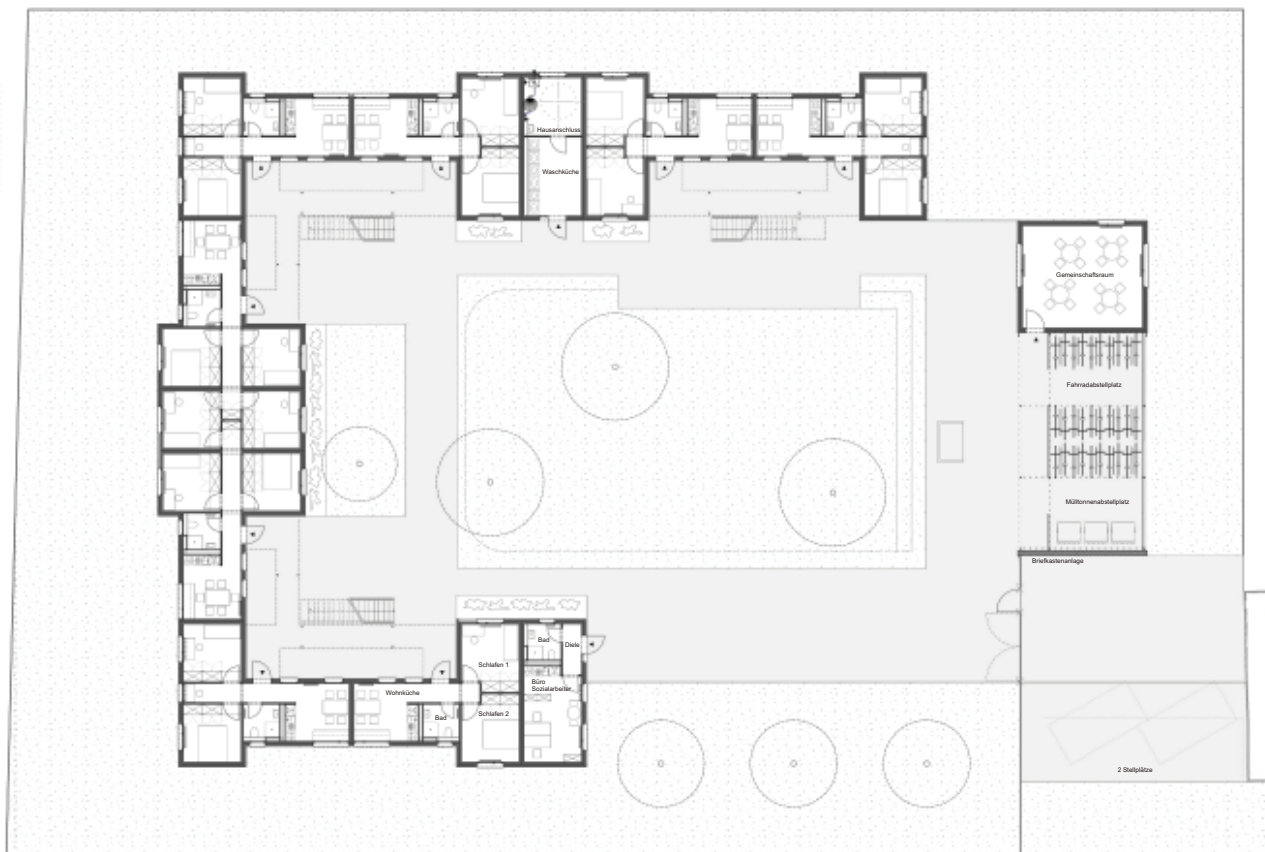
On the southeastern outskirts of the Bad Soden municipality in the Taunus mountain range, a residential building has been constructed as family housing for 80 asylum seekers. The 2-story building was built using the modular timber construction method and encompasses 16 residential units in three different sizes.

The U-shaped building surrounds a central courtyard that is bounded on the street-side by the 1-story community building. The residential building is accessed via three corridors which each lead to 2 or 3 living units on the upper floor.

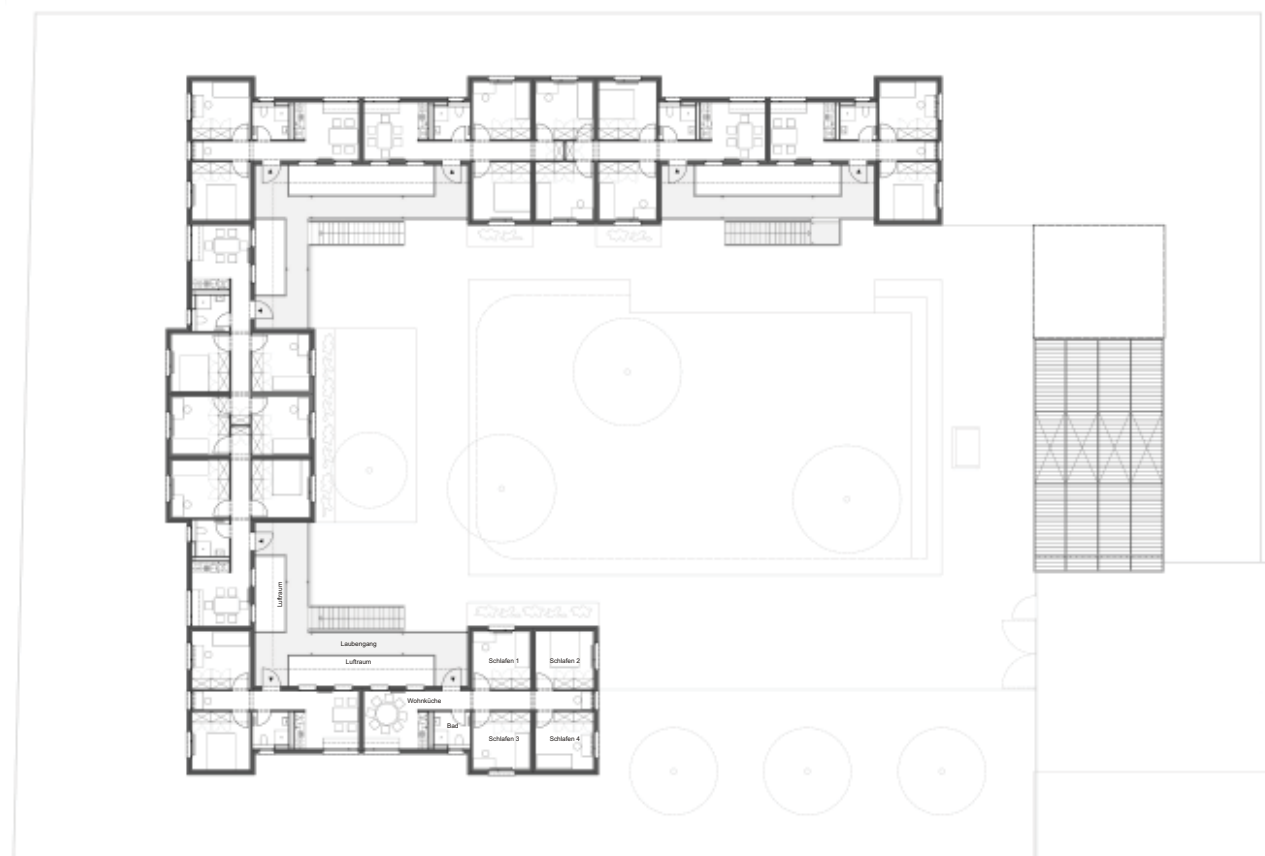
Each living unit features its own bathroom and a small kitchen with a seating area.

The 40 timber frame spaces / modules are mostly prefabricated in the factory and delivered to the construction site. The interior assembly, hung wood-panel cladding, and the large roof planting were finished on site.

(Excerpt from project description)



Floor plan, ground level



Floor plan, second level



Kitchen and site plan / Photo: © Olaf Rigoll

ASYLUM SEEKER ACCOMMODATION, FLÖRSHEIM AM MAIN / KRIFTEL



Flörsheim am Main: residential building / Photo: © Olaf Rigoll



Flörsheim am Main: community building / Photo: © Olaf Rigoll



Flörsheim am Main: Corridor and stairway residential building / Photo: © Olaf Rigoll

NUMBER OF RESIDENTS / MODULAR UNITS

-

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

-

COMMISSIONED BY

The Kreisausschuss Main-Taunus-Kreis – Hochbau- und Liegenschaftsamt, Hofheim

ARCHITECT

rigoll architekten, Wiesbaden

CONSTRUCTION FIRM

CMS Container Modul Systeme GmbH, Düsseldorf

BUILDING METHOD

Container, steel frames

CONSTRUCTION COSTS

-

LIVING SPACE PER PERSON

-



Kriftel: Back side / Photo: © Olaf Rigoll



Kriftel: Corridor second floor / Photo: © Olaf Rigoll

DESCRIPTION

Flörsheim am Main:

On a former parking lot in the municipality of Flörsheim am Main's industrial area, accommodation for 48 asylum seekers has been built in modular fashion using prefabricated containers. The shelter encompasses a 2-story residential building with an attached corridor, and a 1-story community house with rooms for social work, the facilities manager, laundry room, and a facilities room.

Each wing of the building features 8 small apartments for 2 people, each with a small kitchen, bathroom with shower, and a bedroom/living room. The buildings, in the form of 28 containers, were largely prefabricated in the factory and delivered to the construction site. The interior assembly, the hung wood-panel cladding, the corridor, and the metal roof construction were finished on site.

Kriftel:

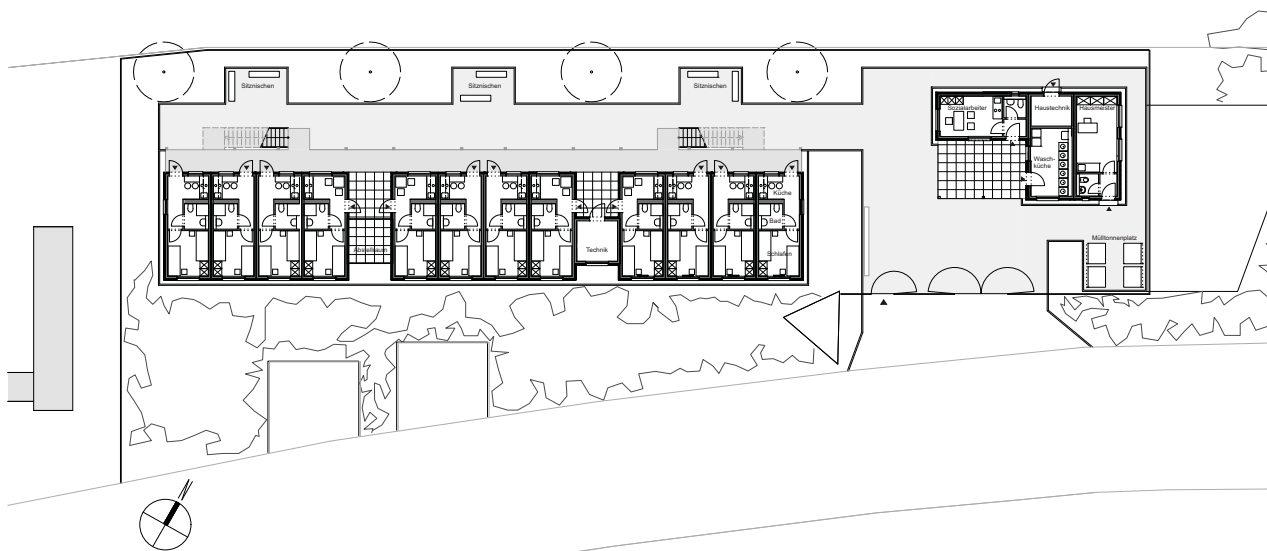
On the northern outskirts of the Kriftel municipality in the Taunus mountain range, a family residential building has been built to house 40 asylum seekers. The 2-story building was built using the modular container method and comprises eight building units in two different sizes.

The L-shaped building surrounds a central courtyard that is bounded on the street side by the trash area / bike box and a strip of planters. The residential buildings are accessed by two corridors that lead to 2 or 3 living units in the upper floor.

Each living unit features its own bathroom and a small kitchen with a seating area.

The buildings, in the form of 22 containers, were largely prefabricated in the factory and delivered to the construction site. The interior assembly, the hung wood-panel cladding, the corridors, and the metal roof construction were finished on site.

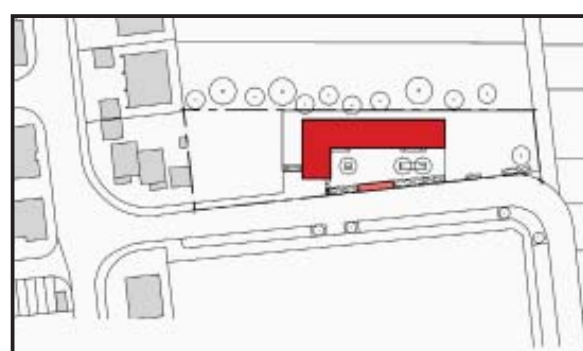
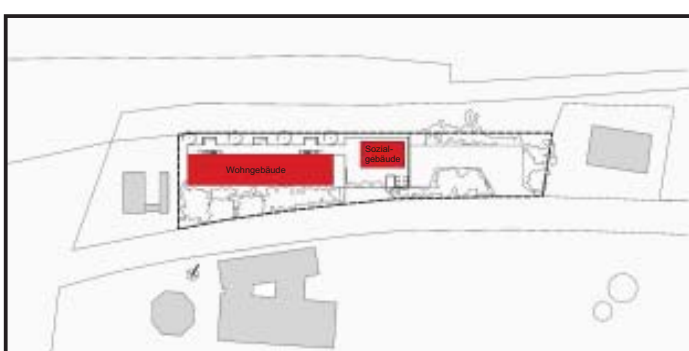
(Excerpt from project description)



Flörsheim am Main: floor plan, ground level



Kriftel: floor plan, ground level



Site plan Flörsheim am Main and Kriftel

FIRST ADMITTANCE FACILITY, WOOD paneled structure, LAUTZENHAUSEN



Construction site / Photo: © Carsten Costard, Mainz

NUMBER OF RESIDENTS / MODULAR UNITS

200 residents

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

December 2015

COMMISSIONED BY

Ministry of finance Rheinland-Pfalz, Mainz

ARCHITECT

Holzbau Kappler GmbH & Co.KG, Gackebach-Dies

CONSTRUCTION FIRM

Holzbau Kappler GmbH & Co.KG, Gackebach-Dies

BUILDING METHOD

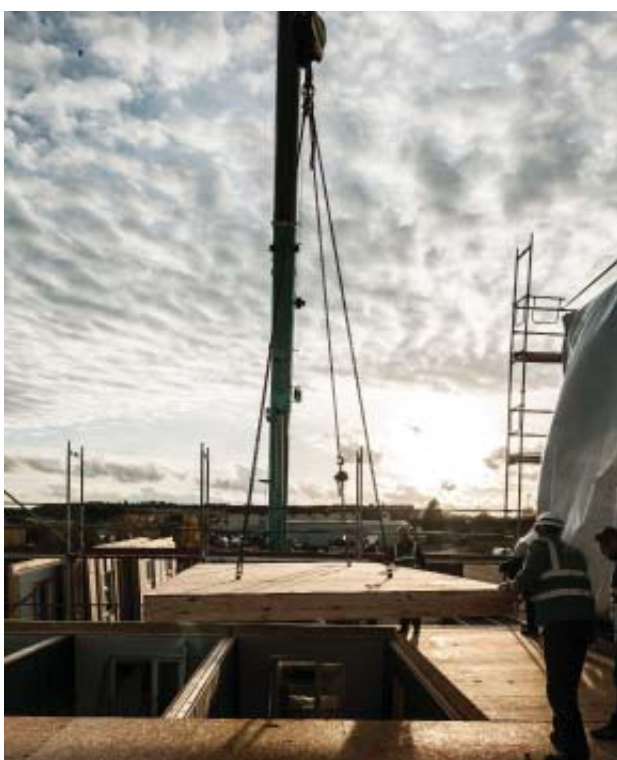
Timber frame construction

CONSTRUCTION COSTS

1,025 Euro/m² GFA (building and engineering costs)
Total costs: approx. 1,450,000 Euro net (without property and Outdoor facilities)

LIVING SPACE PER PERSON

-



Construction site / Photos: © Carsten Costard, Mainz



Detail facade / Photo: © Carsten Costard, Mainz

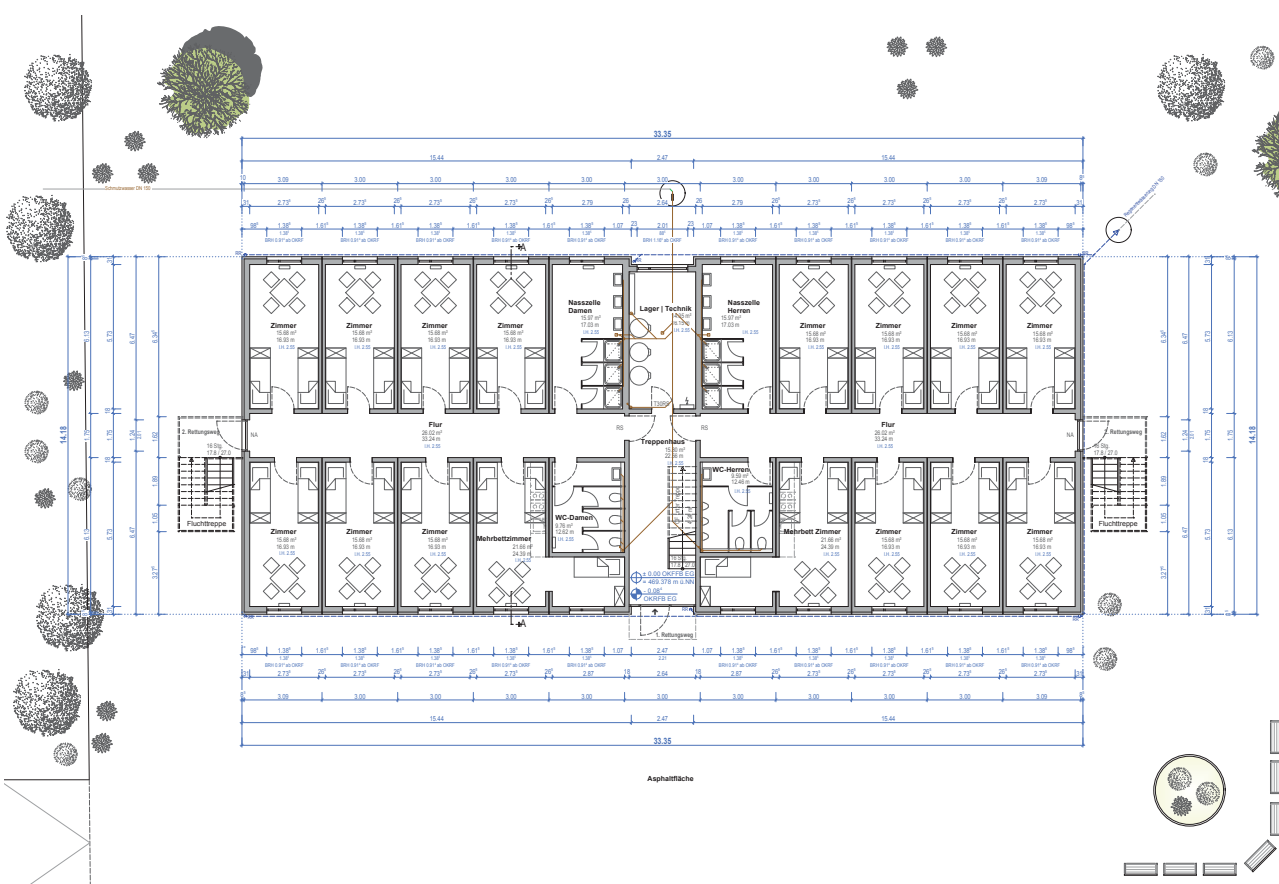
DESCRIPTION

This first admittance facility was built in a very short time using high-quality construction materials in a high-density structure. This 3-story building was planned in 3 weeks, constructed in 4 months. The building (33 m long, 15 m wide, 9 m high) was built using prefabricated wooden panel elements (3 x 6 m grid modules). Domestic wood was used for the interiors and exteriors. Ideally, the building will be used subsequently as a hostel or office.

(Excerpt from project description)



Bedroom / Photo: © Carsten Costard, Mainz



Floor plan, ground level

HOUSING FOR ASYLUM SEEKERS, TÜBINGEN



Facility as a whole / Photo: © Heiner Holme



Exterior view / Photo: © Heiner Holme



Playground / Photo: © Heiner Holme

NUMBER OF RESIDENTS / MODULAR UNITS

96 residents

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: April 2015

Lifespan: 5 Years. Another 5 years are optional

COMMISSIONED BY

District council Tübingen

ARCHITECT

Haefele Architekten, Tübingen

CONSTRUCTION FIRM

ALHO Systembau GmbH, Morsbach

BUILDING METHOD

Room modules in steel

CONSTRUCTION COSTS

1,762 Euro/m² GFA

LIVING SPACE PER PERSON

14.5 m²/person GFA



Floor plan

DESCRIPTION

At the suggestion of Tübingen District Council the container housing was erected on a site owned by the State of Baden-Württemberg in the administrative quarter of Tübingen. The visual link to the District and Regional Administration was the explicit aim. The main station can be reached in 15 minutes on foot. The use has been approved for five years, with an option to extend for ten years. The three buildings are three-storey with access walkways and free-standing steel staircases. They accommodate 2- and 3-room apartments for self-sufficient residents who can live here for up to a year while waiting for their asylum applications to be processed. The architects designed the façades in bright colours. On the upper floor the modules were offset by two metres to allow for access galleries and covered terraces. French windows on the ground floor enable direct access and provide better ventilation. The machinery is located in an outbuilding. The complex, which is currently functioning well, is now to be expanded to five times its present size. On the adjacent open space the State of Baden-Württemberg is planning a reception centre consisting of containers for 500 persons. The first part is due to open in early 2016.

Text: Friederike Meyer,

from: Stadtbauwelt 48.2015

<http://www.bauwelt.de/artikel/Container-2480270.html>

FIRST ADMITTANCE FACILITY / PERMANENT REFUGEE HOUSING, COLOGNE



Exterior view / Photo: © Jens Kirchner, Düsseldorf

NUMBER OF RESIDENTS / MODULAR UNITS

68 residents

RESIDENTS

Refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

May 2016

COMMISSIONED BY

Gebäudewirtschaft der Stadt Köln

ARCHITECT

pagelhenn architekttinnenarchitekt
Planungsbeteiligte: Bert Böcking Planungsbüro
Haustechnik GmbH, ISRW Dr.-Ing- Klapdor Bauphysik
GmbH, Stracke Ingenieur GmbH, Atelier Grünplan
Olaf Conrad

CONSTRUCTION FIRM

Diverse

BUILDING METHOD

Mass-wall masonry: Perforated bricks, filigree ceilings

CONSTRUCTION COSTS

1,100 Euro/m² GFA net

LIVING SPACE PER PERSON

13,7 m²/person GFA



Bedroom / Photo: © Jens Kirchner, Düsseldorf



Floor plan



DESCRIPTION

This residential concept for refugees is oriented toward subsidized housing and will be built in two locations in Cologne. It provides a structure that can be adapted to specific locations through terracing, rowing, and setback alignments. The organization of the floor plan allows for 2-, 3-, 4- and 5-room apartments. Thanks to the placement of the fuse boxes, and the ability to separate or combine different units, the apartment partitions are very flexible and can be easily adapted to meet different needs. The top-lit central circulation and the all-around orientation allows for variation without conveying the impression of “modular construction,” which can often be at odds with a sense of “being at home” and permanence. The separate flats, which feature underfloor heating and plastered walls and ceilings, consist of a bathroom, living room/kitchen area, and bedrooms. The compact bathrooms feature a walk-in shower, vanity, and toilet, and are equipped with porcelain stoneware. Each unit has a balcony.

(Excerpt from project description)

Inside views / Photos: © pagelhenn architekttinnenarchitekt



Inside view / Photo: © Jens Kirchner, Düsseldorf



Site plan

WINTER ACCOMMODATION FOR REFUGEES, HALBERSTADT



Building in first admittance facility / Photo: © Ulrich Schrader for Opitz Holzbau

NUMBER OF RESIDENTS / MODULAR UNITS

320 people / 8 buildings

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2015

Unlimited lifespan

COMMISSIONED BY

Bau- und Liegenschaftsmanagement Sachsen-Anhalt

ARCHITECT

Opitz Holzbau GmbH & Co. KG

CONSTRUCTION FIRM

Opitz Holzbau GmbH & Co. KG

BUILDING METHOD

Timber frame construction (walls and floorboards made of wood-panel elements with OSB panels; heavily insulated exterior walls)

CONSTRUCTION COSTS

N/A

LIVING SPACE PER PERSON

6.25 m²/person

NUMBER OF RESIDENTS / MODULAR UNITS

80 people / 40 modular units



Overall view / Photo: © Ulrich Schrader for Opitz Holzbau



Interior / Photo: © Ulrich Schrader for Opitz Holzbau



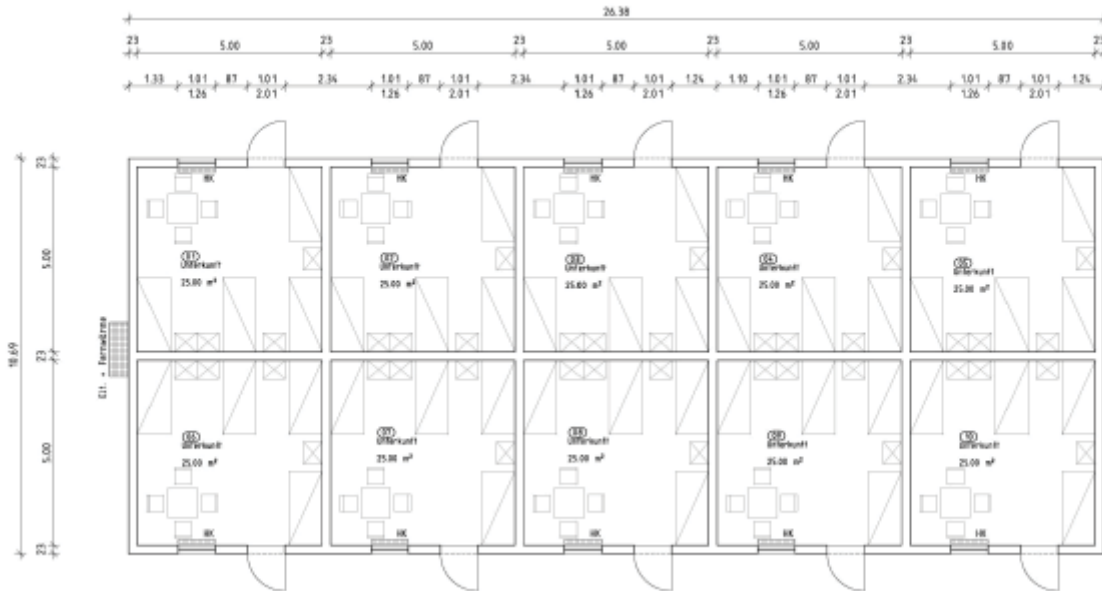
Construction site / Photo: © Ulrich Schrader for Opitz Holzbau

DESCRIPTION

Opitz Holzbau has constructed two large refugee shelters for the first admittance facility in Halberstadt. 2,500 refugees live in Halberstadt (population 50,000). The only first admittance facility in the state of Saxony-Anhalt is located here.

The environmentally friendly choice of wood offers high energy efficiency: Exterior walls are heavily insulated. The choice of wood as a building material also offers domestic comfort and benefits the environment.

(Excerpt from project description)



Floor plan

SOCIAL FACILITY, KÖNIGSBRUNN / LINDENBERG



Königsbrunn: residential building and interior courtyard / Photo: © VARIAHOME



Producing the modules / Photo: © VARIAHOME



Königsbrunn: Delivery of the modules / Photo: © VARIAHOME

NUMBER OF RESIDENTS / MODULAR UNITS

Königsbrunn: 120 residents / 20 modular units

Lindenbach: 78 residents / 18 modular units

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: Königsbrunn, July 2015; Lindenbach, November 2015 (2nd construction phase: May 2016)

COMMISSIONED BY

Königsbrunn: HGI GmbH, Neresheim

Lindenbach: Grundwert Bayern GmbH & Co. Lindenberg KG, Munich

ARCHITECT

VARIAHOME – Bauer Holzbausysteme GmbH & Co. KG, Neukirch

CONSTRUCTION FIRM

VARIAHOME – Bauer Holzbausysteme GmbH & Co. KG, Neukirch

BUILDING METHOD

Prefabricated wooden room modules

CONSTRUCTION COSTS

Both projects: 1,700 Euro/m²

LIVING SPACE PER PERSON

Both projects: 7.6 m²/person



Königsbrunn: delivery of the modules / Photo: © VARIAHOME

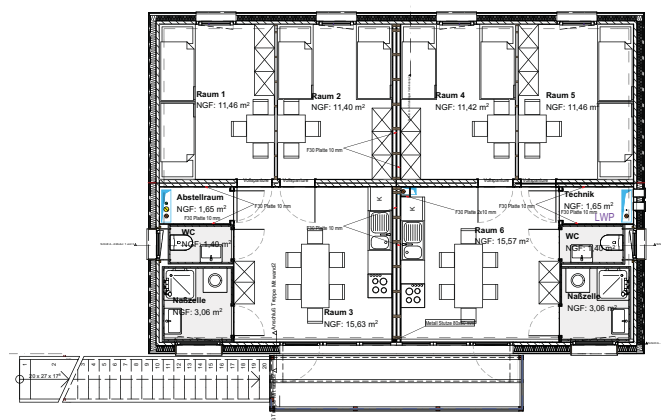
DESCRIPTION

The project's aim was to facilitate the best possible integration of asylum seekers. Human dignity was the core focus in the project's planning and implementation. Particular emphasis was placed on meeting individual needs in the sanitary area, installing a playground for children, and creating a room for volunteers to enable active social support.

(Excerpt from project description)



Lindenbach: exterior view / Photo: © VARIAHOME



Lindenbach: corridor and floor plan, ground floor / Photo: © VARIAHOME

FIRST ADMITTANCE FACILITIES FOR REFUGEES, KÖNIGSBRUNN



Exterior view / Photo: © Foto Zolleis



Total facility / Photo: © Foto Zolleis



Outdoor view / Photo: © Foto Zolleis

NUMBER OF RESIDENTS / MODULAR UNITS

120 residents / 8 buildings

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2015

Lifespan: unlimited

COMMISSIONED BY

GWG Gesellschaft für Wohnungsbau u. Gewerbebe-
siedlung d. Stadt Königsbrunn mbH, Königsbrunn

ARCHITECT

Wunderle + Partner Architekten mbB,
Neusäß-Steppach

Brugger_landschaftsarchitekten_stadtplaner_öko-
logen

CONSTRUCTION FIRM

Gumpp & Maier GmbH, Binswangen

BUILDING METHOD

Timber frame construction

CONSTRUCTION COSTS

2,000 EUR/m² (ready for occupancy – building and
engineering costs)

Total costs: approx. 4,100,000 Euro (incl. outdoor
facilities)

LIVING SPACE PER PERSON

11.2 m²



Playground / Photo: © Foto Zolleis

DESCRIPTION

An ensemble consisting of eight two-level wood frame buildings. One half of one building is being used by the administration.

(Excerpt from project description)



Indoor / Photo: © Foto Zolleis



Floor plan and site plan

ASYLUM-SEEKERS ACCOMODATION, JESTETTEN



Outdoor view / Photo: © Schanz Architekten



Court / Photo: © Schanz Architekten



Overview / Photo: © Schanz Architekten

NUMBER OF RESIDENTS / MODULAR UNITS

90 residents

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: March 2016

Lifespan: 30 years

Construction time: 10 months

COMMISSIONED BY

District of Waldshut

ARCHITECT

Schanz Architekten, Hohentengen a. H.

CONSTRUCTION FIRM

-

BUILDING METHOD

Mass-wall construction: limestone with curtain walls

CONSTRUCTION COSTS

1,151 Euro/m² GFA (building and engineering costs)

total costs: 1,570,000 Euro

LIVING SPACE PER PERSON

10 m²/person

1.393 m² GFA

DESCRIPTION

(Excerpt from project description)



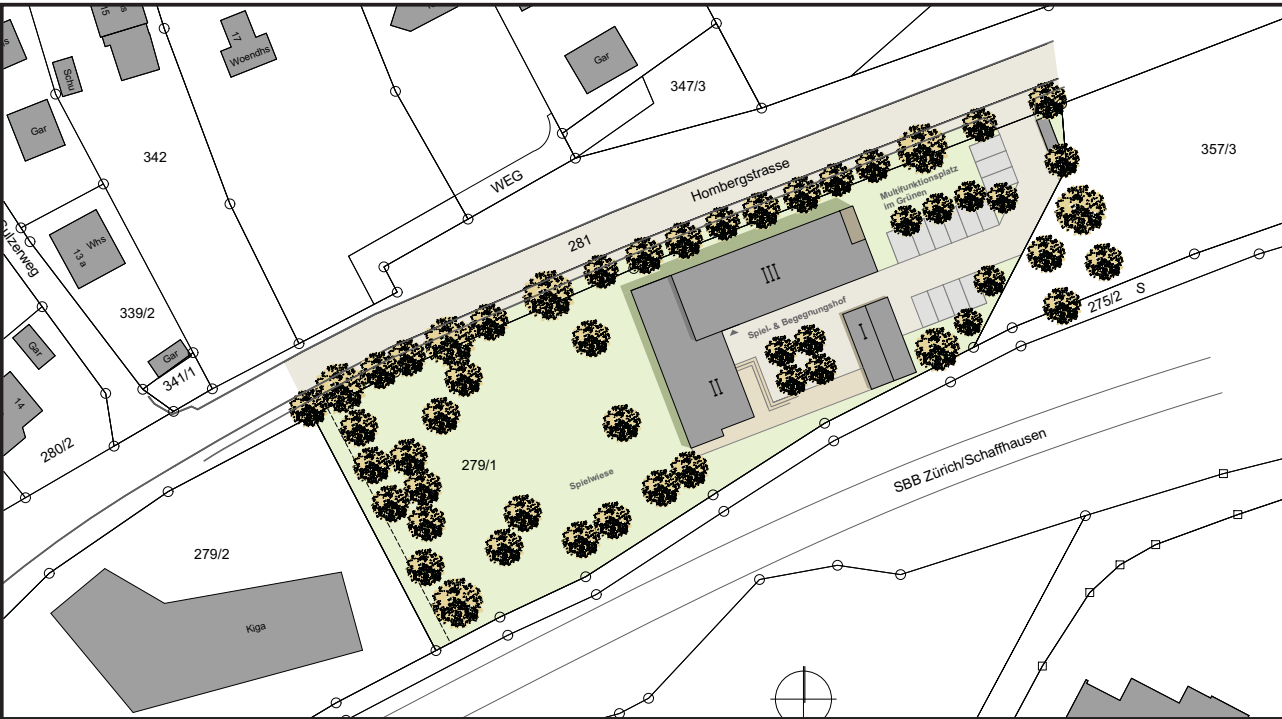
Eingangsgeschoss

Floor plan, ground floor



Wohngeschoss

Floor plan, first floor



Site plan

EMERGENCY AND FIRST ADMITTANCE FACILITY, HAMBURG



Concept



View of the tents at night / Photo: © Malte Metag



Schnackenburgallee, Hamburg: Tents / Photo: © Mari Wahdat



Schnackenburgallee, Hamburg: Interior of tents / Photos: © Mari Wahdat

NUMBER OF RESIDENTS / MODULAR UNITS

Hamburg, Schnackenburgallee: A total of 9 units in an existing tent and container village;
 Bergedorf and Jenfeld: 5 units
 Hauptbahnhof (Central Station): 2 units

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: Schnackenburgallee and Hauptbahnhof, October 2015; Bergedorf and Jenfeld: November 2015

COMMISSIONED BY

N/A

ARCHITECT

Daniel Kerber, Hamburg (MORE THAN SHELTERS)

CONSTRUCTION FIRM

MORE THAN SHELTERS, Hamburg

BUILDING METHOD

DIY: Tents can be put together in 20 to 40 min by 4 people

Tent system: Loadbearing structure made of aluminum; fitted components of stainless steel; tent flooring and dust walls: PVC tarp; outdoor tent cover in differing versions: 100% cotton, technical cotton (mixed cotton blend), ripstop polyester with PU coating

CONSTRUCTION COSTS

3,500 Euro / tent. (No construction costs. Including experts for assembly: 3,590 Euro / tent)

LIVING SPACE PER PERSON

24 m² floor space per unit



Concept drawing of DOMO camps

DESCRIPTION

Hamburg's social services have developed a new kind of refugee tent: the Domo. Inhabitants can customize it to different climatic conditions onsite and adapt it to their cultural and social needs. In this way, the Domo provides more than merely protection against wind and weather, but provides a real retreat—a temporary home. An emphasis has been laid on creating adequate solutions in the humanitarian context and planning efficiently for emergency aid.

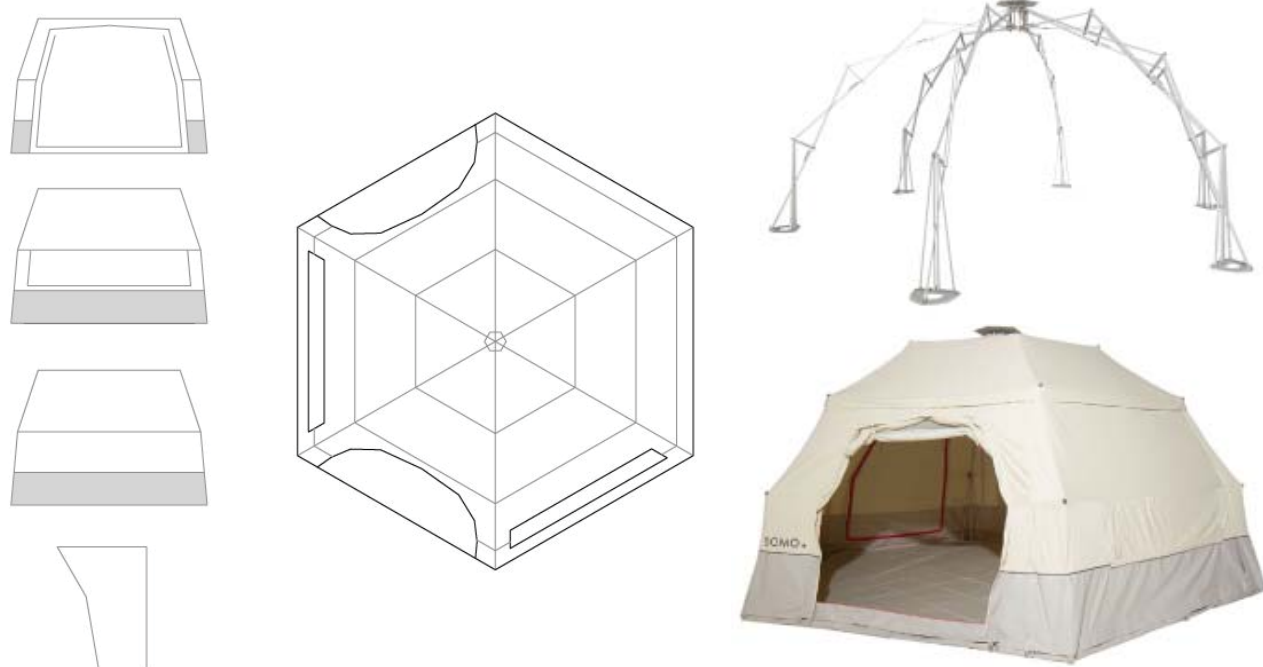
The Domo is easy to expand so that it can be adapted to changing needs and challenges. As many Domos as needed can be linked together at the awning via zippers. There are limitless ways to set the tents up; the system can be adapted to any amount of people or any spatial context. Domo is not another tent. It's the first mobile "transitional shelter" solution to lastingly improve the living conditions of people driven from their homes by conflict and natural disaster.

Instead of constantly buying new tents or replacing them with inflexible, expensive products, it's easy to expand the Domo system. The individual Domo units can be connected like "building blocks."

(Excerpt from project description)



Schnackenburgallee, Hamburg: Interior of tents / Photo: © Mari Wahdat



Floor plan, elevations, loadbearing structure, and cotton cover

REFUGEE ACCOMMODATION, SCHWEICH



Aerial view / Photo: © Holzbau Henz GmbH



Exterior view / Photo: © Holzbau Henz GmbH



Interior view / Photo: © Holzbau Henz GmbH

NUMBER OF RESIDENTS / MODULAR UNITS

56 residents

RESIDENTS

Asylum seekers, Refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Date of completion: February 2016

Construction time: 12 Weeks

COMMISSIONED BY

Kreisverwaltung Trier-Saarburg

ARCHITECT

Cooperation with Lamberty Architekten GmbH, Harald Lamberty

CONSTRUCTION FIRM

Holzbau Henz GmbH (general contractor)

BUILDING METHOD

Timber frame construction

CONSTRUCTION COSTS

1.350 Euro/m² GFA

LIVING SPACE PER PERSON

10,5 m²/person GFA

585 m² GFA

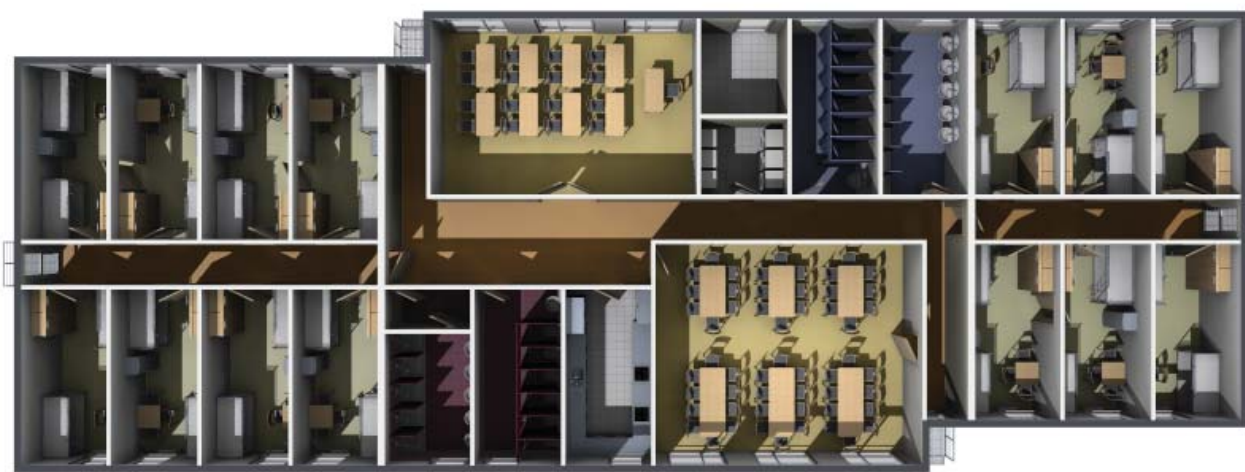


DESCRIPTION

The refugee accommodation was realized in predefined grid sizes with later uses planned in.

(Excerpt from project description)

Bedroom / Photo: © Holzbau Henz GmbH



Floor plan, first floor

CONVERSION OF A LISTED MASS-WALL BUILDING, BERLIN



Canal / Photo: © Nina Röder



Facade and entrance / Photos: © Nina Röder



Common room / Photo: © Nina Röder

NUMBER OF RESIDENTS / MODULAR UNITS

56 residents / 12 rooms

RESIDENTS

Asylum seekers, Refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Date of completion: February 2016

Lifespan: 4 years

COMMISSIONED BY

Salaground Projekt GmbH

ARCHITECT

dreigegeneinen - architektur | urbane stragegien |
gestaltung, Berlin

CONSTRUCTION FIRM

Drywall+ installation: PSM Bauausführungen GmbH;
product design: Maximilian Schmahl and Fabian
Schnippering; graphic design: Christine Lange

BUILDING METHOD

Conversion of a listed building

CONSTRUCTION COSTS

285 Euro/m² GFA

Total costs: 250,000 Euro

LIVING SPACE PER PERSON

15.6 m²/person GFA

875 m² GFA; living space: 575 m²



Bedroom and kitchen / Photos: © Nina Röder



DESCRIPTION

The Haus Märkisches Ufer is a privately initiated shelter for lodging refugees. What makes this project unusual is how it uses an existing historical building, as well as its excellent central location in Berlin-Mitte, directly on the water, with a view of Berlin's Fernsehturm (TV tower) and the new City Palace. Also unusual is the high degree of creative ambition applied to the project's interior—above all in the community areas.

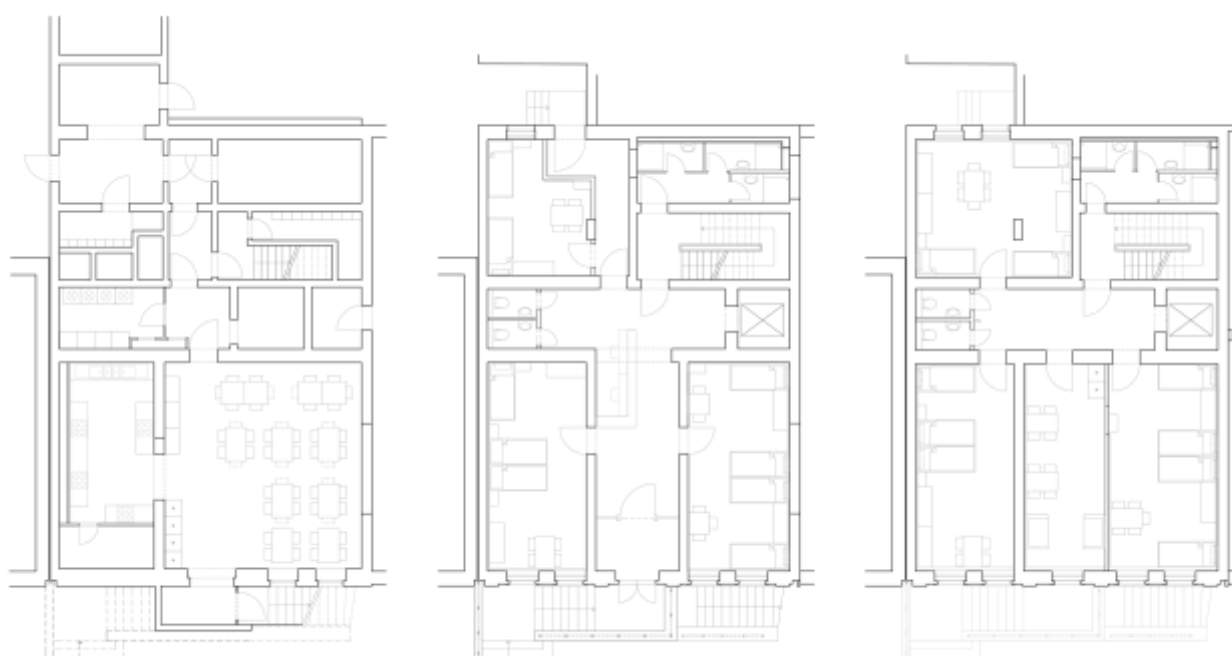
What has emerged is a place where people can arrive home to children playing in the halls and the smell of good food. Because of the low occupancy, residents can identify with the building, fostering the emergence of a community.

We have accompanied the project through all its phases: from the various use studies, the lengthy and protracted approval process in a landmark-protected building, to the execution of the building, all the way to the complete furnishing and installation of amenities.

