

INSPIRING, SUSTAINABLE,

INNOVATIVE

Proven solutions
with wood fibre insulation



CLASSIC EXAMPLE

of multi-storey timber construction

Seven storeys, constructed entirely in timber, tower in the air above the solid foundation of 'Buggi 52'. The construction of the first FSC-certified building in Germany shows how coordinating planning, prefabrication, and the right choice of components at an early stage can contribute to a smart overall solution for residential living, child daycare, and commercial space. An important part of this brief is met by the GUTEX Pyroresist wall wood fibre insulation board, which fulfils fire protection requirements for a flame-resistant insulation material and is fully in line with ecological considerations.

The rainscreen façade in front of the wall structure with GUTEX Pyroresist is comprised of pre-greyed silver fir formwork. Continuous sheet metal strips mark the storey lines and prevent fire from spreading.



Project: 'Buggi 52' residential building with child daycare, Freiburg

Developer: IG Klösterle

Architecture: Weissenrieder Architekten BDA, Freiburg

Timber construction: Holzbau Bruno Kaiser GmbH, Bernau im Schwarzwald

Wood fibre insulation: flame-resistant GUTEX Pyroresist wall wood fibre insulation board

Year of construction: 2021

Photos: Martin Granacher

Project: 'Quartier Wir' residential development, Berlin

Developer: UTB Berlin Besser Genossenschaftlich Wohnen von 2016 eG

Architecture: Deimel Oelschläger Architekten Partnerschaft, Berlin

Timber construction: Terhalle Group, Ahaus

Wood fibre insulation: Thermowall ETICS thermal insulation system, Implio F window joint system

Year of construction: 2020

Photos: Martin Mai, Jens Schumann



The 'Quartier Wir' residential development in Berlin comprises five new buildings constructed from timber modules and promotes cross-generational community life with its diverse units and range of socially responsible commercial projects. The architecture of the buildings in this new development is also marked by diversity: while the basements and reinforcing stairwells are constructed in concrete, timber is used for all the floors and façades.

Thanks to considerable prefabrication, the insulated façade elements were supplied ready to install with integrated windows and the wind and rain-resistant Implio window joint system. The Thermowall ETICS thermal insulation system, including an approved render system, completes the façade design.

ROBUST BUILDING ENVELOPE with climate effect



Project: Residential building refurbishment
Soldiner Str. Berlin

Developer: Manuela und Thomas Windmüller
GbR, Berlin

Timber construction: Dachdeckerei Günther
Heinrich GmbH, Berlin

Wood fibre insulation: GUTEX Thermofibre
blow-in insulation, GUTEX Multiplex-top sarking
board

Year of construction: 2018

Photos: Jens Schumann

Roof extensions and loft conversions can create high-quality residential space in urban areas. The mixture of flat and inclined roofing, known as the 'Berlin roof,' harbours considerable potential but is also a particular challenge. The economical roof form is a variation on the pent roof with a slightly inclined middle section and steeply sloping sides, a design common in Berlin and many other major German cities in the Gründerzeit of the late nineteenth century.

In order to design the extension roof in an ecologically and physically safe way, work at the residential building on Soldiner Straße in Berlin involved the combined use of various insulation materials. For the vapour-permeable pitched roof refurbishment, sarking boards were used on the rafter, and blow-in insulation in the compartment, both made of wood fibre from GUTEX. In the flat roof, the foamed insulation board in combination with the roof waterproofing meets the 'hard roofing' requirement, while the wood fibre insulation in the compartment provides the sound and heat protection that is conducive to pleasant living.

URBAN CONSOLIDATION in historic buildings

The ecologically-minded plans for the refurbishment and expansion of the KEIDEL Mineral Thermal Baths succinctly highlight the building's key design features, such as the wooden supporting structure, extensive glazing, and the diverse geometric design language of the roof surfaces. The new roof covering with wood fibre insulation and the shifting of the façade to the outside guarantee the necessary air-tightness of the building envelope; the supporting structure – completely surrounded by protective structural elements – only has to withstand the temperature and indoor humidity of the thermal bath environment.

