

Press Release 20 May 2022



# Reliable partner for energy balancing!

PHPP 10 now available in English language - Webinar on 25 May explains new features

Darmstadt, Germany. The energy demand of a building can be reliably calculated using the Passive House Planning Package (PHPP). The Passive House Institute has developed the 10th version of the PHPP, which is now also available in English. PHPP 10 contains helpful new add-ons and features for the energy balancing of highly efficient buildings. The new features will be presented in detail in a webinar on Wednesday, 25 May 2022. Members of iPHA will be able to attend free of charge.

Designers of highly energy efficient buildings value the Passive House Planning Package for its ability to predict the energy performance of buildings reliably. The tenth version of the PHPP is now also available in an English language version. It contains useful add-ons and new features for energy balancing of highly efficient buildings. The Passive House Institute will present the PHPP



10 in a webinar on 25 May, in collaboration with the International Passive House Association (iPHA). Jürgen Schnieders of the Passive House Institute will discuss the new features and add-ons. Webinar participants can choose between two different starting times to fit their time zone. For **iPHA** members. the registration for the online event is free of charge. Non-iPHA members can also attend for a small fee.

#### New add-ons

The PHPP 10 contains helpful new add-ons and innovative new features for the energy balancing of highly efficient buildings. The calculation of heat pumps has been improved, and split devices are now included as well. Another new feature is a stress test for summer comfort, which is helpful for planning buildings in an already noticeably shifting climate. Furthermore, the PHPP 10 features a new sheet for comparing calculated results with measured data, which makes quality assurance even easier. The new version also simplifies the input of more complex windows and improves the algorithm for heat losses through the ground.

# Revised building criteria

Coinciding with the launch of the English PHPP 10, the **Passive** House Institute publishes updated building which criteria, define requirements for certification relating to the Passive House, EnerPHit and PHI Low Energy Building standards. Among other things, the calculation of the limit values now takes into account the boundary conditions of a specific building. This applies to the primary energy demand of densely occupied residential and office buildings and the requirements for comfort and mould prevention. The



Coinciding with the launch of the English PHPP 10, the Passive House Institute publishes updated building criteria for the certification regarding the Passive House, EnerPHit and PHI Low Energy building standards. © Passive House Institute

requirements for building cooling have also been revised.

#### **Know-how online**

The international Passive House Association (iPHA) will be offering several webinars throughout the year, with more than 10 events this year alone. During the iPHA online events, participants will have the chance to interact with the speakers. Each webinar is offered twice, usually on the same day, to make it accessible to members across different time zones. After the event, participants receive a link to re-watch the webinar. They receive two further education credit points for live participation. The following iPHA webinar will take place on 1 June 2022 and will have simplified methods of energy modelling versus dynamic simulation as its topic. >> Further information

#### **General Information**

#### Latest report of the IPCC

"The time window remaining to us becomes smaller and smaller the longer we defer protection of the climate and adaptation" – this is what Hans-Otto Pörtner of the UN Climate Council IPCC had to say in February 2022. Solving the problems of supply security and climate protection in the building sector means highly energy efficient new constructions and retrofits. This is how the existing building stock will become climate-neutral!



Apartment blocks to House standard. Passive © Neue Heimat Tirol

### **Passive House buildings**

With the Passive House concept, the heat loss that typically takes place in buildings through the walls, windows and roof is drastically reduced. By applying the five basic principles - 1. excellent thermal insulation, 2. windows with triple glazing, 3. a ventilation system with heat recovery, 4. avoidance of thermal bridges, 5. an airtight building envelope – a Passive House building needs very little energy. For this reason, Passive House buildings can dispense with a traditional heating system. A major part of their heating demand is met through "passive" sources such as solar radiation or the heat emitted by occupants and technical appliances.

#### **Advantages of Passive House buildings**

In a Passive House building, in winter the heat is retained for a very long time since it escapes very slowly. In the summer (and in hot climates), a Passive House building also offers advantages: among other things, the excellent level of insulation ensures that the heat stays outside, therefore active cooling usually isn't necessary in residential buildings (in Central Europe). Due to the low energy costs in Passive House buildings, the utility costs are predictable - which is a fundamental principle for affordable homes and social housing. The Passive House standard meets the requirements of the EU for Nearly Zero Energy Buildings (NZEB).



The world's first Passive House building in Darmstadt, Germany recently celebrated its 30th anniversary.

## © Peter Cook

#### Pioneer project

The first Passive House in the world was built in Darmstadt, Germany, 30 years ago by four private homeowners. Professor Wolfgang Feist was one of them. 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.

#### Passive House and renewable energy

The Passive House Standard and generation of renewable energy directly on-site or near the building is a good combination. The Passive House Institute has introduced the building classes Passive House Plus and Passive House Premium for this purpose. The world's first Passive House building in Darmstadt has also been producing renewable energy since 2015 by means of a subsequently installed photovoltaic system, and received the Passive House Plus certificate for this reason.

#### **Building types**

**Passive House Institute** 

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 to the Passive House standard. The start of operations of the first Passive House hospital in the world in Frankfurt am Main is planned for Summer 2022.



Professor Wolfgang Feist © Peter Cook

# The Passive House Institute was founded by Professor Wolfgang Feist in 1996 as an independent

research institute. The Passive House Institute holds a leading position with regard to research and development in the field of energy efficient building construction and deep retrofits.

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