(Excerpt from project description)



kitchen life / Photo: © Nina Röder



Floor plans

CONTAINER ESTATE, HAMBURG



Lewenwerder: entrance / Photo: © Joachim Reinig



Lewenwerder: exterior view / Photo: © Joachim Reinig



Curslack: playground / Photo: © Joachim Reinig

NUMBER OF RESIDENTS / MODULAR UNITS

Lewenwerder: 110 residents / 23 living units

Curslack: 100 residents / 19 living units

RESIDENTS

Refugees with recognized refugee status, homeless

DATE OF COMPLETION / LIFESPAN

Date of completion: Curslack 2012; Lewenwerder

September 2015

COMMISSIONED BY

f&a fördern und wohnen AöR

ARCHITECT

Plan-R-Architekten Joachim Reinig, Hamburg

CONSTRUCTION FIRM

Fa. Comma GmbH and others

BUILDING METHOD

Containers: steel frame

CONSTRUCTION COSTS

Curslack: 1,550 Euro/m² living space

Total costs: Curslack 200,000,000 Euro; Lewenwer-

der: 2,400,000 Euro

LIVING SPACE PER PERSON

15.5 m²/person GFA



Curslack: exterior view / Photo: © Joachim Reinig



Curslack: building site / Photo: © Joachim Reinig

DESCRIPTION

Curslack

As a complement to the existing pavilion estate in Curslack's Neuer Deich, a temporary expansion concept was developed to address the urgent need for housing. The "module buildings" developed by Plan -R- consist of 4 living units with 3-4 rooms each, as well as a kitchen, bath, and WC. The living units are connected via an open, central, loggia-style stairwell. In order for them to be experienced as domestic spaces, the units—each composed of 18 individual containers—are given a wooden pitched roof construction with corrugated steel cladding. The 5 buildings each feature a facilities room with heating and warm water boilers. A central laundry room and community room are set up in one building. The prefabricated containers were installed using a truck-mounted crane. The modules were assembled on strip foundations at the building site; the connection to the existing mains and the construction of the roof also took place on site. The assembly time for a complete house is one week.

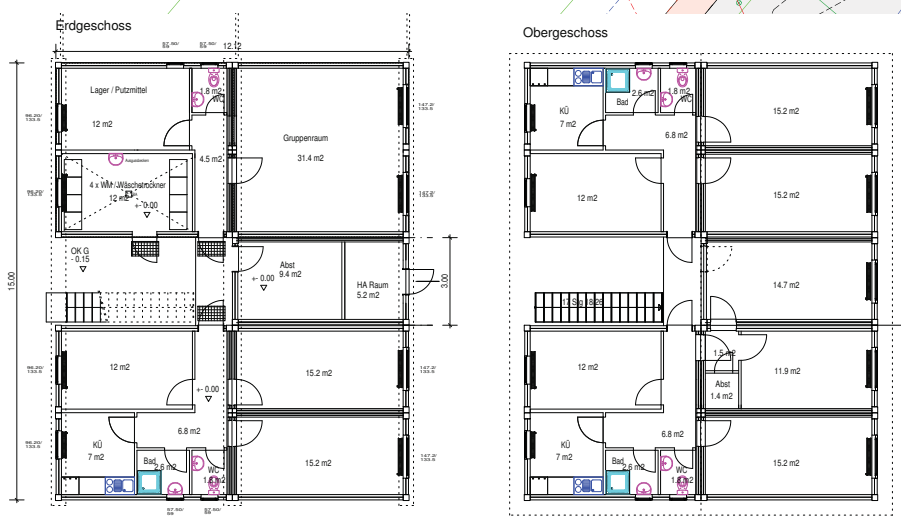
The division into small-format living and building units creates a domestic climate for people living in publically administered lodging.

Lewenwerder:

Because of the severe need for publically administered lodging, a facility with 6 buildings was built for temporary use on part of a parcel planned for industrial buildings in Hamburg. This building form was developed by Plan -R- as "module buildings" for the expansion of the shelter in Curslack. Despite being built using the temporary container method, the buildings were intended to look like proper "houses" and not be discriminatory. Each container building consists of 4 living units with 3-4 rooms, a kitchen, bath, and WC. They are connected by an open, central stairwell and have a pitched roof.

In Hamburg, a total of 120 module buildings are being built across 11 locations in line with this concept by Plan -R- Architektenbüro Joachim Reinig.

(Excerpt from project decription)



Site plan Lewenwerder and floor plans modules

RENOVATION OF A LANDMARK-PROTECTED RESIDENTIAL BUILDING, MUNICH



Exterior view / Photo: © Christian Krinninger

NUMBER OF RESIDENTS / MODULAR UNITS

102 residents / 17 living units

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: May 2015

COMMISSIONED BY

Regierung von Oberbayern

ARCHITECT

Team Modal M GmbH: Geschäftsführer Reiner Nowak, March Architekt | BA (Hons) | DipArch | | RIBA; Dipl.-Ing. Architektin Nele Bayer; Dipl.-Ing. Architektur Stephanie Nafziger; Designer Flor Faini

CONSTRUCTION FIRM

SIGISMUND KOZIURA

BUILDING METHOD

Renovation of a landmark-protected residential building from ca. 1900

CONSTRUCTION COSTS

-

LIVING SPACE PER PERSON

Approx. 18 m²/person GFA



Stairwell / Photo: © Nele Bayer



Floor plan, ground floor



Elevation

DESCRIPTION

Since 2014, when the building operator, the District Government of Upper Bavaria, decided to increase the number of inhabitants and develop additional living areas, the residential building in Munich Haidhausen has been used as community accommodation to house and support refugees.

The residential building is located along the eastern bank of the Isar in the Munich neighborhood of Haidhausen. The area is inhabited by middle-class residents, its population is diverse, and the atmosphere is tolerant. Since the renovation of the landmark-protected corner building from ca. 1900, the neighborhood also now accommodates 102 asylum seekers.

To create additional living area, an existing laundromat on the ground floor was converted into a living space. The apartments on the upper floors were partially restructured through minor alterations, which aimed to integrate the inhabitants into the existing structure of the residential building.

Thus, instead of dormitory-like structures, there have emerged 17 separate 2-3-room apartments, each with its own bathroom and kitchen where residents can cook independently. Abiding by the asylum-seeker-housing guidelines, which stipulate 7 square meters of living and sleeping space per person, each apartment has a maximum occupancy of six people. The property houses families and individuals of different nationalities.

(Excerpt from project description)

MODULAR BUILDINGS IN WOOD-PANEL CONSTRUCTION, TAUFKIR-



settlement / Photo: © FEEL HOME GmbH & Co. KG



Duplex / Photo: © FEEL HOME GmbH & Co. KG

NUMBER OF RESIDENTS / MODULAR UNITS

224 residents / 28 living units

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: : January 2016

Lifespan: 10 years

COMMISSIONED BY

FEEL HOME GmbH & Co. KG

ARCHITECT

Concept and project development: ehret + klein GmbH, Dipl.-Ing. Michael Ehret; architect: Sacher GmbH, Dipl.-Ing. Bernd Sacher

CONSTRUCTION FIRM

DiamondModule GmbH, Vienna

BUILDING METHOD

Timber frame

CONSTRUCTION COSTS

-

LIVING SPACE PER PERSON

Approx. 7 m²/person GFA

GRÖSSE UND BELEGUNGSART DER WOHNUNGEN

65 m² pro Wohneinheit; 8 Personen je Wohneinheit; 2 separate Schlafzimmer und Bäder.

DESCRIPTION

The guiding principle of the FEEL HOME housing concept is the following: to effortlessly integrate architecturally ambitious temporary and masonry structures into existing residential developments, in order to provide accommodation for asylum seekers in a timely and humanitarian way that speaks to the existing population. Taufkirchen is one of 11 projects that have been planned or realized in the administrative district of Munich. The “asylum village” is connected to a residential development along the S-Bahn to Munich, and is located next to a secondary school and daycare center, just 5 minutes from a shopping center at the station.

(Excerpt from project description)



Floor plan

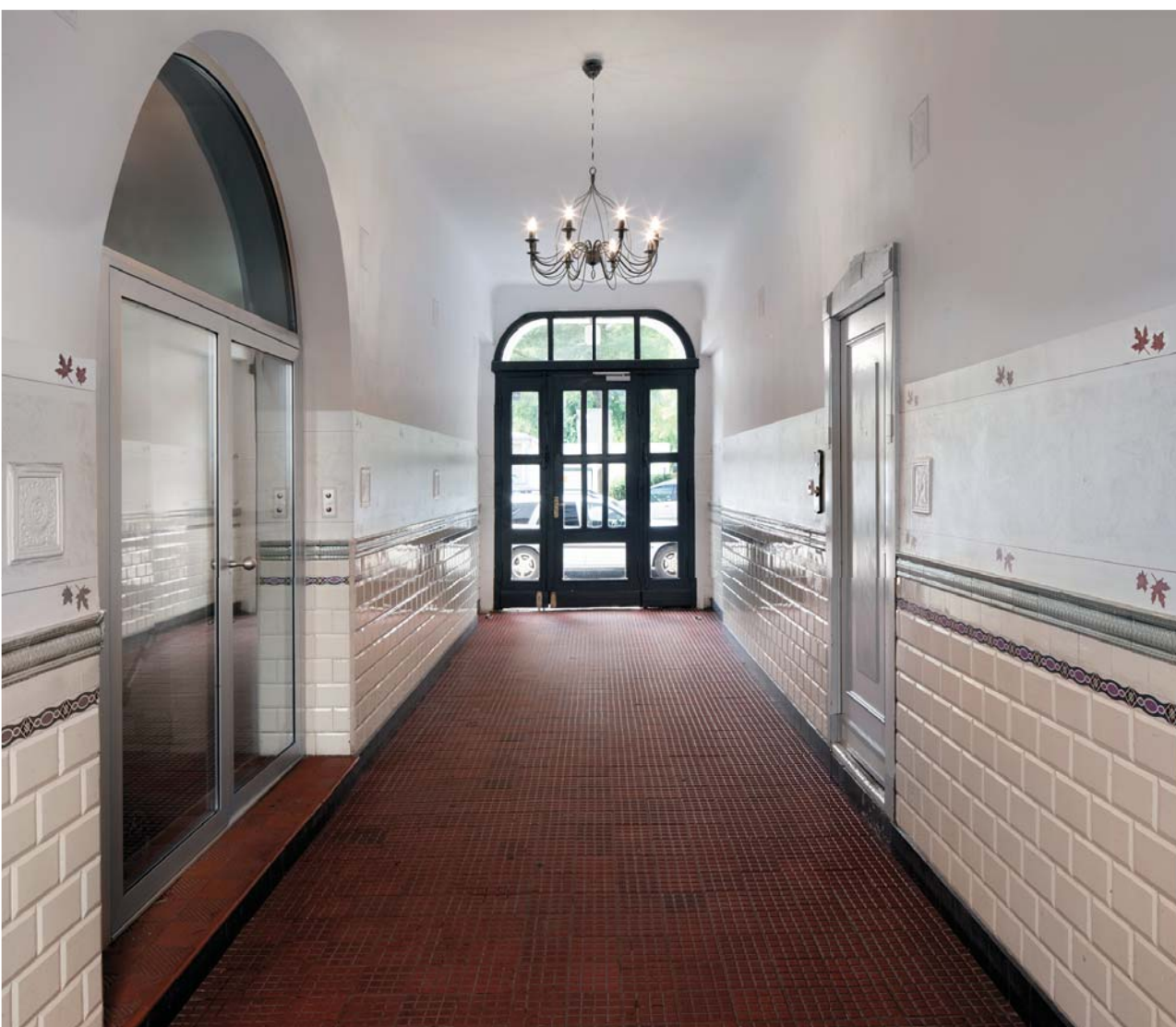
HARZER STRASSE, BERLIN



View of the exterior / Photo: © Aachener Siedlungs- und Wohnungsgesellschaft mbH, Cologne



Building after renovation work / Photo: © Christian T. Joergensen



Interior view / © Aachener Siedlungs- und Wohnungsgesellschaft mbH, Cologne

NUMBER OF RESIDENTS / MODULAR UNITS

600 residents (including 220 children) / 8 buildings, 137 apartments

RESIDENTS

EU citizens (Sinti and Roma people)

DATE OF COMPLETION / LIFESPAN

Date of completion: September 2012

COMMISSIONED BY

Aachener Siedlungs- und Wohnungsgesellschaft mbH (SWG)

ARCHITECT

Benjamin Marx, Berlin

CONSTRUCTION FIRM

Local contractor with the help of residents with a trade license

BUILDING METHOD

Building renovation

CONSTRUCTION COSTS

N/A

Rent: 4.50 – 7.80 €/m²

LIVING SPACE PER PERSON

Approx. 12 m²/person



Interior courtyard / Photo: © Theo Schneider



Residents / Photo: © Theo Schneider



Courtyard prior to renovation / Photo: © Aachener Siedlungs- und Wohnungsgesellschaft mbH, Cologne

DESCRIPTION

Aachener SWG began renovating the buildings in September 2011. This necessitated disposing of 150 cubic meters of trash and installing large-scale recycling containers. Marx [the architect] dismantled the “mattress camp” and examined rental contracts to figure out whether those paying rent truly lived in the buildings, or were only extorting the residents in exchange for a mattress. This put an end to the goal was to stop the exploitation. Because not only had the property fallen into deep neglect, but a kind of legal vacuum prevailed there, which apparently the district of Neukölln had no means to counter. Only after this initial process could the process of renovating the eight houses to structural and energy-efficiency standards begin. Paco Höller, together with ten of his students, painted the courtyard.

After nearly twelve months of work, the renovation of the building complex was finished in summer 2012 and the buildings were given a white plaster coat. The facades and roofs were insulated, new bathrooms and windows were installed, stairwells were renovated, and the piping and heating was replaced. The pathways are now paved and lead into a courtyard that resembles a small park, filled with flowerbeds and junipers. 600 people (220 of whom are children) now live in 137 apartments between 30 and 140 square meters large. Apartments that become unoccupied are sold on the open market. New leases to non-Roma residents are currently given priority, in order to ensure an ethnic and social mix that will finally clear the buildings of their “ghetto” reputation.

(Excerpt from project description)

YOUNG REFUGEE CENTRE, MUNICH



Exterior view / Photo: © Martin Mai

NUMBER OF RESIDENTS / MODULAR UNITS

150 residents / 1 building

RESIDENTS

Unaccompanied minor asylum seekers

DATE OF COMPLETION / LIFESPAN

April 2016

COMMISSIONED BY

Municipal Government, State Capital of Munich

ARCHITECT

Modal M, Munich

CONSTRUCTION FIRM

Jaeger Ausbau, Heinemann Elektro, Otto Hermann
HLSK

BUILDING METHOD

Conversion of an existing office building

CONSTRUCTION COSTS

approx. 2,900,000 Euro gross

LIVING SPACE PER PERSON

approx. 4–6 m²/person



Corridor and stairway / Photo: © Martin Mai



Exterior view / Photo: © Martin Mai

DESCRIPTION

In 2015, 150,000 refugees arrived in Munich, and around 5,000 of these were unaccompanied minors. A vacant office building near Munich's central station offered the ideal conditions for the establishment of an arrival center for minors, the Young Refugee Center (YRC). For instance, the building features two entrances and two gates. Here, the youths will be fed, registered, and medically examined before they are brought to the appropriate facilities. The YRC will be operated by the City of Munich in collaboration with private sponsors. The office Modal M is planning the conversion. The main focus was to install a new fire alarm and water fire-extinguisher system, new bathrooms, as well as an orientation system in the seven-story building. To help residents find their way, the corridor sections on each floor are painted in different colors, and symbols that are understandable for all cultures designate the different rooms. The interior courtyard features benches, table tennis, and an herbal and berry garden for recreation.

(Excerpt from project description)

EUROPADORF, AUGSBURG-HOCHZOLL



Europadorf / Photo: © Thomas Körner-Wilsdorf



Europadorf / Photo: © Thomas Körner-Wilsdorf

NUMBER OF RESIDENTS / MODULAR UNITS

New building: 48 residents / 16 units

Existing buildings: Originally 110 residents, now approx. 80 residents / 20 residential units

RESIDENTS

In the late 1950s, the building provided housing for displaced persons (former forced laborers who could not return to their homelands because they might be accused of collaborating). After this, it also housed “boat people,” Russian Jews, refugee families, and individual asylum seekers.

DATE OF COMPLETION / LIFESPAN

Completion of new buildings: 2002; Modernization of the existing buildings: 2003

Lifespan: Unlimited

COMMISSIONED BY

Tür-anTür e.V. Augsburg

ARCHITECT

Architektengemeinschaft Gilg-Peer-Wolff, Weißbrod, Augsburg

CONSTRUCTION FIRM

Fa. Ruisinger, Baar

BUILDING METHOD

Mass-wall masonry construction: Ceiling of reinforced concrete, brick walls; South-facing facades: timber-frame construction with facade panels

CONSTRUCTION COSTS

New buildings: 1,340 Euro/m² GFA (construction and technical facilities); Total costs: 1,164,700 Euro gross

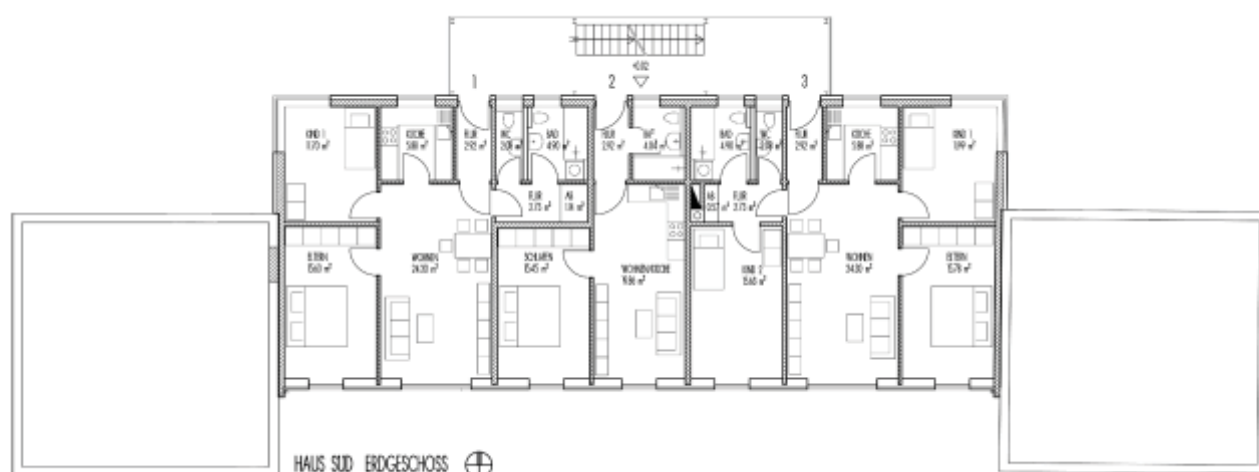
Modernization of existing buildings:

1,505 Euro/m² GFA (construction and technical facilities); Total costs: 766,600 Euro gross

LIVING SPACE PER PERSON

20,5 m²/person

Total living space: approx. 982 m²



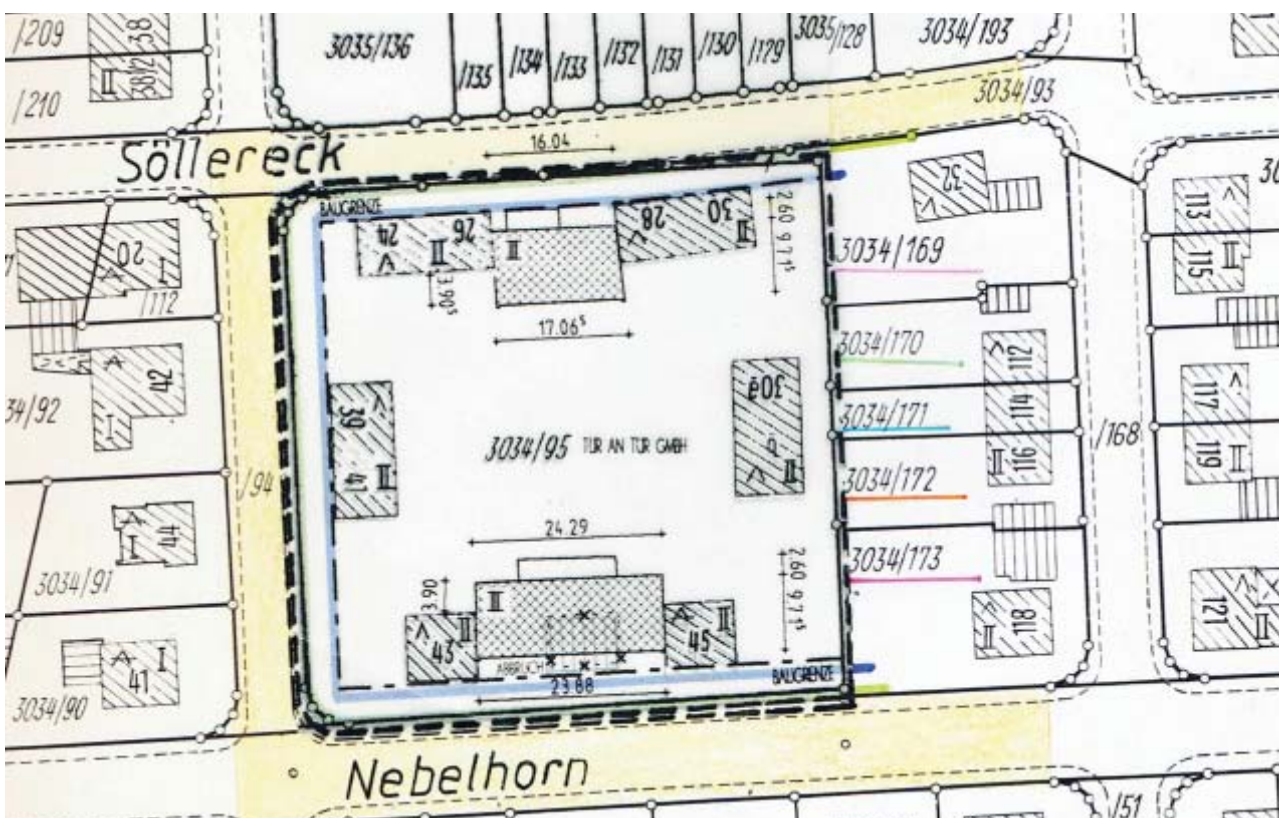
South side Building: Floor plan, ground floor



Europadorf / Photo: © Thomas Körner-Wilsdorf



Europadorf: new building / Photo: © Thomas Körner-Wilsdorf



Site plan

DESCRIPTION

In 1999, the organization "Tür an Tür" took over "Europadorf," which had been built in the late 1950s to house former forced laborers and displaced persons and consisted of 20 apartments. The organization added 16 apartments in 2002. The "Europadorf" is the only one of originally 7 estates that is still being used according to the intentions of the founder, Belgian Dominican priest Dominique Pire. To this day, the estate houses former "boat people," refugee families, individual asylum seekers, Russian Jews, as well as Turkish and Kurdish refugees, and it is operated by the non-profit "Tür an Tür—miteinander wohnen und leben GmbH."

The new structures close off two lengths of the square plot along the road, but are situated behind the building lines of the old buildings. The courtyard is almost closed off; however, the corners remain open. The north-facing exterior corridors that access each apartment enable every apartment to have a front door as well as a reception area. The materials here are left rough—concrete, galvanized steel, and untreated larch. The common areas are south-facing and aligned one after another in a row. They do not have balconies, so that the new buildings aren't seen as more desirable than the old buildings and to underline the importance of the green space.

(Excerpt from project description)

CONVERSION OF A LANDMARK-PROTECTED BUILDING, MUNICH



Exterior view / Photo: © Andreas Holzapfel



Indoor rooms / Photo: © Andreas Holzapfel



NUMBER OF RESIDENTS / MODULAR UNITS

9 residents / 2 units

RESIDENTS

Refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Date of completion: April 2016

Lifespan: estimated 5 years

COMMISSIONED BY

State Capital of Munich, Markthallen Munich

ARCHITECT

Andreas Holzapfel und Architekt, Munich

CONSTRUCTION FIRM

Diverse group of contractors (contracted individually), including the construction firm Wildgruber

BUILDING METHOD

Conversion of a listed building

CONSTRUCTION COSTS

-

LIVING SPACE PER PERSON

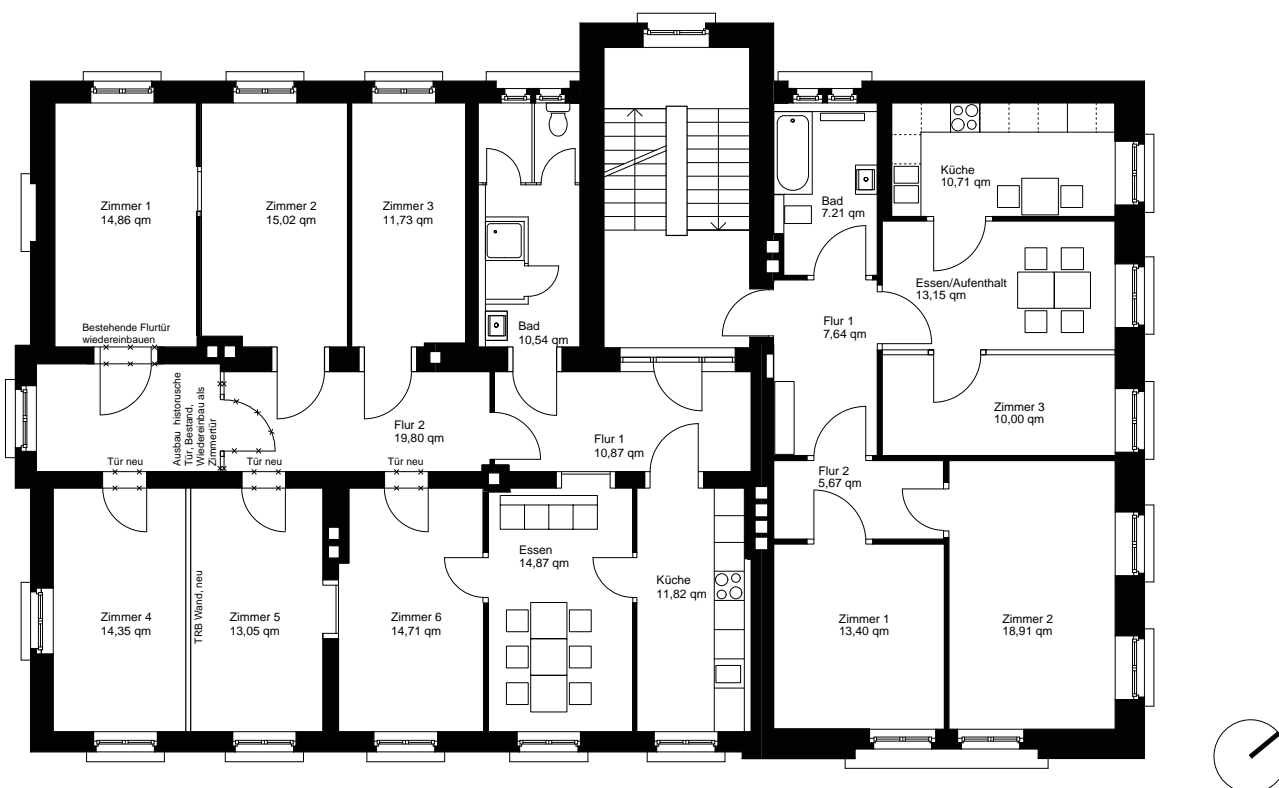
33 m²/person



Corridor / Foto: © Andreas Holzapfel

DESCRIPTION

The landmark-protected building on Thalkirchnerstrasse 112 dates back to 1904 and was planned as a railway gatekeeper's building for the municipal slaughterhouse and stockyard. The building originally contained living and sleeping quarters for workers and train conductors on the ground floor and apartments upstairs. As part of the current construction project, 2 apartments have been combined into a single large unit. Together with another apartment, the entire first upper floor of the building is now available to house refugees. The expansion was carried out to a simple standard, without incurring heavy costs. The main considerations were meeting standards for preventive fire protection and landmark preservation. (Excerpt from project description)



Floor plan, second floor

RENOVATION OF RESIDENTIAL BUILDING FOR REFUGEES, SOLINGEN



Exterior view/ Photo: © Lucius Ladleif

NUMBER OF RESIDENTS / MODULAR UNITS

11 apartments

RESIDENTS

Refugees with recognized refugee status
Long-term family residence, not intended for individuals

DATE OF COMPLETION / LIFESPAN

Date of completion: Early 2016

COMMISSIONED BY

Private benefactor from Solingen

ARCHITECT

Ladleif Architekten BDA, Kassel

CONSTRUCTION FIRM

Building shell: Bauunternehmen Schwarting
Roofing: Wadenpohl
Locksmith: Heinhaus

BUILDING METHOD

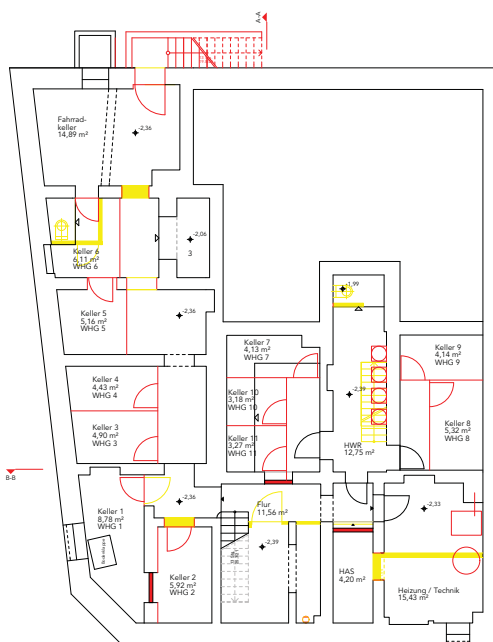
Old building renovation

CONSTRUCTION COSTS

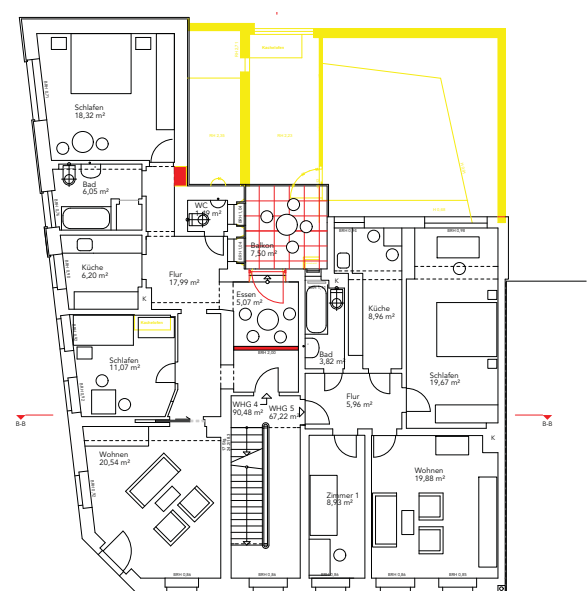
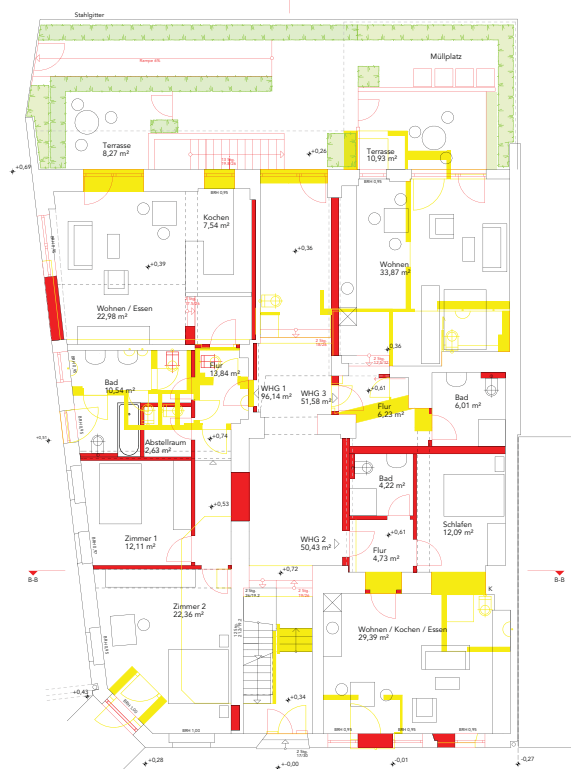
641 Euro/m² GFA

LIVING SPACE PER PERSON

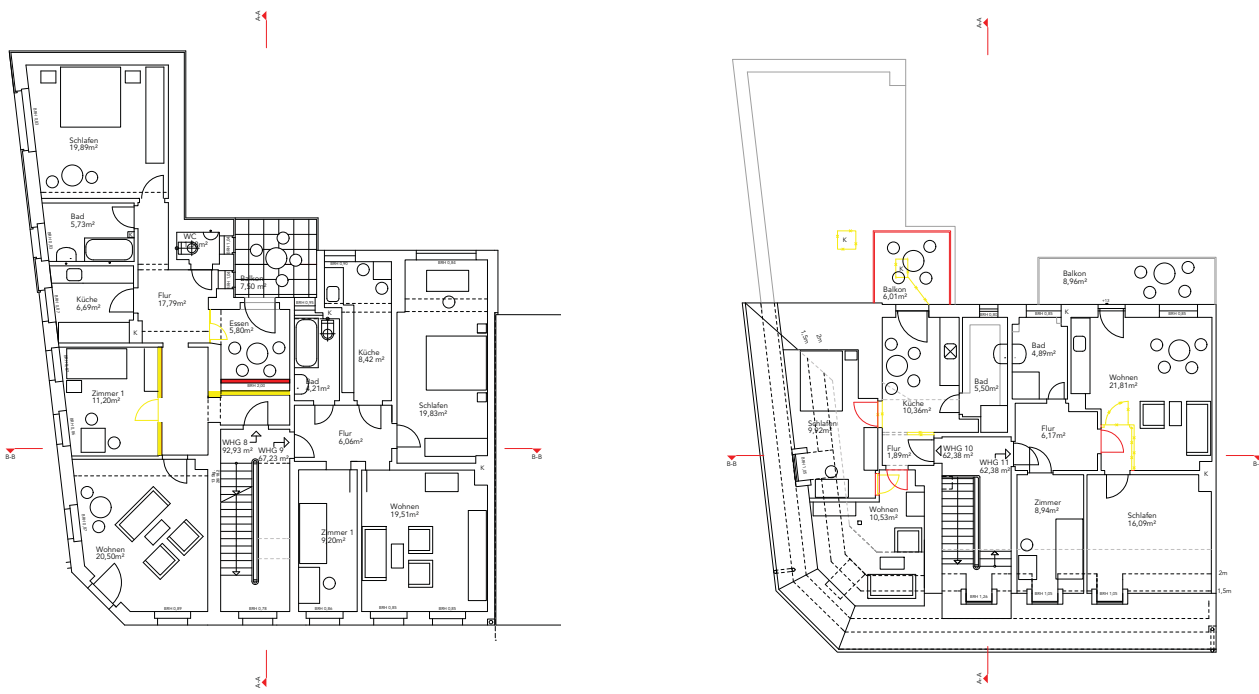
12 / 15 m²



Floor plan: Basement and ground level



Floor plan: First floor and second floor



Floor plan: third floor and fourth floor

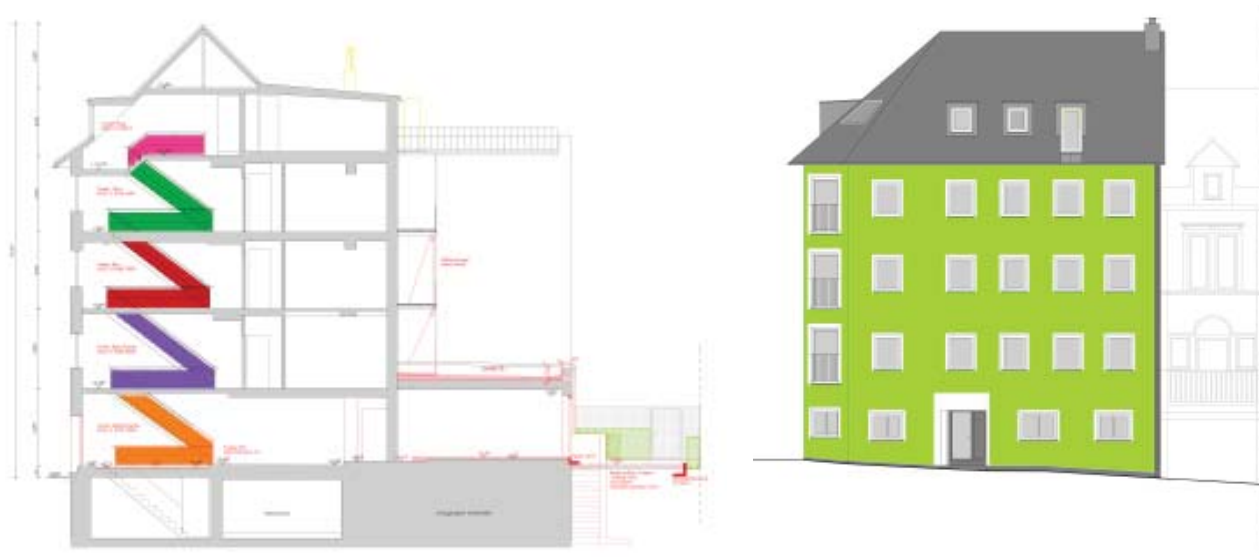
DESCRIPTION

Renovation of a multifamily building into living space for refugees, including a vacant restaurant space on ground floor.

A new throughway is being built down the middle of the ground floor to enable better access to basement and waste disposal area; also usable as a fire-escape route.

Total renovation: new building facilities, new windows, roof renovation, new interior, new heating and electricity.

(Excerpt from project description)



Section and south elevation



West elevation

CONCRETE SHELTERS, AHRWEILER



Aerial image / Photo: © OPTERRA / Sven-Erik Tornow

NUMBER OF RESIDENTS / MODULAR UNITS

300 residents / 30 double modules (4 residents / module unit)

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

January 2016

Subsequent use possible

COMMISSIONED BY

State of Rheinland-Palatinat

ARCHITECT

Dipl.-Ing. (FH) Peter Görden, Hachmeister

CONSTRUCTION FIRM

End-to-end design/build: Hachmeister, Andernach

BUILDING METHOD

Modular prefabricated elements: Concrete (slab assembly)

CONSTRUCTION COSTS

Approx. 1,000 Euro/m² UFA

LIVING SPACE PER PERSON

3.5 m² in accordance with “Sphere Handbook” (Humanitarian Charter and Minimum Standards in Humanitarian Response)



Exterior view / Photo: © Martin Hachmeister



Construction site / Photo: © Martin Hachmeister



Construction site / Photo: © Martin Hachmeister

DESCRIPTION

The plans for 15-square-meter living containers made of prefabricated concrete components were first developed for use abroad. With the addition of the necessary insulation and heating, they can now be used in Germany.

Thanks to the concrete, the buildings can be placed close to each other without incurring fire-safety concerns. The concrete's high heat retention and the added thermal insulation means that an infrared heating element on the ceiling entirely suffices for temperature control. The ten-centimeter concrete elements can also be cast without reinforcement on a concrete slab with two-by-fours to serve as partitioning. Therefore, the shelter can also be produced onsite in crisis areas and developing nations.

One building weighs a total of 22 tons and consists of six individual concrete elements, which can be offloaded from a truck with a car crane.

6–8 people can reside in a finished living container.
(Excerpt from project description)

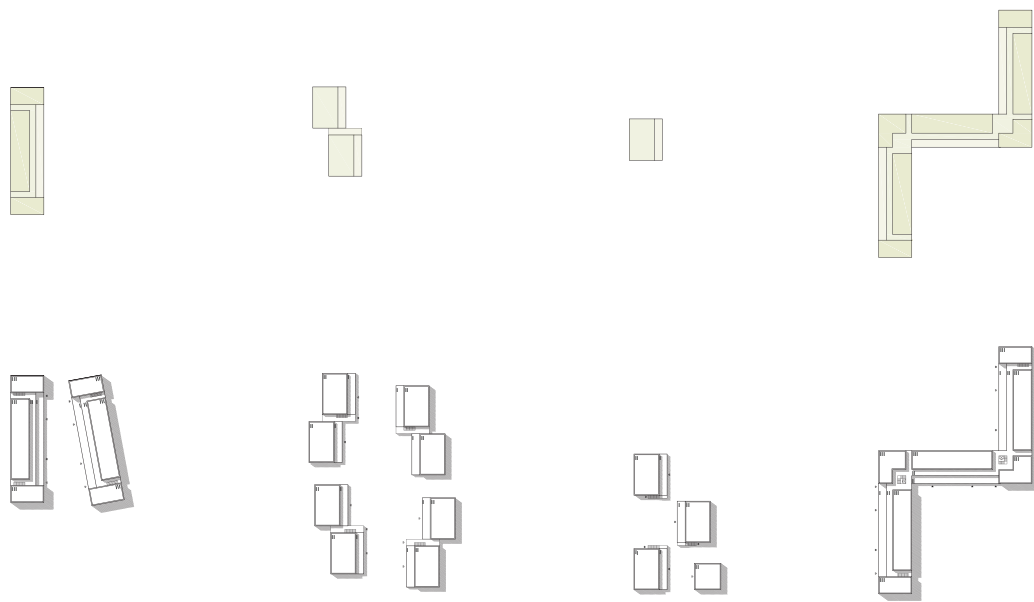


Construction site / Photo: © Martin Hachmeister



Interior and floor plan / Photo: © Martin Hachmeister

REFUGEE RESIDENCES REUTLINGEN, KÜRNBACH



Schematic diagram



Exterior view, rendering



Exterior view, rendering



Section

NUMBER OF RESIDENTS / MODULAR UNITS

Storlachstraße: 162 people / 2 building structures, 28 living units
 Kürnbach: 66 people / 4 building structures, 12 living units

RESIDENTS

Refugees with recognized refugee status or “tolerated status”

DATE OF COMPLETION / LIFESPAN

Date of completion: Storlachstraße: September 2016
 Kürnbach: December 2016
 Unlimited usage
 Can be converted to rental apartments

COMMISSIONED BY

Reutlingen: GWG Wohnungsgesellschaft Reutlingen mbH
 Kürnbach: Landratsamt Karlsruhe

ARCHITECT

PWS Architekten GmbH, Pforzheim, Berlin

CONSTRUCTION FIRM

Reutlingen: Holzbau Büker GmbH, Eichstetten

BUILDING METHOD

Timber-frame construction
 Kürnbach: Mass-wall construction, cast with Gisoton

CONSTRUCTION COSTS

Reutlingen Storlachstraße: 1,632 Euro/m² GFA (total costs: 5.363.000 Euro)
 Kürnbach: 1,725 Euro/m² GFA (total costs: 2,950,000 Euro)

LIVING SPACE PER PERSON

19.30 m² GFA/person
 Module for use-neutral space: minimum 14 m².

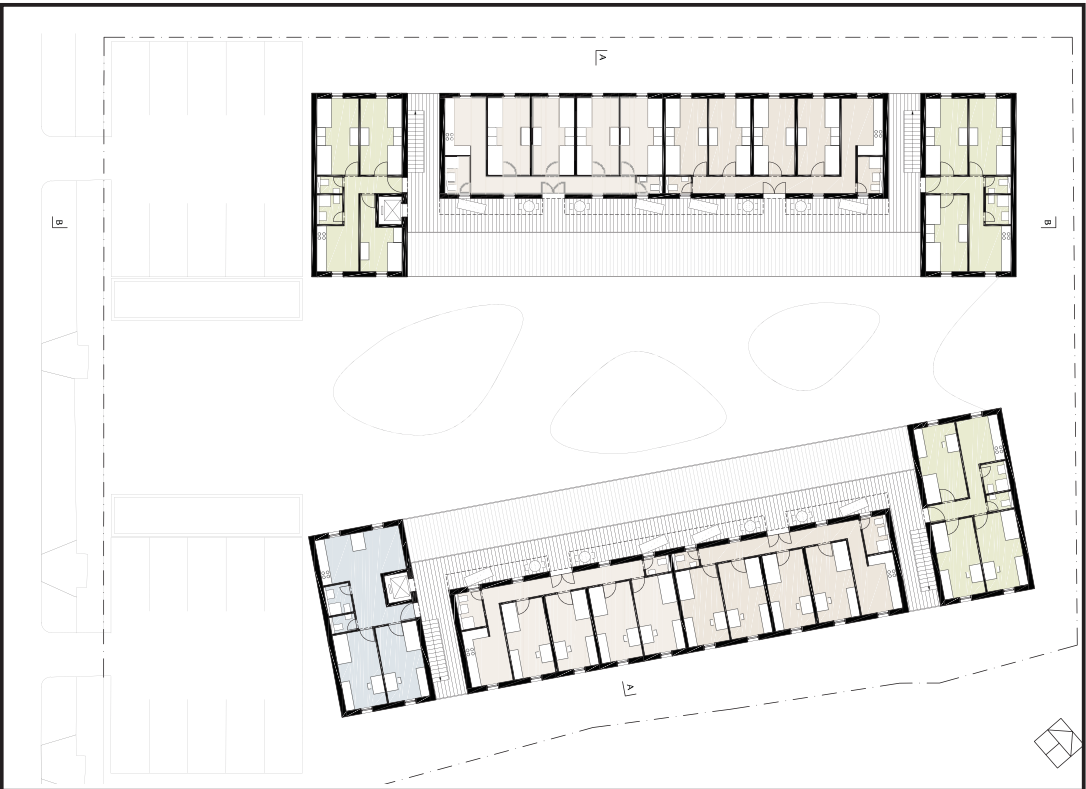
DESCRIPTION

The design was developed with a particular focus on flexibility of use. The question was: how can the building react in the future to an ever-changing number of refugees seeking help? The idea of building a temporary building, to be deconstructed when demand tapers off, was quickly ruled out. Neighbors and users don't tend to welcome the classic, temporary container solution. This design solves that problem through its ability to be reused as normal rental apartments.

Planning for the long-term and deciding to take priority-housing standards into account enabled the designers to achieve a high level of quality for the refugee apartments without being fiscally irresponsible.

The exterior stairwells are connected to terraces offering direct access to the living units. The building structure can be realized in varying lengths, finished with head-end structures, positioned in groups, or made to stand alone.

(Excerpt from project description)



Floor plan, ground level, second floor, third floor



Site plan: Storlachstrasse, Reutlingen / Sternenfelser Strasse Kürnbach

CUBITY_ENERGY PLUS AND MODULAR FUTURE STUDENT LIVING, FRANKFURT / MAIN



Exterior view / Photo: © Thomas Ott

NUMBER OF RESIDENTS / MODULAR UNITS

12 residents, 12 modular units

RESIDENTS

The aim is a mixed population of local and refugee students supported by social programs.

