

Conditions of participation in the COMPONENT AWARD 2016

between

_____	and
Company	Passive House Institute
_____	Rheinstraße 44/46
Street, number	64283 Darmstadt
_____	Germany
Postcode, town/city	

Country	

The Component Award for ventilation solutions for residential buildings will be presented at the 20th International Passive House Conference to be held in Darmstadt. The focus is on cost-effective ventilation solutions for retrofits based on an example of a typical building built in the 1960s. Comprehensive solutions are being sought for a cost-effective ventilation system for a whole building which will also allow easy installation. The winners will be selected by a jury and the prizes will be awarded at the 20th International Passive house Conference. The aim of the Award is to demonstrate cost-effective and viable Passive House ventilation systems and to promote these and encourage their widespread use.

The Task

A multi-unit residential building with 8 dwellings is to be retrofitted with a controlled ventilation system during the course of refurbishment to be completed in several steps. As shown in the attached drawing, the apartments are intended for use by a maximum of 3 occupants. Mechanical ventilation of the stairwell is recommended in principle, but will not be taken into



account in the evaluation of this Award. Ventilation of the basement which is located outside of the heated building envelope will also be excluded from the evaluation.

The participants are expected to provide a fully functional ventilation system for the entire building in accordance with the requirements mentioned below. The quotation will include all investment costs for the ventilation unit and all necessary components as well as the costs for planning, installation, adjustment and maintenance in the first year of operation. Further instructions for preparing the quotation are provided in the document "Instructions for preparing quotations and cost calculation".

All submitted documents will be checked for completeness and compliance with the requirements. The quoted prices are binding and it should be possible to use these for planning of comparable projects. The price commitment will be for a period of one year. The Passive House Institute reserves the right to carry out random checks relating to the quoted prices. Deviations from the costs submitted for the Awards may subsequently lead to disqualification and revocation of the awarded prizes.

Requirements

- All ventilation units that have been certified as **Passive House ventilation** units by the Passive House Institute may be entered for the competition.
- **Fully functional ventilation system:** if services other than those described in the instructions are necessary for the full functionality and implementation of the ventilation system, then these must also be taken into account in the quotation.
- **Dimensioning of air quantities** should be such that IDA 3 air quality (based on EN 13779) can be achieved for an occupancy density of 3 persons with normal operation (with directed air flow in supply air and extract air rooms, this correspond with an supply air volumetric flow of ca. 90 m³/h). In addition, reduced ventilation and purge ventilation operation should also be possible.
- **Sound protection:** during continuous operation mode of the ventilation unit, a sound pressure level of 25 dB(A) in living areas and 30 dB(A) in functional areas should be adhered to. If the requirements are not met by the device, suitable additional measures should be undertaken (sound absorbers, encasing of the unit) and should be included in the cost calculation.
- **Summer ventilation:** Assuming an inner-city location of the building, the unit should include a strategy for ventilation in summer.
- **Frost protection:** if the device itself is not equipped with frost protection, suitable additional measures for this should be taken into account.
- **Condensate drainage:** a solution for drainage of condensate should be developed (if necessary) and included in the cost calculation.



Evaluation criteria

Evaluation will include the following:

- the life cycle costs will be determined with 50 % (these can also be calculated by the participants themselves using the provided evaluation tool)
- with another 50 % for the aspects of practicability (suitability for step-by-step retrofitting), integration of the unit and ducts, design, space demand and ease of maintenance. These will be assessed by an independent panel of judges.

Participation

- The deadline for entries is 31.12.2015. All energy relevant characteristic values of the device must be provided in verified form by this date. A signed certification contract must be presented by this date in the case of certification procedures that are still ongoing. This implies that the thermal characteristic values have been validated by the PHI and that certifiability is given.
- This year's Component Award will be awarded for the cool, temperate climate zone (Frankfurt/Main, Germany).
- In the follow-up to the Component Award, a publication will be prepared by the PHI which will be made available on the PHI website for downloading free of charge. The prize-winners will be mentioned with their names and ranking; the names of other participants will also be mentioned upon request. This documentation will include all relevant results as well as the quoted prices.
- Participation by interdisciplinary teams consisting of manufacturers, architects and building services engineers is expressly requested.
- Participants in the Component Award shall transfer all non-exclusive publication rights to the PHI for all documents submitted for the Award.
- There is no entitlement to participation. The PHI reserves the right to reject applications if necessary.

Documents to be submitted

- Ventilation design planning showing all necessary components, duct routing, and position of the ventilation unit in "Gebäudezeichnung_MFH_CA2016"
- Excel tool "LCC_Lueftung_CA2016_en" which has been completed (further information and input assistance are given in the file)



- Quotation for the implementation of a ready-to-use and fully functioning ventilation system for the entire building (in accordance with the attached document "Gebäudezeichnung_MFH_CA2016") including detailed specification of services (further information can be found in the attached "Instructions for preparing quotations and cost calculation")
- An itemised list of all services and components offered
- Documentation of the technical parameters of the components used
- Proof of compliance with the specified sound level (evidence of the sound absorbers and device encasing used if necessary)

Prizes

The winning entries will receive a special certificate showing the Component Award logo and the position achieved, which will be valid until the end of 2017. In addition, the winners will be announced at the International Passive House Conference. A special certificate valid until the end of 2016 will be issued for the winners of the second and third positions. All winners will be able to use the logo of the Component Award showing their position for their own advertisements for as long as the certificate is valid. The certificates and a plaque will be publicly presented to the winners within the framework of the International Passive House Conference. The participants will be informed of the results in advance, in order to make it possible for them to promote the Award at the accompanying exhibition at the 20th International Passive House Conference in Darmstadt. The parties agree not to disclose the ranking until the award ceremony.

Rights to use of the Excel tool LCC_Lueftung_CA2016_en

The Excel interface is based on algorithms of the Passive House Planning Package Version 9. All rights remain with the PHI. Use of the tool is restricted to the Component Award 2016. The tool may not be transferred to others, sold, or distributed in any other way.

You will receive the Excel tool after you have submitted these conditions of participation.

We will be pleased to answer any questions that you may have and will make these available to all participants in anonymised form together with our answers.

The deadline for questions and responding to these is 15 November 2015. All questions and answers published up to this date will constitute a part of these conditions of participation.

Any recourse to courts of law is excluded.



We wish you much success with your participation and look forward to seeing you at the 20th International Passive House Conference in Darmstadt.

With my signature I accept the conditions of participation in the COMPONENT AWARD 2016 as laid out above.

Place, Date, Signature (name, forename)

Contact person for the COMPONENT AWARD 2016:

Name: _____

E-mail: _____

Telephone: _____

Attachments:

- Excel tool: LCC_Lueftung_CA2016_en (will be provided after the conditions of participation have been submitted)
- Instructions for preparing quotations and cost calculation
- Gebäudezeichnung_MFH_CA2016



Co-funded by the Intelligent Energy Europe
Programme of the European Union

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