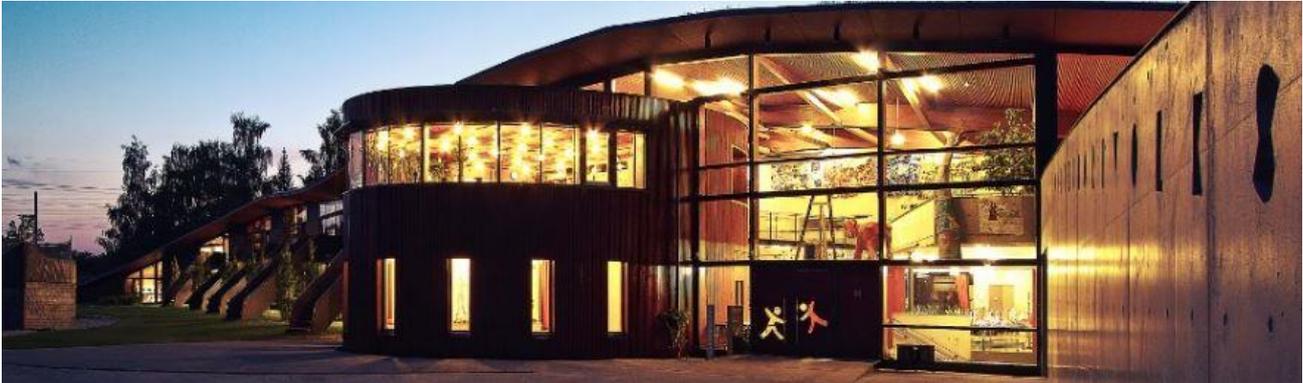


## Press Release

28 February 2018



The Montessori school in Aufkirchen is one of the many Passive House projects in Bavaria. The 22<sup>nd</sup> International Passive House Conference takes place in Munich.  
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# Munich, Manhattan and Mongolia

## Global application of the Passive House Standard - Specialist exhibition

***Darmstadt/Munich, Germany.*** Munich is extensively applying it, so is Manhattan, and Mongolia has just started. What? Energy efficient construction to the Passive House Standard. All three locations have impressive projects that focus on maximum energy efficiency for construction and retrofits. This will be demonstrated at the International Passive House Conference to be held on 9 and 10 March 2018 in Munich. At the same time, the Passive House specialist exhibition will also welcome private building owners to the Congress Center MOC. One of the topics there: "What do Passive House residents really think?"



At the Passive House specialist exhibition, private building owners can also find information about energy efficient components and receive advice for their building project.  
© Vallentin + Reichmann

At the **Passive House specialist exhibition**, all those interested in components for energy efficient construction and retrofit projects can find information on materials for insulation and windows with triple glazing. Due to the better thermal insulation and the triple-glazed windows, large differences between surface temperatures and indoor temperatures are avoided, resulting in increased thermal comfort in rooms and absolutely no draughts. In addition, the residents benefit from much lower heating costs. Of course, it is still possible to open the windows in a Passive House.

## Clean air

Ventilation units with heat recovery are also highly popular. These devices use the heat in the extract air to preheat the incoming fresh air. Ventilation units are also ideal for allergy sufferers as pollen and dust remain outside.

## Free tickets

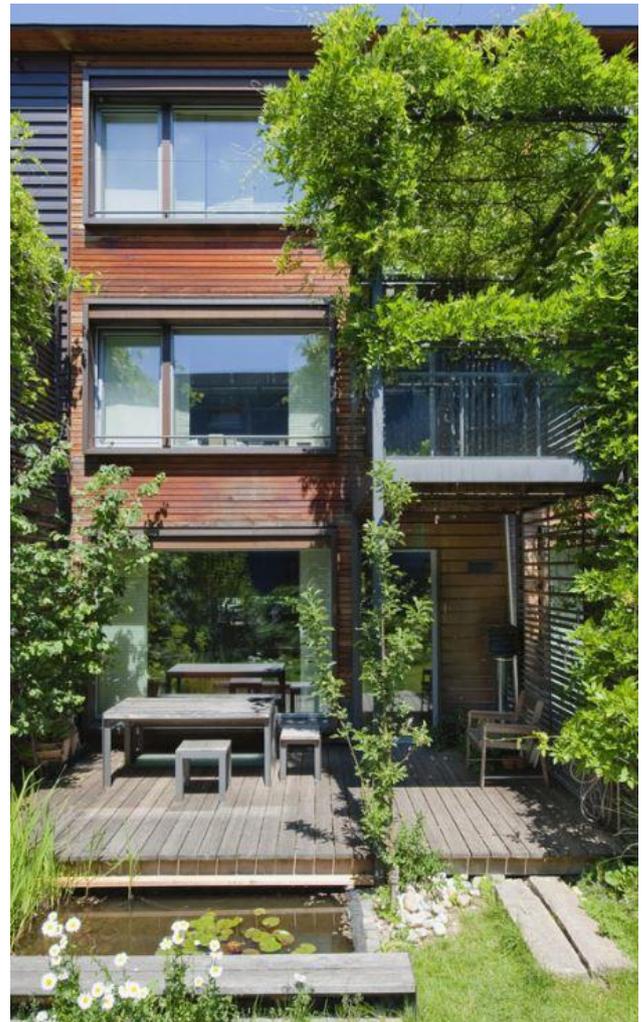
What do Passive House residents really think? The answer to this question will be given on Saturday at the Passive House Forum during the exhibition. Private building owners will report on the planning and construction of a highly energy efficient Passive House and talk about the enhanced living comfort. Free tickets for the Passive House specialist exhibition can be downloaded [here](#) or can be found at [www.passivhaustagung.de](http://www.passivhaustagung.de)

## Advice from experts

With the Passive House Standard, building owners can already fulfil the requirements of the European Buildings Directive today, which stipulates that from 2021, all new private buildings should be built as nearly zero-energy buildings. Experts from the Passive House Institute will also be available to give advice during the specialist exhibition.