DATE OF COMPLETION / LIFESPAN

Date of completion: November 2016

Lifespan: 3 years

COMMISSIONED BY

A research project at TU Darmstadt funded by the Hessian Ministry of Economics, Energy, Transport, and Regional Development and the Hessian Ministry for Higher Education, Research, and the Arts

ARCHITECT

TU Darmstadt, Department of Architecture, Prof. Anett-Maud Joppien, Prof. Manfred Hegger, and 45 students

CONSTRUCTION FIRM

DFH Deutsche Fertighaus Holding AG, Forschungs- und Materialpartner

BUILDING METHOD

Timber frame construction: Timber-frame construction (main hall) – Wooden wall panels (Cubes)

CONSTRUCTION COSTS

Prototype approx. 1,200 Euro/m² GFA

LIVING SPACE PER PERSON

7.5 m² individually, 25 m² communal area per person




Interior view: marketplace and Cube / Photos: © Thomas Ott

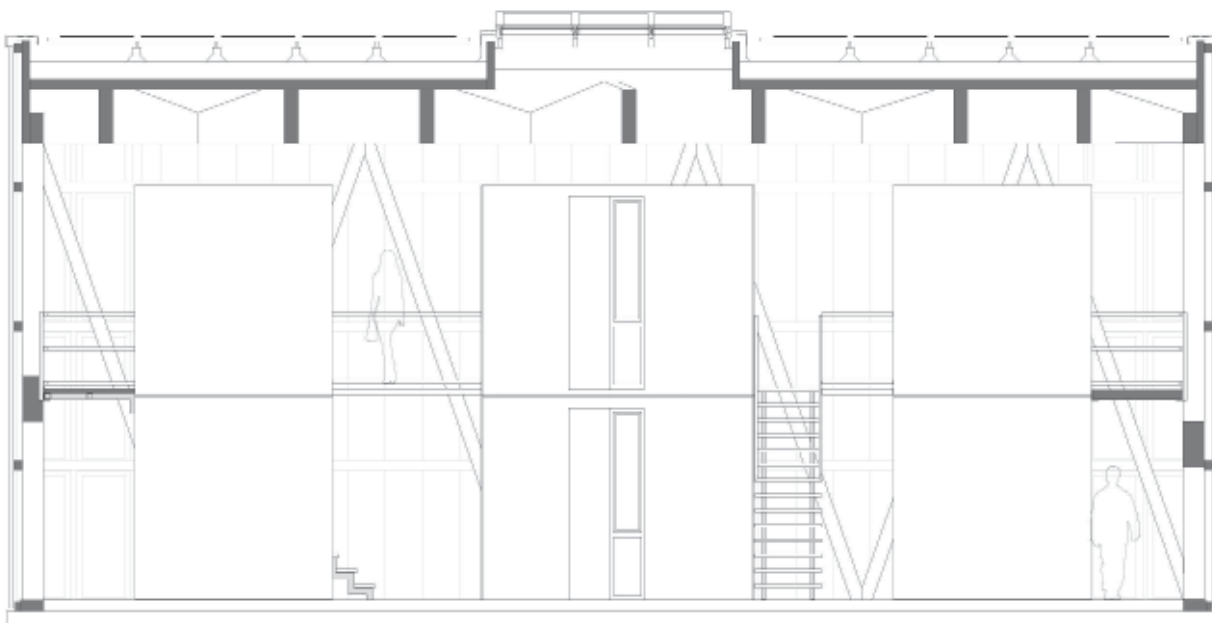
DESCRIPTION

Cubity was developed by students at the TU Darmstadt as an out-of-competition entry for the Solar Decathlon 2014 in Versailles as a student dormitory. The individual areas have since been optimized and the main space includes the common areas: the private 7.5-square-meter “cubes” consist of a bed, desk, shower, and toilet, and are grouped around a 16 x 16 m public space made up of a “market place” and a kitchen. The spaces in between the buildings form semi-public areas. Cubity is currently being built in Frankfurt where its social and environmental aspects will be studied for a three-year period. The places will be allocated by the Studentenwerk Frankfurt, and 3 cubes are reserved for refugee students.

(Excerpt from project description)



Floor plan



Section

SHARED REFUGEE ACCOMODATIONS, SCHWÄBISCH GMÜND



Exterior view / Photo: © architektur:labor martin hoiker

NUMBER OF RESIDENTS / MODULAR UNITS

164 residents / 5 buildings

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: Early 2016

Subsequent use possible as student dormitory

COMMISSIONED BY

Ostalbkreis represented by Mr. Landrat Pavel, Aalen

ARCHITECT

architektur:labor martin hoiker, Schwäbisch Gmünd;

Cooperation with: Dipl. Ing. Juanita Cardenas, Dipl.

Designerin Anke Fischer

CONSTRUCTION FIRM

Shell: Traub GmbH & Co. KG, Aalen; timber: Holzbau

Rieg, Schwäbisch Gmünd

BUILDING METHOD

Timber frame construction on reinforced concrete base plate

CONSTRUCTION COSTS

Approx 1,365 Euro/m² GFA (building and engineering costs)

LIVING SPACE PER PERSON

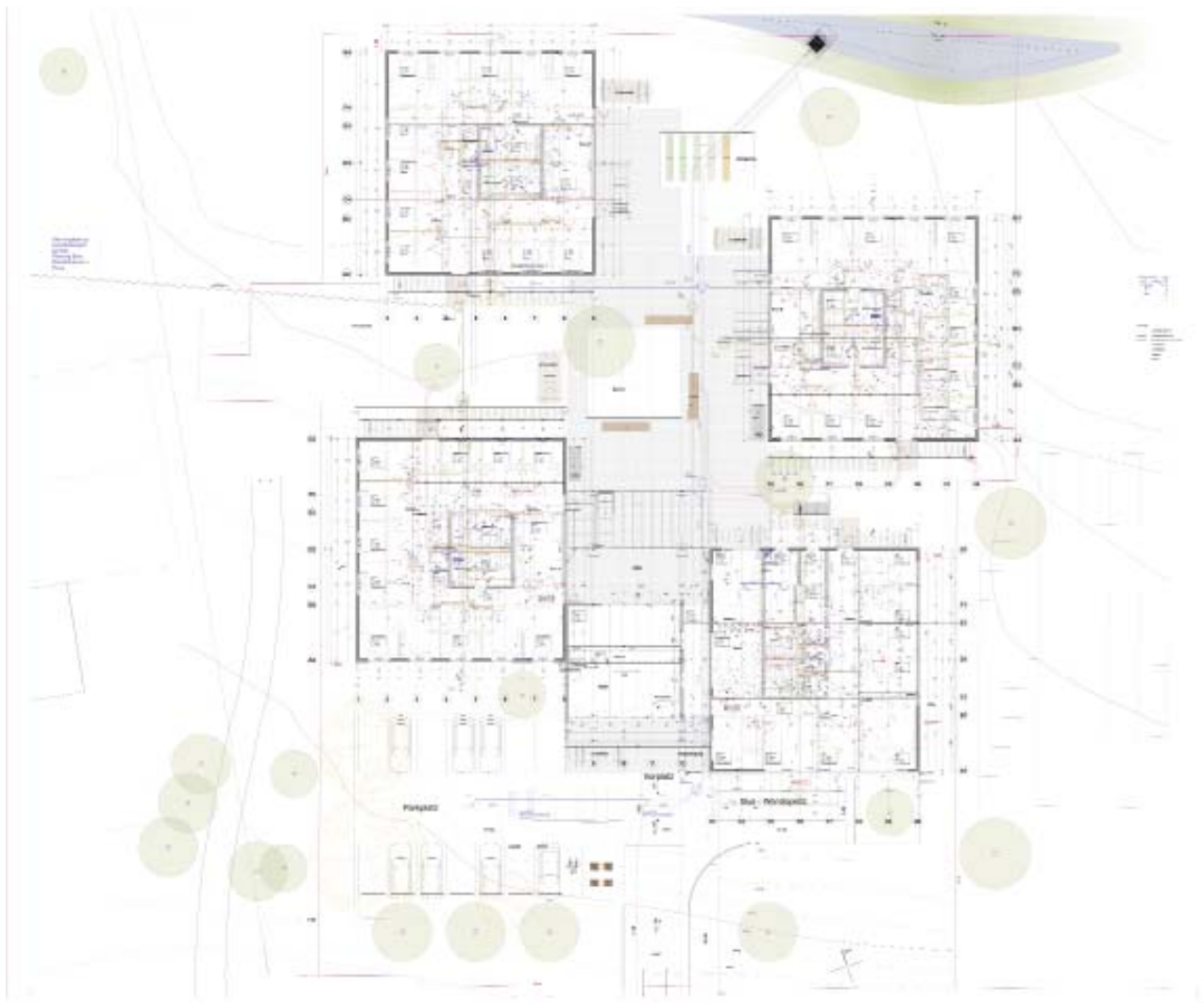
7 m²



Facility / Photo: © architektur:labor martin hoiker



Construction site / Photo: © architektur:labor martin hoiker



Floor plan, ground floor

DESCRIPTION

With the construction of the new shared refugee accommodations in Schwäbisch Gmünd, the district of Ostalbkreis will create a replacement for the existing shelter in a former barracks building. In the new structure, the unusual life situations of the affected people as well as the urban-planning concerns have been taken specifically into account. An architectural competition held for the site awarded first prize to this design.

The complex consists of four identical two-story accommodation houses and a single-story communal building. This functions as an entrance hall as well as common area. The new shared accommodations are grouped around a communal courtyard.

The new buildings will accommodate 164 refugees, community and recreation rooms, as well as office space for the maintenance and administration of the facility. The windows, window glazing, and external components meet the minimum requirements of the current Energy Saving Ordinance (EnEV).

(Excerpt from project description)



Site plan

MASONRY REFUGEE HOUSING PROJECT, HANOVER



Facility / Photo: © Olaf Mahlstedt, Hanover



External view / Photo: © Olaf Mahlstedt, Hanover



Kitchen / Photo: © Olaf Mahlstedt, Hanover

NUMBER OF RESIDENTS / MODULAR UNITS

59 residents / 13 residential groups

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

April 2016

COMMISSIONED BY

GBH Gesellschaft für Bauen und Wohnen Hanover GmbH

ARCHITECT

KSW Architekten + Stadtplaner GmbH, Hanover

CONSTRUCTION FIRM

W. Wallbrecht GmbH & Co. KG, Hanover

BUILDING METHOD

mass-wall construction: Poroton masonry, reinforced concrete

CONSTRUCTION COSTS

1,450 Euro/m²

LIVING SPACE PER PERSON

Approx. 18 m²

GFA: 2.168 m², UFA: 1.895 m²



Construction site / Photo: © Wienerberger – Jens Krüger

DESCRIPTION

Based on the urban planning competition entry by KSW Architekten, a new urban quarter is being developed in stages on the site of a former freight yard. And, in the middle of this district, a refugee housing project was recently built: a four-story white building with single-pitch roof elements, with 4 units to a floor. The building's residential units each house 4 to 5 people, and it also features care facilities and a commercial unit on the ground floor.

In the long-term, the units will be converted to rental apartments with 6 apartments on each floor. The external fire escapes that were initially required will be removed. In this way, the structural interferences will be reduced to a minimum. All floors are barrier-free, and can each accommodate one apartment suitable for disabled persons.

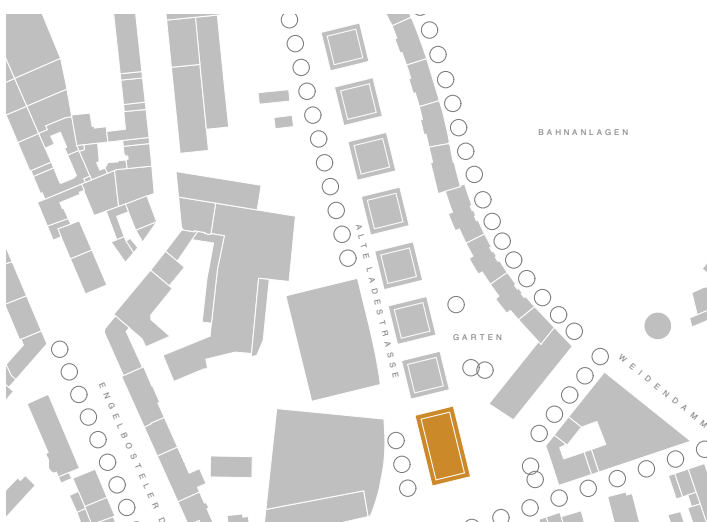
(Excerpt from project description)



Floor plan, ground floor



Floor plan, levels 2-4

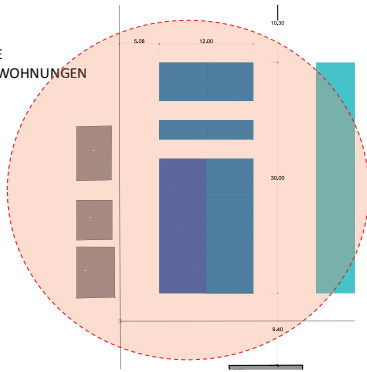


Site plan

CONTAINER RENOVATION FOR REFUGEES, WEITERSTADT

FOKUS

- 1. BA HELLBLAU – NOTUNTERKÜNFTE
- 2. BA DUNKELBLAU – 26 M2 MICRO WOHNUNGEN



Scheme

NUMBER OF RESIDENTS / MODULAR UNITS

46 residents / 22 modular units

RESIDENTS

Asylum seekers, refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

April 2016, The project was finished according to plan, but is not being used.

COMMISSIONED BY

Eduard Schuster, Eduard Reinhardt

ARCHITECT

SWAB Architekten, Frankfurt am Main

CONSTRUCTION FIRM

Awarded individually

BUILDING METHOD

Container renovation

CONSTRUCTION COSTS

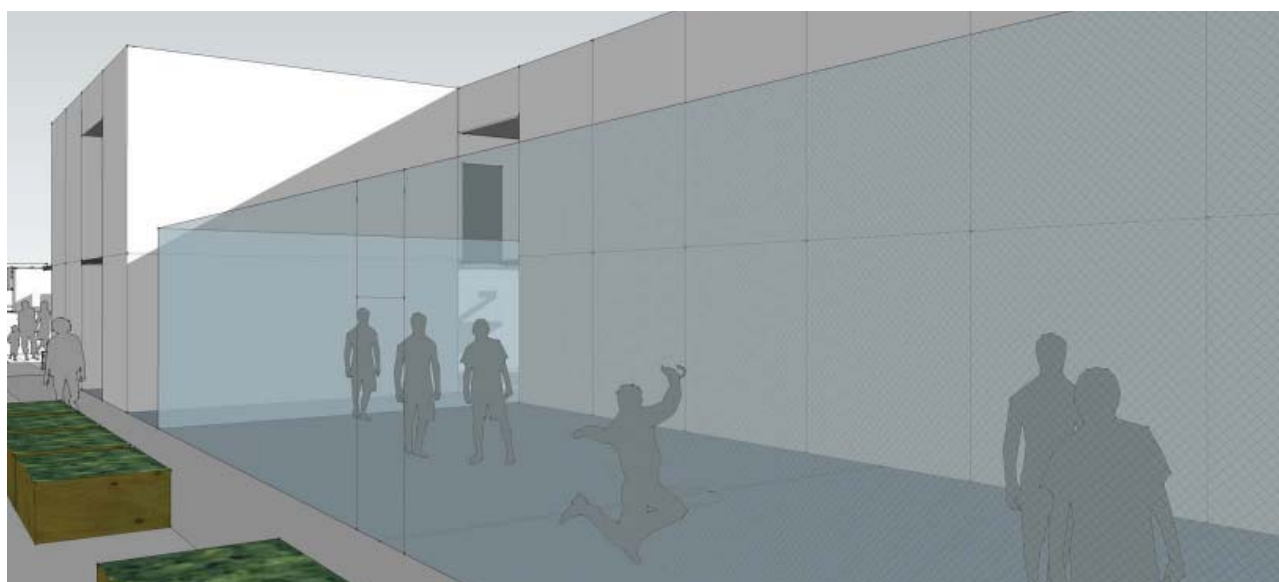
Total: 540,000 Euro

LIVING SPACE PER PERSON

7m²/Person



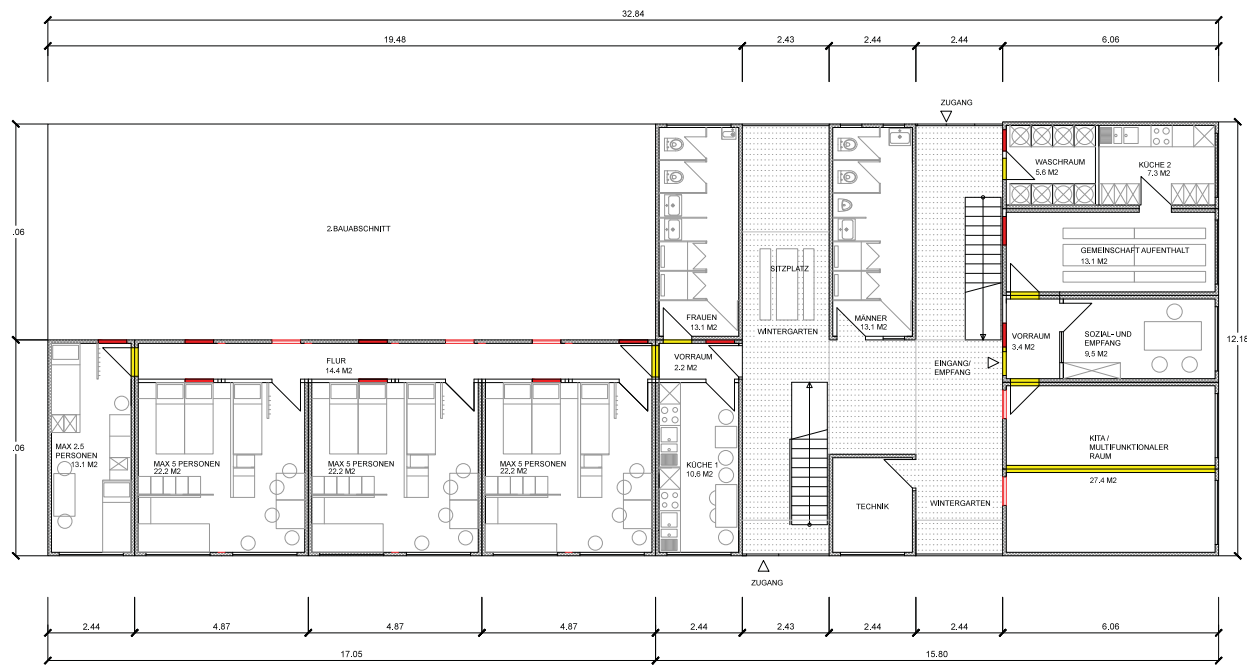
Design concept



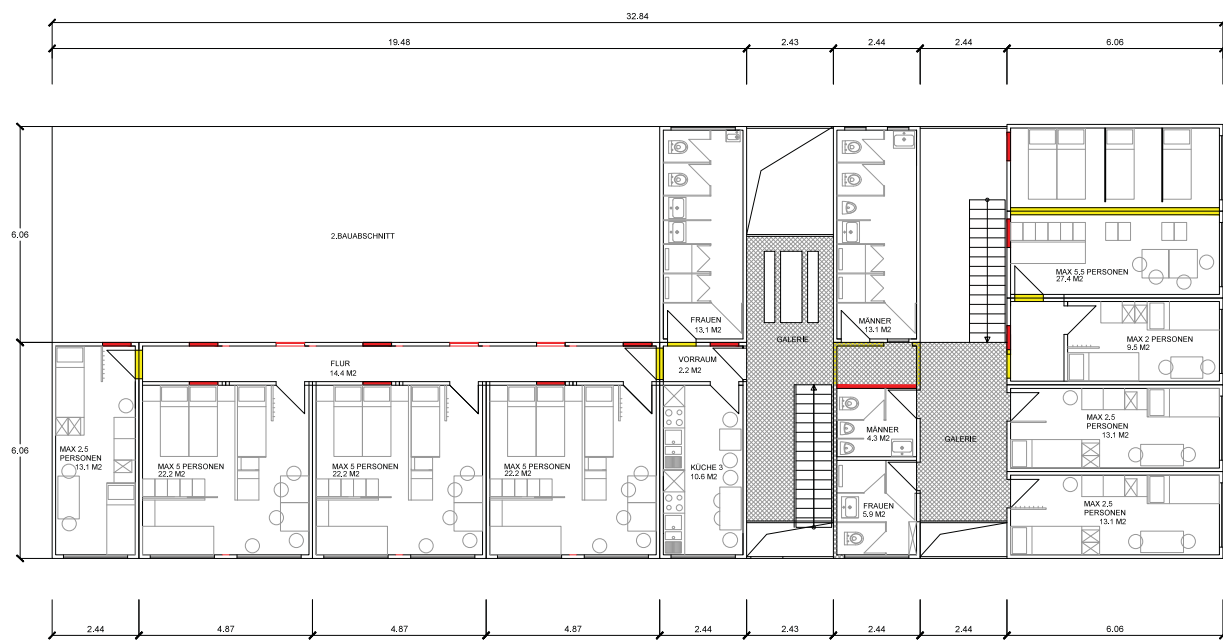
Design concept: Soccer and gardening



Existing buildings / Photo: © Sabina Wallwey



Floor plan, ground level



Floor plan, top floor



Family apartment, interior

DESCRIPTION

The concept was, rather than producing new container modules, the concept was to reuse existing modules and window elements instead. The Project is the private initiative of a client who spent time himself, as a German ethnic repatriate, living in collective housing.

(Excerpt from project description)

MUNICIPAL CONTAINERS, ZÜRICH (CH)

NEW BUILDING/ COMPLETED

NUMBER OF RESIDENTS / MODULAR UNITS

114 Residents / 70 room modules in 12 residential units

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2015

Lifespan: temporary

COMMISSIONED BY

Asylum organisation AOZ, Zürich

ARCHITECT

NRS in situ, Zürich

Project architect: Sebastian Güttinger, Pascal Angehrn

CONSTRUCTION FIRM

JägerPartner AG, Zürich

BUILDING METHOD

Container

CONSTRUCTION COSTS

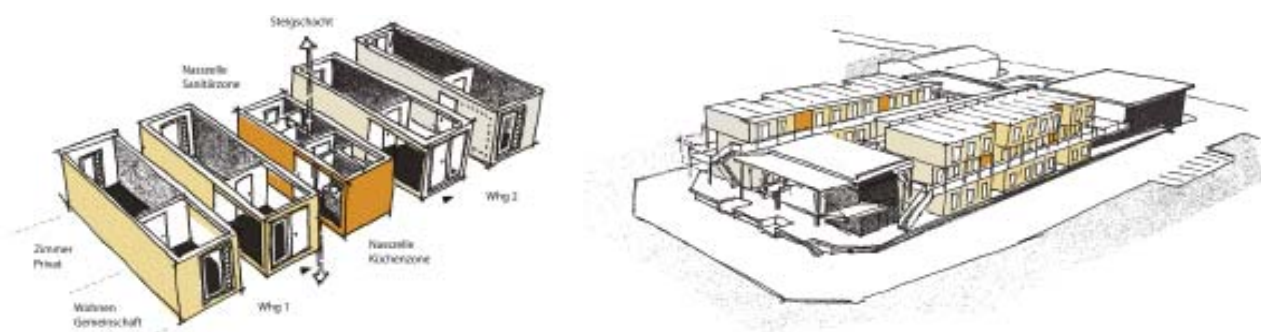
Total costs: 6.300.000 Euro

LIVING SPACE PER PERSON

Approx. 15,5 m²

DESCRIPTION

Interim use with containers
The Asylum Organisation Zürich (AOZ) already started looking for short-term accommodation for asylum seekers in 2010. In Leutschenbach, to the north of Zürich city centre, they found what they were looking for: the City of Zürich acquired a former beverage depot, the “Heineken site”. Thanks to the intense efforts of all involved, the temporary residential area was planned, approved and built within six months. Beverages continue to be sold in the head-end structure, but the warehouse has been demolished to the foundation and the three levels of containers erected on it. The latter were offset-stacked to create a covered access balcony on each floor. The 70 room modules are grouped into 12 dwelling units. A dwelling unit (124-150 m²) for 8 to 10 persons consists of 4 to 5 residential modules together with a kitchen and bath module.



Concept



Exterior view / Photo: © Martin Zeller



Exterior view / Photo: © Martin Zeller



Exterior view / Photo: © Martin Zeller

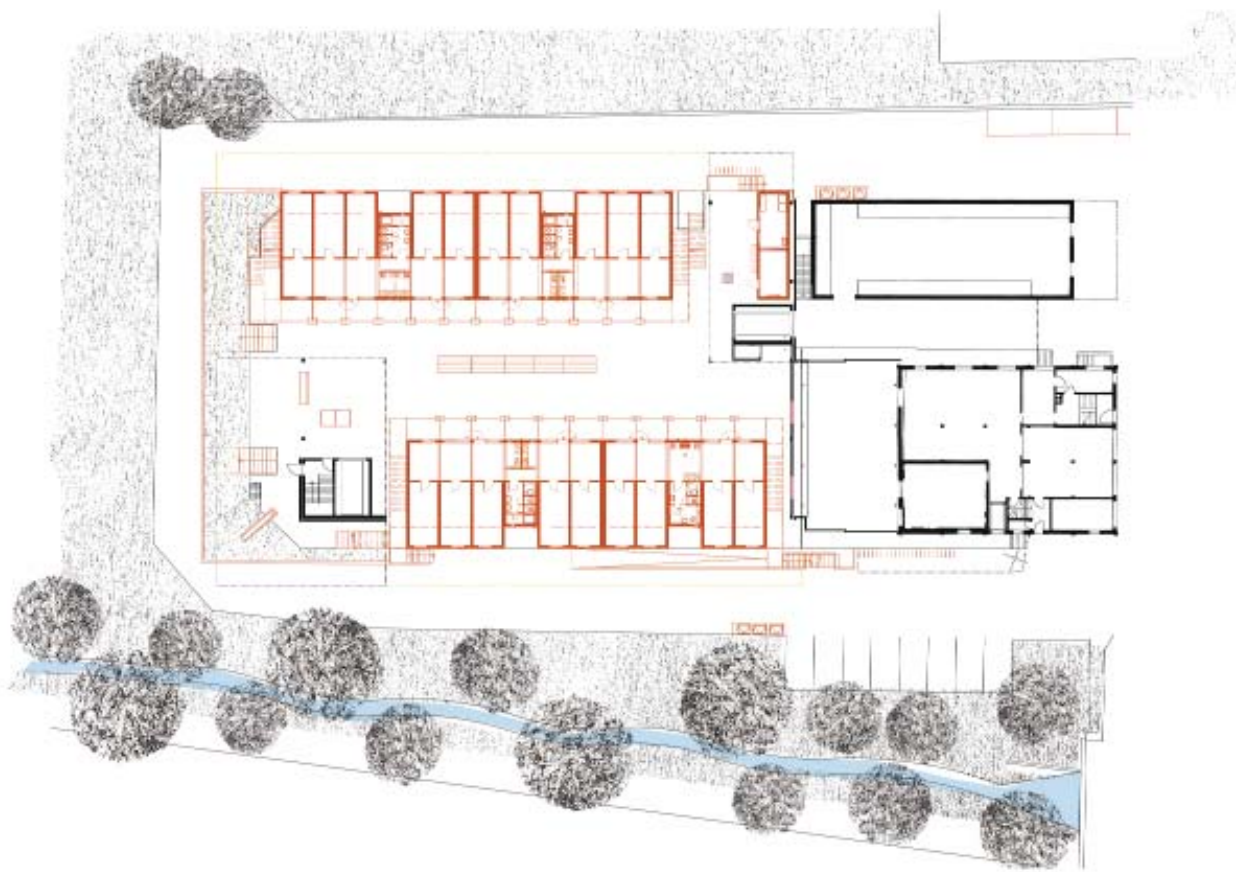
The two ends of the warehouse remain as covered exterior areas. In one of them is a container that is used as a launderette.

Some of the adults perform regular duties on a daily basis. Those who have no job make use of the educational and employment programmes. About 20 children attend kindergarten or the local public school. At the end of the year an extension for 36 persons was completed, but the complex must soon be relocated because a residential area is to take its place.

Text: Friederike Meyer / Yvonne Michel

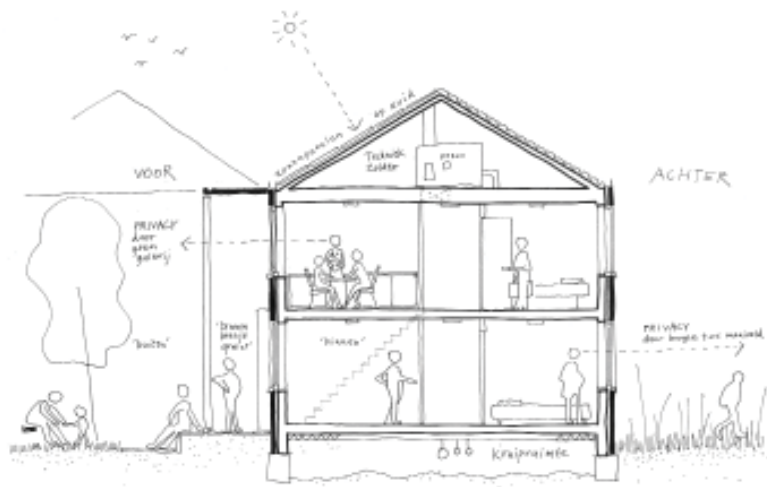
from: Stadtbauwelt 48.2015

<http://www.bauwelt.de/artikel/Container-2480270.html>



Site plan

ASYLUM SEEKERS CENTRE, TER APEL (NL)



Scheme: section - Privacy

NUMBER OF RESIDENTS / MODULAR UNITS

2000 residents / 258 modular units

RESIDENTS

Asylum seekers, asylum seekers whose application was rejected

DATE OF COMPLETION / LIFESPAN

Date of completion: November 2015 (1. building phase)

Lifespan: 30 Years

COMMISSIONED BY

Central Agency for the Reception of Asylum Seekers in the Netherlands (COA)

ARCHITECT

De Zwarte Hond, Groningen
Landscape Architects: Felixx, Rotterdam

CONSTRUCTION FIRM

BAM Building Contractors

BUILDING METHOD

Mass-wall construction: brick facades

CONSTRUCTION COSTS

N/A

LIVING SPACE PER PERSON

5 m² (without common spaces)

DESCRIPTION

Camp architecture for 30 years

For anyone seeking asylum in the Netherlands there is no avoiding Ter Apel. Refugees with very diverse statuses – ranging from first-time applicants to asylum seekers whose application was rejected in the last instance – are accommodated in the central reception centre at a former NATO military base on the border to Lower Saxony. From Ter Apel the residents are distributed to other quarters.

In summer 2014 the Dutch COA (Central Agency for the Reception of Asylum Seekers) launched a competition for the redesign of its “capital city”. It was won by De Zwarte Hond Architects together with BAM Building Contractors. The existing centre is to be extended and newly structured on a site of almost ten hectares by 2017. The first phase was completed in November. Plans call for 2,000 asylum seekers to be accommodated in 258 residential buildings, in addition to offices, a health centre, leisure facilities



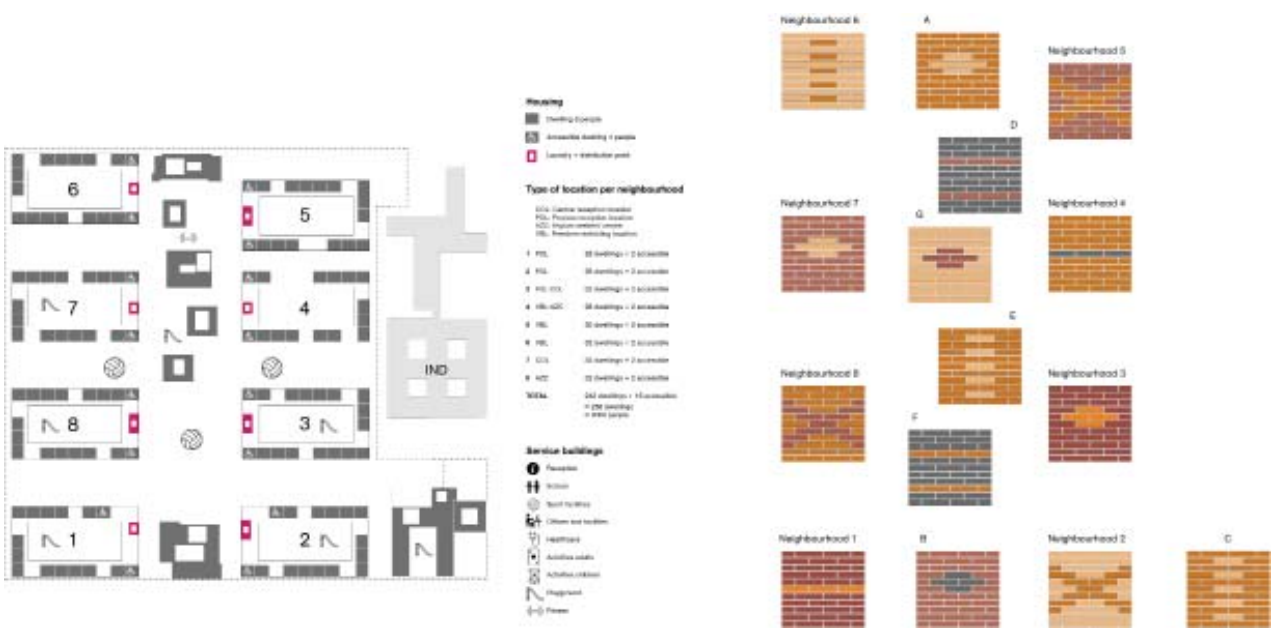
Exterior view / Photo: © Harry Cock (www.harrycock.nl)



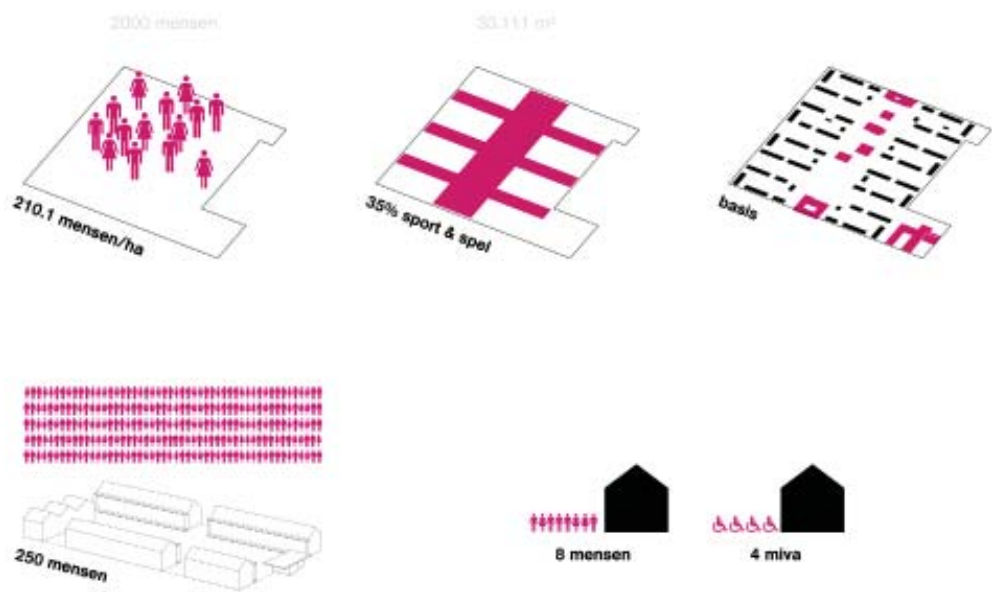
Aerial image / Photo: © Lidia Overstegen (info@aerophoto-schiphol.nl)



Floor plane



Scheme: program and neighborhood



Scheme project



bird's-eye perspective terrain

and a school.

The agency had originally proposed eight enclosed courtyards, a cluster formation for social control. The architects reacted to this requirement with Dutch pragmatism and a high degree of sensitivity to the needs of the residents: they opened the courtyards to a central green zone in which all service facilities were accommodated in pavilions. The courtyards were reduced from 50 to 30 metres in width, a size the architects knew from other projects to be ideal for neighbourhood contacts. In order to promote communication, launderettes and kiosks at which the residents can collect utensils such as towels and toothbrushes are located at the boundary between the courtyards and common open space. "We drew an analogy to a camping site," says project manager Martine Drijfholt. The message: if you have to spend the whole day waiting, why not make it as pleasant as possible?

The human scale was introduced to the mass accommodation in city planning terms right down to the last detail: 250 people now live around a courtyard; 16 inhabitants share a house, eight per unit. Instead of the access walkways so typical of container architecture, the architects implemented the Dutch layout principle of a double front door with a steep stairway upwards. In compliance with requirements, the single rooms are very small, with a floor space of only five square metres and a width of 1.80 metres. Wide hallways were favoured over common rooms next to the kitchen. Experience has shown that residents prefer to retire or go out into the open. The architecture ensures a minimum of privacy within a confined space.

The asylum centre has been designated as a camp for the next thirty years. At the tender stage the building contractors had to commit themselves as operators of the site, a special circumstance that had a positive effect on the selection of materials and construction standard: durable brick façades in various designs, a zero energy house standard with solar panels and efficient thermal insulation. The isolated location outside the village of Ter Apel is hardly conducive to subsequent uses, nor are such uses intended. According to the architects, other refugee centres with more rural house typologies are considered by many to look more like holiday camps, and that is not politically viable in the Netherlands.

Text: Doris Kleilein

from: Stadtbauwelt 48.2015

<http://www.bauwelt.de/themen/bauten/Lagerarchitektur-fuer-30-Jahre-2480342.html>

CENTRAL ACCOMMODATION FACILITY, NEUSS



Quartiersanalyse - Verortung Distanzen



Facility as a whole



Flexible use of the living space



Design concept

NUMBER OF RESIDENTS / MODULAR UNITS

Approx. 1,000 residents / 8 connected, 3-story living modules (each houses around 125 residents) and a central facilities building

RESIDENTS

Asylum seekers, and refugees with recognized refugee status seeking apartments

DATE OF COMPLETION / LIFESPAN

Date of completion: January 2017

Scheduled Lifespan: 25 years

Mass-wall buildings can be used afterward

COMMISSIONED BY

Neusser Bauverein AG, City of Neuss, State of NRW – District Government of Düsseldorf

ARCHITECT

Schmale Architekten GmbH, Grevenbroich / Markus Schmale, Dipl.-Ing. Architekt BDA
 Project team: Michael Müller, Dipl.-Ing. (FH) Architekt, Oliver Breithor, Dipl.-Ing. Architekt, Manuela Rath, Dipl. Ing. (FH) Architektin, Paul Jarosch, B.Sc. Architektur, Thomas Gilbert, senior site engineer

CONSTRUCTION FIRM

Diverse group (separate elements commissioned individually)

BUILDING METHOD

Dining hall, administrative rooms, kitchen, stairwell:
 Mass-wall construction, concrete
 Residential buildings: Modular construction, steel frames, insulated steel panels

CONSTRUCTION COSTS

Approx: 2,286 Euro/m² GFA

Total: 32,000,000 Euro (including property costs)

LIVING SPACE PER PERSON

12 m²/person (including usable space)

Total usable floor area approx. 12,000 m² (living areas + subsidiary spaces), 14,000 m² gross floor area



Design concept



Design concept



Design concept



Site plan

DESCRIPTION

Refugees arriving from Central Registration (EAE) stay in the new Central Accommodation Facility (ZUE) and wait to be permanently assigned to another municipality. As a rule, the facility functions like a hotel, accommodating new arrivals for a few days (at most a few weeks), after which they are assigned their own living units. This is the ideal scenario.

The functional and architectural ideas behind the structure are founded in this hotel/resort approach, in combination with the state of North Rhine-Westphalia's space allocation plan. A total of 8 interconnected 3-story living modules are planned, each housing around 125 people. The new accommodations have the character of a small village community.

(Excerpt from project description)

PERMANENT HOUSING FOR REFUGEES, WEDEL



Overview



Inner courtyard



Corridor

NUMBER OF RESIDENTS / MODULAR UNITS

30-43 people / 14 apartments

RESIDENTS

Asylum seekers, refugees with recognized status.
The goal is to achieve a mixed resident base of local homeless and refugees.

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2016
Lifespan: unlimited

COMMISSIONED BY

N/A

ARCHITECT

june architects, architect Merle Zadeh, Stephanie Monteiro Kisslinger, Florian Titz, Carolin Brüggebusch and Sebastian Latzn

CONSTRUCTION FIRM

N/A

BUILDING METHOD

Modular building method: Timber panel construction, facade: part plaster, part wood cladding

CONSTRUCTION COSTS

Approx. 1,550 Euro/m² UFA
total costs: approx. 1,400,000 Euro net

LIVING SPACE PER PERSON

16 m²/person / 906 m² UFA
Total: approx. 680 m²

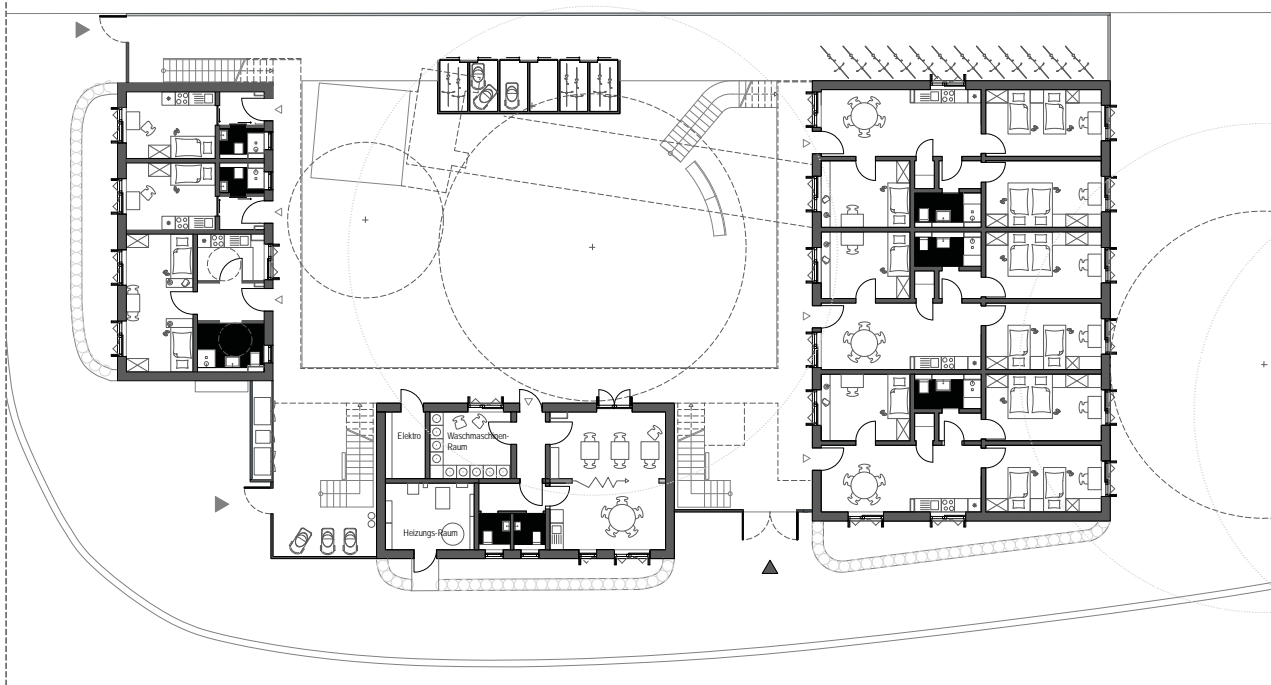


South elevation

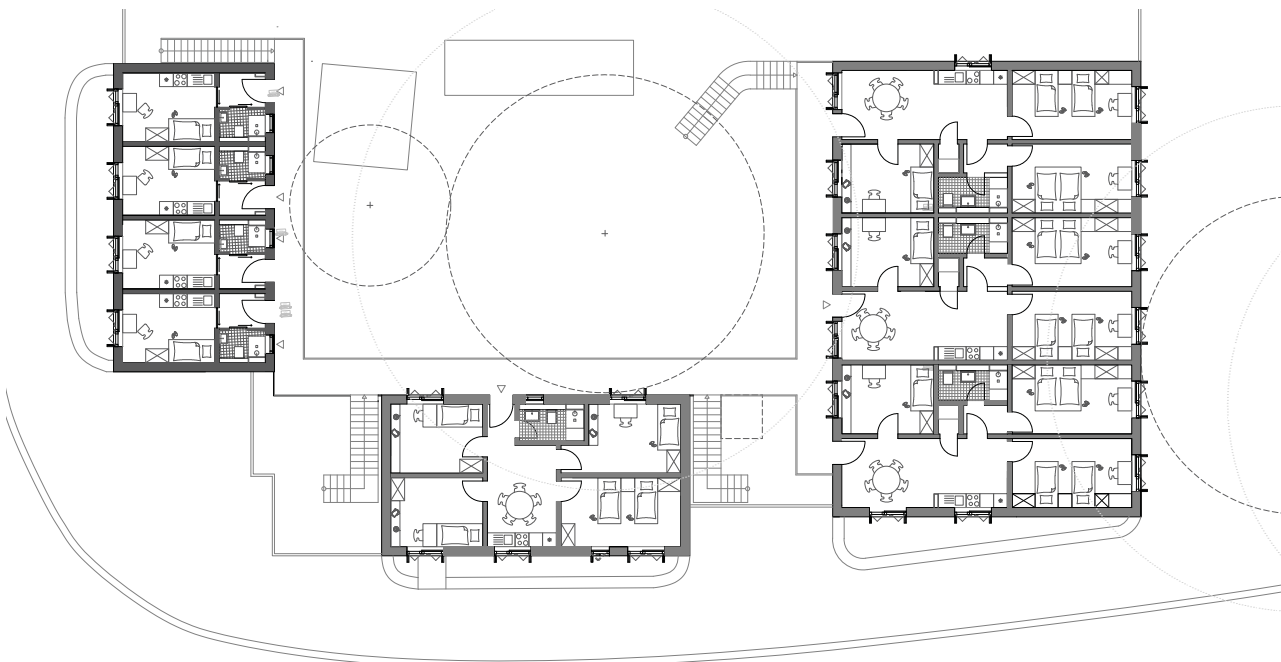
DESCRIPTION

The goal for the project, formulated jointly by the city and June Architects, is to create a building that, on the one hand, is cost- and resource-efficient, while also being durable and top-quality from an architectural perspective. The building complex is well-connected to the urban infrastructure thanks to its central location and will contribute positively to the community.