The new roof structure under the rear-ventilated shingle roofing offers vapour permeability and moisture tolerance with two-layer on-roof insulation made of wood fibre insulation boards from GUTEX. The ecological insulation boards make a significant contribution to heat and sound insulation in the thermal baths and ensure soothing relaxation under 2,900 m² of roof area.

ATMOSPHERE

under the hall roof



Project: Keidel Mineral Thermal Baths refurbishment and extension, Freiburg

Developer: Freiburger Kommunalbauten GmbH, Freiburg

Architecture: Sacker Architekten GmbH, Freiburg

Roof construction: Rudi Metzler GmbH, Hinterzarten

Timber construction: Holzbau Baumer GmbH, Simonswald

Wood fibre insulation: GUTEX Thermosafe-homogen on-roof insulation, GUTEX Ultratherm sarking board

Year of construction: 2011

Photos: GD90 Markus Dold, Thomas Dix



COMPETENCE CENTRE

for nature conservation

At the new NABU Lake Constance Centre, conservationists in Reichenau have a home that perfectly fulfils the principles of the 'Naturschutzbund Deutschland' natural conservation organisation in an environmentally conscious manner. In addition to a modern architectural language, bird protection glass for the windows and doors, solar technology on the roof, and a highly efficient heat pump, the natural insulating materials used in the interior and on the façade implement the high sustainable standards of the new building at all levels.

The timber post-and-beam building offers flexible space for exhibitions, seminar and office use, a workshop for landscape maintenance, and a living area for the volunteers. It is just as flexible as the GUTEX Thermoflex insulation mats, which were clamped precisely into the timber studs in the compartment area and ensure a pleasant indoor climate.

Project: NABU Lake Constance Centre, Constance

Developer: NABU Baden-Württemberg, Stuttgart

Architecture: Braun + Müller Architekten BDA, Constance

Timber construction: Ettwein Holzbau GmbH, Villingen-Schwenningen

Wood fibre insulation: GUTEX Thermoflex interior insulation, GUTEX Multitherm façade insulation

Year of construction: 2019

Photos: Martin Granacher





Project: refurbishment and conversion of listed glassworks in Alt-Stralau

Developer: Baugruppe Glashütte Alt-Stralau

Architecture: Eyrich Hertweck Architekten, Berlin

Façade construction: PROBAU GmbH, Annaberg

Wood fibre insulation: GUTEX Thermoroom interior insulation

Year of construction: 2018

Photos: Udo Meinel, Eyrich Hertweck Architekten

On the Stralau peninsula in Berlin's Friedrichshain borough, a construction group revitalised the listed workshop building from 1923 for residential and commercial use. With the careful refurbishment and the use of ecological, in part recycled, building materials, the original character of the former glassworks was preserved, while at the same time creating an energy-efficient building.

External insulation of the brick façade was not possible but the existing steel structure represented a significant thermal bridge, so GUTEX insulation boards were bonded over the entire inside surface of the external walls. The vapour-permeable and moisture-tolerant insulation board, which is applied in a low insulation thickness, can absorb up to 15% of its own weight in moisture and release it again in a controlled manner without significantly impairing the insulation effect.

NEW LIVING in a former glassworks

ECOLOGICAL WOOD FIBRE INSULATION

for new builds and refurbishments

For hundreds of years, wood has been rediscovered again and again in architectural design and reinterpreted through creative ideas and attractive material combinations. In addition, the ecological building material makes an important contribution to the environment and the quality of life in buildings – it is renewable, stores carbon, saves energy as an insulating material, is durable, and healthy to live in.

Thanks to innovative manufacturing processes, insulation materials made of natural wood fibres have been developed into versatile insulation solutions for new buildings and modernisation projects. Their range of application includes almost all insulation procedures for roofs, façades, and extensions.

Since 1932, GUTEX has been delivering sophisticated solutions that are further developed in close cooperation with architects, planners, and specialist tradespeople, and can be flexibly combined. All products are made from sustainable Black Forest fir and spruce wood and offer natureplus® tested and certified quality – true to the GUTEX guiding principle: Sustainability in every fibre.