## "Passive House – it's worth it!"

The **22<sup>nd</sup> International Passive House Conference** will take place at the Congress Center MOC parallel to the specialist exhibition. More than 120 speakers will report on worldwide projects, products and solutions for energy efficient construction and retrofits. In line with this year's focal theme "Passive House - it's worth it!," a particular focus will be on the compatibility of cost-effectiveness and energy efficiency.



What do Passive House residents really think? The answer to this question will be given on Saturday at the Passive House Forum, during the exhibition at the Congress Center MOC. © Vallentin + Reichmann



In Mongolia, with the help of a German architect a Passive House adapted to the extreme local climate was created from two scrapped shipping containers. © Ludwig Rongen

## Energy efficiency

Many projects from North America and Asia will be presented in addition to projects from Germany and Europe. Many large-scale projects to the Passive House Standard are currently being realised in China in particular, and Mongolia is also addressing the subject of energy efficient buildings. Here, comfortable housing will be made available to the people in rural areas in order to check migration to the cities.



The shipping containers after conversion. The façade of the Passive House pilot project consists of anodised aluminium panels which reflect the countryside. In winter the floor slab can store heat for a long time and helps keep the building pleasantly cool in summer. In Mongolia the rural population will be provided with comfortable housing in order to reduce migration to cities. © Ludwig Rongen

### **Pilot project in Mongolia**

In Mongolia, this housing must offer comfortable conditions even at temperatures of minus 25 °C in winter and up to 38 °C in summer. In collaboration with a German architect, for a pilot project two decommissioned shipping containers were converted into a single-family Passive House. Specially developed folding elements on the outside can be moved into the window reveals at night. Together with the insulation and the highly insulating windows, this reduces cooling down in winter to a minimum.

### **Workshops and excursions**

Numerous workshops will take place in the run-up to the International Passive House Conference, dealing with topics such as the latest ventilation concepts, cooling, and dehumidification, and highly efficient building envelopes. Courses for the Passive House Planning Package PHPP and for designPH will also be offered in Munich. Following the Conference, excursions will take place to impressive Passive House projects in and around Munich. The 22<sup>nd</sup> International Passive House Conference in Munich takes place under the patronage of the Bavarian Ministry of Economics and Media, Energy and Technology. Further information can be found at [www.passivehouse-conference.org](http://www.passivehouse-conference.org)

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The 22nd International Passive House Conference is supported by



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## General information

### Passive House

A Passive House is a building that does not require any conventional building heating on account of its excellent thermal insulation. Such buildings are called "passive houses" because a major part of their heating demand is met through "passive" sources such as solar radiation or the waste heat from occupants and technical appliances. A Passive House thus consumes about 90 percent less heating energy than existing buildings and 75 percent less energy than an average new construction.

### Passive House & COP23 in Bonn

The United Nations (UN) explicitly mention Passive Houses as a possibility to increase the energy efficiency of buildings and thus reduce global warming in "The Emissions Gap Report 2016".

### Pioneer Project

The first Passive House in the world was built in Darmstadt-Kranichstein (Germany) 25 years ago by four private homeowners on their own personal initiative. Ever since the homeowners moved in with their families in 1991, these terraced houses have been regarded as a pioneer project for the Passive House Standard.

25 years later, building physicists have attested to the unimpaired functioning of the first Passive House and its unchanged low heating energy consumption. With its newly installed photovoltaic system, the world's first Passive House now utilises renewable energy and received the Passive House Plus certificate for this reason.



© Peter Cook

### Passive House and renewable energy

The Passive House Standard can be combined well with on-site renewable energy generation. Since April 2015, the new building classes "Passive House Plus" and "Passive House Premium" have been available for this supply concept.

### Passive Houses worldwide

Passive House buildings for all types of uses now exist everywhere. In addition to residential and office buildings there are also kindergartens and schools, sports halls, swimming pools and factories built as Passive House buildings. The first Passive House hospital in the world is currently being built in Frankfurt am Main. Interest in Passive House is growing. In view of the consumption of resources in industrialised countries and the need to contain global warming, municipalities, businesses and private people are increasingly implementing new constructions or retrofits to the Passive House Standard.

### Passive House Institute

The Passive House Institute with its headquarter in Darmstadt (Germany) is an independent research institute for highly efficient use of energy in buildings. Dr. Wolfgang Feist is the founder of the institute. It holds a leading position internationally with regard to research and development in the field of energy efficient construction. The Passive House Institute is the organizer of the International Passive House Conference and the related exhibition. The next Passive House Conference takes place on 9 - 10 March 2018 in Munich, Germany.



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Pictures for editorial use: [www.flickr.com/photos/passive-house-institute](http://www.flickr.com/photos/passive-house-institute)

The latest news on the subject of Passive House: [www.twitter.com/IGPassivhaus](http://www.twitter.com/IGPassivhaus)

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