(Excerpt from project description)



Floor plan, ground floor



Floor plan, second floor

PARKING LOT ANNEX, MUNICH



Rendering



Construction site / Photo: © Stefan Müller-Naumann



Construction site / Photo: © Stefan Müller-Naumann

NUMBER OF RESIDENTS / MODULAR UNITS

Approx. 129 residents / 100 apartments

RESIDENTS

Refugees with recognized status , people with low incomes

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2016

Lifespan: unlimited

COMMISSIONED BY

Gewofag Wohnen GmbH, Munich

ARCHITECT

Florian Nagler Architekten GmbH, Munich

CONSTRUCTION FIRM

B+O Wohnungswirtschaft GmbH Bayern, Bad Aibling;
Huber+Sohn, Bachmehring

BUILDING METHOD

Ground floor: reinforced concrete columns and slabs,
upper floors: timber frame, solid wood

CONSTRUCTION COSTS

1.805 Euro/m² GFA (KGR 300-400)

LIVING SPACE PER PERSON

Approx. 23 m² /person (building and engineering costs)

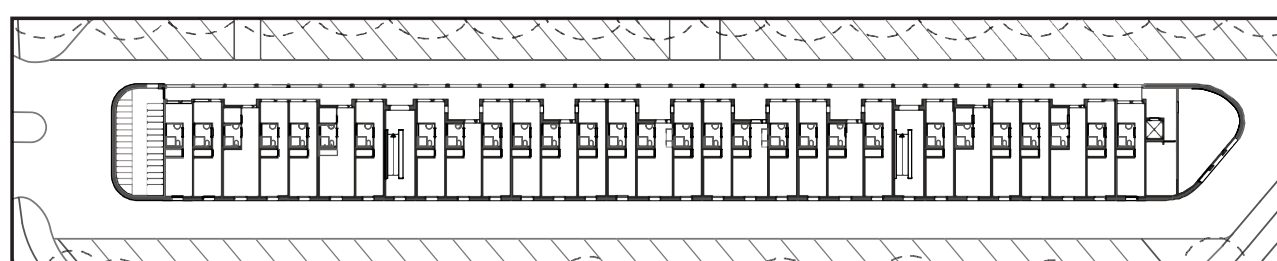
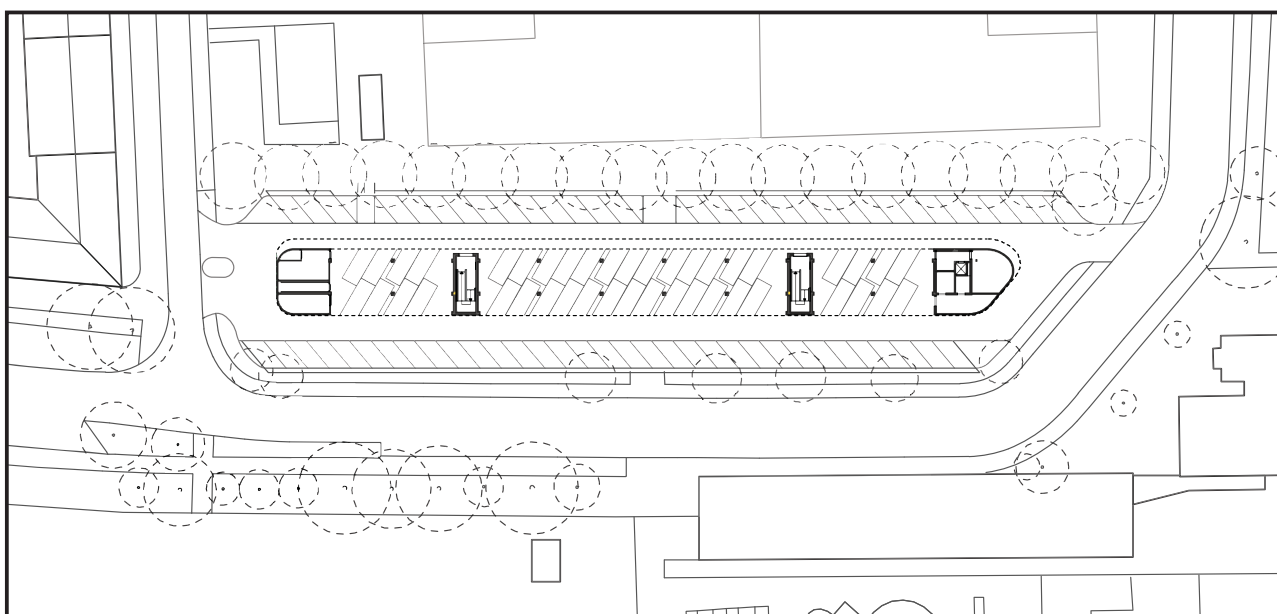
GFA: 4.630 m²



Rendering, bed room



Rendering, roof terrace



site plan and floor plan, first floor

DESCRIPTION

The parking lot superstructure at Dantebad was built before this backdrop. Some conditions in its favor were the fact that the property belonged to the state capital of Munich, that the parking places located there weren't tied up, and that everyone involved wanted to implement the project quickly at a decent quality.

The building is a total of five stories tall and over a hundred meters long. The surrounding residential buildings (in the area of Borstei) also feature very heavy volumes. For this reason, the building volume doesn't just fit in very well from an urban planning perspective—it actually enriches the quarter, leading to an improved use of the available free space.

In order to retain most of the existing parking spots, first a reinforced-concrete construction of columns and slabs was built. Over this, the actual residential building was constructed as a timber-frame structure. The building only touches the ground where the two stairwells are located and at the two head-end structures, where the building services, storage, and trash disposal are housed.

The apartments are connected by corridors that begin at the stairwells. In front of every three apartments, the corridor broadens into a small niche that can be furnished and used as a meeting point for residents. Most apartments are one-room apartments, but two-and-a-half room apartments are also available. Further offerings for residents include a common area, a laundry salon, and a nice rooftop terrace with play areas, lounge decks, and space to grow herbs and vegetables.

To match the urban context, the facades have been painted colorfully and fit quite naturally into the surroundings.

(Excerpt from project description)

HIGH-RISE REFURBISHMENT, OBERHAUSEN



Exterior View / Foto: © Christoph Stark

NUMBER OF RESIDENTS / MODULAR UNITS

82 apartments

RESIDENTS

Asylum seekers, refugees with recognized status , people with low incomes

DATE OF COMPLETION / LIFESPAN

-

COMMISSIONED BY

Kitev Oberhausen

ARCHITECT

Ateliers Stark & Wnuczak, Ramash Imanifardazar, kitev Oberhausen

CONSTRUCTION FIRM

Artists, refugees, engaged citizens and craftsmen

BUILDING METHOD

Renovation

CONSTRUCTION COSTS

-

LIVING SPACE PER PERSON

31 - 54 m²/person



Workshop / Foto: © Christoph Stark



Renovation / Foto: © Christoph Stark

DESCRIPTION

The highrise in Oberhausen was long considered a “problem building,” with high turnover and long-term vacancies. Thanks to the renovation, both local residents and refugees live there today.



Event / Foto: © Christoph Stark

1-12 STORE PLAN



Floor plan

CONVERSION OF OFFICE BUILDING INTO PERMANENT APARTMENTS, KORBACH



Rendering

NUMBER OF RESIDENTS / MODULAR UNITS

30–34 residents

RESIDENTS

Asylum seekers, Refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2016

Lifespan: unlimited

COMMISSIONED BY

Werner Grebe, Korbach

ARCHITECT

Christoph Hesse Architekten, Korbach

CONSTRUCTION FIRM

Batan Bau GmbH, Bad Arolsen

BUILDING METHOD

Conversion of an existing office building in drywall

CONSTRUCTION COSTS

800 Euro/m² GFA

LIVING SPACE PER PERSON

12.5–15 m²/person GFA



Planning meeting



Rendering

DESCRIPTION

A former office building will be converted into a permanent residence to accommodate refugees, and refugee families in particular. A total of five apartments of differing sizes will be built in order to react flexibly to families' needs.

Because of the building's self-supporting construction method, all the walls built into the conversion will be drywall. The large glass surfaces will be partially removed to ensure more protection of the private sphere. All necessary infrastructure like power, gas, water, and drainage can be installed without major expense in the existing double-bottom floor of the former open-plan office.

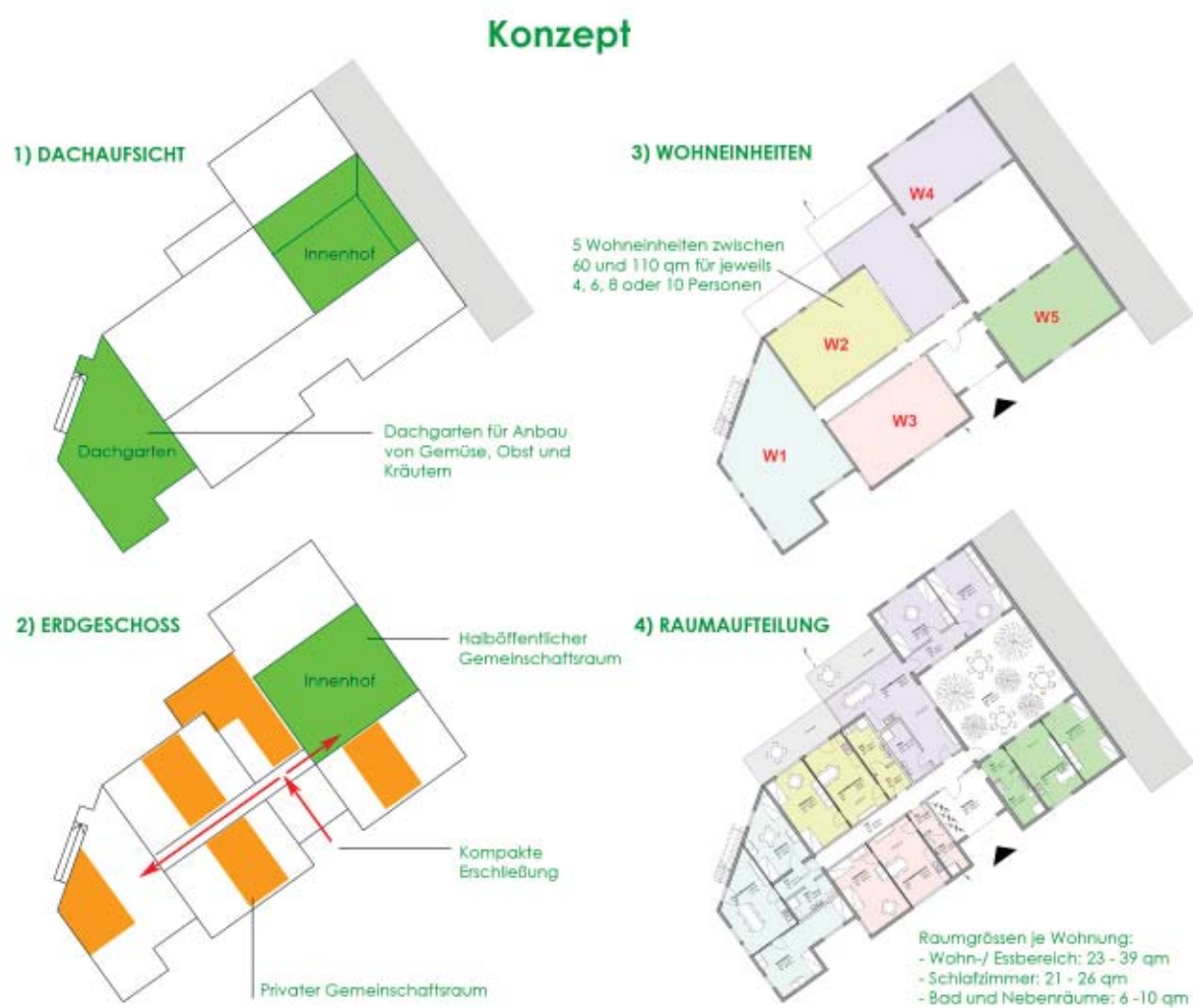
The site's two main elements are the shared interior courtyard and the garden terrace. The idea for the project emerged over the course of multiple discussions with asylum seekers from Syria and Afghanistan, as well as local residents with a migration background.

The introverted interior courtyard functions as a semi-public community room for social and intercultural exchange. It can also be used as a retreat space for prayer, or as a protected play area for children.

The garden terrace, with raised planters for crops, serves as a productive recreation opportunity for residents. Beyond the social dimension of shared gardening, residents can plant crops for their own personal use.

The consulting on cultural uses, technical details, planting and vegetables was provided by Mustafa Aziz, an agricultural engineer from Syria, who fled six months ago with his wife. The team of Mehmet Batan, who came to Germany in the early 1990s as an asylum seeker, is responsible for carrying out the construction of the project.

(Excerpt from project description)



Concept

HOUSE FOR LGBTI REFUGEES AND LOCALS, BERLIN



View

NUMBER OF RESIDENTS / MODULAR UNITS

32 residents / 1 building

RESIDENTS

Asylum seekers, and refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Date of completion: January 2018

Lifespan: unlimited

COMMISSIONED BY

Schwulenberatung Berlin gGmbH

ARCHITECT

Christoph Wagner Architekten. Collaboration with Wenke Schladitz

CONSTRUCTION FIRM

-

BUILDING METHOD

Timber frame construction

CONSTRUCTION COSTS

2,100 Euro/m² (including additional building costs and property)

Total costs: 2,480,000 Euro

LIVING SPACE PER PERSON

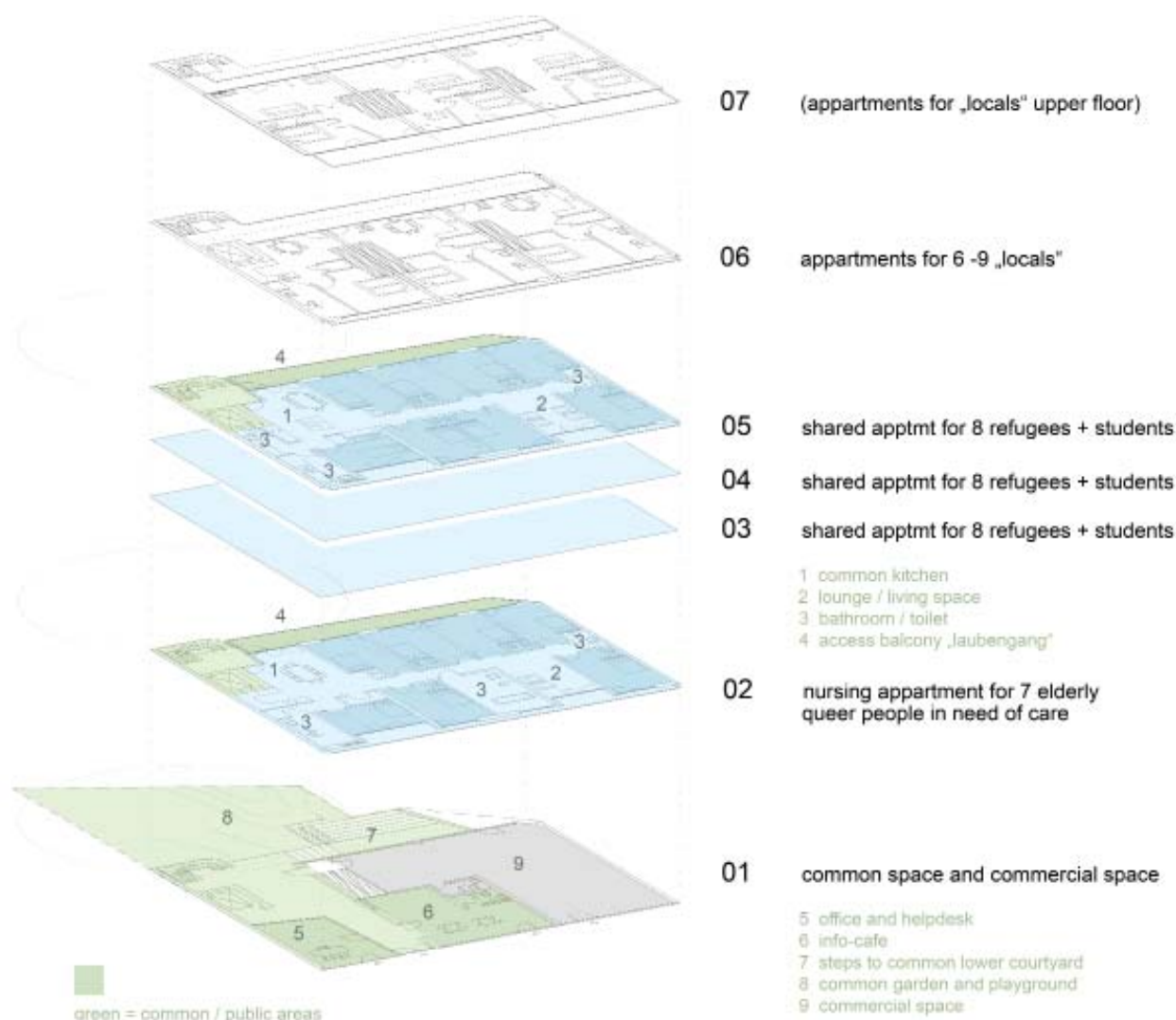
13 m² (excl. common kitchen and -sleeping areas)

GFA total building: 1.497 m²

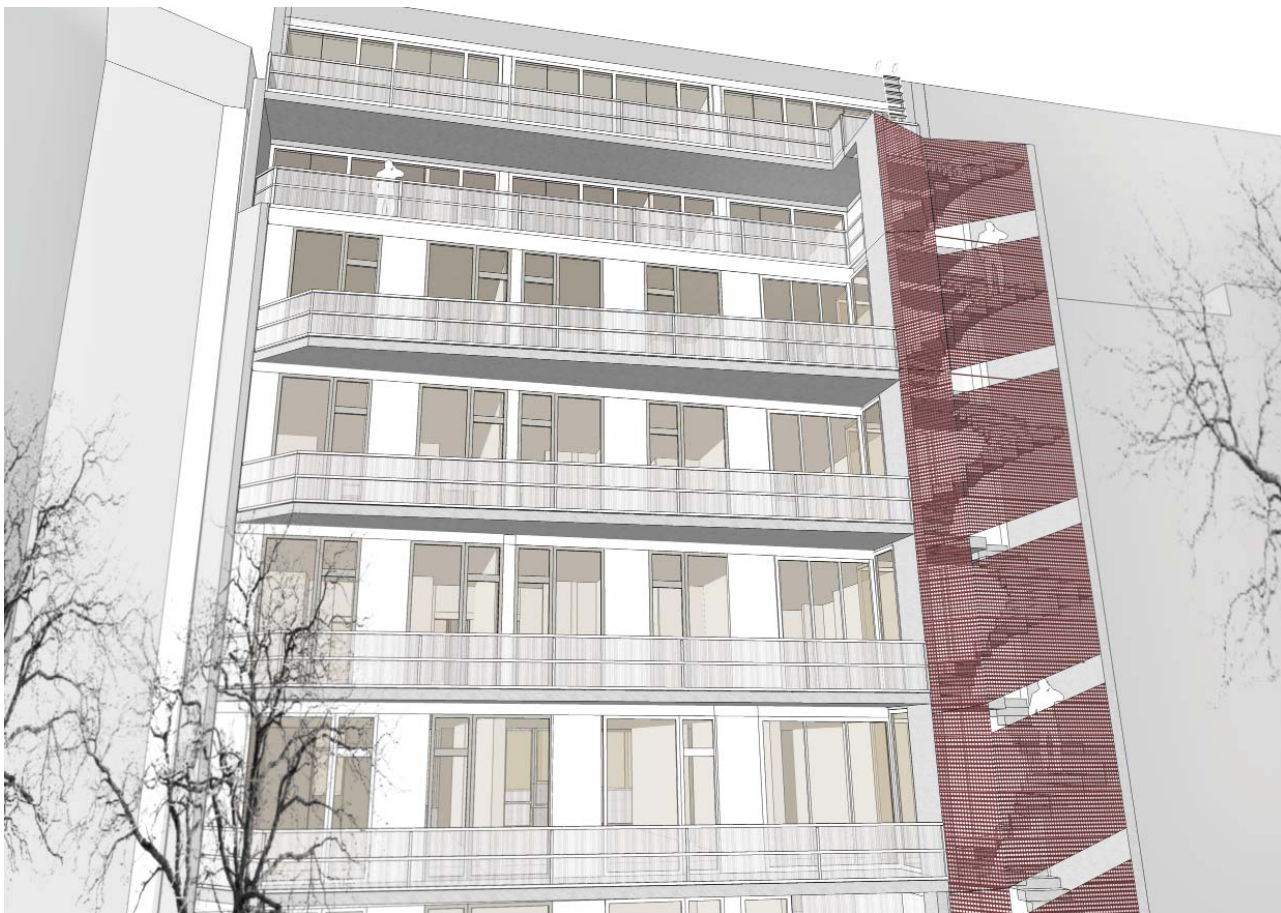
NBI OSTKREUZ

queer refugees and „locals“ live together in berlin friedrichshain

Christoph Wagner Architekten mit Wenke Schladitz



Isometry



View garden site

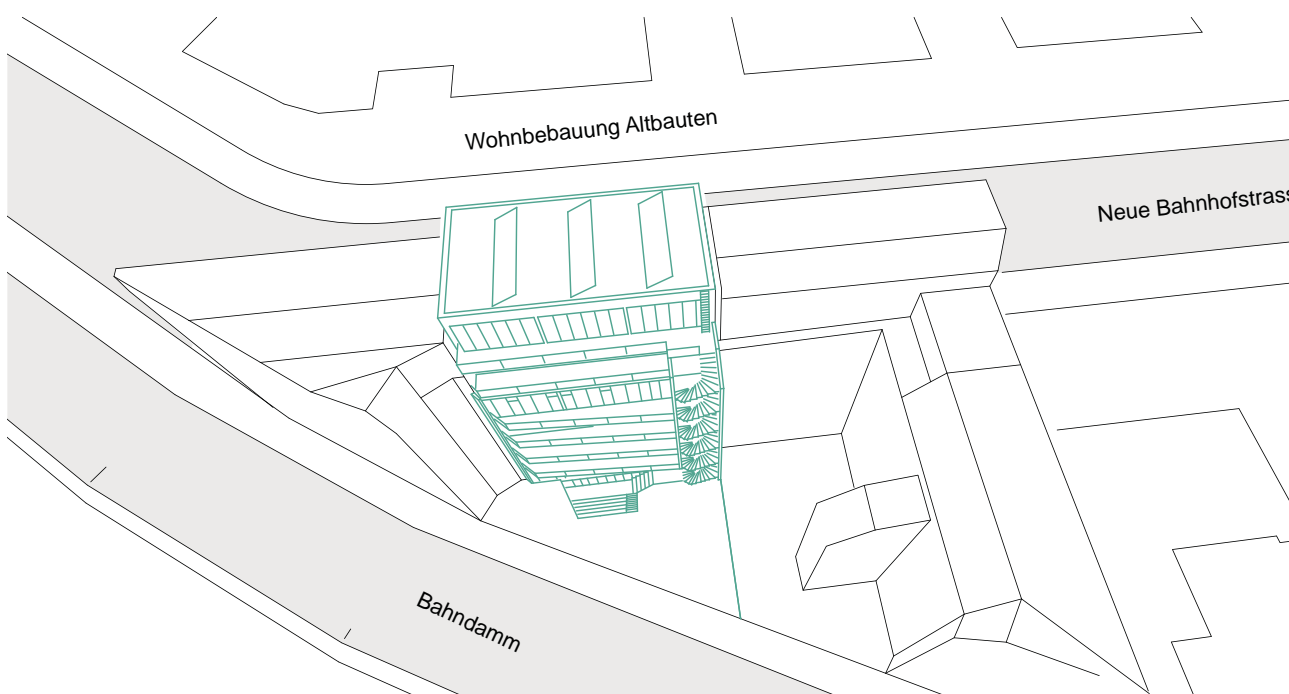
DESCRIPTION

A house that houses LGBTI (lesbian / gay / bisexual / transgender / intersex) refugees and locals, and that integrates different types of housing: 3 shared integration flats for refugees and students, a retirement home for elderly LGBTI people, and 3 maisonettes in the attic. The goal is to have mutual assistance and exchange between the different groups of residents. Flexibility: If necessary, 2 of the shared flats can be combined and turned into a single unit. The shared flats in the 2nd, 3rd, and 4th floor could later be turned into two apartments accessible from the corridors (subsequent use).

(Excerpt from project description)



View



Bird's-eye view

“A HOME—FOR REFUGEES TOO,” ORANIENBURG



Overall view

NUMBER OF RESIDENTS / MODULAR UNITS

Approx. 50 residents / 22 apartments

RESIDENTS

Refugees with recognized refugee status

The goal is to achieve a socially cared, mixed resident base of locals and refugees

DATE OF COMPLETION / LIFESPAN

Date of completion: November 2017

COMMISSIONED BY

Wohnungsbaugesellschaft Oranienburg

ARCHITECT

BBP (Oliver Langhammer), Berlin

Andreas Brümmel, Brummell Landschaftsarchitekten International

CONSTRUCTION FIRM

N/A

BUILDING METHOD

Mass-wall construction: Exposed brick masonry

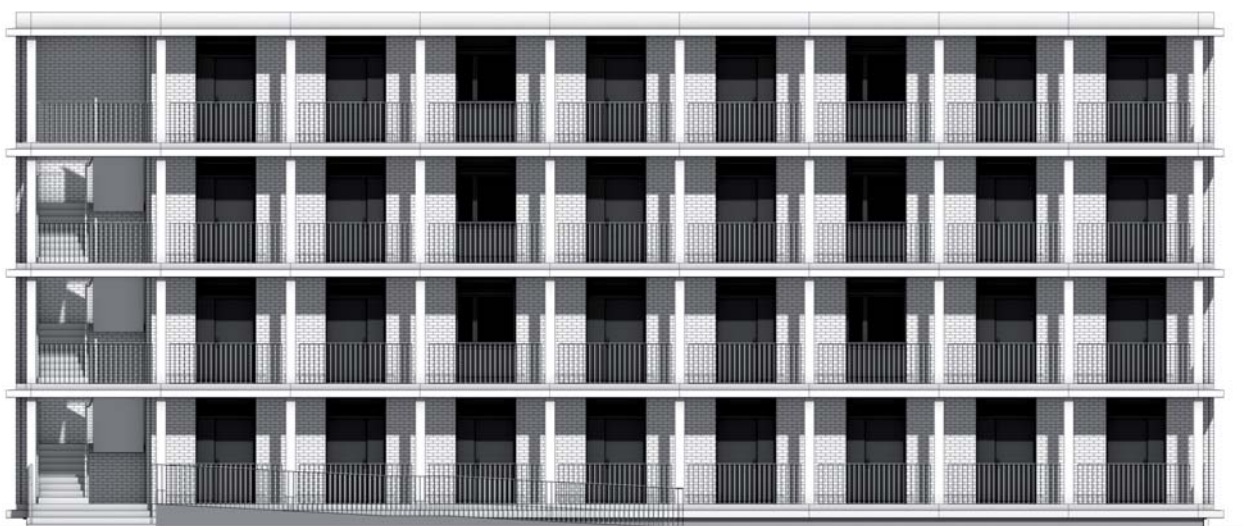
CONSTRUCTION COSTS

1,858 Euro/m² GFA

LIVING SPACE PER PERSON

Approx. 18.5 m²/person

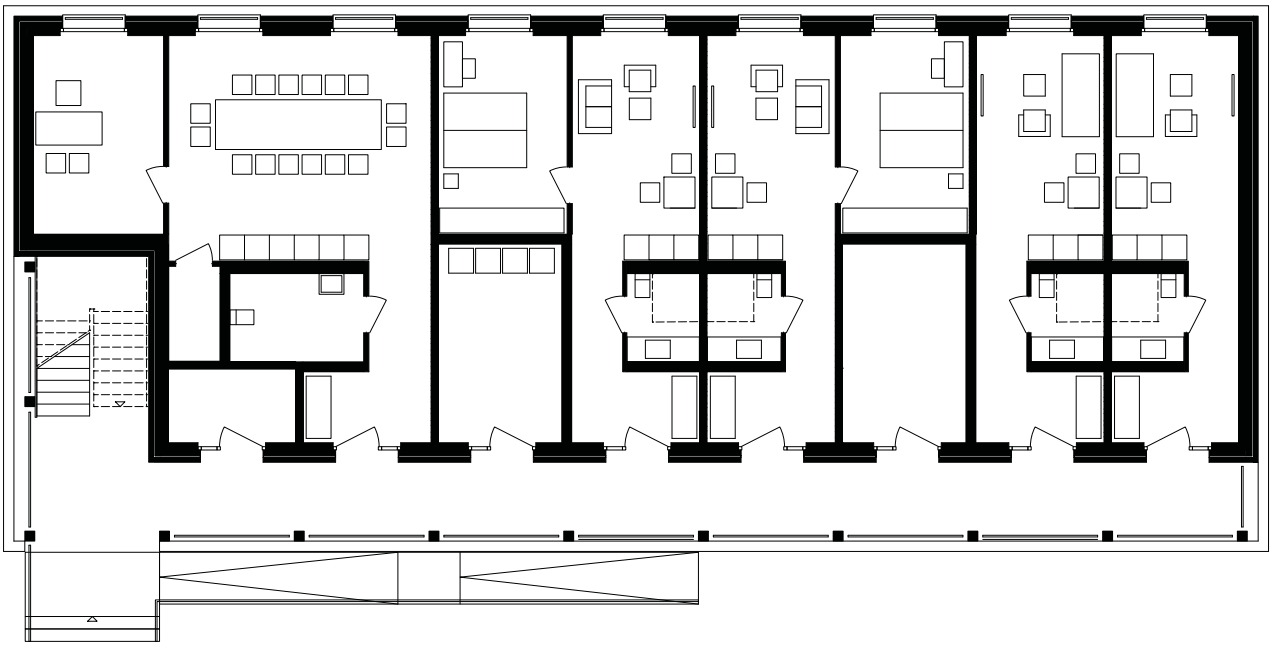
925 m² of rental space (including common areas) for approx. 50 people



Entry side elevation



Garden side elevation



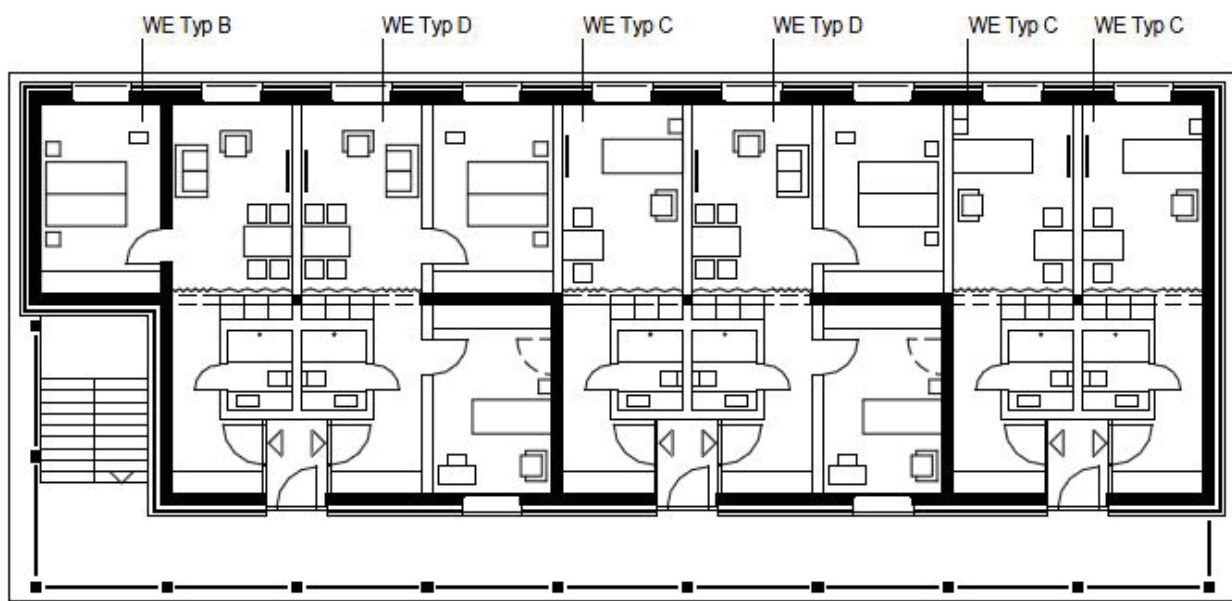
Floor plan, ground floor

DESCRIPTION

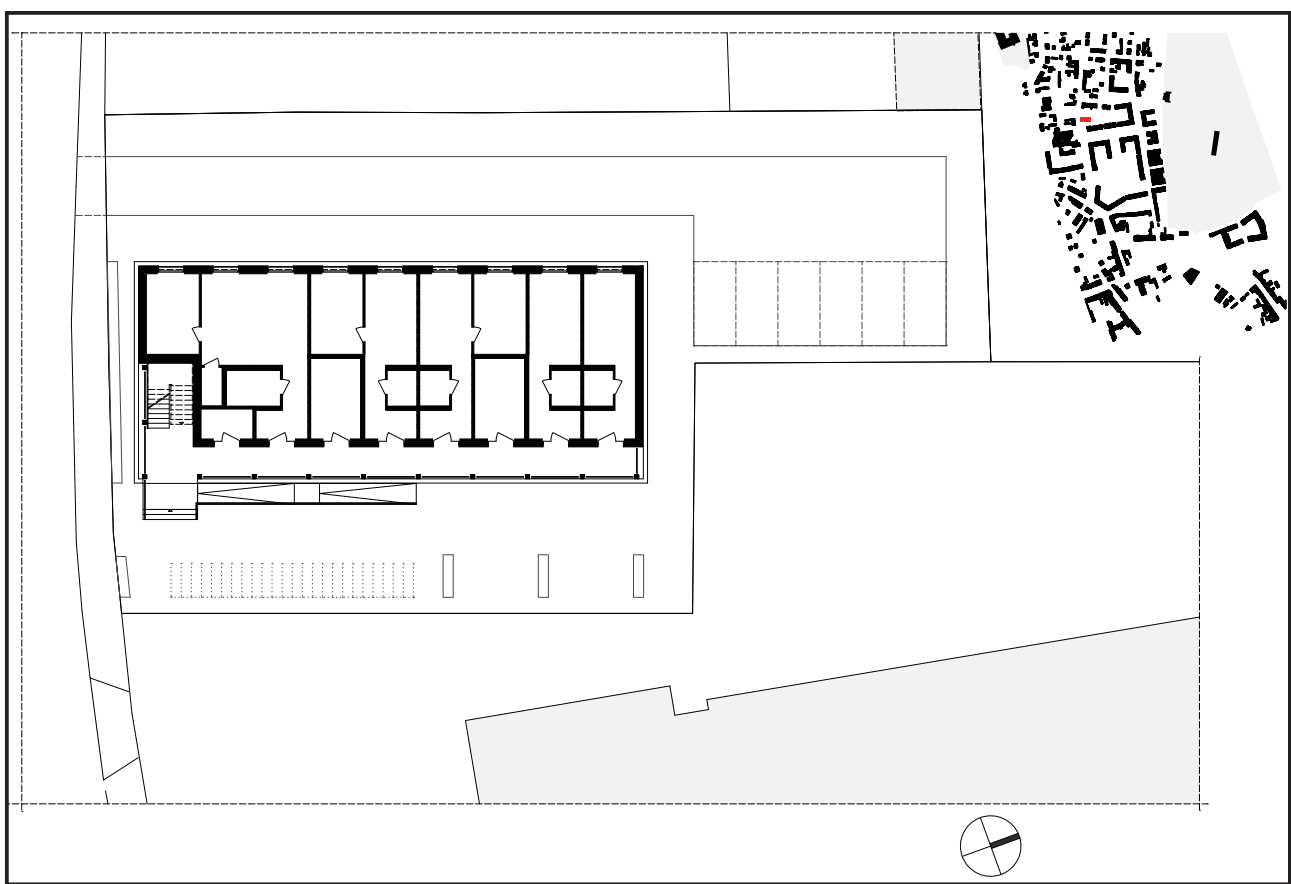
The following considerations served to frame the development of this structure: selecting a centrally located construction site; enabling floor plans to be calibrated flexibly to adapt to the needs of singles, families, or groups; creating spaces for group activity, education, and consulting. The effort to create a balanced mix of renters, composed of both refugees and locals, will be overseen by social workers and aims to increase the degree that residents identify with the building and the site—and thereby build a lasting community among residents.

The building and outdoor space are conceived to offer a range of private and public spheres. A clearly articulated and distinctive stairway, a bright corridor, and clearly defined exterior spaces (featuring solid, low-slung walls and ledges for seating) promote informal communication and group activities outside the apartments.

(Excerpt from project description)



Floor plan, first–third floor



Site plan

OFFICE BUILDING CONVERSION INTO APARTMENTS FOR REFUGEES, MUNICH



Exterior view / Photo: © Johannes Talhof

NUMBER OF RESIDENTS / MODULAR UNITS

245 residents (planned) / 77 apartments

RESIDENTS

Originally planned: Asylum seekers, refugees with recognized refugee status and people in need of accommodation. The project will only be implemented for people in need of housing.

DATE OF COMPLETION / LIFESPAN

Lifespan: approx. 15 years

COMMISSIONED BY

State Capital of Munich, Municipal Department, Buildings and Construction Department
(Project Management)

ARCHITECT

Hess / Talhof / Kusmierz Architekten und Stadtplaner
BDA

CONSTRUCTION FIRM

-

BUILDING METHOD

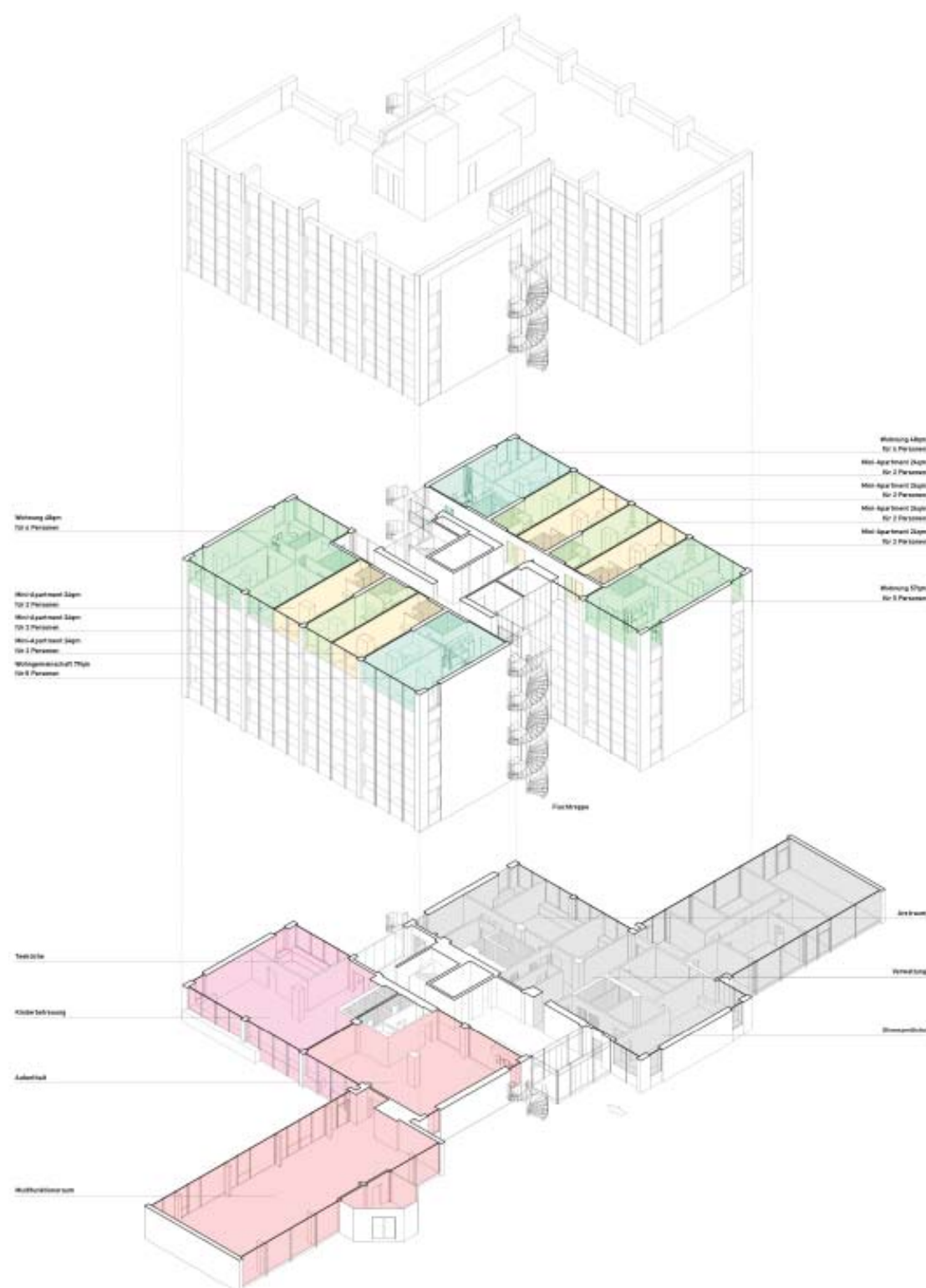
Conversion of an existing office building

CONSTRUCTION COSTS

-

LIVING SPACE PER PERSON

10–12 m²

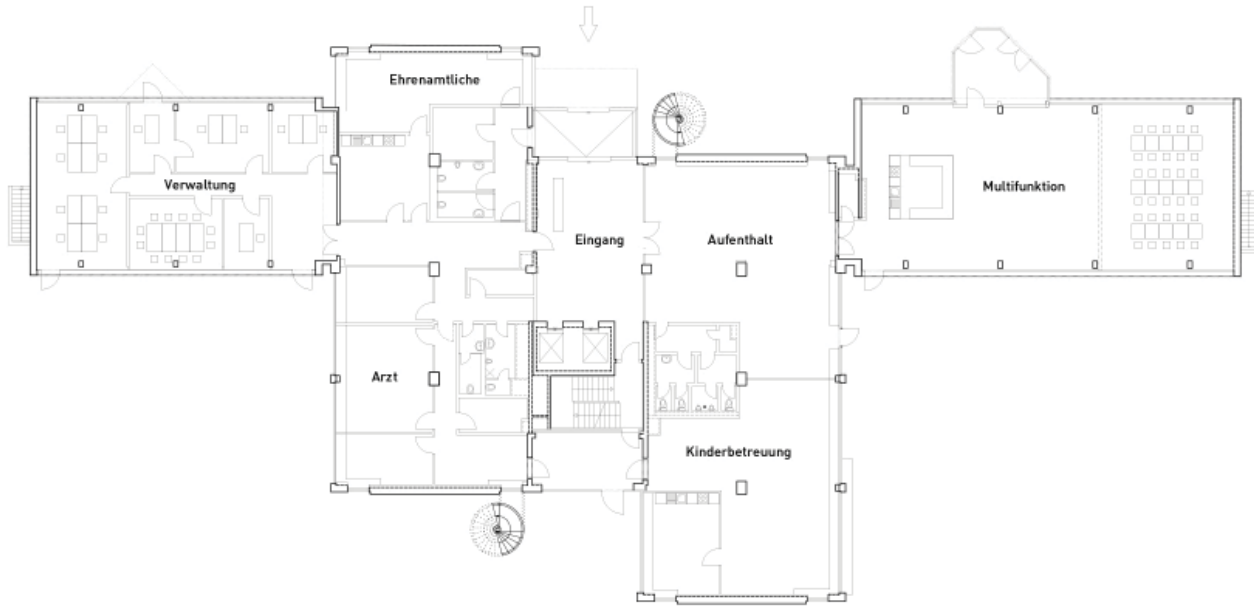


Isometry

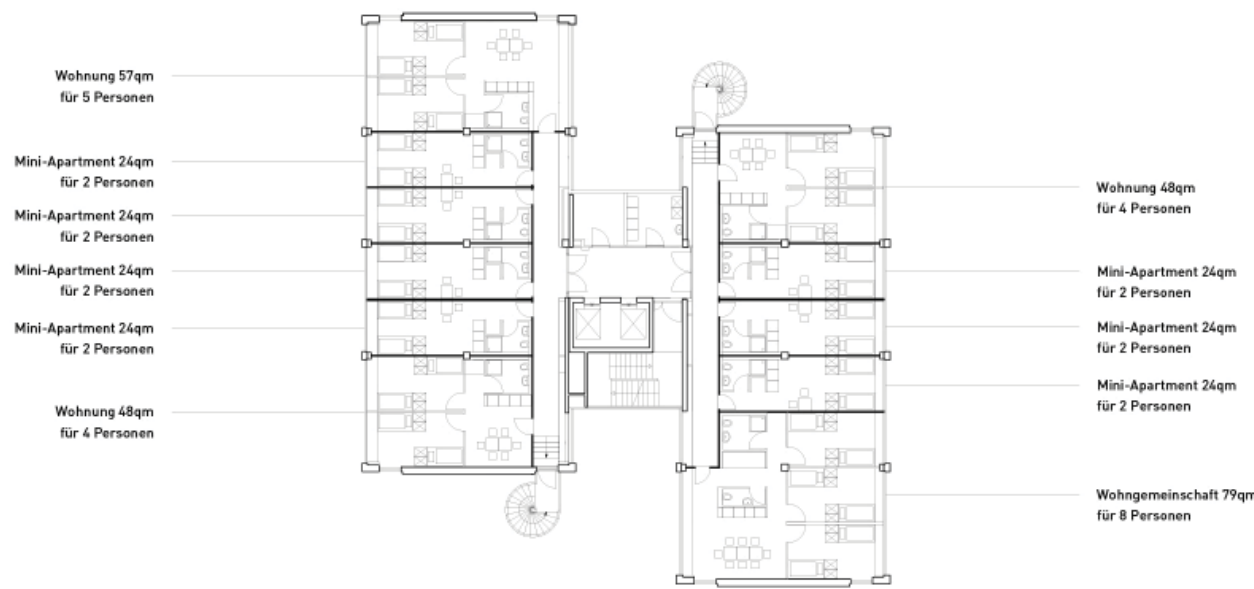
DESCRIPTION

An 8-story office building in Munich is being converted into a residential building to receive refugees. The building's ground floor will be used as a common area with lounges, meeting rooms, and an administrative area. The structure of the upper floors enables the floor space to be divided into individual apartments with private kitchens and sanitary areas. This ensures private and individual living and therefore decent accommodations for the residents. The mix of different types of apartments within the building—from mini-apartments to family homes and larger shared apartments—produces a variety of living situations, making the building responsive to the different needs of the residents. A sustainable, flexible, and continuously evolving residential use of the building is possible; it can also serve as an integration home by being mixed with social or student housing.

(Excerpt from project description)



Floor plan, ground level

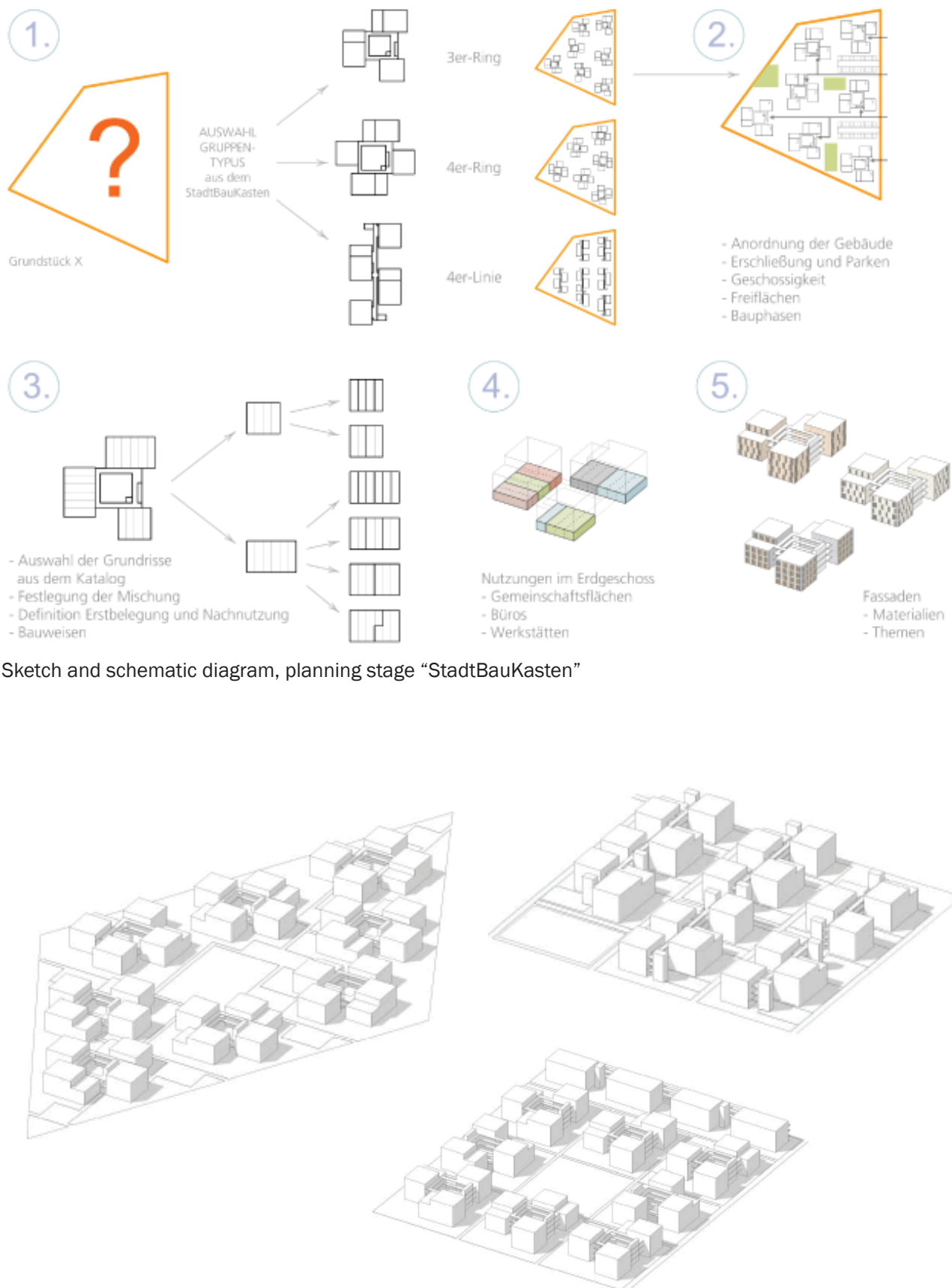


Floor plan, regular level



Site plan

STADTBAUKASTEN, KRONBERG



Sketch and schematic diagram, planning stage "StadtBauKasten"

NUMBER OF RESIDENTS / MODULAR UNITS

8r residents / 46 modules

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: June 2017

Subsequent use for up to 50 residents

COMMISSIONED BY

City of Kronberg

ARCHITECT

florian krieger architektur und städtebau gmbh, Darmstadt

CONSTRUCTION FIRM

N/A

BUILDING METHOD

Timber frame construction

CONSTRUCTION COSTS

Approx: 1,290 Euro/m² GFA

LIVING SPACE PER PERSON

13 m²/person (subsequent use: 21 m²/person)

Axonometry site plan qartiers "StadtBauKasten"



Illustration of "StadtBauKasten"

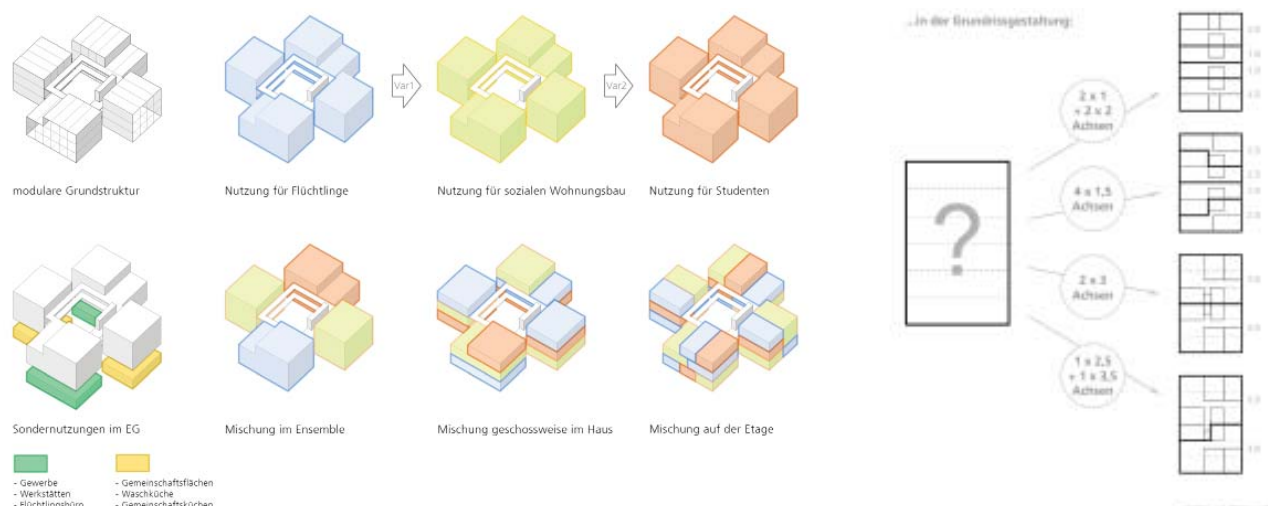


Illustration of "StadtBauKasten"

DESCRIPTION

The "StadtBauKasten" can reflect the needs of a wide variety of residential types—from 1-room apartments (e.g., for students or refugees) up to 5-room family apartments and shared apartments for refugees or seniors. The structures are pre-planned to be transitioned, at a later date, from compact refugee apartments into apartments that meet social housing standards. The apartments are grouped together in compact structures; multiple buildings are connected via shared corridors and grouped into ring-shaped or linear ensembles.

(Excerpt from project description)



Schematic diagram: Conversion and mixed use



Project Grüner Weg Kronberg: Elevations and site plan



Project Grüner Weg Kronberg: Floor plan, ground level

REFUGEE HOUSING WITH SUBSEQUENT USE, BREMEN



Rendering exterior view



Rendering interior courtyard

NUMBER OF RESIDENTS / MODULAR UNITS

344 residents / 2 Buildings

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: June 2017

Lifespan: 5 Years

Subsequent use possible (dauerhafter Wohnungsbau)

COMMISSIONED BY

Bremen Senator for Social Affairs, Children, Adolescents, and Women

ARCHITECT

Feldschnieders + Kister Architekten BDA

CONSTRUCTION FIRM

Ed. Züblin AG

BUILDING METHOD

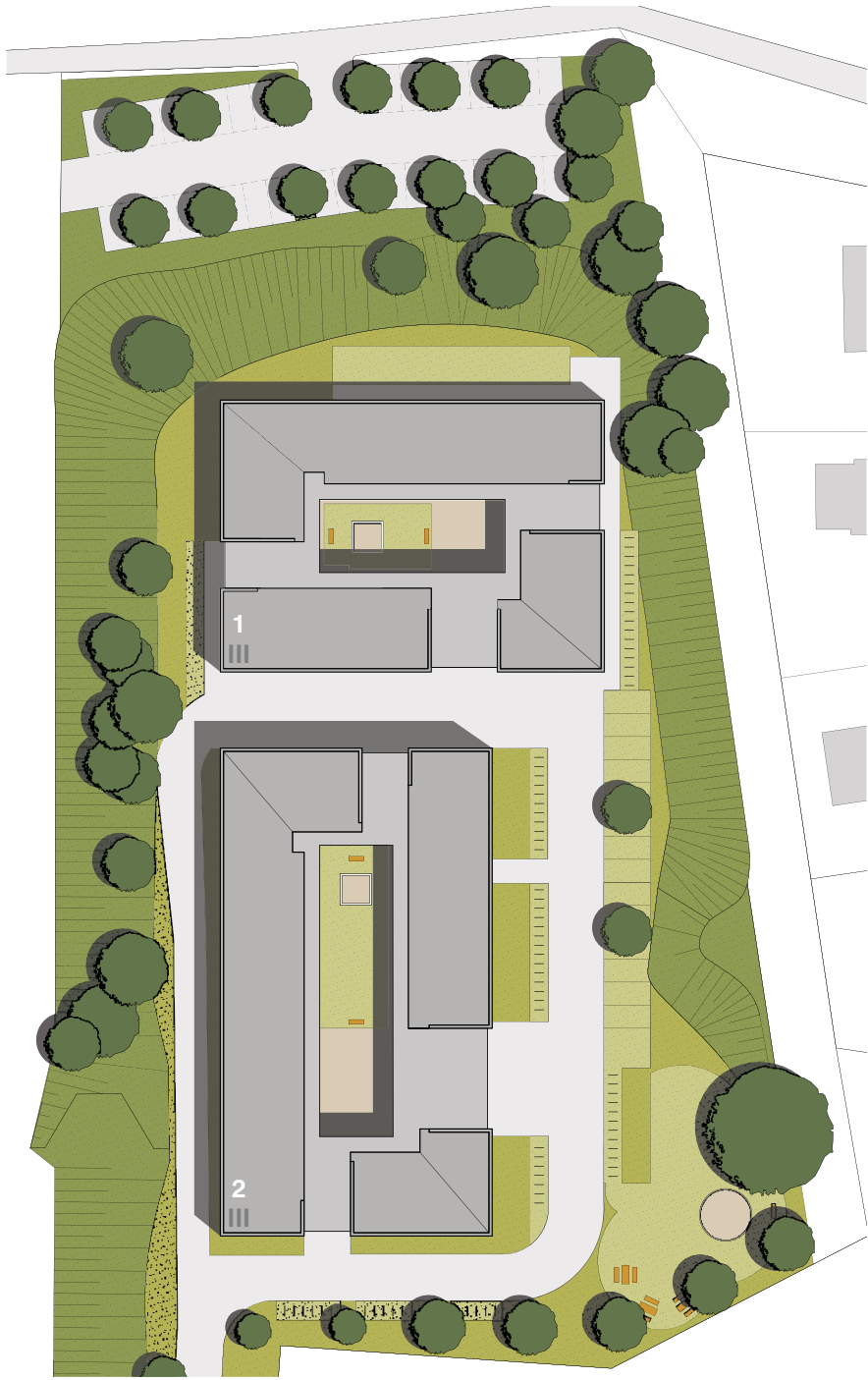
Timber frame

CONSTRUCTION COSTS

Total costs: 9,000,000 Euro gross (building and engineering costs)

LIVING SPACE PER PERSON

10 m²



Site plan

DESCRIPTION

The measure called for the construction of a permanent housing facility with plain apartments, to be used by refugees for a limited period of five years. As part of our preliminary assessment, we explored the location, the task, and the unique qualities needed from the building, and developed an analysis of the environment and the requirements. The study concluded that the favored building form would be permanent housing, made of two large timber-frame courtyard buildings. The facility is conceived as a structured site, integrated into the environment via a carefully designed outdoor area. To comply with the area's standards, the facility is divided into two main buildings.

The two individual buildings are each conceived as courtyard buildings with interior circulation. Apartments are accessed on the upper floors by a continuous corridor connected to the ground level via two double-lane staircases. The residential buildings each open to the square on one side.

(Excerpt from project description)

PALOTTI HOUSE, STUTTGART



Rendering



Siteplan and floor plan, ground level

NUMBER OF RESIDENTS / MODULAR UNITS

42 residents / 3 residential groups

RESIDENTS

Asylum seekers, refugees with recognized refugee status

The housing will strive to accommodate a mixed resident base of students and refugees

DATE OF COMPLETION / LIFESPAN

Start of construction: Summer 2017

Date of completion: December 2020

COMMISSIONED BY

Siedlungswerk GmbH, Stuttgart, Wohnungs- und Städtebau, Stuttgart

ARCHITECT

Schwarz.Jacobi, Stuttgart

CONSTRUCTION FIRM

-

BUILDING METHOD

Mass-wall construction

CONSTRUCTION COSTS

-

LIVING SPACE PER PERSON

approx. 10 m²/person

DESCRIPTION

Post migrant city development

In the accommodation of refugees the City of Stuttgart is pursuing a concept it calls the "Stuttgart way". This involves decentralised placement in the urban districts: never more than 250 people at one location, care by independent organisations, one care person for 68 residents, help by volunteers. At the end of November 6,231 refugees were living in 94 shelters in 21 Stuttgart districts.

The idea of accommodating asylum seekers in individual residential areas is also being pursued by the Siedlungswerk, a housing association with an ecclesiastical background that constructs 400 to 500 dwelling units per year in Baden-Württemberg. By its own account, for many years the Siedlungswerk, whose principal owners are the Diocese of Rottenburg-Stuttgart and the Landesbank Baden-Württemberg, has been developing residential projects in which all segments of society and all age groups find a home. In Stuttgart-Birkach, where the disused church of St Vinzenz Pallotti from the 1960s is located, a mixed residential neighbourhood is planned with living space for asylum seekers and refugees with the right of abode. In all eight buildings are to be erected on a 8,500 m² site: six with a total of 64 condominiums, a three-storey structure for an extended day-care centre and the so-called Pallotti House with accommodation for 60 asylum seekers, refugees and students.

Schwarz.Jacobi Architects won the competition in July with the proposal to give the Pallotti House the same architectural treatment as the other buildings, both with respect to the façade design and its urban location – on equal terms on the main thoroughfare through the neighbourhood. The building was designed as a house, not a hostel. A total of 74 people can live in group accommodation (1st to 3rd floor) and subsidized housing (4th and top floor). Should the demand for housing for asylum seekers slacken in a few years, the units can be converted to one unit for fewer residents. The purpose of the Pallotti House is to promote or assume the social function in the neighbourhood. A common room on the ground floor which can also be used for children's parties and similar is proposed for the purpose.

Parallel to this, the Siedlungswerk is developing a further housing area for about 800 residents in Neuhausen auf den Fildern. In addition to plots for private homes and row houses and 155 condominium apartments, "Wohnen an den Akademiegärten" will also include 35 rental apartments, supplemented by residential group models and an integrative residential models for refugees with a meeting room for whole neighbourhood.

Text: Friederike Meyer,

aus: Stadtbauwelt 48.2015

<http://www.bauwelt.de/artikel/Postmigrantische-Stadtentwicklung-2480425.html>

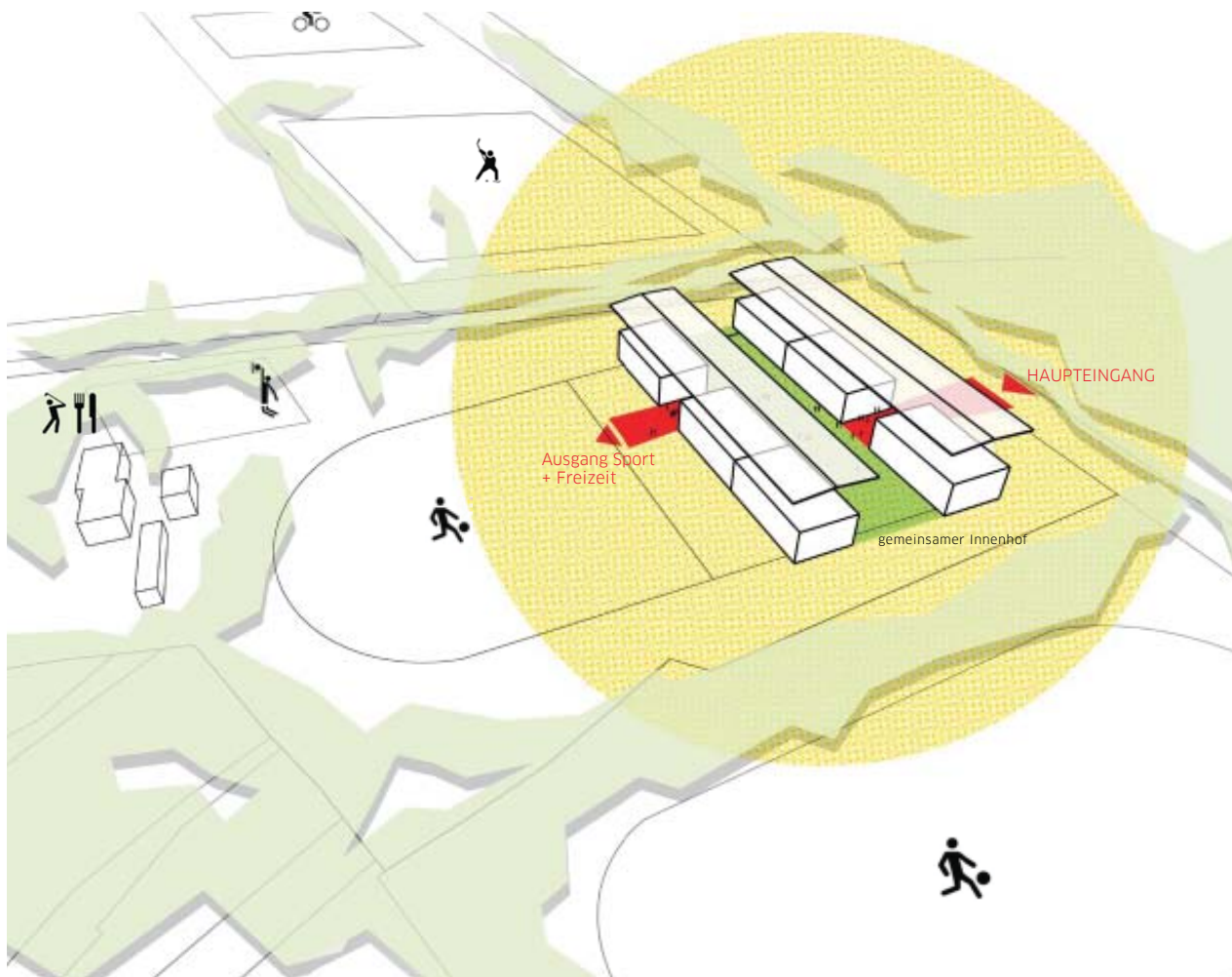


Ground level second, third and upper level



Elevations

SHARED ACCOMMODATION FOR REFUGEES, ESSLINGEN



Schematic view

NUMBER OF RESIDENTS / MODULAR UNITS

approx. 200 people / 10 buildings

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Scheduled completion: April 2017

Lifespan: approx. 5 years

COMMISSIONED BY

District of Esslingen

ARCHITECT

Reichel Schlaier Architekten (LPH 1-9), City of Stuttgart in cooperation with District of Esslingen

CONSTRUCTION FIRM

N/A

BUILDING METHOD

Mass-wall construction: Timber construction in block form

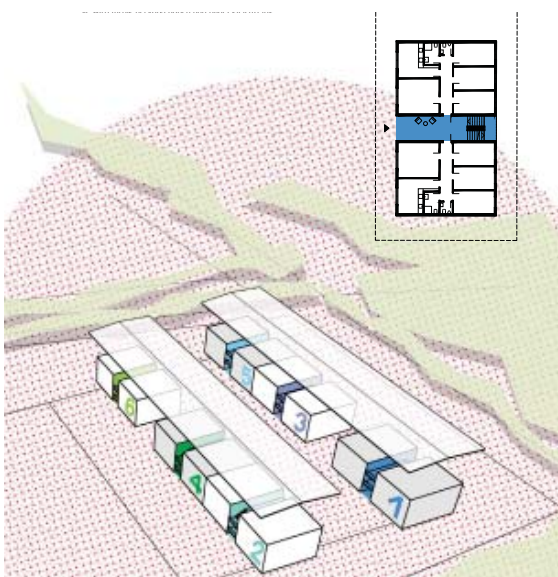
CONSTRUCTION COSTS

N/A

LIVING SPACE PER PERSON

7 m²/person

Total GFA: 4,053 m² (including GIA: 10,570 m³)



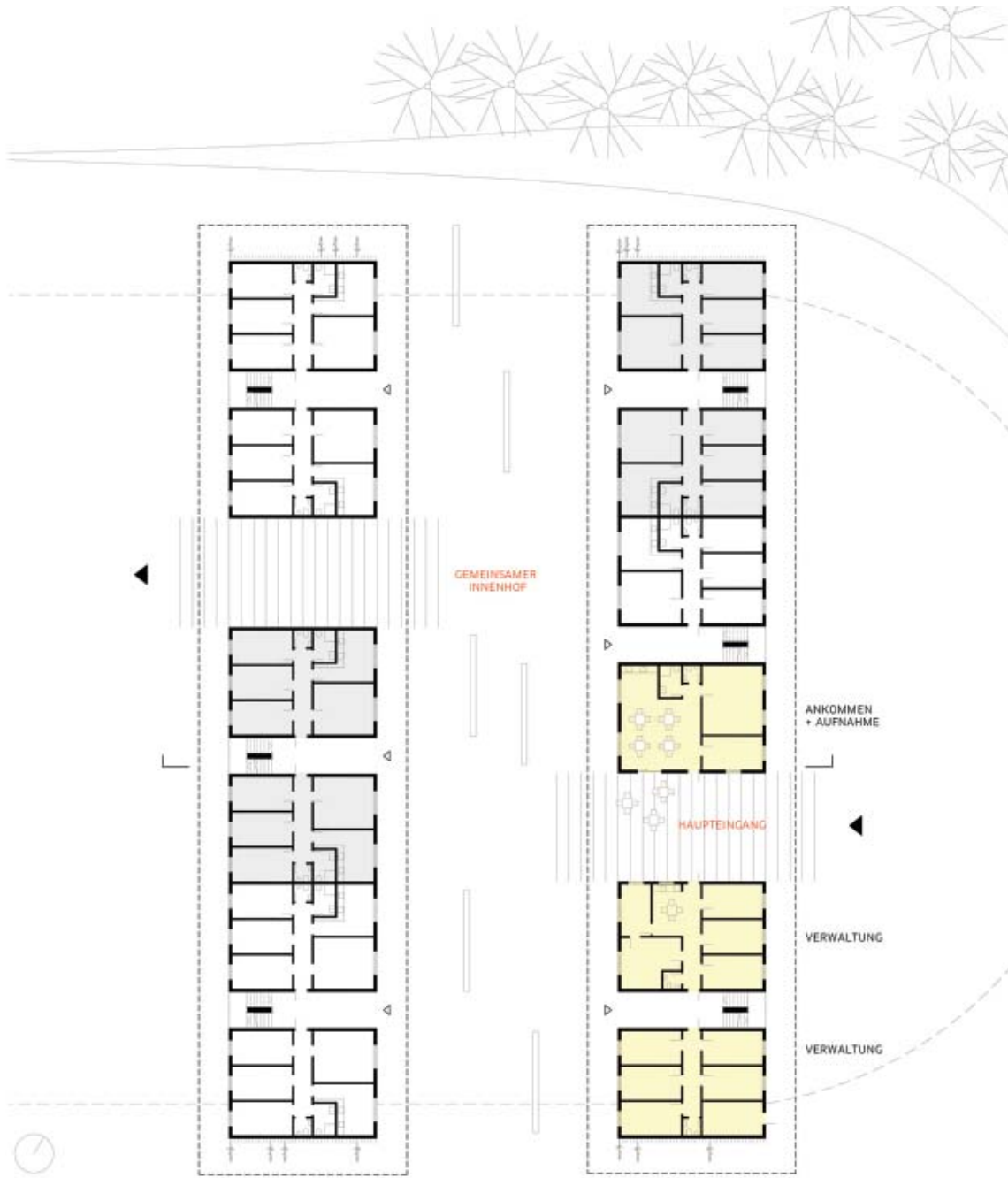
Concept and floor plan, smallest unit

MATERIALIEN

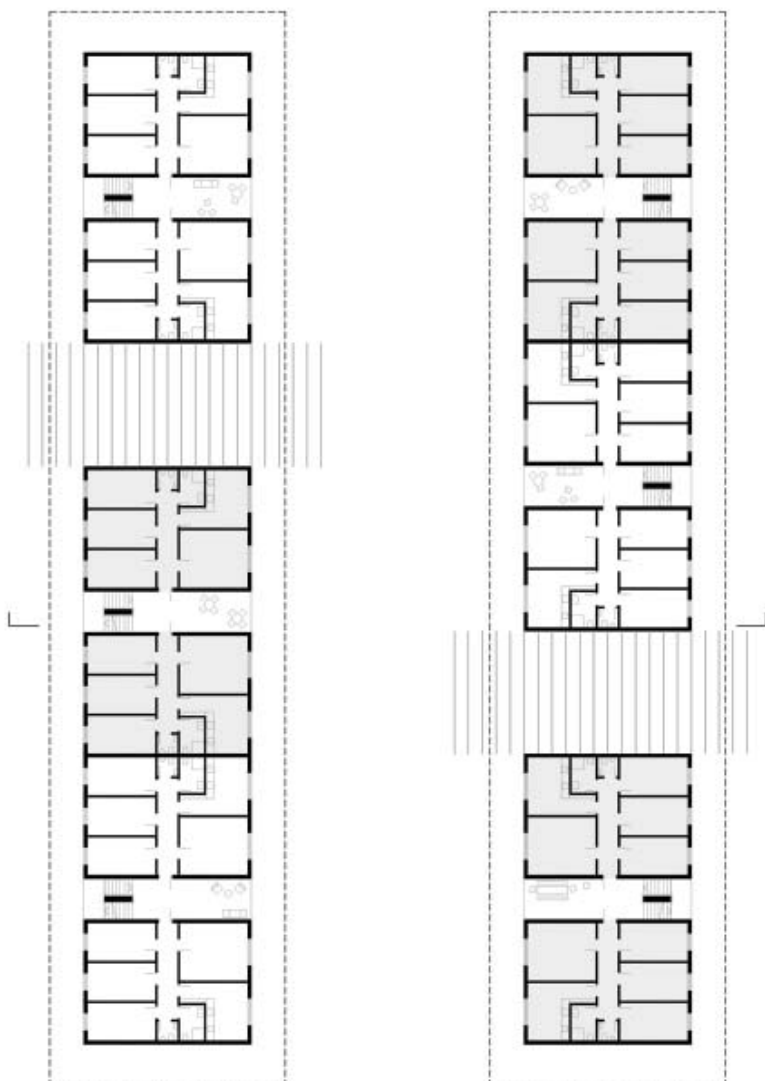




Section



Floor plan, ground floor



Floor plan, second floor

DESCRIPTION

In densely populated areas like the District of Esslingen near Stuttgart, not only is the cost of developable property and empty buildings very high—they are practically impossible to find. This makes it very difficult for builders to find adequate housing space for the enormous number of refugees. In general, authorities are hoping to foster immigration through inner-city density and the construction of smaller units; this is being carried out on a large scale. But larger new building projects, like this shared accommodation for around 300 people, complement this objective.

The YMCA has made a sports field available to the City of Esslingen as a building site. It lies in a popular location within Esslingen, halfway up a hill with a view over the city. It also borders a suburban area and is situated near the Schurwald recreation area with a variety of sports facilities.

The smallest unit is a living unit with a kitchen and bathroom that fits a maximum of 12 people. Apartments are each accessed by an egress connecting two units. The egresses are colorfully highlighted, serving simultaneously as an identification site and a shared communicative space. 6 buildings are under construction.

(Excerpt from project description)

REFUGEE HOUSING, BAD KROZINGEN



Rendering

NUMBER OF RESIDENTS / MODULAR UNITS

80–160 residents / 20 units

RESIDENTS

Asylum seekers, Refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Date of completion: January 2017

Construction time: 5–7 months

Lifespan: 20 Years. Subsequent use possible

COMMISSIONED BY

Bauherren GU Lamb GbR for Mieter Landratsamt Breisgau Hochschwarzwald

ARCHITECT

Zimmerei/Holzbau Lamb

CONSTRUCTION FIRM

Zimmerei/Holzbau Lamb

BUILDING METHOD

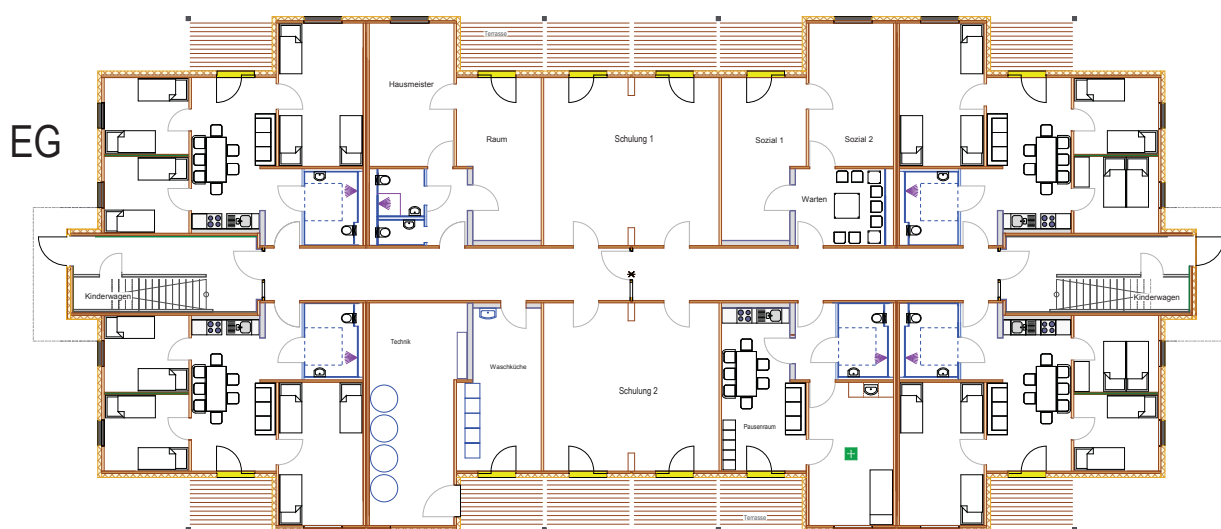
Mass-wall construction: solid wood panels

CONSTRUCTION COSTS

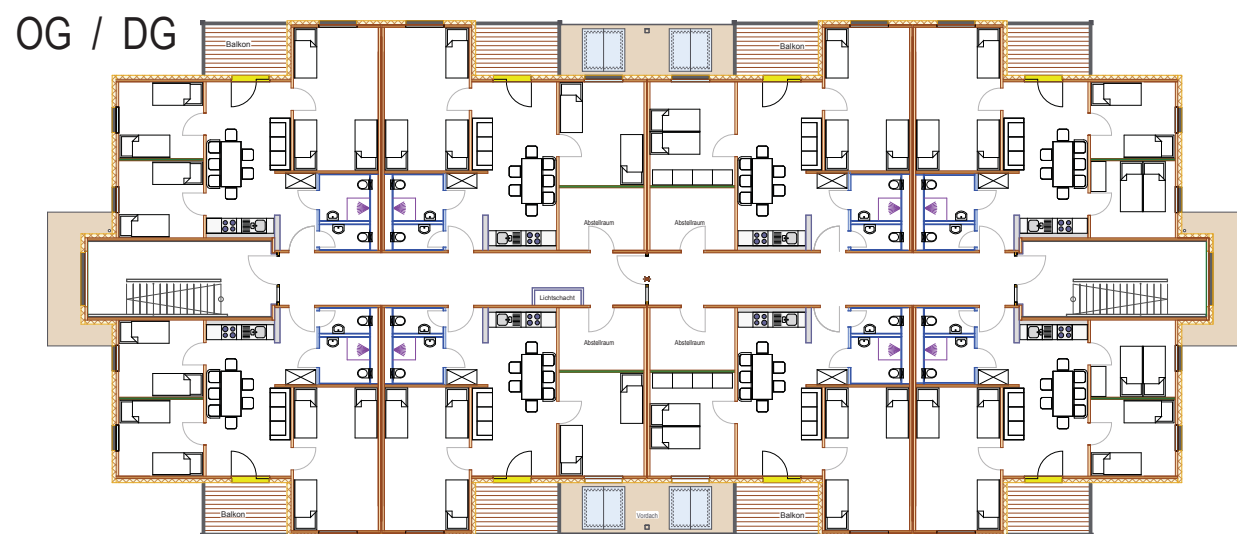
Approx. 1,400 Euro/m²

LIVING SPACE PER PERSON

Based on 4-person occupancy: 16.9 m² GFA; for 8-person occupancy: 8.45 m² GFA



Floor plan, ground floor



Floor plan, attic

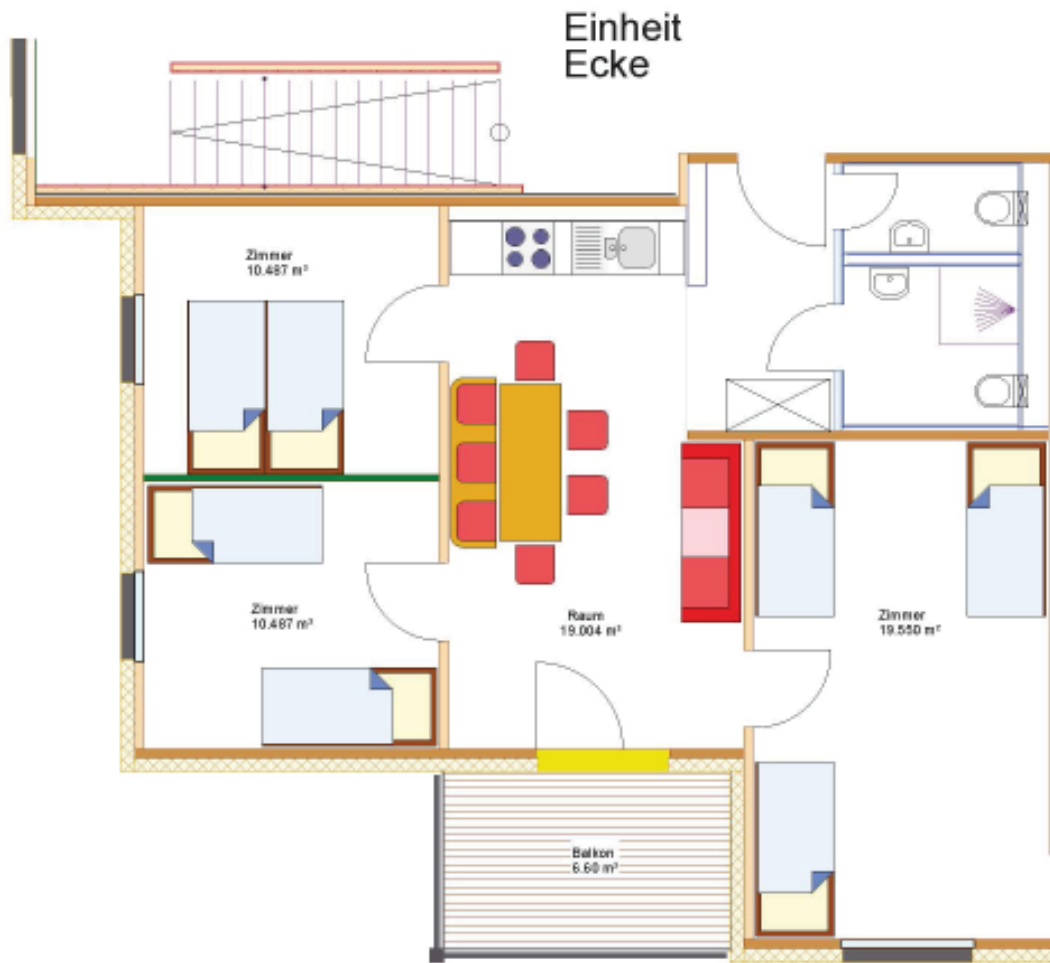


Elevation

DESCRIPTION

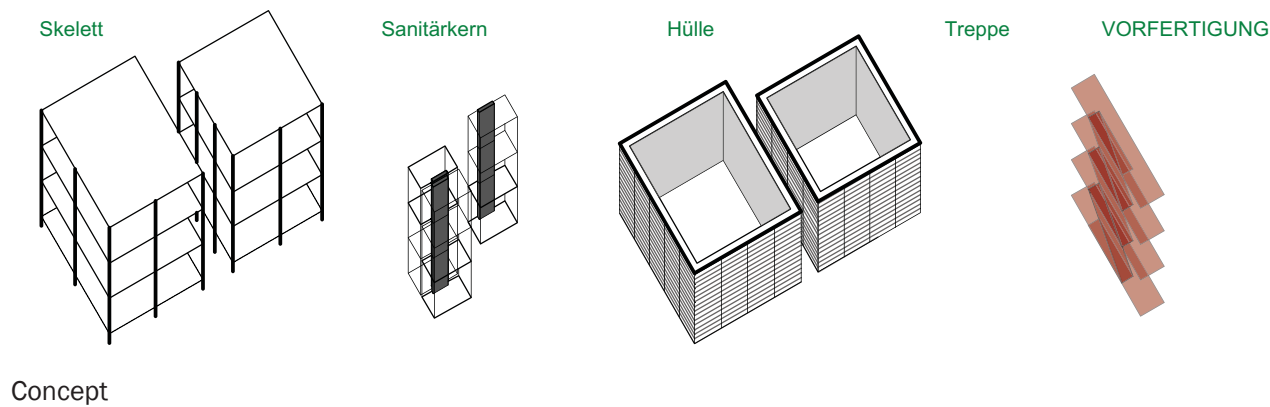
Refugee accommodation will soon be ready in Bad Krozingen, south of Freiburg. The 3-story building encompasses 20 living units for 4 to 8 people, accessible via two internal staircases. Each living unit has a 19 m² kitchen and a 6.5 m² balcony. The plans call for living units with 2 and 3 bedrooms. The four living units on the ground floor are barrier-free. The ground floor also features two 47 m² rooms usable as classrooms or multipurpose rooms. Additionally, the ground floor also features a janitor room, two rooms for social workers, a first aid/examination room with a waiting room, one break room for employees, a laundry room, as well as two storage areas that can fit approx. 8 strollers. The 16 living units in the upper floors and attic all feature a second toilet in addition to the bathroom. Each floor and the attic also contains four 8.5 m² storage spaces. TV connections are available in each unit and the building has a wireless internet connection. The fire safety plan has been drawn up and calls for the installation of a fire-protection system.

(Excerpt from project description)



Floor plan, unit

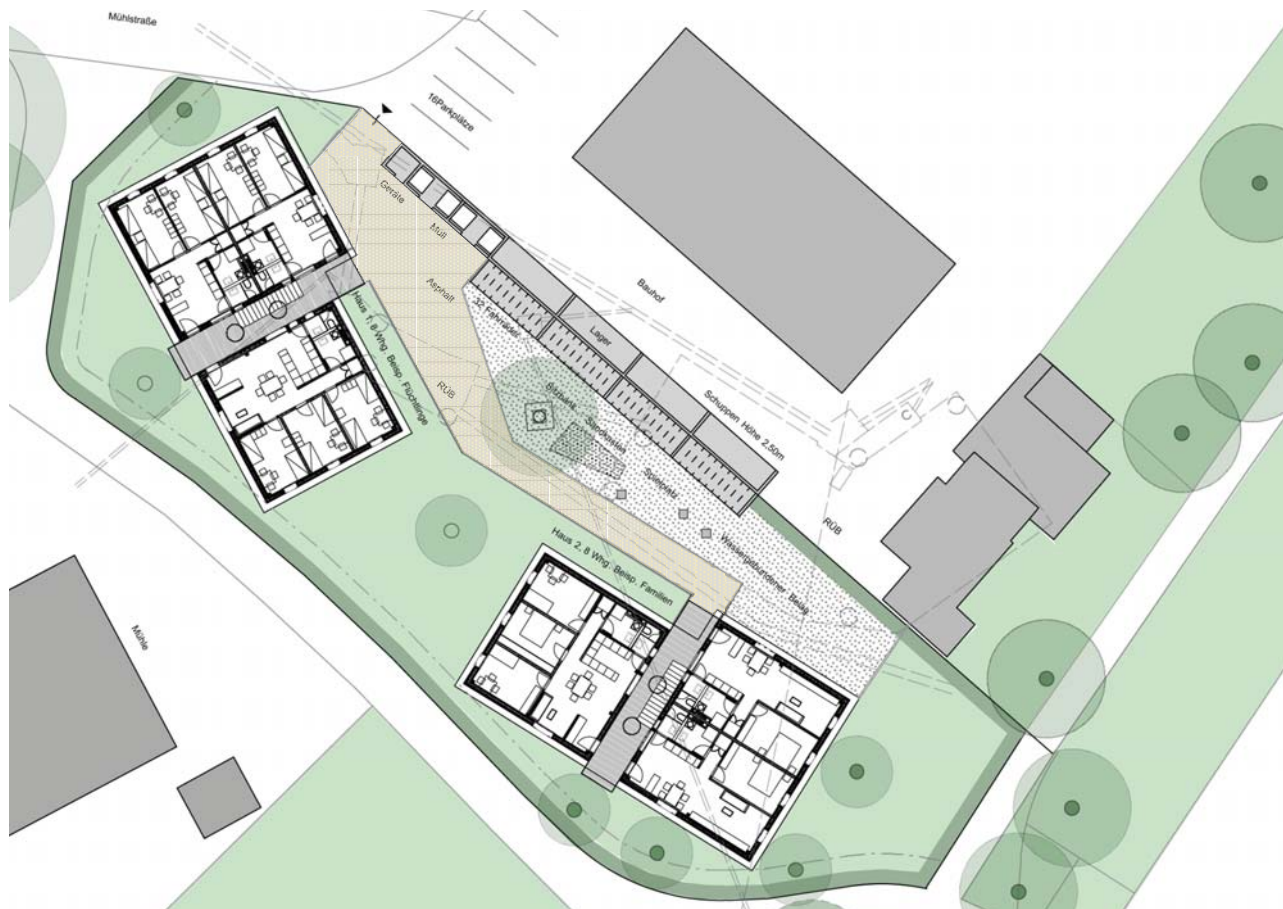
REFUGEE ACCOMMODATION, KÖNGEN



Concept



Rendering



Siteplan

NUMBER OF RESIDENTS / MODULAR UNITS

114 residents / 16 apartments

BEWOHNER

Flüchtlinge mit anerkanntem Status

DATE OF COMPLETION / LIFESPAN

Date of completion: 2017

Lifespan: unlimited

COMMISSIONED BY

Köngen council, Esslingen district

ARCHITECT

Schwarz.Jacobi Arch.BDA, Stuttgart

CONSTRUCTION FIRM

-

BUILDING METHOD

Concrete frame, wooden facade

CONSTRUCTION COSTS

1.726 Euro/m² GFA

LIVING SPACE PER PERSON

9,8 m²

DESCRIPTION

The municipality of Köngen (approx. 10,000 residents) has bought its own property to provide refugees with accommodation once granted refugee status. Reserve property makes it possible to create more living space if needed. The apartments are also meant to be usable as social housing. An effort has been made to employ a concept that is long-term and flexible.

TRANSFER HOUSING, VORARLBERG (A)



Model Design development / Photo: © Andreas Postner

NUMBER OF RESIDENTS / MODULAR UNITS

25–60 residents

RESIDENTS

Asylum seekers, refugees with recognized refugee status, locals

DATE OF COMPLETION / LIFESPAN

Date of completion: N/A

Lifespan: 5 to 10 Years

After 5 to 10 years houses can be used by local municipalities as social housing

COMMISSIONED BY

Communal housing associations and cooperatives

ARCHITECT

Andreas Postner, Konrad Duelli, Hermann Kaufmann
Partner: Voralberger Holzbaukunst

CONSTRUCTION FIRM

Local wood construction companies

BUILDING METHOD

Raummodule aus Holz

CONSTRUCTION COSTS

N/A

LIVING SPACE PER PERSON

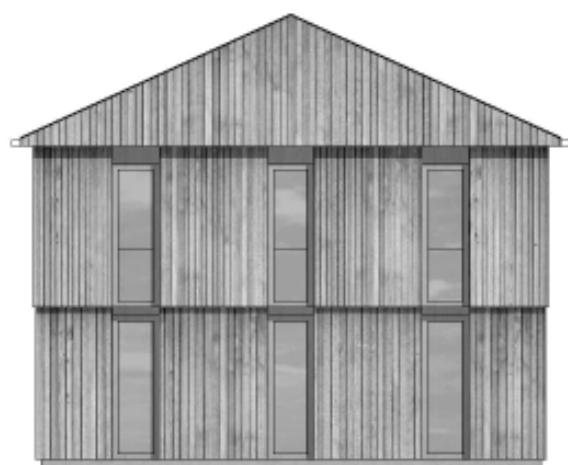
8.97 m² (without common spaces)

DESCRIPTION

Building as an integration exercise.

There are 96 communities in the Austrian state of Vorarlberg. About 4,000 people are in search of housing, and the asylum seekers – in Austria the number is increasing daily – only serve to aggravate the situation. The concept developed by three local architects Andreas Postner, Konrad Duelli and Hermann Kaufmann in cooperation with the Vorarlberg timber construction industry, has an alluring role model effect. They propose houses made of wood: equally suitable for refugees and local residents.

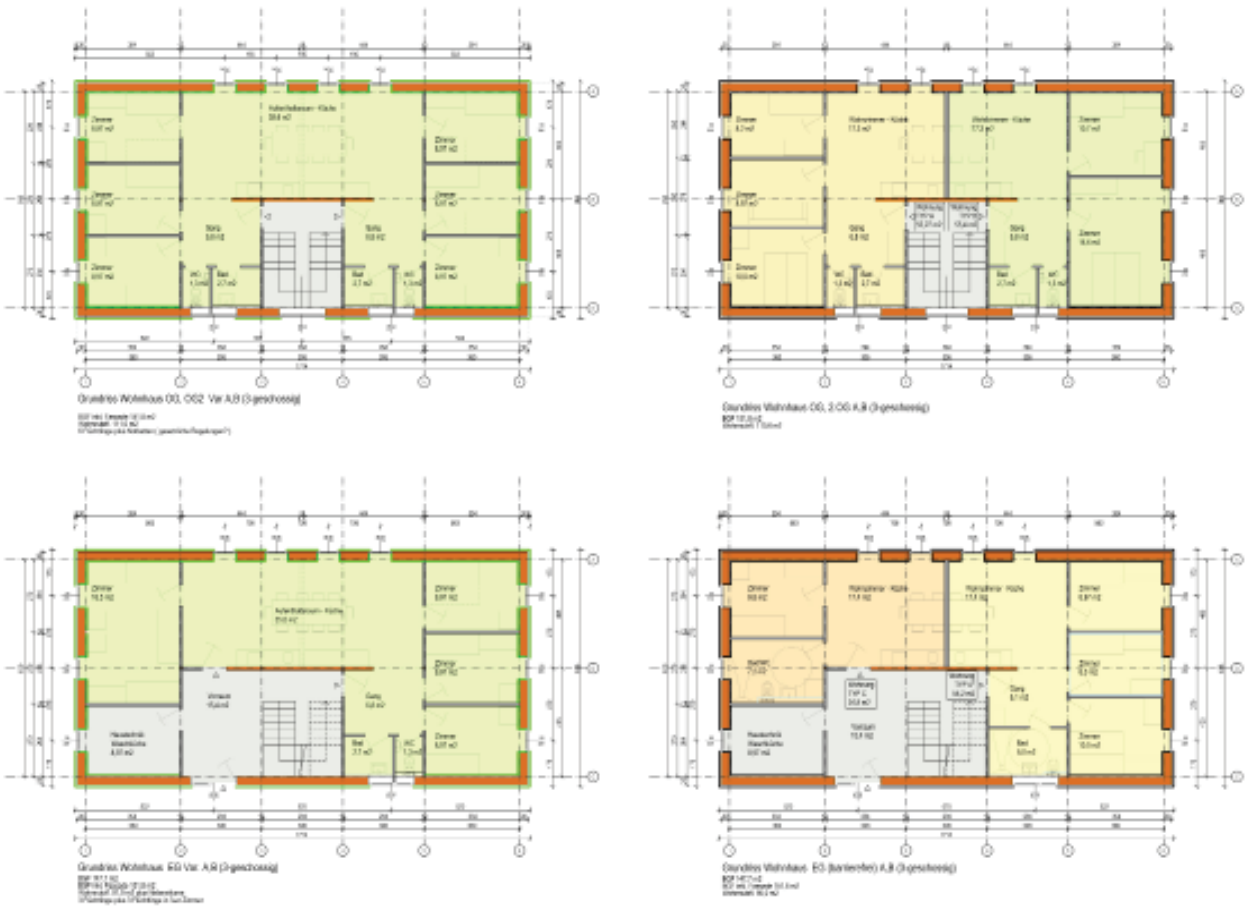
The initiators see housing construction not only as the fulfilment of demand, but as a basic integration element. According to their reasoning, the contracts could be distributed among about 60 Vorarlberg timber construction companies. That will strengthen the regional economy and acceptance for the new residents in the population. Designs already exist for building typologies in the country and in the city. In rural areas no more than 25 to 30 persons should live in two two-storey houses. Three-storey houses for 50 and more persons are proposed in denser urban agglomerations. Here again, however, the number of refugees to be integrated in one location should not exceed 30 persons. The majority of apartments will go to Vorarlberg apartment seekers.



Elevations

Wohnnutzung Flüchtlinge

Wohnnutzung Mietwohnungen



Ground floor variant A and B



Ground floor variant C

The initiators also recommend laying out gardens which can be tended by the refugees together with the local population, permaculture initiatives and local fruit and gardening associations. Furniture (mainly tables and chairs) originating from local recycling initiatives will be repaired and restored by the residents themselves.

With the instrument of the building rights contract, an agreement for a specific term between the developer and property owner, the support of dioceses, parishes, state, municipalities and housing cooperatives has already been won. After five to ten years – depending on requirements – the right to use these buildings as social housing for first-time or emergency accommodation reverts to the municipality. After fifty years the property is returned to the original owner. The Bishop of Vorarlberg, Benno Elbs, has already offered to provide suitable land. The State of Vorarlberg is likewise supporting the project with an amendment to the conditions of subsidy.

The standards applicable to housing subsidies have already been simplified for the construction of the first 150 dwellings. For the architects this means that they can build to the minimum standards applicable in Austria and, for example, dispense with underground parking. They need provide only minimal parking spaces and erect a kind of shell construction, e.g. with varnished OSB panels and visible installations which the residents can finish themselves. The exchange of skills and related interaction promote integration.

The project launch involved serious communication work for the architects, who had to demonstrate solutions and overcome prejudices. But that is precisely what the project is about. Although individual aspects of their proposal have already been practised elsewhere, it is the combination of ideas which are tailored to the special needs of the region that make the idea so convincing and transferable to other locations.

Text: Friederike Meyer,
 from: Stadtbauwelt 48.2015
<http://www.bauwelt.de/artikel/Bauen-als-Integrationsuebung-2480256.html>

ARRIVAL SITE, MUNICH



Rendering, back side and garden



Rendering, back side and garden



Rendering new event hall

NUMBER OF RESIDENTS / MODULAR UNITS

240 people / 4 buildings

RESIDENTS

Refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Originally December 2016. The project will not be realized.

COMMISSIONED BY

Wolfgang Nöth; Department for Housing and Migration, Munich

ARCHITECT

Kollektiv A (Jonas Altmann, Benedict Esche, Lena Kwasow), Berlin

CONSTRUCTION FIRM

N/A

BUILDING METHOD

Prefabricated wooden room modules

CONSTRUCTION COSTS

Total cost: approx. 3,800,000 Euro

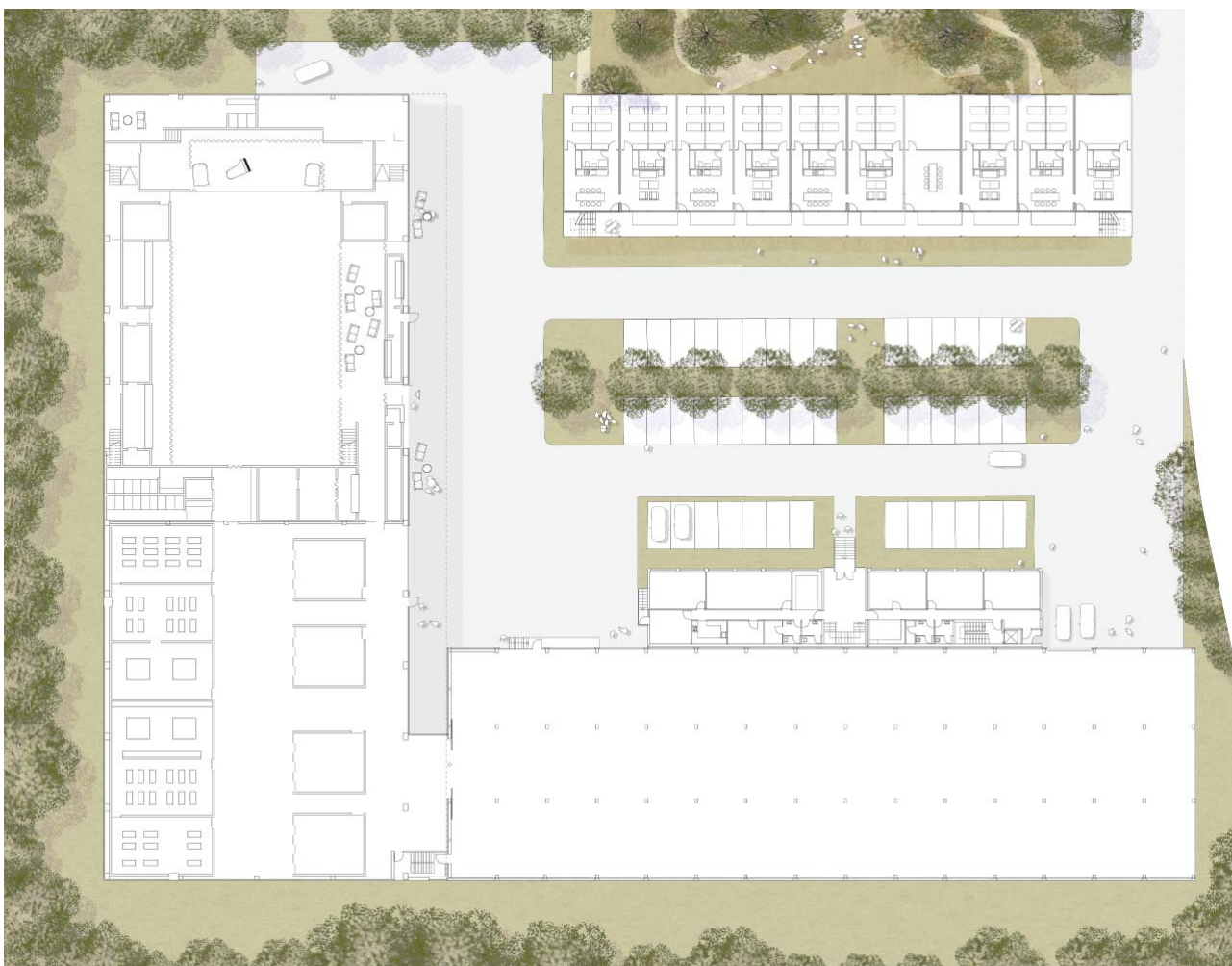
LIVING SPACE PER PERSON

8,5 m²/person

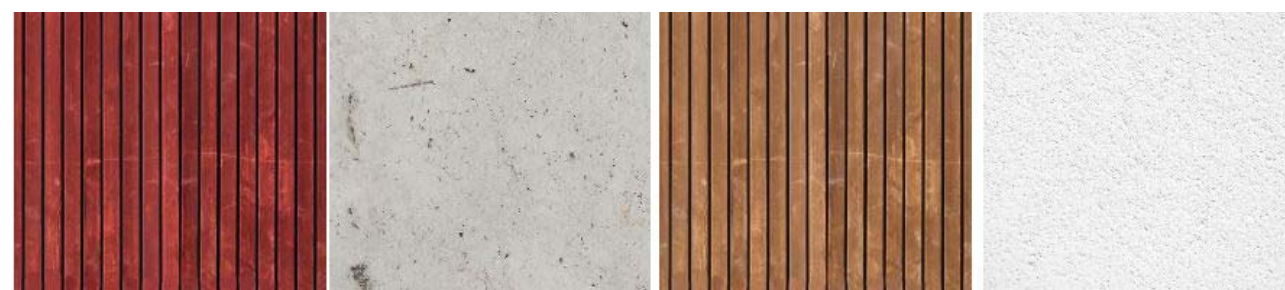
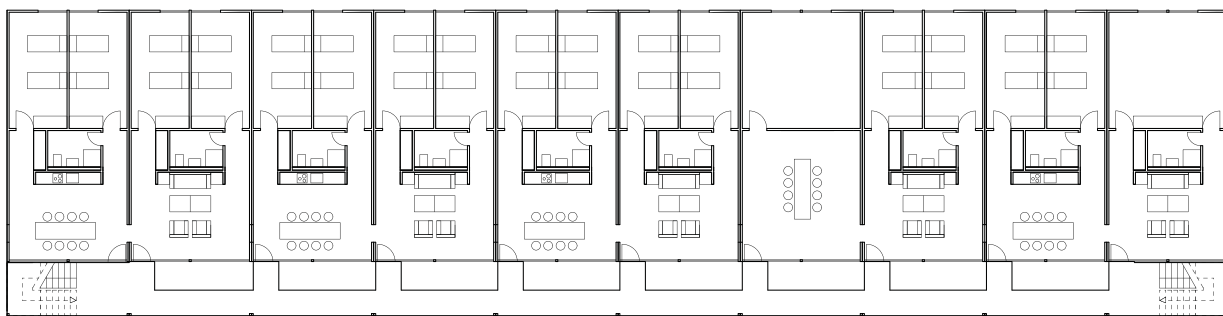
GFA: 2,223 m², usable area: 2,050 m²



Rendering Exterior view



Site plan and floor plan



Materials

DESCRIPTION

Experiment in a mixed-use zone

Recognised refugees who are allowed to remain in Germany must often spend a considerable time in community lodgings. The Munich housing market is tense; lack of networks and language skills further impede the search for an apartment. Restaurant owner Wolfgang Nöth, initiator of the club area "Kunstpark Ost", is planning a "place of arrival" for this group of immigrants in Munich that should offer more than just affordable accommodation.

In cooperation with the Department of Housing and Migration he wants to develop the former premises of a timber merchant in the Johanneskirchen district into a colourful quarter with studios, concert hall, workshops, social facilities and living accommodation. The young Berlin architects' office Collective A has been commissioned with the planning of the 13,000 m² site, located in a mixed-use zone. The planned uses are distributed over four existing buildings which form a courtyard: the 7,000 m² former production hall is to be converted to a venue with a stage, exhibition space, studios and open workshops (Fab Lab). An office building is to accommodate the administration, an advice centre of the Department of Housing and Migration, child care and a language school. Instead of the hall on the south side of the site, the architects have planned a residential building that assumes the cubic volume, foundation slab and 6-metre grid of the existing concrete structure: three floors with serially arranged living units and a common room on the ground floor, generously-sized access balconies to the yard and a vegetable garden on the south side. The 68 m² dwelling units are accessed via the kitchen/living room. In the middle is an internal bath, to the south two rooms intended for double occupancy, so that initially a total of 240 residents can be accommodated. The prefabricated wood modules have a floor area of 6 x 12.5 metres and can also be joined together to form larger units.

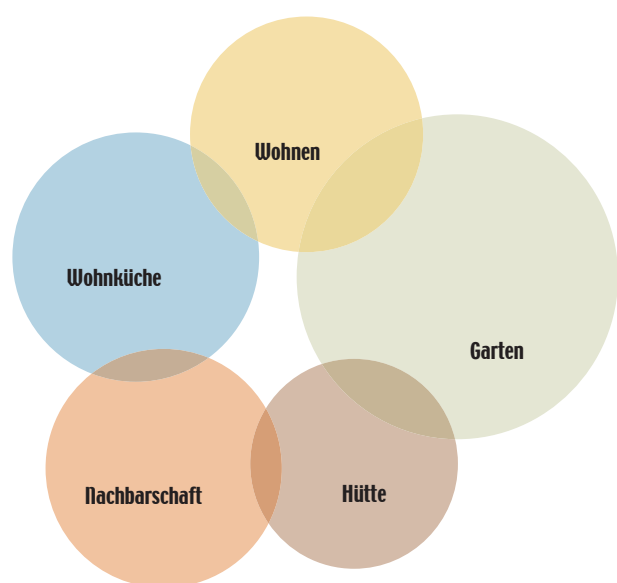
The architects have calculated an investment of € 3.8 million; a second phase with studios and small businesses is envisaged. The Department of Housing and Migration is expected to act as lessee and manager of the residential and administration building for ten years – a time horizon with which many local authorities are currently planning. After this time renewal applications can be submitted, so that private investors may count on amortisation of the construction sum within twenty years. The community of immigrants and creative artists is an experiment of the type one would wish to see more of. In architectural terms the "Place of Arrival" promises to be a neighbourhood that endures longer than ten years.

Text: Doris Kleilein

from: Stadtbauwelt 48.2015

<http://www.bauwelt.de/artikel/Experiment-im-Mischgebiet-2480444.html>

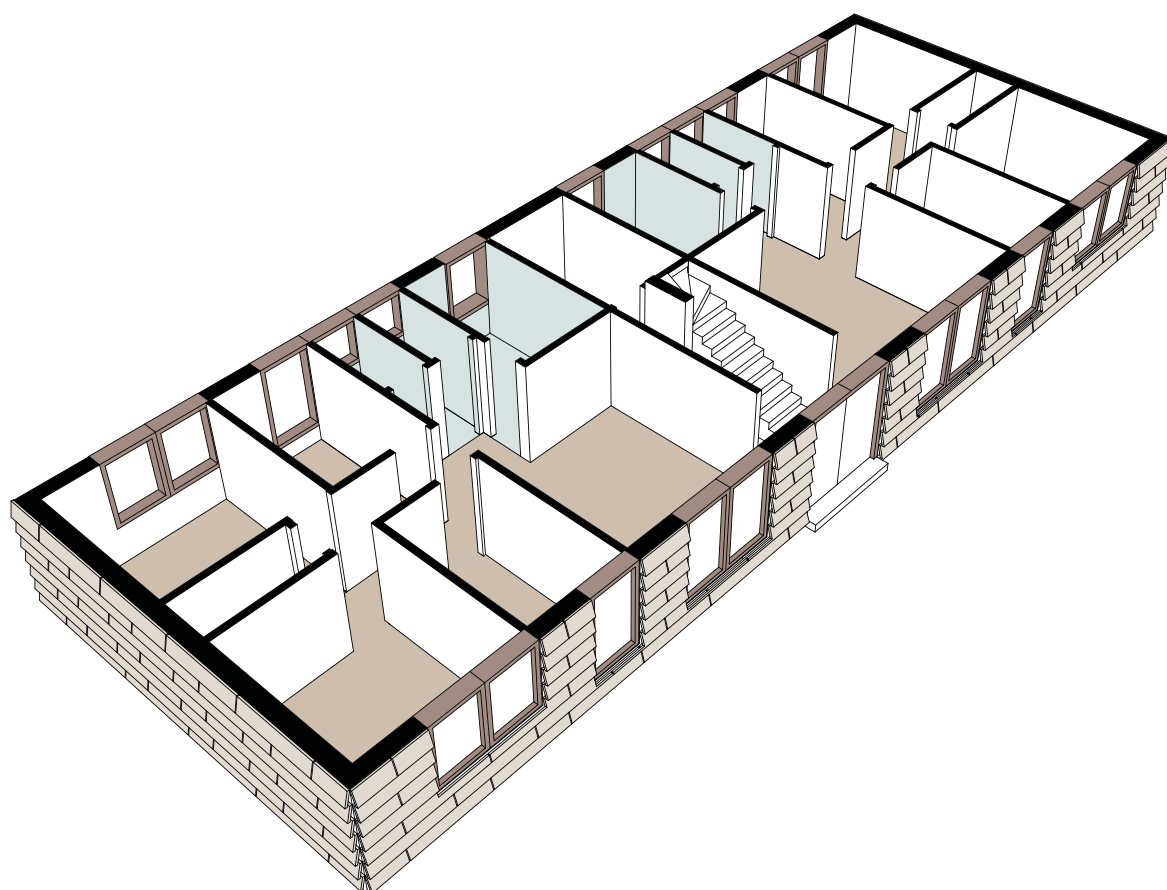
GROUP HOUSING FOR REFUGEES, STEPHANSKIRCHEN



Concept



Exterior view, rendering



Model

NUMBER OF RESIDENTS / MODULAR UNITS

24 residents / 1 building with 4 apartments

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Originally May 2016. The project will not be realized.

COMMISSIONED BY

Maria and Rudolf Finsterwalder

ARCHITECT

Finsterwalder Architekten, Stephanskirchen

CONSTRUCTION FIRM

Rottmüller Systemholz

BUILDING METHOD

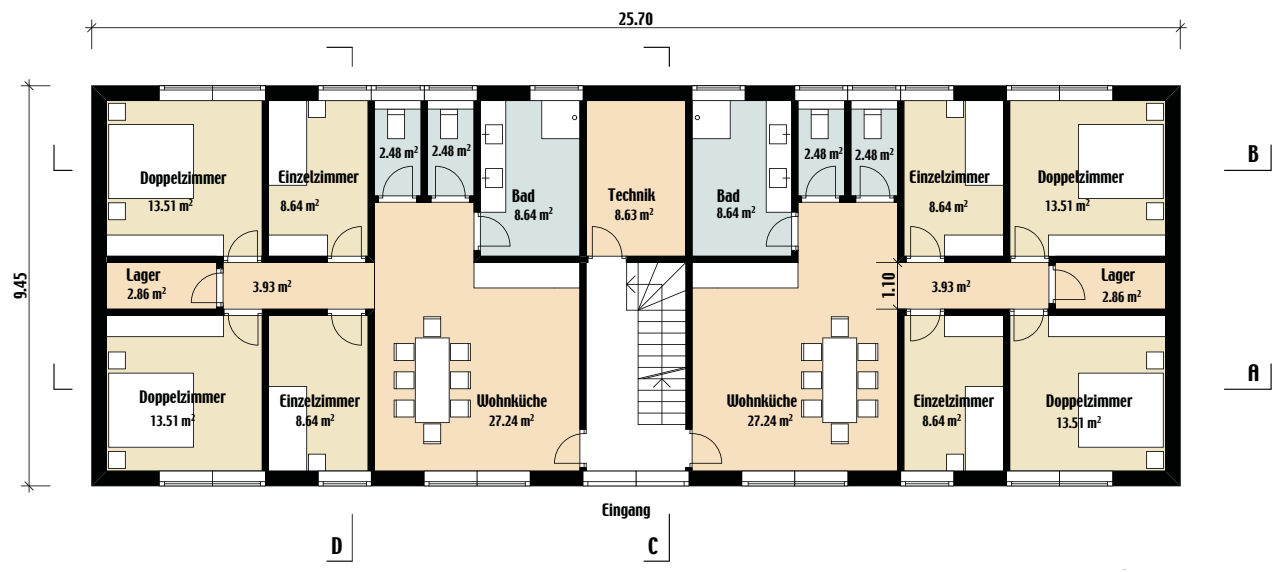
Prefabricated room modules: wood

CONSTRUCTION COSTS

1,074 Euro net/m² GFA

LIVING SPACE PER PERSON

15.3–20.2 m² GFA/person



Floor plan, ground level

DESCRIPTION

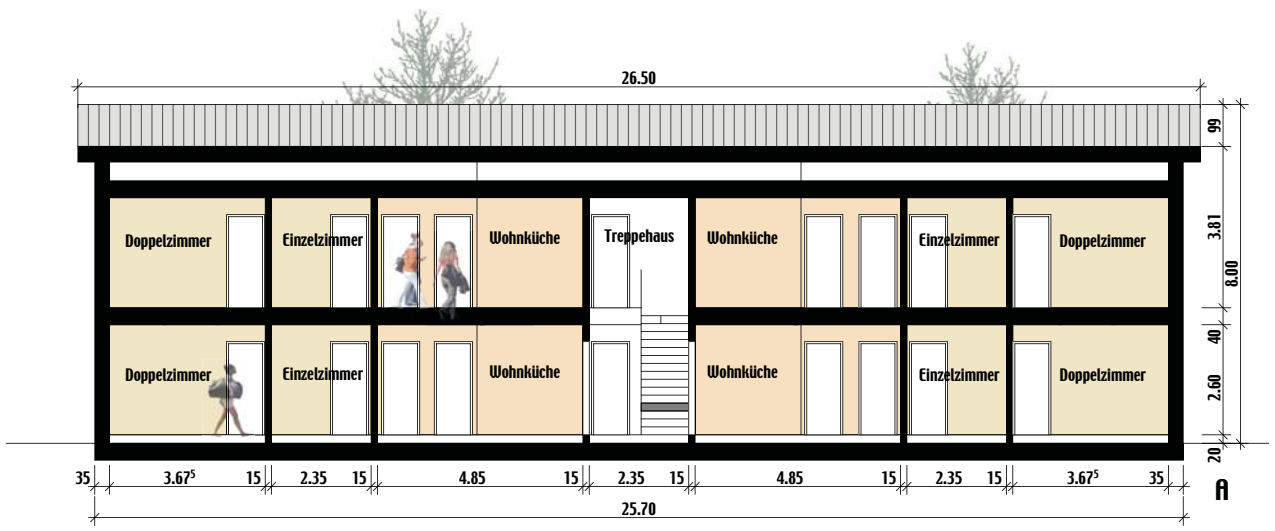
The 2-story building is connected via a central staircase. Each unit has individual rooms and a spacious living/dining area as a meeting point. The building features an extra room for meetings, doctors' appointments, etc. Rooms were prefabricated by the carpenters in complete form, including the windows, doors, and fittings. The high degree of prefabrication ensures low costs and rapid construction time.

Excellent insulation (meeting the KFW-70 efficiency standard) leads to low maintenance costs and optimal heating facilities.

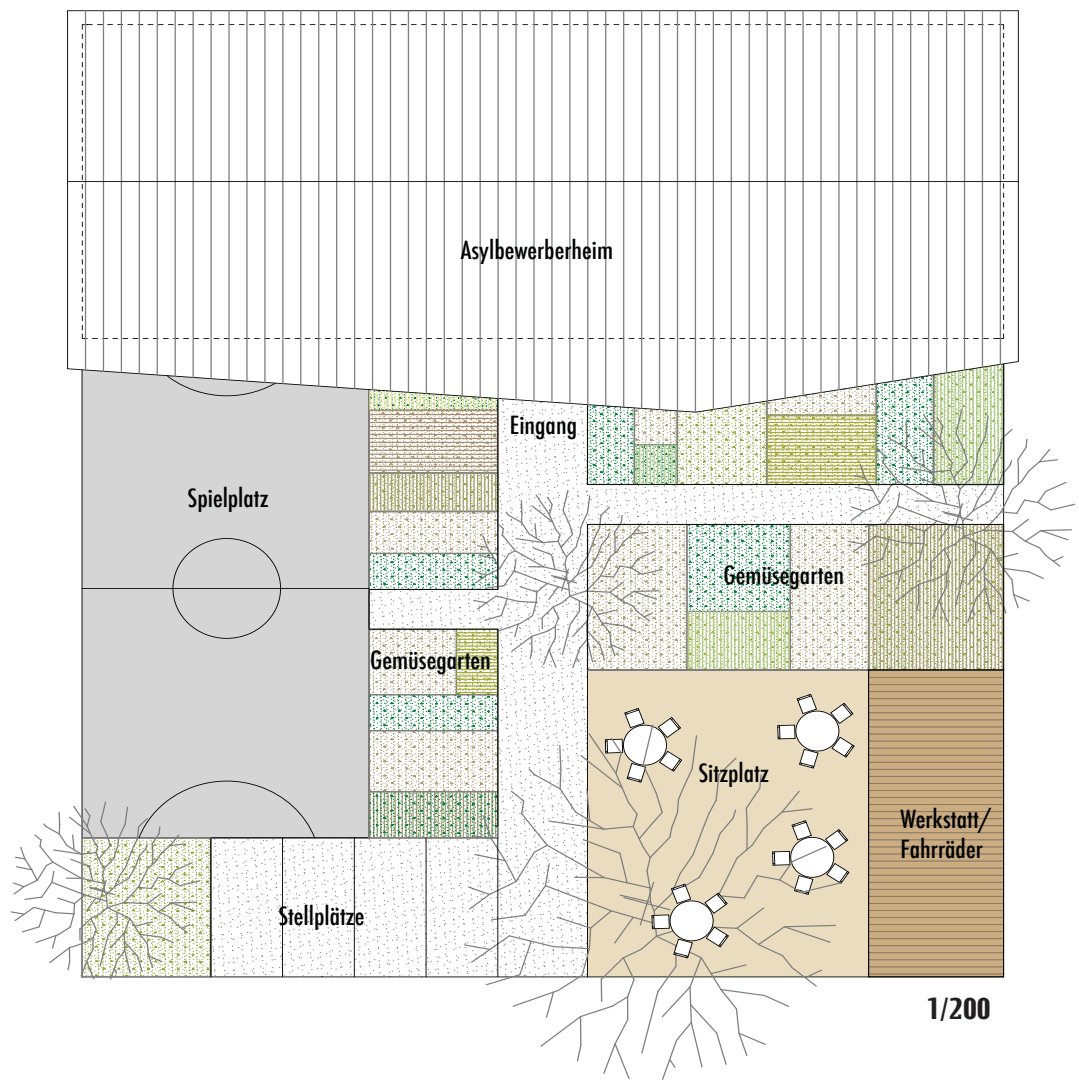
Meets a high standard of heat insulation, sound insulation, and construction.

The recreation space surrounding the building is of central importance. The plans call for a 400–500 m² space featuring a playground and garden.

(Excerpt from project description)



Section



Garden facility

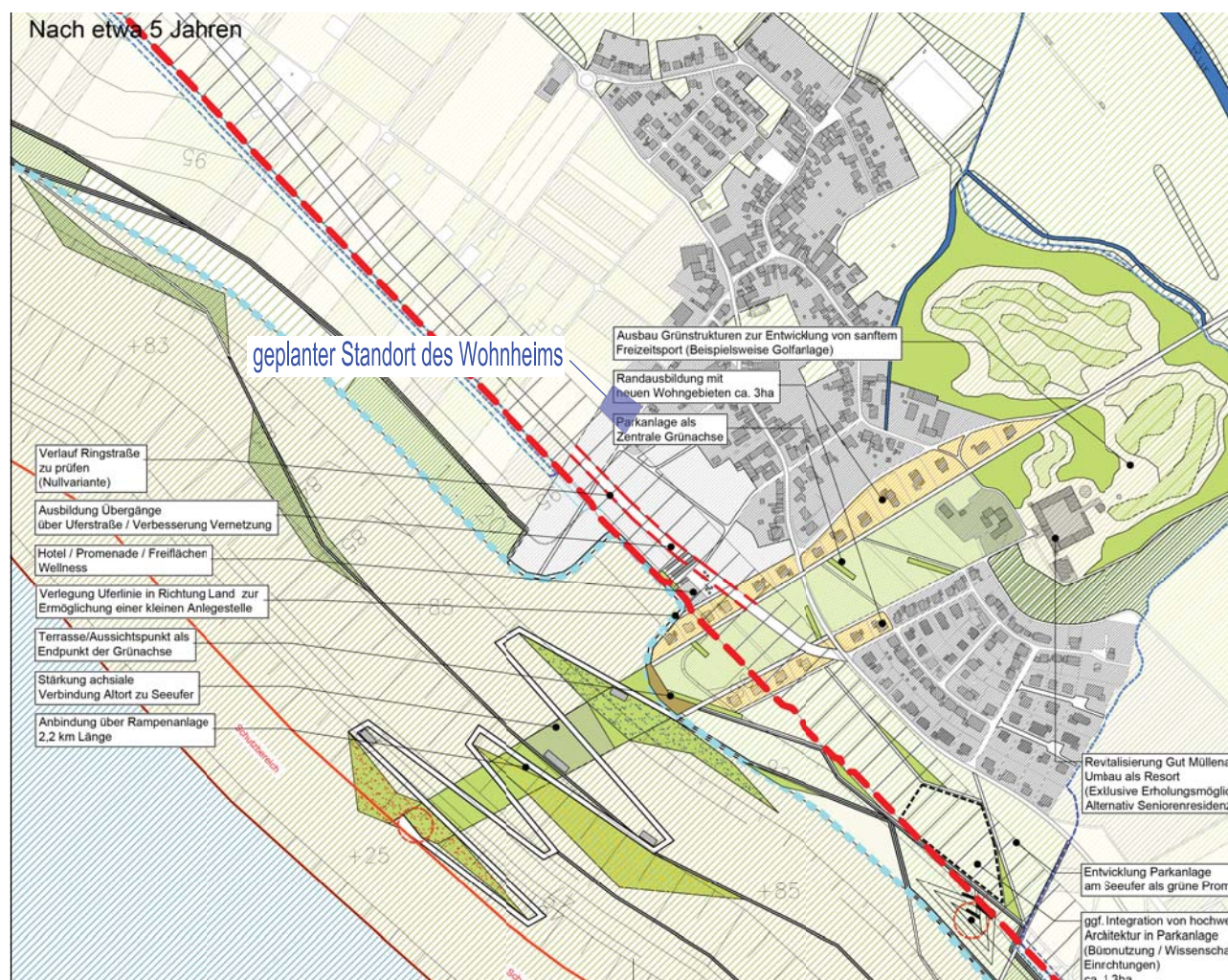
MULTIFAMILY HOUSING, INDEN



Rendering, exterior view



Rendering, exterior view



Site plan: Structural transformation of the municipality of Inden likely to take place 5 years after completion of building

NUMBER OF RESIDENTS / MODULAR UNITS

Up to 50 residents / 8 living units

RESIDENTS

Asylum seekers, refugees with recognized refugee status

DATE OF COMPLETION / LIFESPAN

Originally November 2016, subsequent use possible as vacation flats, student apartments or for employees of nearby research center. The start of construction has been postponed. The building will likely be cancelled.

COMMISSIONED BY

Municipality of Inden, Aachener Stiftung Kathy Beys, indeland Entwicklungsgesellschaft

ARCHITECT

Architektur Hammers, Inden

CONSTRUCTION FIRM

N/A

BUILDING METHOD

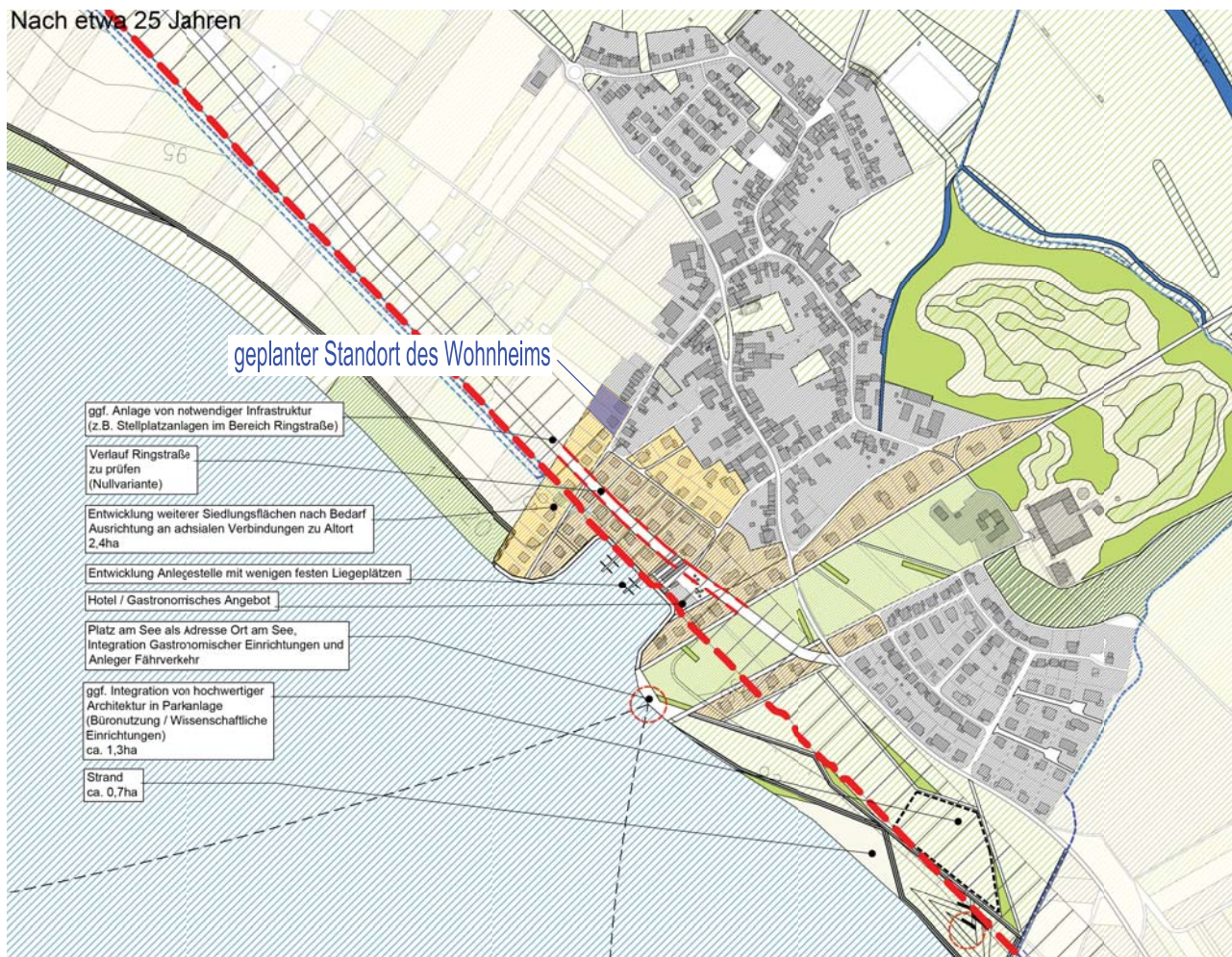
Timber frame construction

CONSTRUCTION COSTS

1,300 Euro/m² GFA

LIVING SPACE PER PERSON

15.1 m²/person



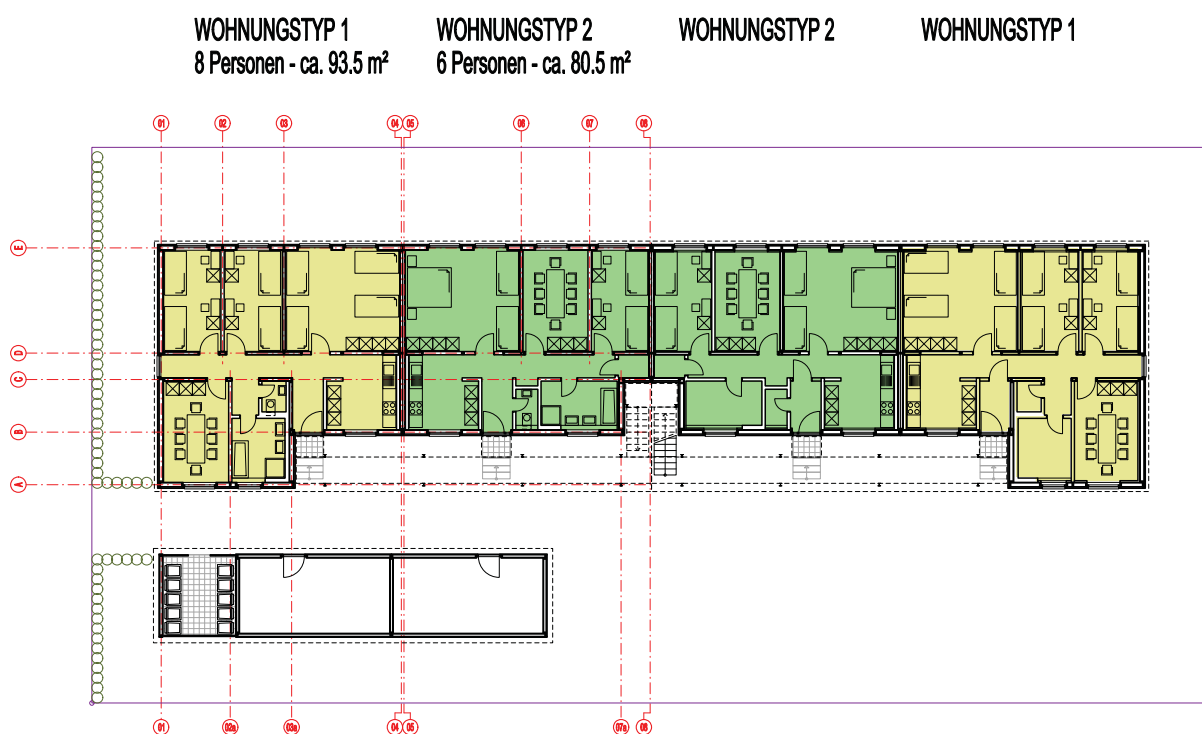
Site plan: Structural transformation of the municipality of Inden likely to take place 25 years after completion of building

DESCRIPTION

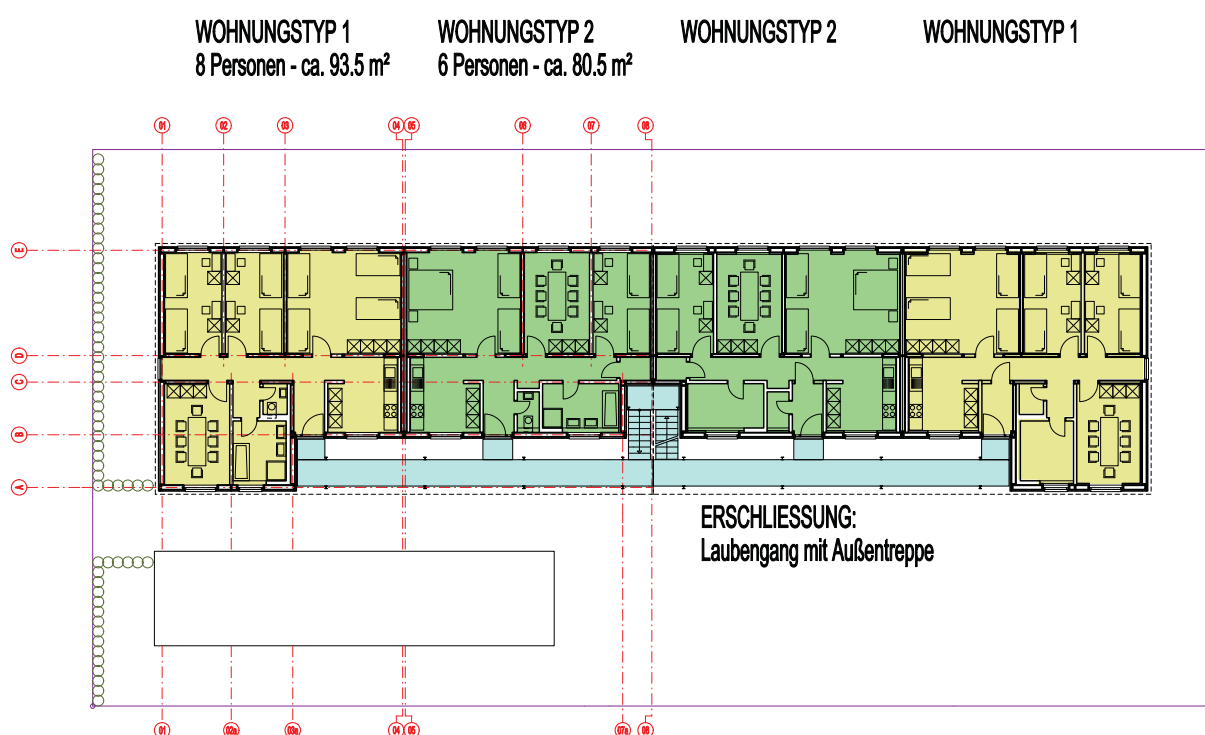
The municipality of Inden is a small rural district with around 8,000 residents in the brown-coal fields of the Rheinland. The Inden opencast mine covers nearly two-thirds of the municipality's land and is the primary economic force in the region. Beginning in 2030, the Inden mine will be subsequently turned into the Inden lake, which will be nearly the size of the Tegernsee, will be put to new use.

Architecturally, the building is meant to conform with the built forms typical of the village. With little conversion or renovation effort, the building can be turned into a family apartment or vacation flat.

(Excerpt from project description)



Floor plan, ground floor



Floor plan, second floor

SHARED ACCOMMODATION, LÖRRACH



Sketch



Site plan and floor plan, ground floor



South elevation

NUMBER OF RESIDENTS / MODULAR UNITS

200 people / 18 living units

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Originally December 2017. The project will not be realized.

COMMISSIONED BY

District of Lörrach

ARCHITECT

Arge: K9 Architekten GmbH and Architekturbüro Herzog GmbH, Freiburg

CONSTRUCTION FIRM

Not yet determined

BUILDING METHOD

Community building: timber
Residential buildings: mass-wall construction

CONSTRUCTION COSTS

1,239 Euro/m² GFA (not including Caritas management building)

LIVING SPACE PER PERSON

18,15 m²/person



West elevation



Section elevation, west

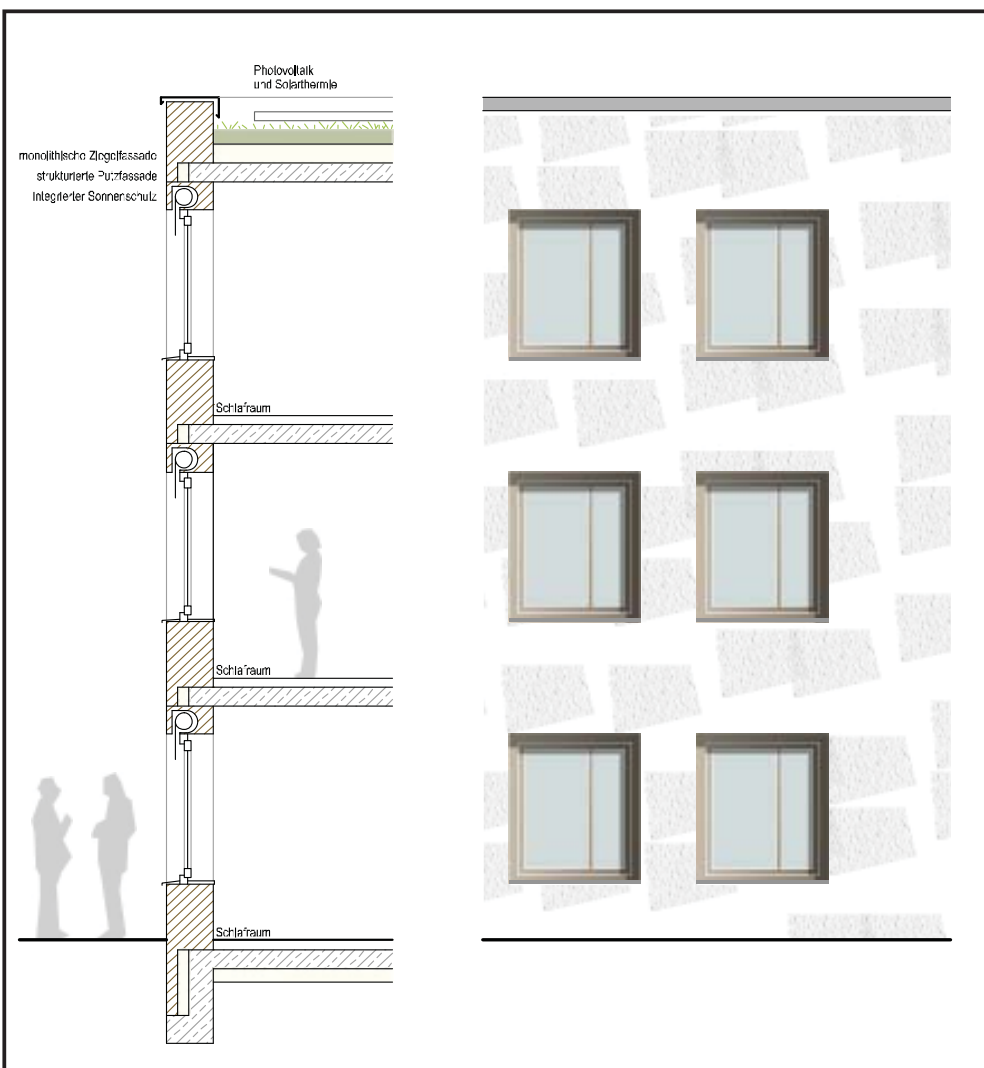
DESCRIPTION

The new headquarters of the Caritas Association and as well as its social station will continue to figure prominently, standing in the foreground of the existing roundabout with its sand courtyard. In the rear, set a little deeper back, a shared accommodation will be constructed facing the kindergarten. The entrance pavilion with the administration and group rooms is planned as a meeting place and neighborhood center.

(Excerpt from project description)

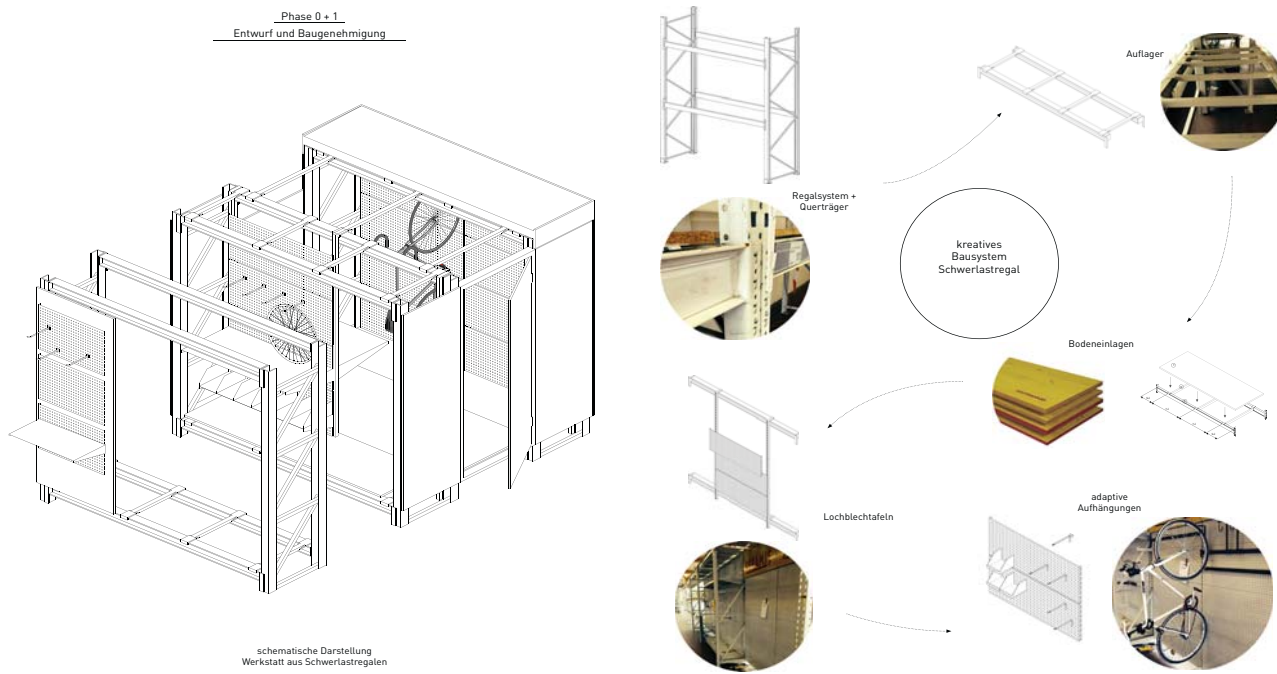


Floor plan, 4-family apartment



facade section with partial elevation of a residence building

BICYCLE WORKSHOP FOR ASYLUM SEEKERS, KARLSRUHE



Schematic illustration of heavy-duty shelving in workshop

NUMBER OF RESIDENTS / MODULAR UNITS

1 Modul

USERS

Asylum seekers, refugees with recognized status, all citizens of Karlsruhe

DATE OF COMPLETION / LIFESPAN

Date of completion: May 2015

Lifespan: minimum of 5 years

COMMISSIONED BY

Freundeskreis Asyl Karlsruhe e.V.

ARCHITECT

bikeswithoutborders, Karlsruhe

CONSTRUCTION FIRM

bikeswithoutborders, Karlsruhe

BUILDING METHOD

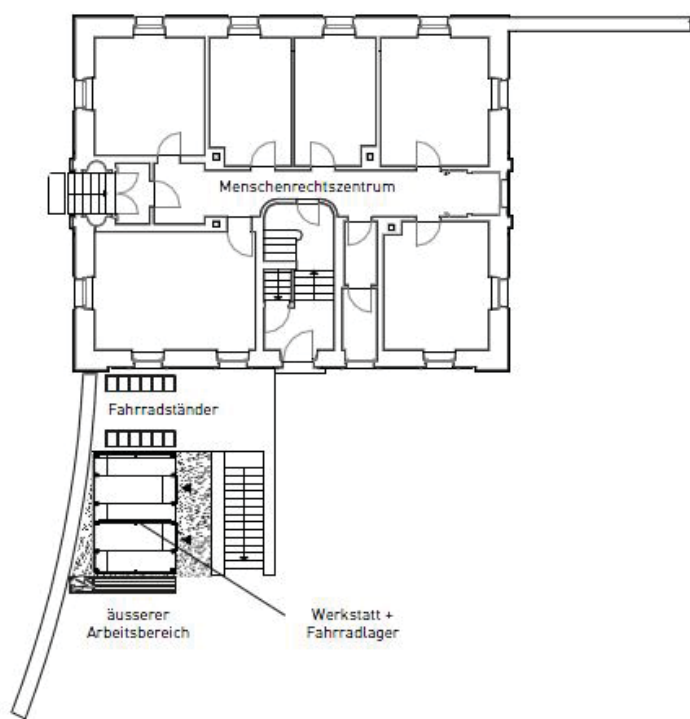
Heavy-duty shelving, multiwall polycarbonate sheets

CONSTRUCTION COSTS

approx. 5,000 Euro

DESCRIPTION

“bikeswithoutborders” collects old bikes and repairs them in order to provide them free of charge to immigrants—especially refugees. The project is open to everyone, inviting refugees to come into contact with Karlsruhe residents and fiddle tinker with bikes together



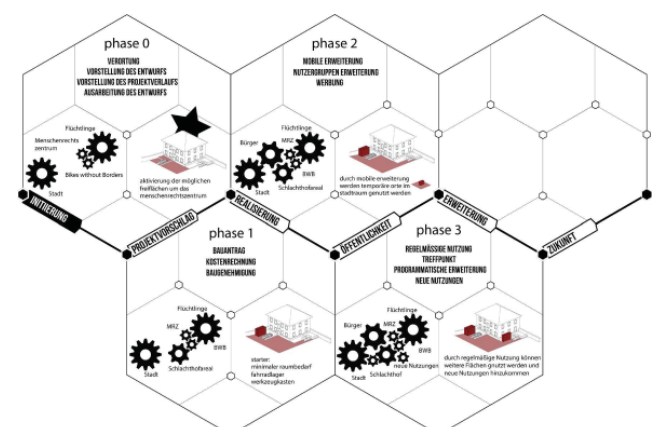
Floor plan



Construction / Photo: © Lorenz del Chin



Bicycle repair shop / Photo: © Tobias Fleiter

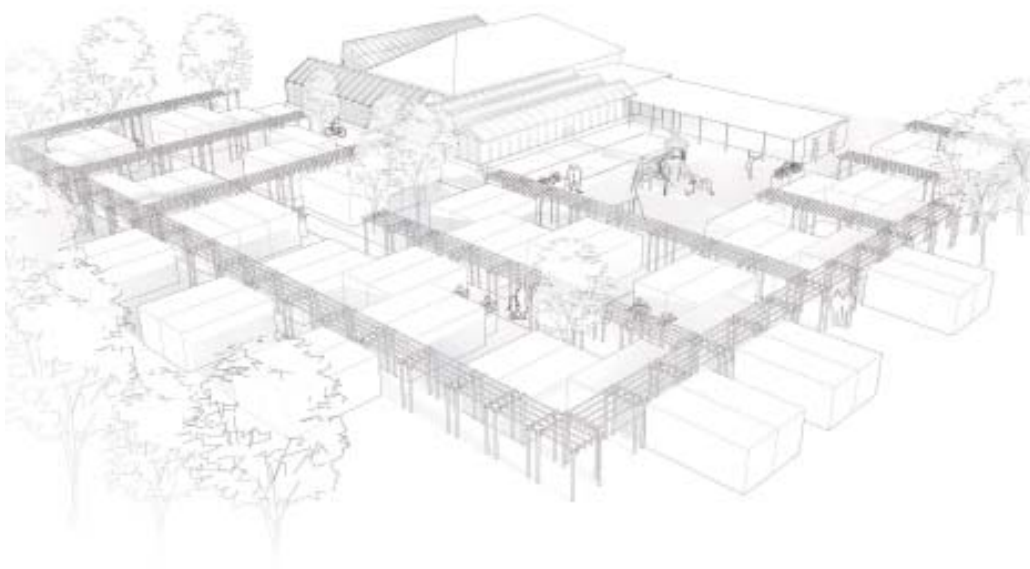


Construction phases

PLAYHOUSE / LEARNING CENTER AND CONTAINER ESTATE, DÜSSELDORF



Container estate: project 3, model / Photo: © Peter Behrens School of Arts



Container estate: project 2, axonometry



Bus before conversion / Photo: © Peter Behrens School of Arts

NUMBER OF RESIDENTS - USERS / MODULAR UNITS

Playhouse / learning center: 200 users / 1 Bus
 Container estate: 120 residents / approx. 55 Modules

RESIDENTS - USERS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: Playhouse / learning center
 April 2016, container estate December 2016
 Playhouse / Lifespan: learning center 5 years, container estate 6-10 years

COMMISSIONED BY

Playhouse / learning center: The city of Düsseldorf
 Container estate: The city of Bottrop

ARCHITECT

Students at the Peter Behrens School of Arts, University of Düsseldorf „Design.Develop.Build“ Program - Prof. Judith Reitz, Franz Klein-Wiele, Container estate: Undergraduate students; Playhouse / Learning Center: Master's students

CONSTRUCTION FIRM

Students at the Peter Behrens School of Arts, University of Düsseldorf „Design.Develop.Build“

BUILDING METHOD

Playhouse / learning center: Conversion Bus
 Container estate: container

CONSTRUCTION COSTS

Playhouse / learning center: total costs: 7,000 Euro
 Container estate: n/a

LIVING SPACE PER PERSON

Playhouse / learning center: 47.8 m²
 Container estate: 8 - 10 m² including recreation rooms



Playhouse / learning center: Interior views / Photos: © Anita Widera – © Judith Reitz

DESCRIPTION

Mobile Playhouse / Learning Center

12 students at the Peter Behrens School of Arts (Düsseldorf University of Applied Sciences) retrofitting an 18-meter-long bus into a temporary playhouse and common area for the Benrodestrasse refugee estate in Düsseldorf.

What results is a place for kids to learn in a structured environment and for different age groups to play together.

In addition to a landscaped play area for kids, the bus features two “flex” areas. There, in the afternoon, kids can receive help with their homework and take German classes. In the evenings, the area hosts events for refugees and adult residents. The events range from adult education to film screenings.

Container Estate:

PBSA students planning spacious residential, recreational, and community areas, as well as a children’s workshop, in the greenhouse areas of an empty nursery. Living modules for 120 refugees are planned in the former fields of the nursery, between old plant beds and trees. What will emerge is a new form of “green container estate”—surrounded by strawberry fields, but still integrated into the urban fabric.

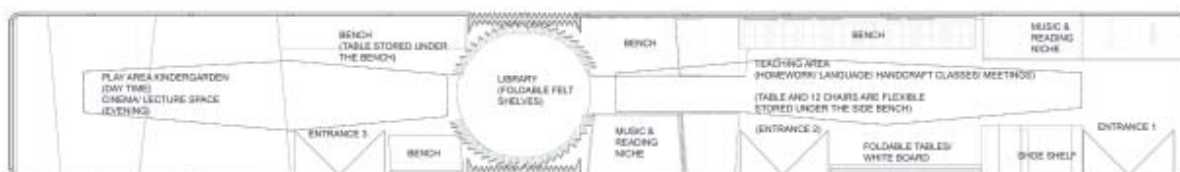
(Excerpt from project description)



Playhouse / learning center: Interior view / Photo: © Anita Widera

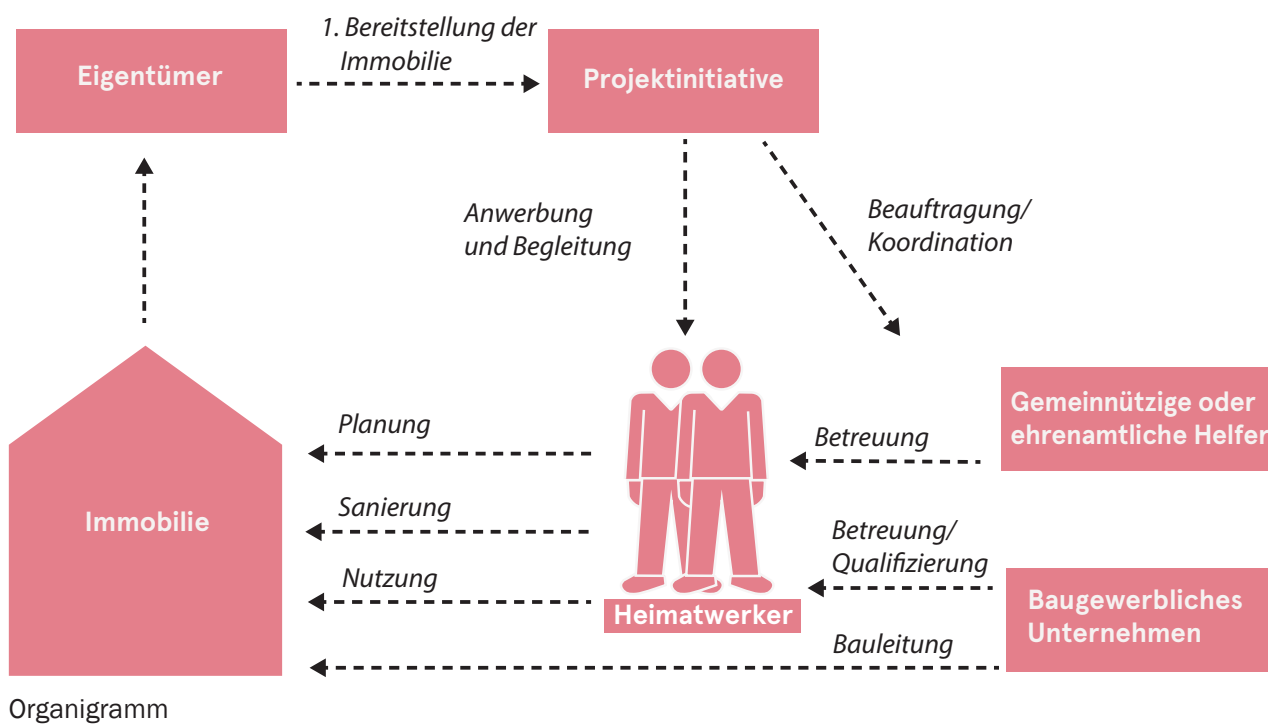


Playhouse / learning center: Interior view / Photo: © Anita Widera



Playhouse / learning center: Floor plan, conversion Bus

BUILDING FOR AND WITH REFUGEES, NIEHEIM



NUMBER OF USERS / MODULAR UNITS

1 building

USERS

Asylum seekers, refugees with recognized status, migrants, all Augsburg citizens

DATE OF COMPLETION / LIFESPAN

Date of completion: end of 2018

Lifespan: 10 Years

COMMISSIONED BY

Client and beneficiary: City of Nieheim; Cooperation partners: StadtBauKultur NRW, Hochschule Westfalen-Lippe

ARCHITECT

“Die Heimatwerker”: Refugees and volunteers in Nieheim, students at the Ostwestfalen-Lippe University of Applied Sciences

CONSTRUCTION FIRM

Local businesses, with contributions from refugees, volunteers, and students

BUILDING METHOD

Conversion of a half-timbered house

CONSTRUCTION COSTS

938 Euro/m², plus donations, volunteered time, additional costs for project coordination and supervision of participants

LIVING SPACE PER PERSON

-



Farmhouse: Existing buildings / Photo: © StadtBauKultur NRW



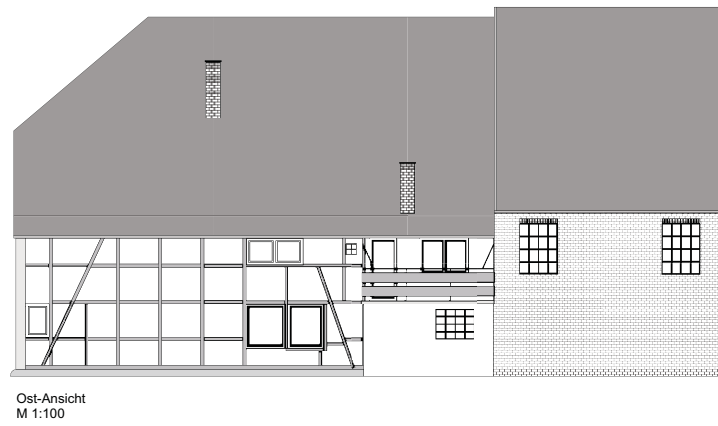
City tour/ Photo: © Hochschule Ostwestfalen-Lippe

BESCHREIBUNG

The goal of the project “Die Heimatwerker” (the home-makers) it is not only to build for, but also with refugees. In Nieheim (district of Höxter, North Rhine-Westphalia), asylum seekers in conjunction with volunteers and students are planning the restoration and future use of a vacant building in the historic city center. In 2017, under expert guidance, they will implement their plans to use the ground floor of the building for community purposes, extending to the outdoor grounds in 2018. A subsequent phase of the project also calls for expanding the upper floors to be used for apartments.

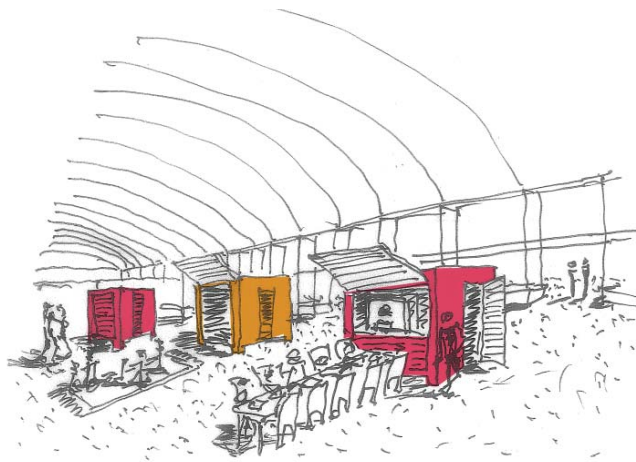
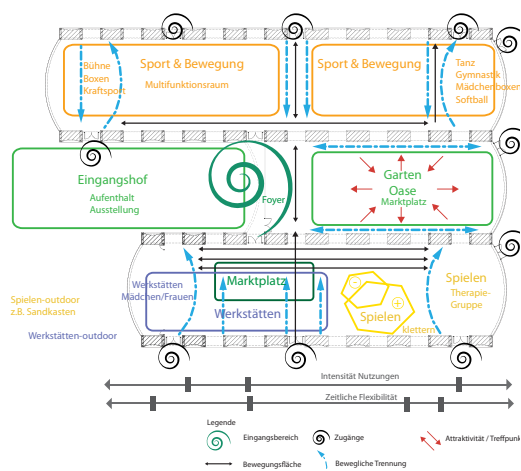
It is hoped that jointly developing a use concept and implementing it together will support social integration. Additionally, the project also offers migrants the opportunity to acquire language and vocational qualifications, and could possibly lead to traineeships or jobs in the construction industry, thus creating long-term career prospects. The planning and building process will be accompanied by the research and teaching staff at the Ostwestfalen-Lippe University of Applied Sciences, as well as by activities aimed at neighborhood integration. The pilot project has a total lifespan of 10 years, and, if successful, will be repeated in other municipalities. It is sponsored by the State Ministry of Building, Housing, Urban Development, and Transport of the Federal State of North Rhine-Westphalia.

(Excerpt from project description)



Elevations

LIGHT-FRAME CONSTRUCTION HALL FOR REFUGEES IN TEMPELHO-



Concept and Sketch

NUMBER OF USERS / MODULAR UNITS

600–800 Residents / 1 hall

USERS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: July 2016

The hall was built as planned on Tempelhofer Feld but only partly used for a few months.

COMMISSIONED BY

Grün Berlin GmbH

ARCHITECT

Gorenflos Architekten GvAmbH, Berlin; Interior design in collaboration with planung.freiraum, Berlin

CONSTRUCTION FIRM

Thies Holzbau GmbH, Schneidewind Planen

BUILDING METHOD

Light-Frame Construction Hall: Timber-frame structure with curved trusses, tensile membrane for facade and roof

CONSTRUCTION COSTS

517 Euro/m²

Total: 2.225.000 Euro net

LIVING SPACE PER PERSON

-



Aerial view / Photo: © Gorenflos Architekten



Construction / Photo: © Gorenflos Architekten



Constructing the foundations / Photo: © Gorenflos Architekten



Constructing / Photo: © Gorenflos Architekten

DESCRIPTION

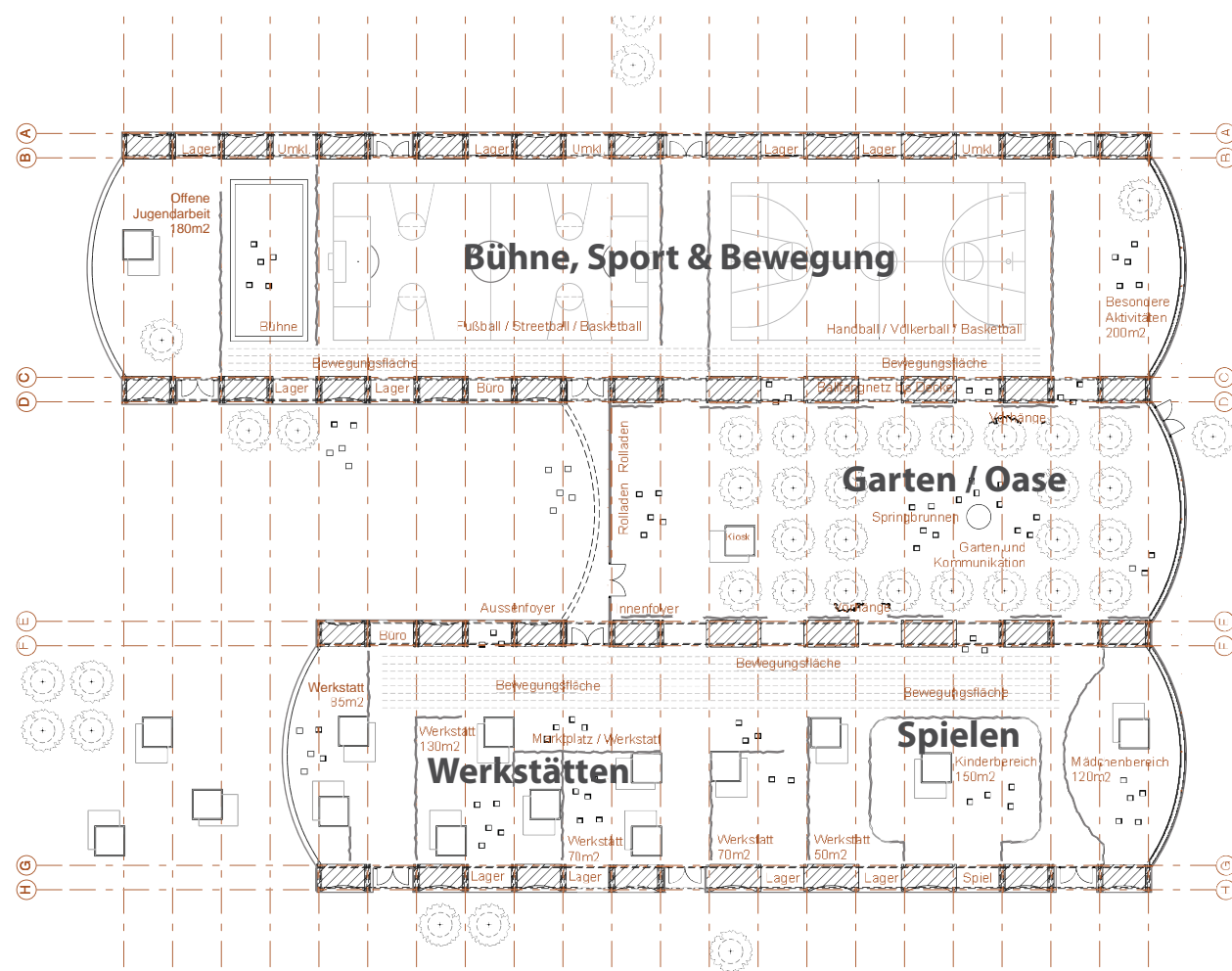
The hall is an open house in which various stakeholders provide education opportunities and social interaction to the refugees housed in the airport terminal. The central space is a garden in the building, conceived as a meeting point for everyone using the structure. Additionally there are rooms for children and adolescents to work, as well as rooms for workshops, sports, and gymnastics. The hall can also be converted into a large event space with a stage.

There are no structural boundaries within the hall. Instead, individual usage areas can be separated using flexible curtains and adapted to the current need. This approach facilitates a temporal and spatial overlay of uses—allowing the house to be occupied intensively throughout the day, from morning until late at night.

(Excerpt from project description)

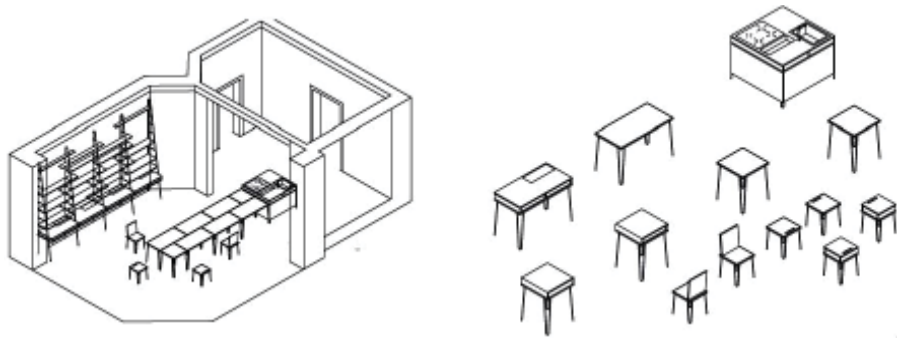


Interior and outside view / Photos: © Hanns Joosten – © Gorenflos Architekten



Floor plan

KITCHEN-HUB, BERLIN



Sketch Modular construction kit system

NUMBER OF RESIDENTS / MODULAR UNITS

1 shop

USERS

Asylum seekers, refugees with recognized status, all citizens of Berlin

DATE OF COMPLETION / LIFESPAN

Date of completion: October 2015

Unlimited lifespan

COMMISSIONED BY

Über den Tellerrand e.V.

ARCHITECT

TU-Berlin, Habitat Unit department / CoCoon – contextual construction

CONSTRUCTION FIRM

Students, refugees, teachers, and volunteers

BUILDING METHOD

Modular construction kit system: Wood-based material, rebar, I-beams

CONSTRUCTION COSTS

N/A



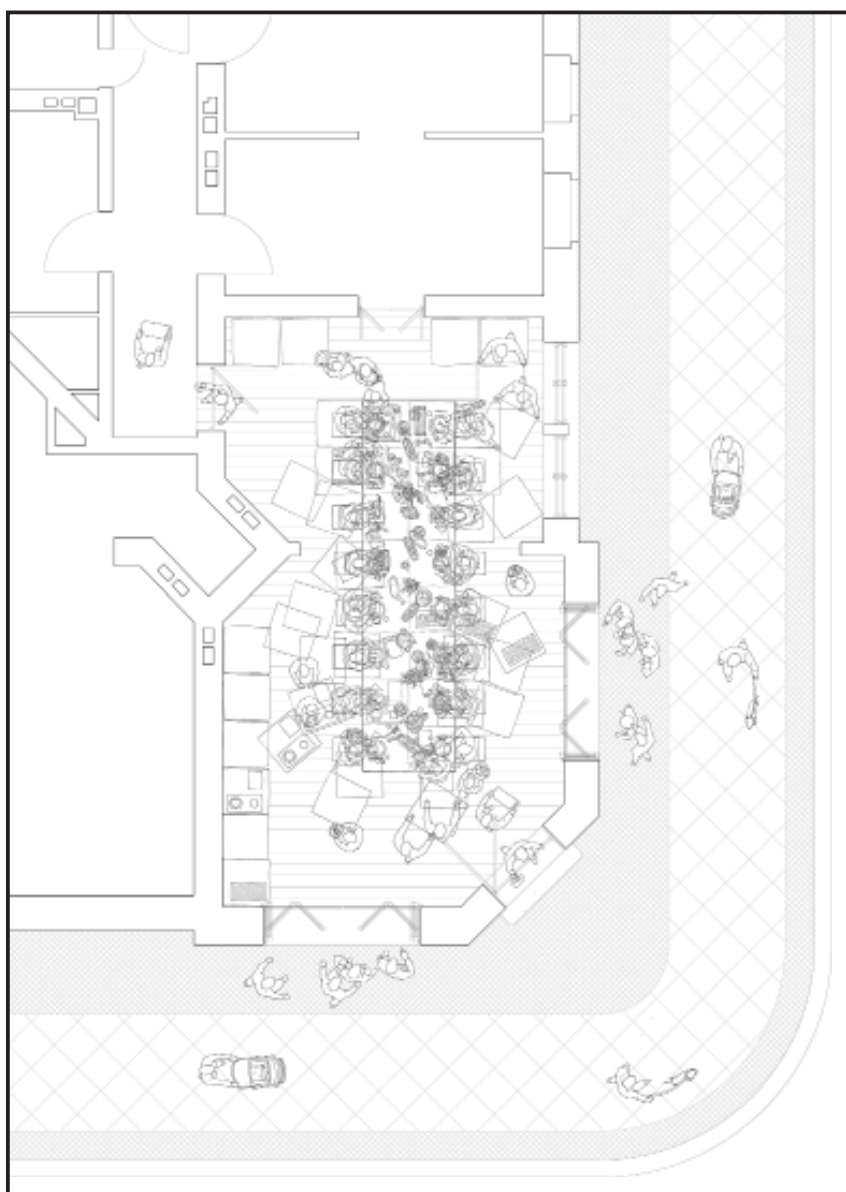
Event / Photo: © Simon Colwill



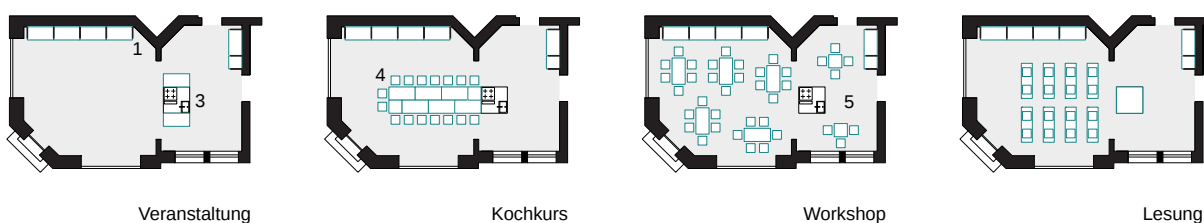
Event / Photo: © Laura Fiorio



Event / Photo: © Nina Pawlicki



Floor plan / Refugees in the City: Community Kitchens in Berlin; Design Studio 2015, Habitat Unit, TUB, Students: Theodora Constantin, Judith Schiebel, Vanessa Vogel



Flexible Usage / Refugees in the City: Community Kitchens in Berlin; Design Studio 2015, Habitat Unit, TUB, Students: Theodora Constantin, Judith Schiebel, Vanessa Vogel

DESCRIPTION

New people's kitchens

The organisation "Über den Tellerrand" (Outside the Box) has had its new headquarters in the Berlin district of Schöneberg since summer 2015. The purpose of the organisation is to facilitate integration on equal terms by way of jointly organised events with a cultural focus, wherefrom comes the idea of supplementing the office rooms in a former corner shop unit in Roßbachstraße by a large kitchen space ("Kitchen Hub").

The Kitchen Hub was initiated and implemented in close cooperation between the Habitat Unit of the Institute for Architecture at the Technical University of Berlin, the CoCoon Studio that plans and builds with students, and the operators. Students, refugees, teachers and volunteers jointly conceived, planned and finished the rooms.

It was based on a blueprint of students (Theodora Constantin, Judith Schiebel, Vanessa Vogel) of the Design Studios "Refugee City: Cooking with Refugees in Berlin" at the Habitat Unit in the summer term 2015, in which communal cooking was the starting point. Itemisation and implementation ensued within the scope of a DesignBuild Summer School (sponsored by the STO Foundation) in August last year.

The result was a central cooking island that can be extended to a large table. Due to a modular system, the tables can be used either at standing or sitting height. Unneeded elements are simply stored in a shelf. Diverse activities in addition to cooking will be possible in the 55 m² kitchen space. The modular design system enables multifunctional uses of the space, for example for workshops, discussion sessions or neighbourhood gatherings.

Refugees and the indigenous population can learn from one another and experience new cultures at a neutral place, free from prejudice and media images. The Kitchen Hub is aimed at promoting a common local identity and social participation. It was opened on 27 November 2015.

Text: Kirsten Klingbeil

from: Stadtbauwelt 48.2015

<http://www.bauwelt.de/themen/bauten/Neue-Volkskuechen-Kitchen-Hub-Berlin-2480183.html>

“LIVING ROOM” FOR REFUGEES, AUGSBURG



Interior space / Photo: © Ramona Stonner



Construction site / Photo: © Thomas Körner-Wilsdorf



Construction site / Photo: © Thomas Körner-Wilsdorf

NUMBER OF RESIDENTS / MODULAR UNITS

Approx. 50 seats in normal circumstances, around 100 seats for events

USERS

Asylum seekers, refugees with recognized status, migrants, all Augsburg citizens

DATE OF COMPLETION / LIFESPAN

Date of completion: September 2015
Construction time: 1.5 years

COMMISSIONED BY

Tür-an-Tür e.V. Augsburg

ARCHITECT

Dr.-Ing. Günther Prechter, architect and social scientist, Bregenz
Thomas Körner-Wilsdorf, artist and educator, Augsburg

CONSTRUCTION FIRM

Students, neighbors and asylum seekers, craftsmen with volunteers

BUILDING METHOD

Conversion of a bus garage

CONSTRUCTION COSTS

Total: 55,000 Euro

USABLE FLOOR SPACE

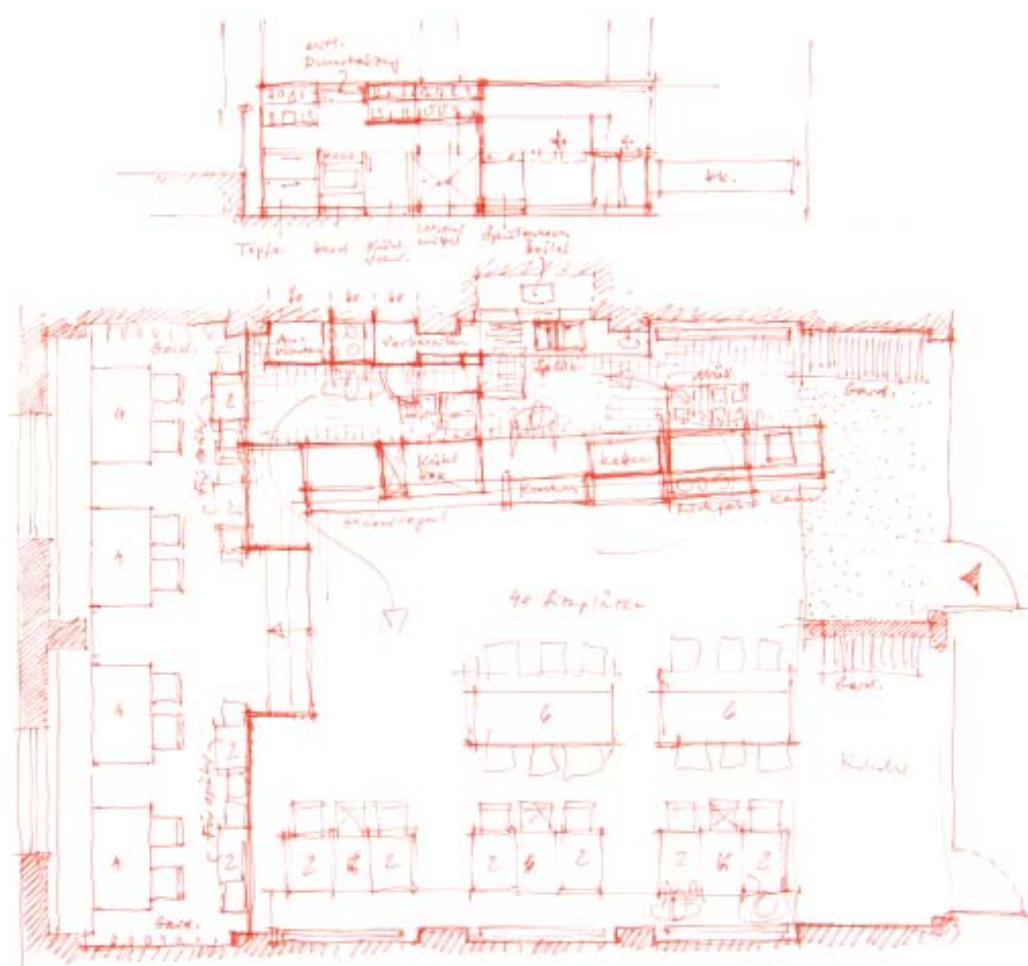
100 m² primary usable space including washroom and storage rooms



Event / Photo: © Thomas Körner-Wilsdorf



Textile workshop / Photo: © Thomas Körner-Wilsdorf



Drawing / Günther Prechter – Photo: Matthias Weissengruber

DESCRIPTION

Since April 2012 the “Tür-an-Tür” (Door-to-Door) Society (founded 1992) has been operating the Centre for Intercultural Counselling (zib) in the former Augsburg tram depot, today protected as an industrial monument. Here refugees, asylum seekers and immigrants will find help, language courses and advice in their search for a job and accommodation. The recently opened café now provides a “living room” for informal meetings.

For almost a decade Günther Prechter, architect in Bregenz, and Thomas Körner-Wilsdorf, art teacher and builder-in-charge at Augsburg’s Holbein-Gymnasium, have been jointly practising “building as self-help”. With Café Tür-an-Tür a participative understanding of architecture and daily demand for robust integration models come together. An old bus garage in the workshop wing of the zib site was converted to the new café. The threatening conflict with neighbours prior to the opening of collective accommodation for asylum seekers in the neighbourhood provided an incentive to use the conversion as an opportunity for participation, integration and identification. The competence pool of Tür-an-Tür activists was closely integrated into the planning and the needs and wishes of neighbours were identified in neighbourhood workshops. Every available hand was used in the building process: schoolchildren, students, neighbours and asylum seekers rubbed shoulders with tradesmen. The roof beams and walls were freed from decades of workshop dust; the underside of the roof was thermally insulated and acoustically optimised with wood wool panels; rough-sawn pine planks were laid; larch panels were screwed together to form benches; the surfaces of custom-made maple wood tops were sanded; the paint on the counter front was polished to a shine and patchworks sewn – much of this by amateurs with expert guidance.

The longer time frame, low-tech solutions in the detailed planning, presence of the architects, specialists and honorary helpers at the building site all contributed to success. The participatory process promoted social added value: cross-milieu friendships arose. These used the jointly created space – hosted by Tür-an-Tür – as a demand-oriented creative workshop and open meeting platform.

Text: Kirsten Klingbeil

from: *Stadtbauwelt* 48.2015

<http://www.bauwelt.de/themen/bauten/Cafe-Tuer-an-Tuer-Augsburg-2480175.html>

PROTOTYPE MODULAR HOUSE FOR REFUGEES, SAARLAND



Prototype module / Photo: © Christian Hussong

NUMBER OF RESIDENTS / MODULAR UNITS

2 people / module

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Construction time: 3 days

COMMISSIONED BY

Semester project, Summer 2015, Saarland University of Applied Sciences, SAS School of Architecture Saar, HBKsaar, S_A_R Project Office

ARCHITECT

Saarland University of Applied Sciences, SAS School of Applied Architecture Saar (Prof. Stefanie Eberding, Prof. Dr. Ulrich Pantle), HBKsaar (Prof. Georg Winter), S_A_R Projektbüro, Designer of the modular building: Esther Recktenwald

CONSTRUCTION FIRM

Prototype that can be self-built without any special expertise. The Völklingen team is made up of students at the Saarland University of Applied Sciences and the HBKsaar: Anna-Maria Gard, Stefanie Eberding, Caroline Heinzel, Christian Hussong, Naomi Liesenfeld, Carla Mörgen, Jonas Niewöhner, Esther Recktenwald, Katarzyna Rogala, Lila Rose, Markus Towae, Turkten Turkmen, Miriam Werle, Georg Winter, Lucas Wirbel

BUILDING METHOD

Used EUR-pallets and simple materials from the construction store: OSB panels, tar paper, and standard assembly parts

CONSTRUCTION COSTS

Total costs: 2,500 Euro

LIVING SPACE PER PERSON

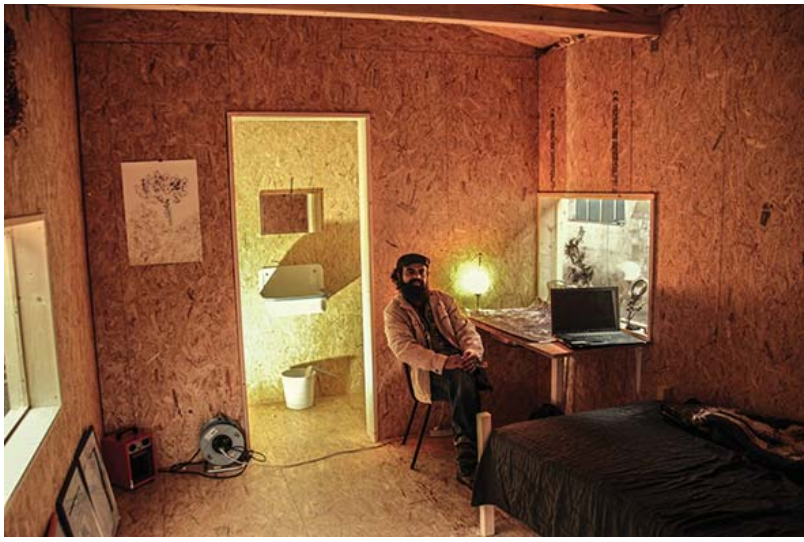
14 m²/person



Construction / Photos: © Christian Hussong



Prototype module / Photo: © Christian Hussong



DESCRIPTION

The prototype helps advance the development of improvised housing, and the cultivation of transitional states and liminal spaces.

The EUR-pallets can carry loads and are very stable and cheap to acquire. The modular house for two people includes: a kitchen, bathroom, bedroom and living area, as well as a covered outdoor area in front of the door.

In a single day, residents can build the modular house with the predetermined materials and a few helpers. This leads to exchange and communication with others.

(Excerpt from project description)

Interior / Photo: © Christian Hussong



Construction / Photo: © Caroline Heinzl



Construction / Photo: © Christian Hussong

MAGDAS HOTEL, VIENNA (A)



Photomontage: exterior view

NUMBER OF RESIDENTS / MODULAR UNITS

25 residents

RESIDENTS

Unaccompanied refugees under 18

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2015

COMMISSIONED BY

Caritas Erzdiözese Wien

ARCHITECT

AllesWirdGut, Vienna

Landscaping: 3:0 Landschaftsarchitektur, Vienna

CONSTRUCTION FIRM

Buchegger 7 Baumanagement GmbH; Berlinger Bau GmbH

BUILDING METHOD

Conversion of a retirement home to hotel and housing

CONSTRUCTION COSTS

Total costs: 1.550.000 Euro

LIVING SPACE PER PERSON

12 m² (without common spaces)

DESCRIPTION

Social entrepreneurship

Bringing hotel guests together with refugees under one roof: since the “Grand Hotel Cosmopolis” in Augsburg this has almost become a proven concept. In a further example in Vienna, Caritas has converted a run-down retirement home to a hotel, albeit with another focus: the declared goal was to introduce refugees to paid work. For an interim period of five years Caritas offered asylum seekers the opportunity to work legally at the reception, in the kitchen or in service. Of the 30 employees 20 are immigrants from 16 nations. However, they do not live in the hotel, only in the west wing of the building, which has its own entrance and is used as shared accommodation for about 25 under-age, unaccompanied refugees.

The former pensioners’ home “Haus Josef Macho” occupies a central location not far from the Vienna Prater. Up until 2014 twelve senior citizens still occupied the building in Konzept.

Social entrepreneurship

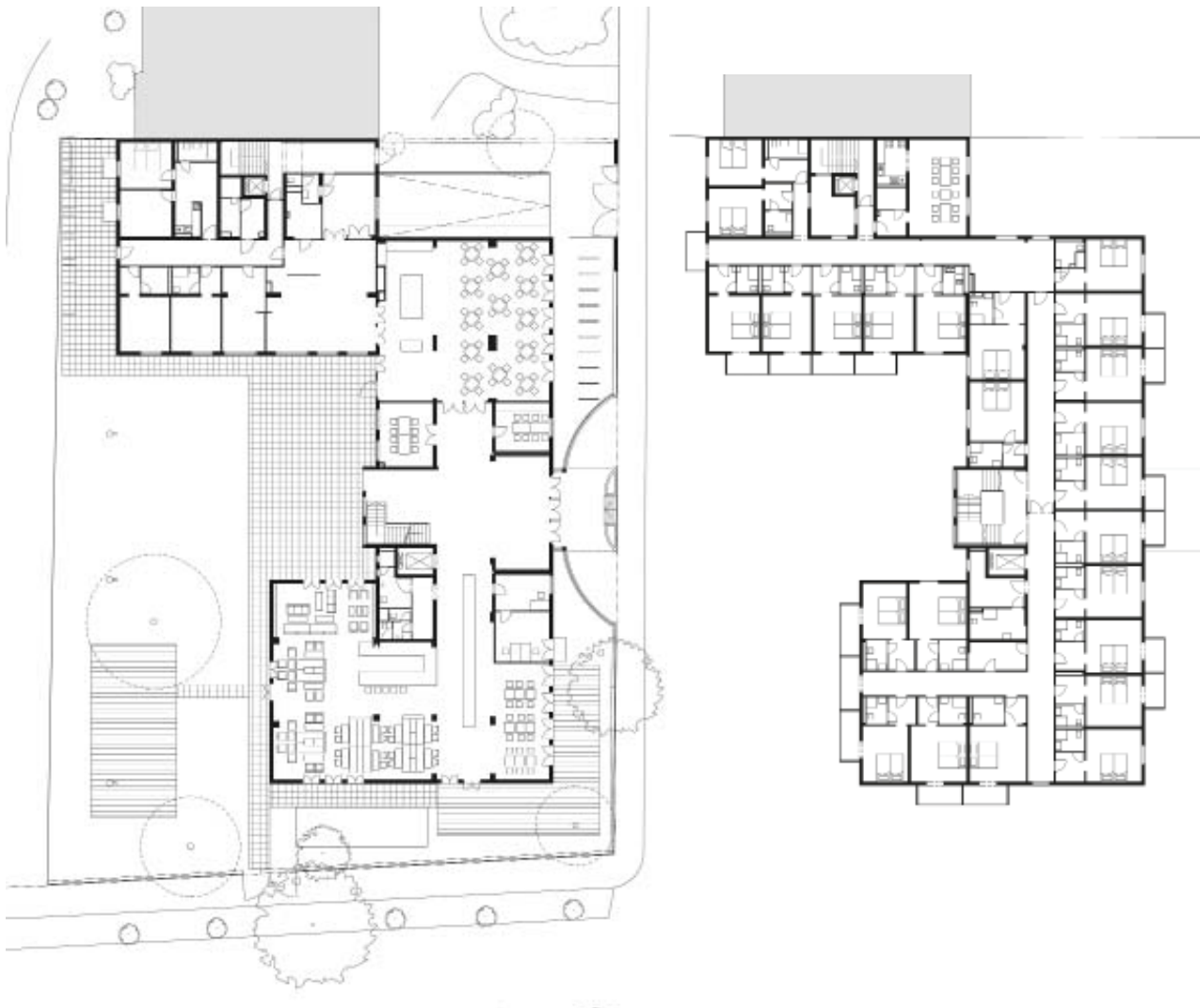
Bringing hotel guests together with refugees under one roof: since the “Grand Hotel Cosmopolis” in Augsburg this has almost become a proven concept.



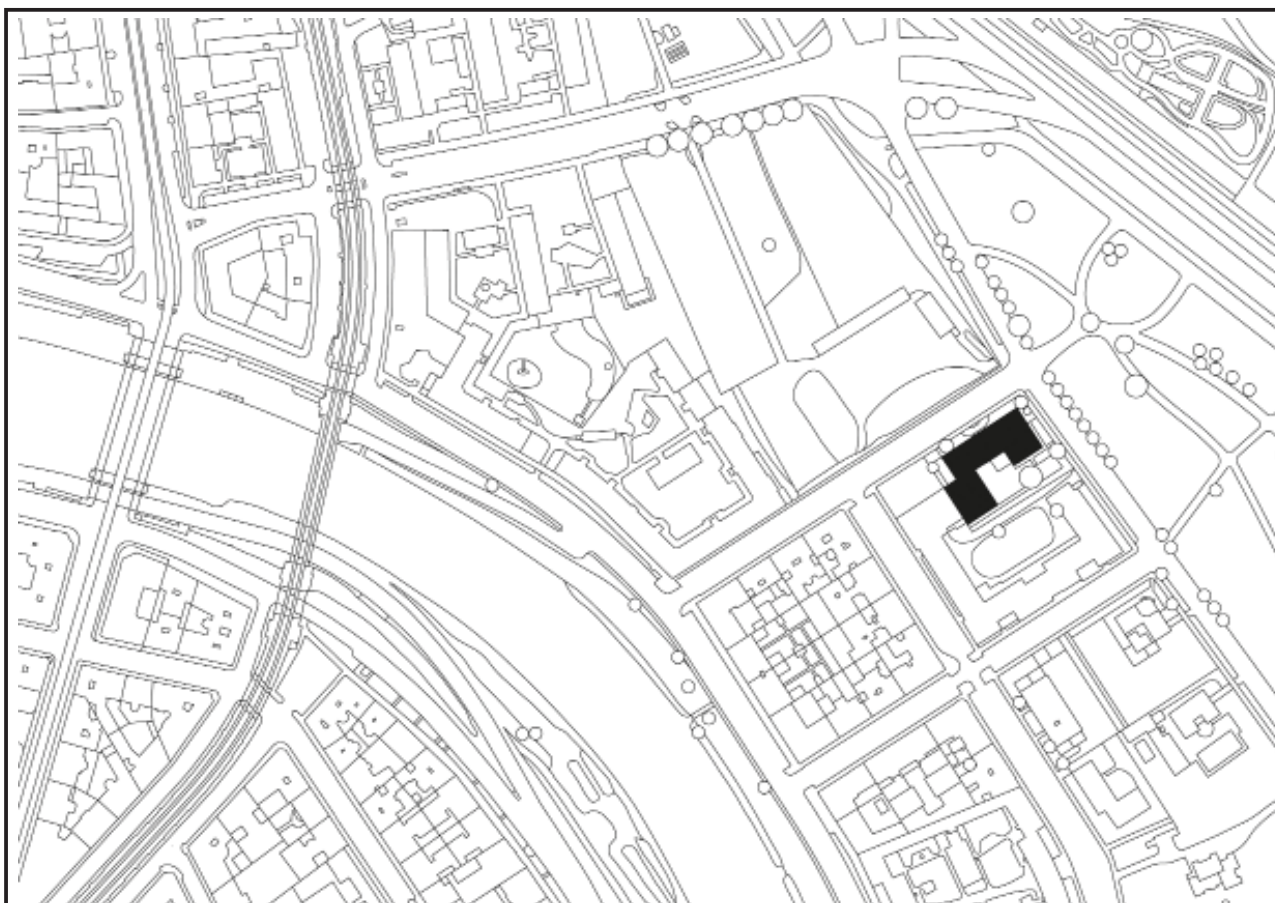
Common space / Photo: © Guilherme Silva Da Rosa – AllesWirdGut Architektur



Bedroom / Photo: © Guilherme Silva Da Rosa – AllesWirdGut Architektur



Floor plan



Site plan

In a further example in Vienna, Caritas has converted a run-down retirement home to a hotel, albeit with another focus: the declared goal was to introduce refugees to paid work. For an interim period of five years Caritas offered asylum seekers the opportunity to work legally at the reception, in the kitchen or in service. Of the 30 employees 20 are immigrants from 16 nations. However, they do not live in the hotel, only in the west wing of the building, which has its own entrance and is used as shared accommodation for about 25 under-age, unaccompanied refugees.

The former pensioners' home "Haus Josef Macho" occupies a central location not far from the Vienna Prater. Up until 2014 twelve senior citizens still occupied the building in Laufberggasse. They were able to relocate to a new building close by. Architects' office AllesWirdGut was commissioned with the conversion of the dilapidated property from the 1960s. The limited budget of € 1.55 million was used predominantly for renewal of the technical installations and rising mains. Fire prevention measures were a further major cost. The façades remained untouched; the garden was designed as a café with a wooden terrace. In the former dining room on the ground floor the architects installed a restaurant, lobby, bar and library.

There are 78 rooms in the hotel, two thirds of which have a loggia. For the furniture and equipment the architects launched a crowdfunding campaign which raised € 57,000 for the purchase of beds, blankets, mattresses and dishes. Furniture was selected from the Caritas warehouses and renovated; armchairs and cupboards from the old people's home were refurbished by designer Daniel Büchel. For reasons of expense the existing plastic windows and the baths had to be retained; only broken tiles were replaced. This hotel distinguishes itself from other shabby-chic hotels by the "social dimension of vintage", as the architects call it. There can be no doubt that the recruitment of an internationally renowned architectural office by a non-profit organisation such as Caritas was instrumental in helping a locally celebrated hotel to become a "social business" in only a matter of months.

Text: Doris Kleilein

from: Stadtbauwelt 48.2015

<http://www.bauwelt.de/themen/bauten/Soziales-Unternehmertum-2484509.html>

UMBRELLA, VIENNA (A)



Umbrella for Private room / Photo: © Paul Kranzler, Matthias Cremer und Caramel

NUMBER OF RESIDENTS / MODULAR UNITS

2 residents / modul

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

-

COMMISSIONED BY

Caritas

ARCHITECT

Caramel architekten, Wien, Vienna

CONSTRUCTION FIRM

Caramel architekten in cooperation with refugees

BUILDING METHOD

Ready-made products: umbrellas, construction-site fencing, electric ducts, assemblable synthetic water pipe, curtain fabric, cable ties, clamp luminaires, and extension cords

CONSTRUCTION COSTS

50 Euro/person

LIVING SPACE PER PERSON

Approx. 9m²



Umbrella for Private room and kitchen / Photos: © Paul Kranzler, Matthias Cremer und Caramel



Private room / / Photo: © Paul Kranzler, Matthias Cremer und Caramel

DESCRIPTION

Part of the Austrian contribution to the Venice Architecture Biennale 2016

Private space to be appropriated individually—enough for 280 refugees—was created in a temporarily unoccupied open-plan office building, at a cost of €50 per person with a construction time of 5 minutes per person. Caramel Architekten developed a prototypical spatial structure, whose construction was explained to refugees on site, using the following affordable ready-made products: umbrellas, construction-site fencing, electric ducts, assemblable synthetic water pipe, curtain fabric, cable ties, clamp luminaires, and extension cords. Immediately after receiving the explanation, the men, women, and children took the test-living spatial structure into their possession and began using the available sewing machines to hem the first fabric strips into curtains. Working communally, one large space after another was converted from an open-plan camp of cots, with nowhere to withdraw, into living spaces with spatial constructions adapted individually to the constellations of residents (small families, large families, shared accommodations).



Lageplan Umbrellas in the first admittance facility in the Pfeiffergasse / Photo: © Paul Kranzler, Matthias Cremer und Caramel



Example floor plane

PARKING LOT ANNEX, KOBLENZ



Rendering



Rendering



Rendering

NUMBER OF RESIDENTS / MODULAR UNITS

80 to 108 / 4 buildings

RESIDENTS

Refugees with recognized refugee status

The goal is a mixed residence base of refugees and students

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2016

Lifespan: minimum of 10 years

For subsequent use, can be quickly adapted to other needs for subsequent use or taken down

COMMISSIONED BY

Feasibility study: Bauherr Koblenzer Wohnbau GmbH

ARCHITECT

Herrmanns Architekten, Vallendar (Prof. Henner Herrmanns + Hung Nguyen)

CONSTRUCTION FIRM

Holz-Bau Schäfer GmbH & Co KG, Nüdlingen, Niederlassung Schäfer Fertighaus, Mülheim-Kärlich

BUILDING METHOD

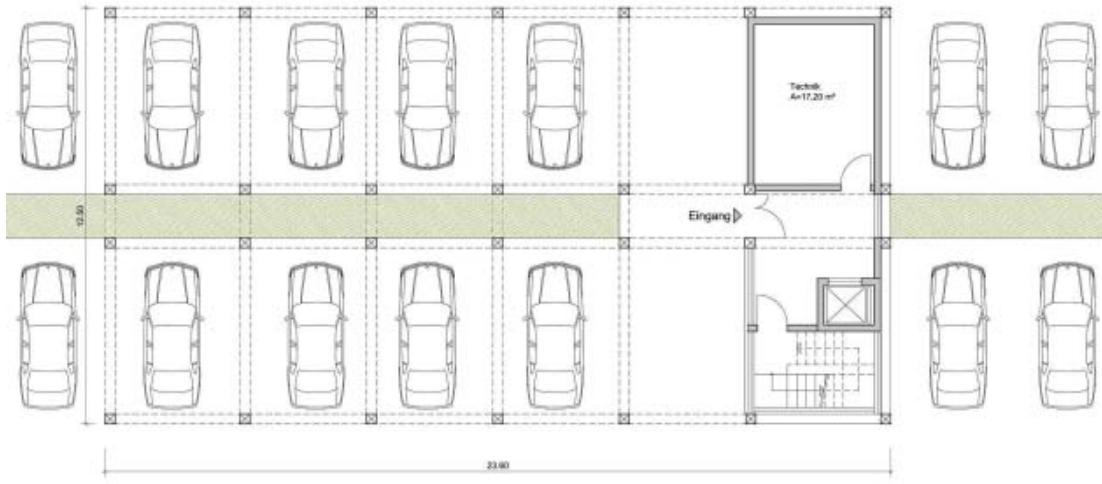
Timber frame construction

CONSTRUCTION COSTS

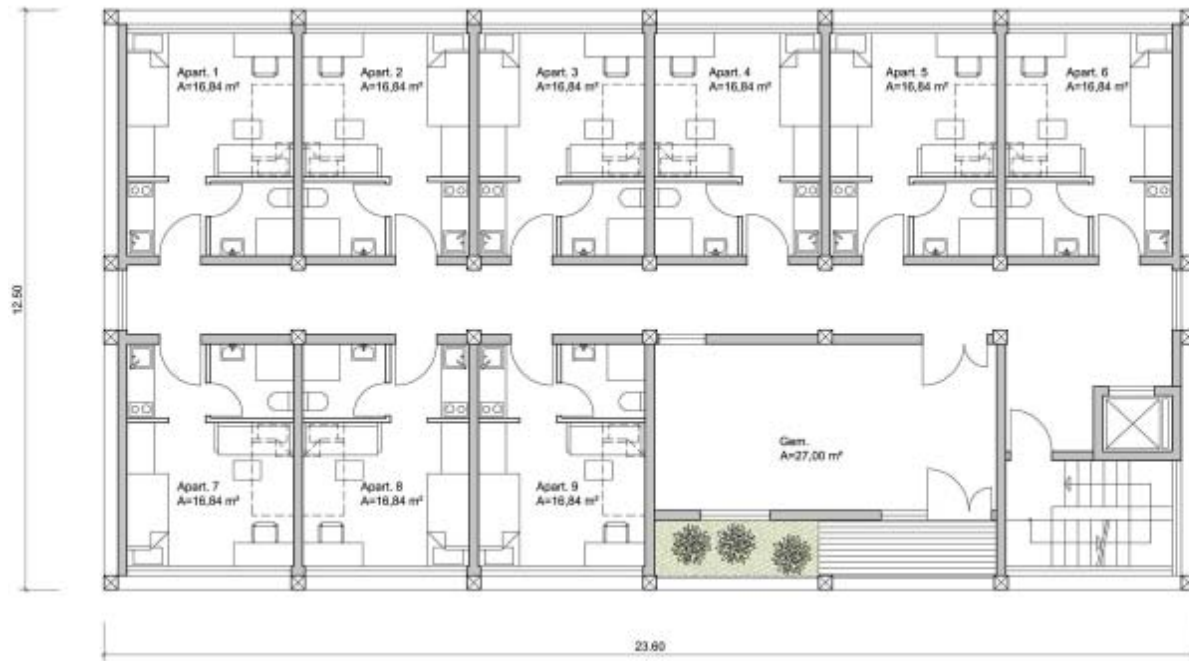
Approx. 1,100 Euro/m² GFA (rent 230–270 Euro/month/person)

LIVING SPACE PER PERSON

16.5 m²/1–2 people



Floor plan, ground floor



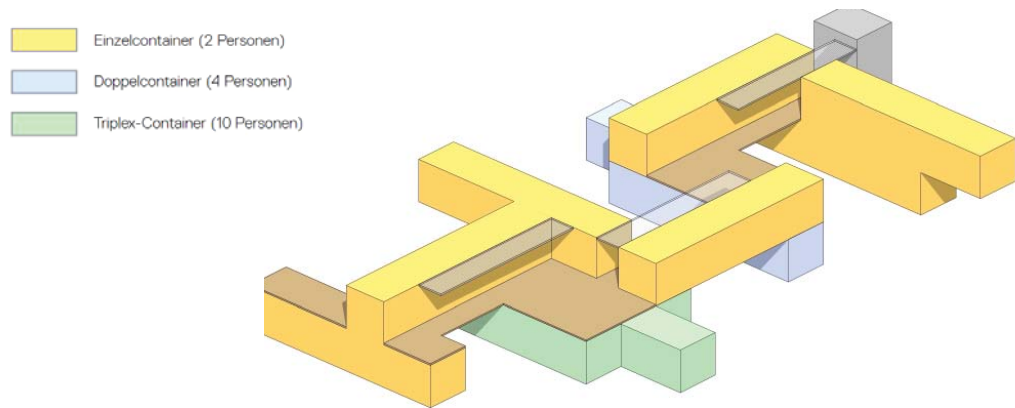
Floor plan, second floor

DESCRIPTION

For our feasibility study, we propose to build a timber-frame prototype on the Rhein-Mosel campus of the Koblenz University of Applied Sciences. The prototype takes the form of an annex superstructure built over a university parking lot. The top three floors of the basement-free building feature apartments conceived for two people. A large common room is planned for each floor. The “floating” buildings have very little impact on the university campus parking lot.

(Excerpt from project description)

BUILDINGS FOR REFUGEES AND MIGRANTS



Concept



Example estate (basic and custom modules)



View of basic module

NUMBER OF RESIDENTS / MODULAR UNITS

28 residents/unit

RESIDENTS

Asylum seekers, refugees with recognized refugee status-

DATE OF COMPLETION / LIFESPAN

Subsequent use possible as student dormitories, social housing, or retirement homes

COMMISSIONED BY

Immobilis GmbH + Urban Progress GmbH

ARCHITECT

Yes Architecture, Munich

CONSTRUCTION FIRM

N/A

BUILDING METHOD

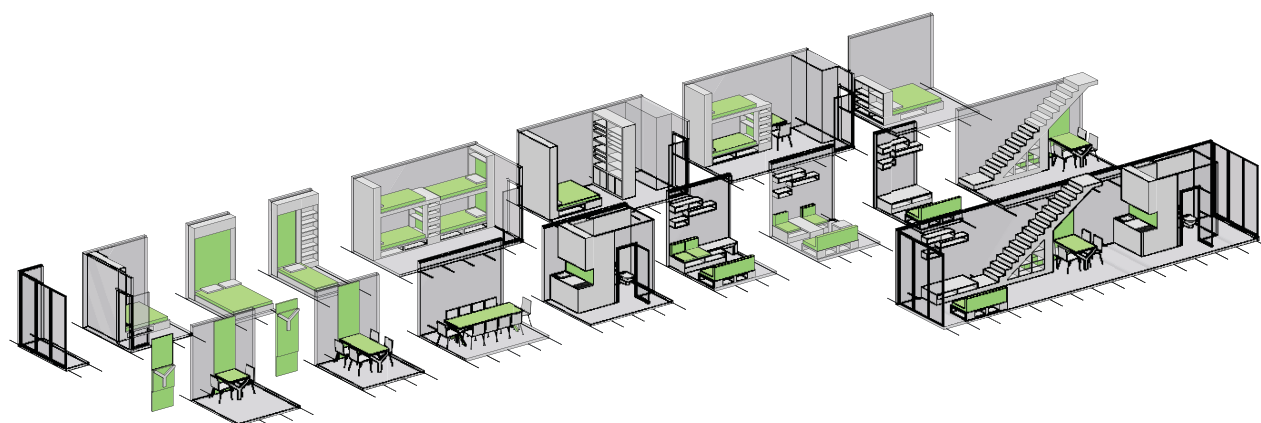
Shipping containers: Clad individually with wood, plaster, metal panels
Employs recycled material

CONSTRUCTION COSTS

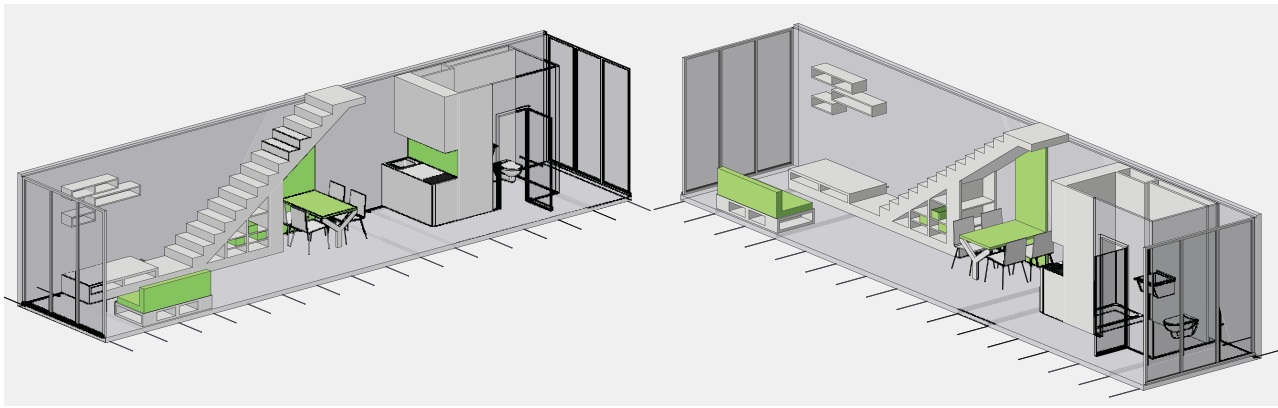
1,100 Euro/m² GFA (including interior fittings)

LIVING SPACE PER PERSON

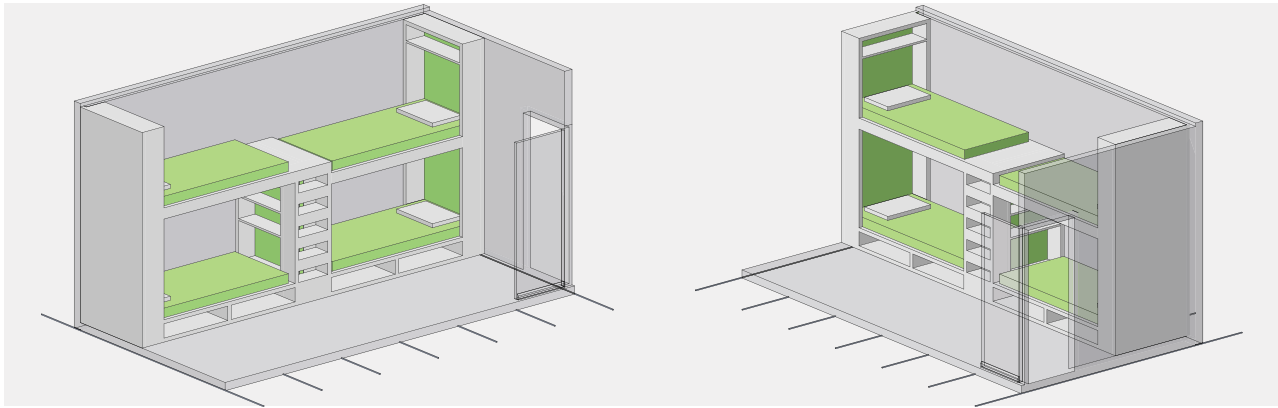
2- and 4-Residents Container: 14,5 m²/Person,
10-Residents Container: 8,7 m²/Person



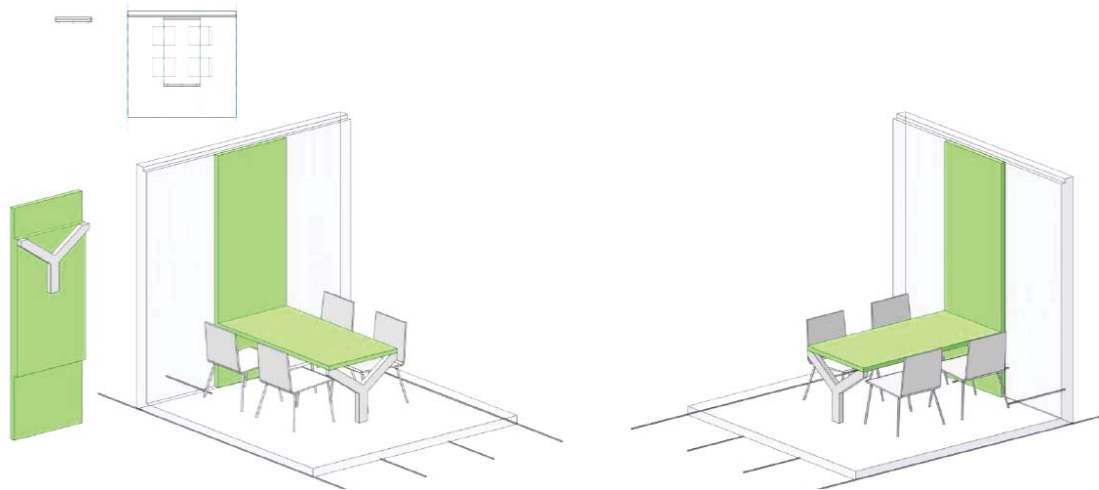
Interior features: Prefabricated standard-size interior module



Interior features: Example of how the ground floor of a two-story apartment can be combined for four people (made of 2 containers)



Module bunks including storage space and wall with door



Interior features: Module table (140 x 80 cm) for 4 people, folded out from wall



Site plan: Example estate (basic and custom modules)

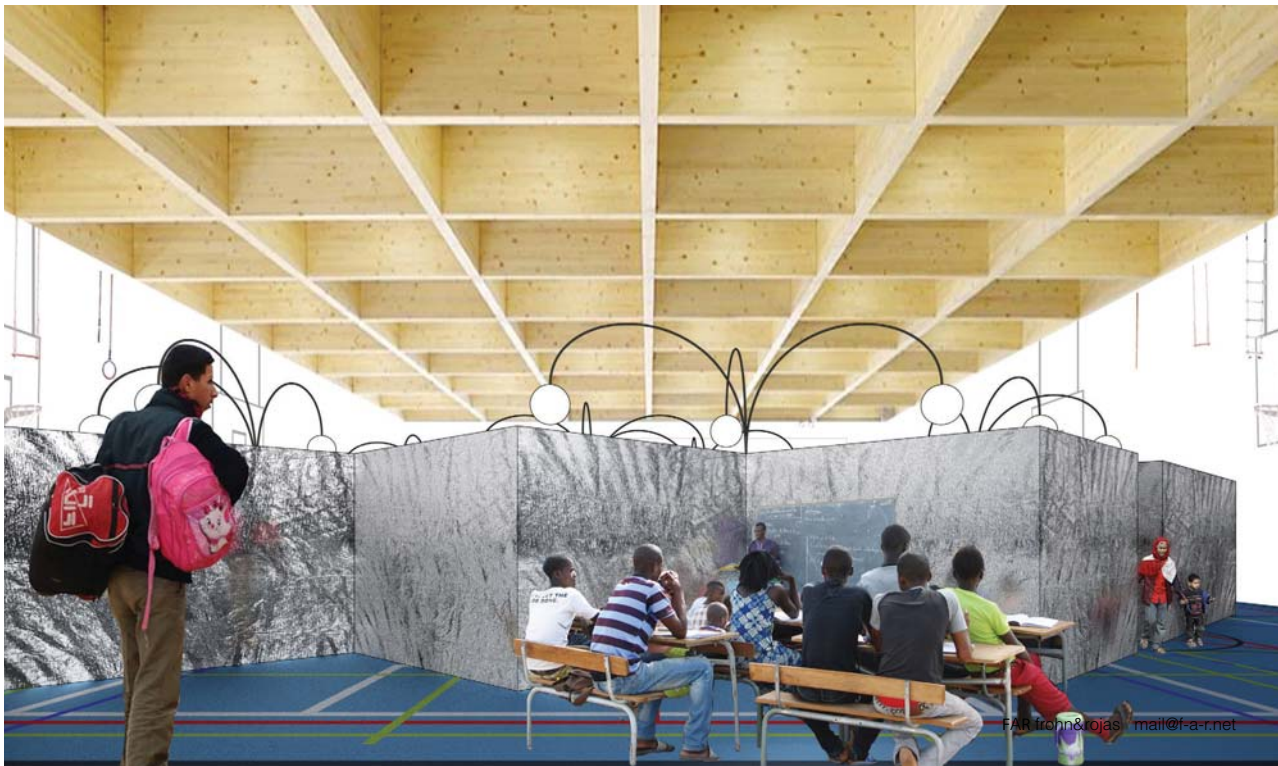
DESCRIPTION

This housing estate project is based around shipping containers that are clad with an energy-efficient insulation layer (in correspondence to the German Energy Saving Ordinance) and various facade elements (wood, plaster, metal panels). The prefabricated interior modules are assembled individually, which enables them to address the spatial needs and desires of individual residents. The facility is sustainably designed and can be used later by residents as student dormitories, retirement homes, or social housing.

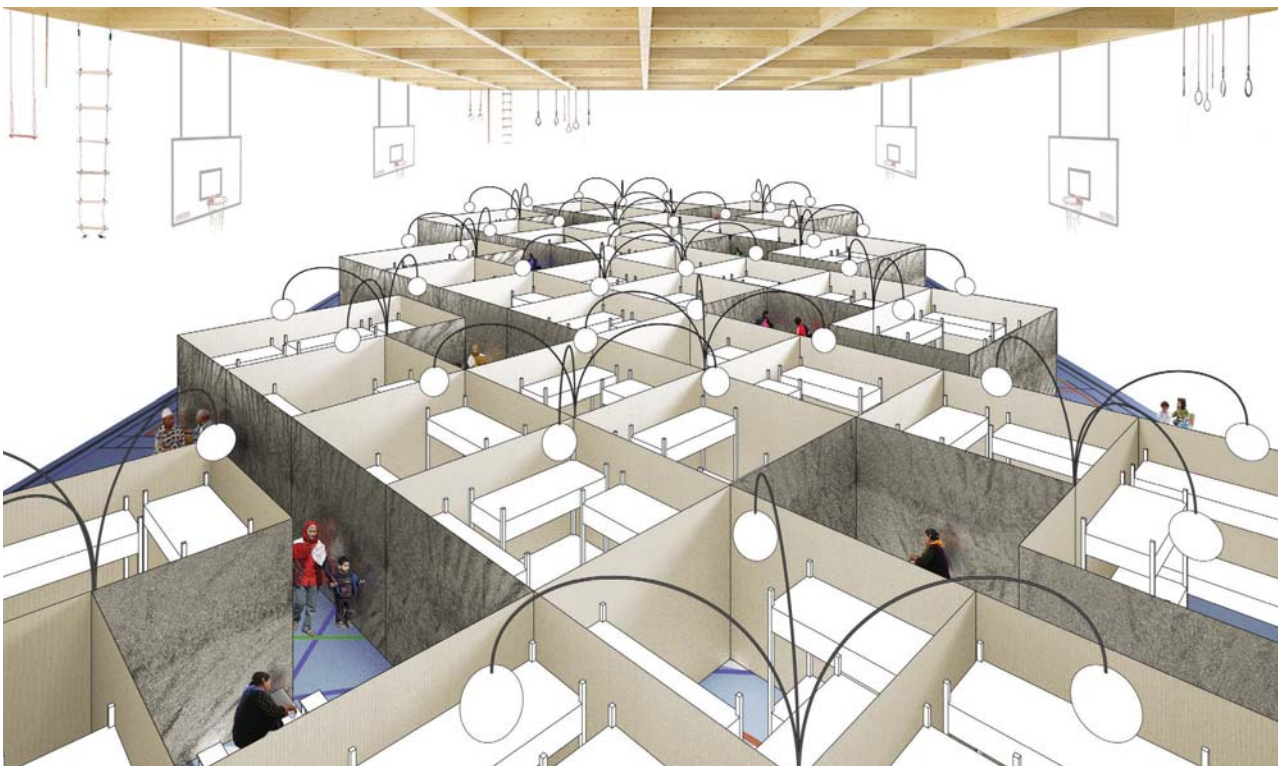
The containers are accessed by separate, elevated containers reachable via walkways, footpaths, and bridges. The basic modules are assembled together into an estate structure. Together, they form gardens, terraces, mixed-use common areas, central courtyards, playgrounds, and storage spaces. Sites for urban gardening and common rooms for parents and children facilitate a higher quality of stay, and help avoid the formation of "ghettos" and resentment due to lack of activity.

(Excerpt from project description)

FIRST ADMITTANCE FACILITY



Design concept



Design concept



Design concept

NUMBER OF RESIDENTS / MODULAR UNITS

Variable

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

-

COMMISSIONED BY

First admittance facility Eisenhüttenstadt

ARCHITECT

FAR frohn&rojas, Berlin / Santiago de Chile / Los Angeles

CONSTRUCTION FIRM

DIY

BUILDING METHOD

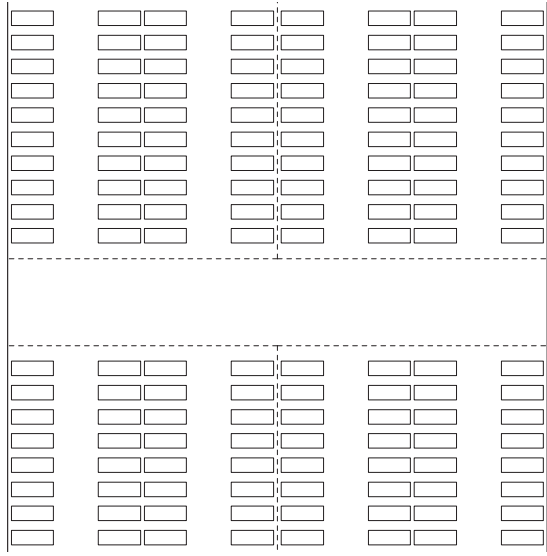
Interior design of hall: using the available material resources

CONSTRUCTION COSTS

No costs

LIVING SPACE PER PERSON

10.3 m²/person

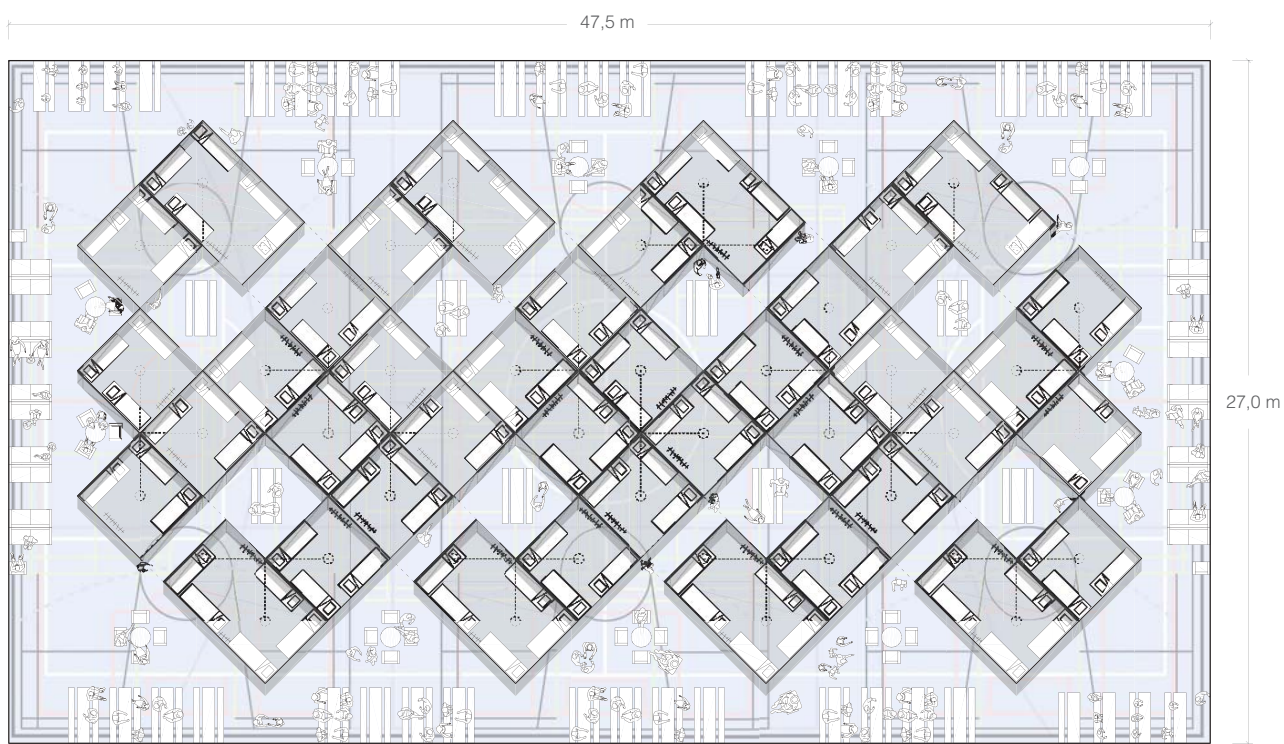


DESCRIPTION

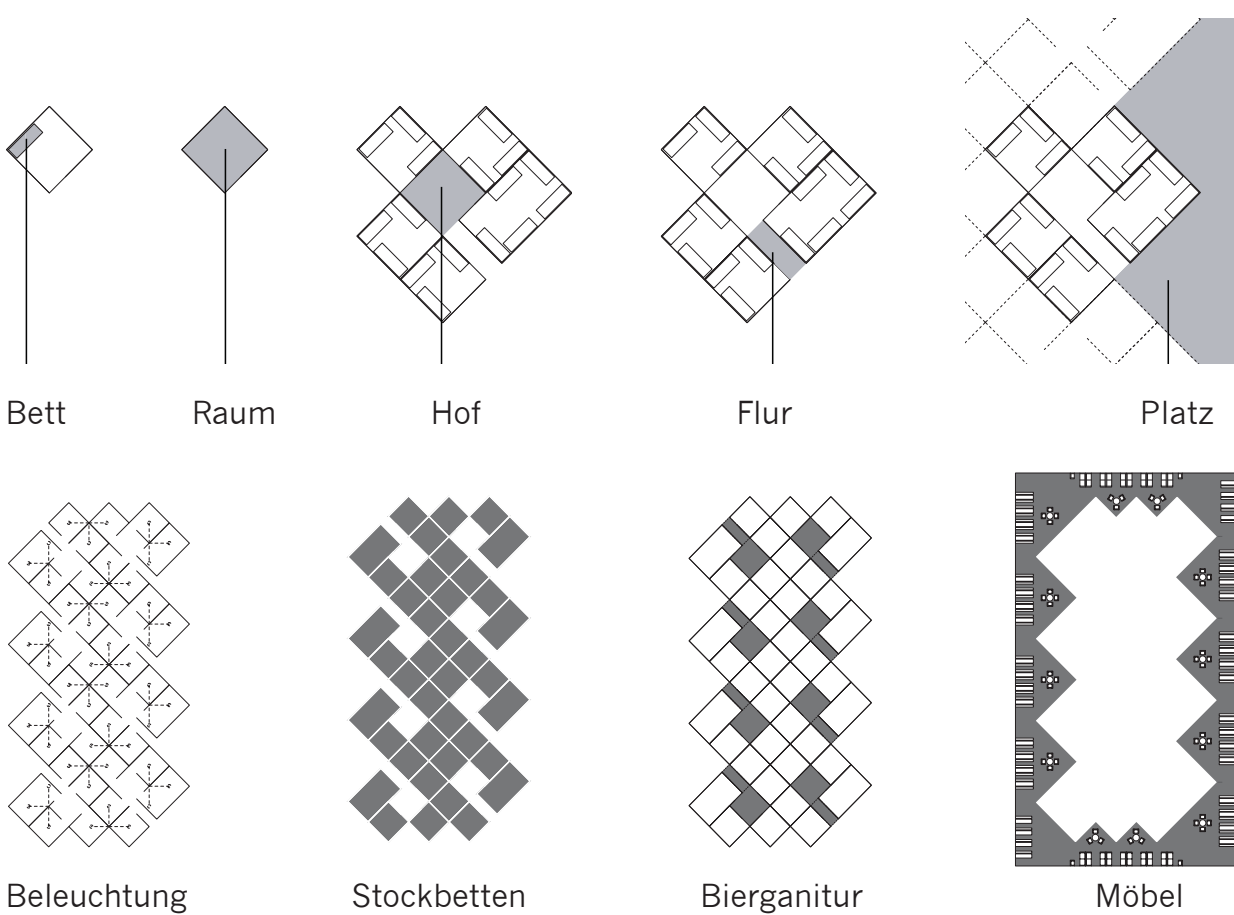
A structural approach to improving emergency-shelter refugee housing in first admittance facilities. The camp logistics are complemented by the facility's urban character.

(Excerpt from project description)

Floor plan with urban model



Floor plan



Floorplan flexibility: Alternatives based on same principles

TWO GROUP ACCOMMODATIONS, KÖNIGSTEIN



Courtyard side



Front



Subsequent use



Material

NUMBER OF RESIDENTS / MODULAR UNITS

Project 1: 115 residents / 56 Modular units

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

-

COMMISSIONED BY

-

ARCHITECT

Franken Architekten, Frankfurt am Main

CONSTRUCTION FIRM

-

BUILDING METHOD

mass-wall construction: Precast concrete elements,
3 facade variations: wood – brick / Trespa – plaster
/ paint – glass

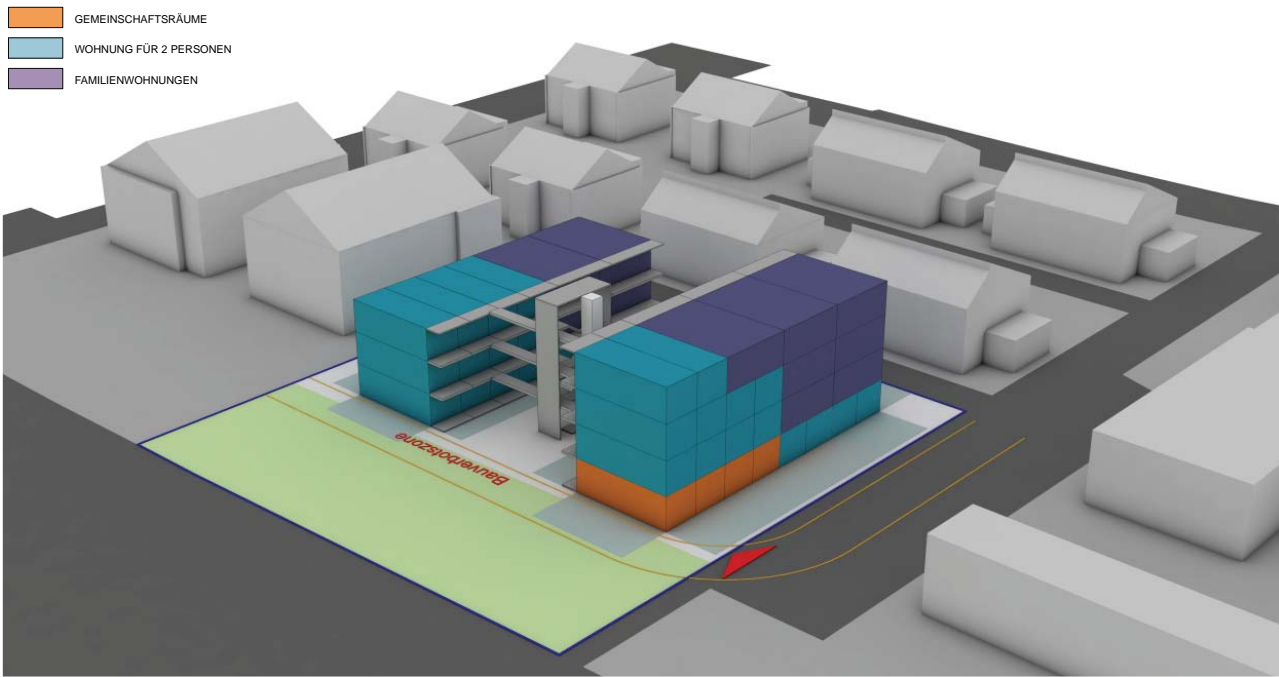
CONSTRUCTION COSTS

1,400 Euro/m² GFA

LIVING SPACE PER PERSON

9–11 m²/person

GFA: 1,600 m²



Modules can be combined

DESCRIPTION

Modular mass-wall construction makes it possible to build the accommodations quickly and cheaply, and deploy them flexibly, while retaining high structural and aesthetic integrity.

The building, designed as a case study for the City of Königstein, will serve as a shared residential form that strives, as far as possible within the spatial program, and in spite of the various issues associated with the refugee crisis, to achieve a balance between individual privacy and shared communal areas.

(Excerpt from project description)



Project 1: Floor plan, second and third floors / Apartment model for families



Site plan

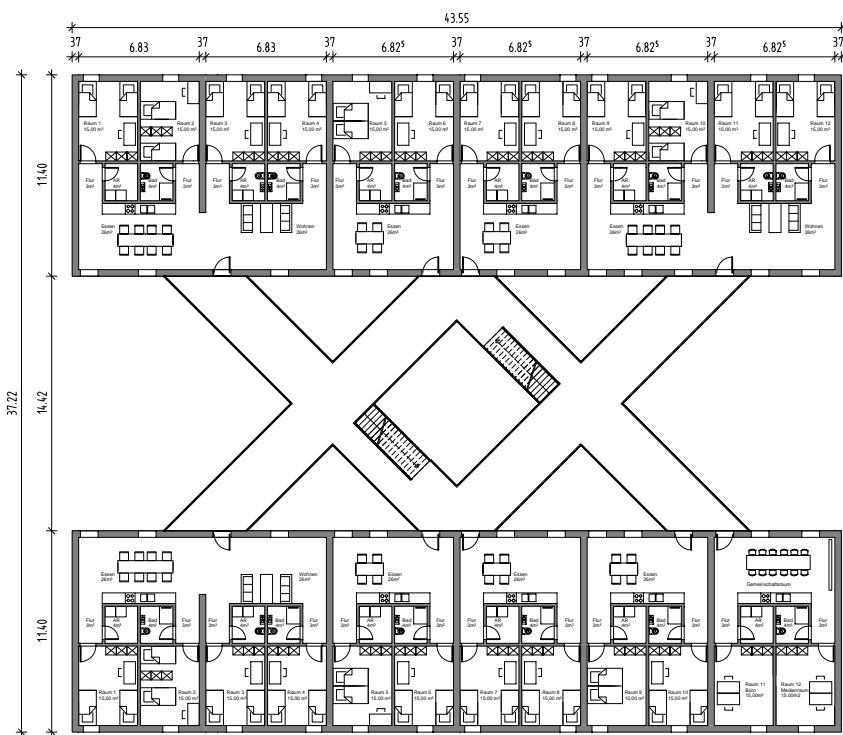
“REFUGIUM,” REFUGEE HOUSING, ANSBACH



Concept



Design idea



Floor plan, ground level



Treppenhaus Stairwel

NUMBER OF RESIDENTS / MODULAR UNITS

24 to 36 residential units

RESIDENTS

Asylum seekers, refugees with recognized refugee status

The housing will strive to accommodate a mixed resident base of students, unemployed, “technicians-construction workers,” and commuters.

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2016

Subsequent use possible

COMMISSIONED BY

N/A

ARCHITECT

hirsch-architekten, Nikolai Warth and Maria Tyroller as intercultural advisors, and clean energy engineer Lisa Schottmann. Supported by graphic design team #Büro25

CONSTRUCTION FIRM

Regional craftsmen

BUILDING METHOD

Mass-wall construction: Precast concrete elements, wood for interior

CONSTRUCTION COSTS

Approx: 1,650 Euro/m² GFA (depending on quality of assembly)

LIVING SPACE PER PERSON

Minimum 7 m²/person (not including community area). When need for housing is less dire, a smaller occupancy level could result in living space of 20 to 25 m²/person

OFFICE BUILDING CONVERSION TO A FIRST ADMITTANCE FACILITY, MUNICH



Interior / Photo: © Michael Heinrich

NUMBER OF RESIDENTS / MODULAR UNITS

492 people / 164 modular units

RESIDENTS

Asylum seekers

DATE OF COMPLETION / LIFESPAN

Date of completion: December 2015

Lifespan: 2 Years

COMMISSIONED BY

State Capital of Munich, Social Department

ARCHITECT

Friedrich Poerschke Zwink Architekten BDA

CONSTRUCTION FIRM

Diverse group (separate elements commissioned individually)

BUILDING METHOD

Conversion

CONSTRUCTION COSTS

N/A

LIVING SPACE PER PERSON

6–9 m²/person



Interior/ Photo: © Michael Heinrich



Interior/ Photo: © Michael Heinrich

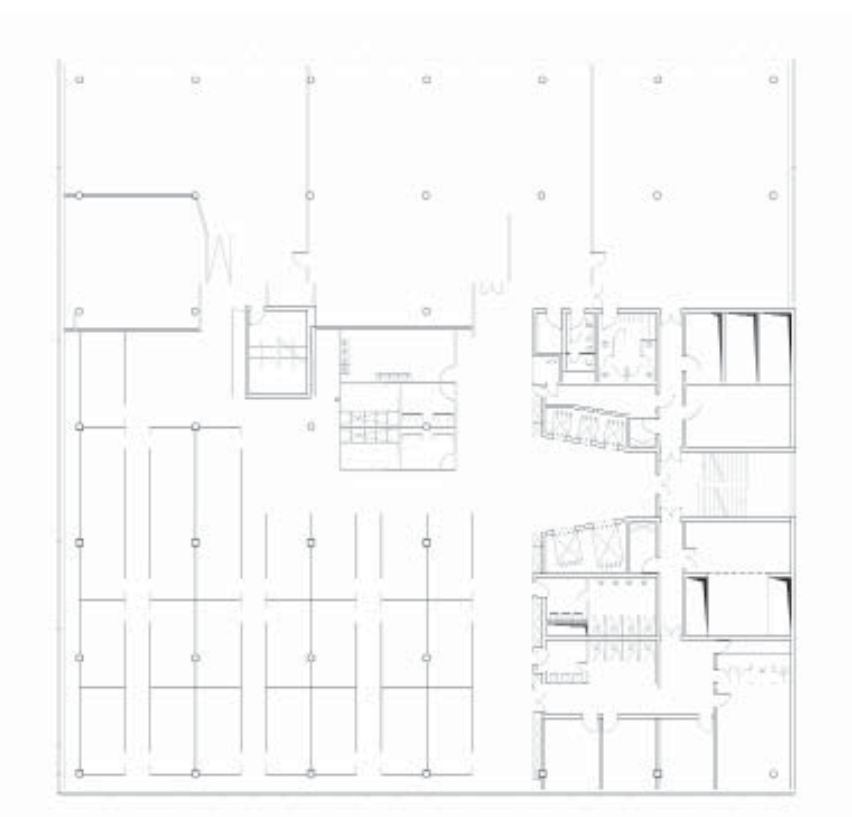
DESCRIPTION

Refugee accommodation in a heritage-protected building (former OSRAM Headquarters, Research & Development Division). To convert the former open-plan office rooms, 1.60-meter-high partitions and shared showers and sleeping areas were installed. Reinstallation of a large kitchen on the ground floor. The adjacent buildings feature office rooms, social rooms, and a small bicycle-repair workshop.

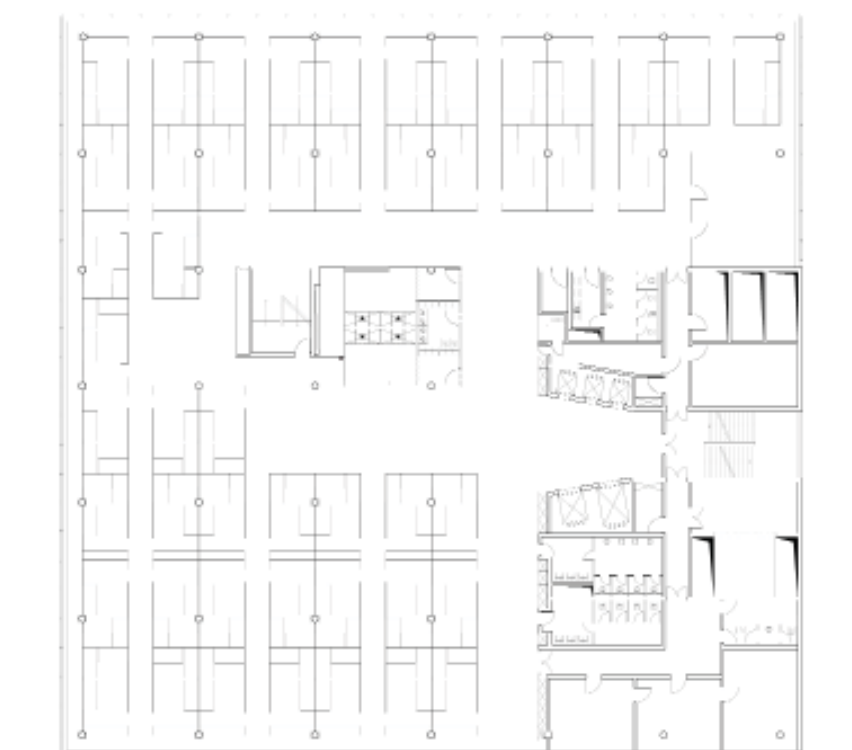
(Excerpt from project description)



Floor plan, ground level



Floor plan, second level



Floor plan, third level