

**BRIEF**

**activehouse**

BUILDINGS THAT GIVE MORE THAN THEY TAKE

**AWARD**

**Rethink  
Suburbs**  
2015/2016

15<sup>th</sup> January 2016

ANNOUNCEMENT  
OF THE COMPETITION

7<sup>th</sup> March 2016

COMPETITION KICK OFF,  
Wolkersdorf

30<sup>th</sup> June 2016

SUBMISSION  
OF PROJECTS

July 2016

JURY - THE NATIONAL  
ROUND

September 2016

JURY - THE INTERNATIONAL  
ROUND

October 2016

WINNERS

**VELUX Česká republika, s.r.o.,  
VELUX Austria, VELUX Switzerland  
and  
VELUX SLOVENSKO spol. s r.o.**

**Announce**

**1<sup>st</sup> international annual anonymous  
double-round competitive exhibition  
of student works for the**

**ACTIVE HOUSE AWARD  
2015/2016**

**“Rethink Suburbs”**

## **TABLE OF CONTENTS**

---

### **1. Introduction**

1.1 Challenge

1.2 Project site\_ Wolkersdorf Austria, A county town in the Weinviertel

1.3 Task / guiding principle of urban infill

1.4 Active House Principles and criteries

### **2. Initial situation**

2.1 Location

2.2 The site that is subject to this project

2.3 Requirements and local building regulations / ensembles

### **3. Procedure**

3.1 Organiser of the competition

3.2 Type of competition

3.3 Approach

3.4 Dates and Deadlines

3.5 Answers to questions posed

3.6 Binding character

3.7 Publication of work results

3.8 Prizes, prize money, compensation and travel expenses of the participants

3.9 Assessment boards (jury)

3.10 Assessment criteria for the assessment board (jury)

3.11 Presentation and submission of results of the student competition

3.12 Documents for the participants

## 1. Introduction

---

### 1.1 Challenge

Isac Newton wrote: "We are dwarfs on the shoulders of giants" meaning that each generation can build up on the spiritual and substantive devices of recent epoch. That is a matter of fact for our cities and villages where less than 1 % of all buildings are newly. So we all benefit from this gigantic fund of houses and infrastructure – but have to meet the challenge to adapt it to the requirements of tomorrow.

(Text: D&A Issue 19)

### Inventory

Suburban area around a big city. Many villages and little towns benefit from the nearby metropolis. Industrial areas nearby and economic congested areas offer numerous jobs within easy and quick reach.

At the same time many people remove to the country. Homes with gardens close to the nature – that's what many people are dreaming about being sick of living in big cities. Multi-story buildings and settlements of single-families had been the answer in most cases regardless the grown structure or the townscape.

The requirement for living space changes during life time. Whilst young people get along with smaller living space without garden young families are exactly looking for more living space and outdoor area. Senior generations mostly need less living area but enjoy spending their time outdoors in their own garden.

An inventory showed, that many single family houses and plots have not been used to their full capacity. Attics or upper floors – sometimes because of restricted mobility in the seniority or when children left the house – are vacant.

We want to focus on exactly that "room"!

### 1.2 Project site\_ **Wolkersdorf Austria, a county town in the Weinviertel**

Owing to the financial support provided by the municipality as of 1960 to attract businesses, **Wolkersdorf** has become an important economic centre. During the years 1966 to 1972, Wolkersdorf grew because of its merger with the municipalities of Riedenthal, Münichsthal, Pföding and Obersdorf.

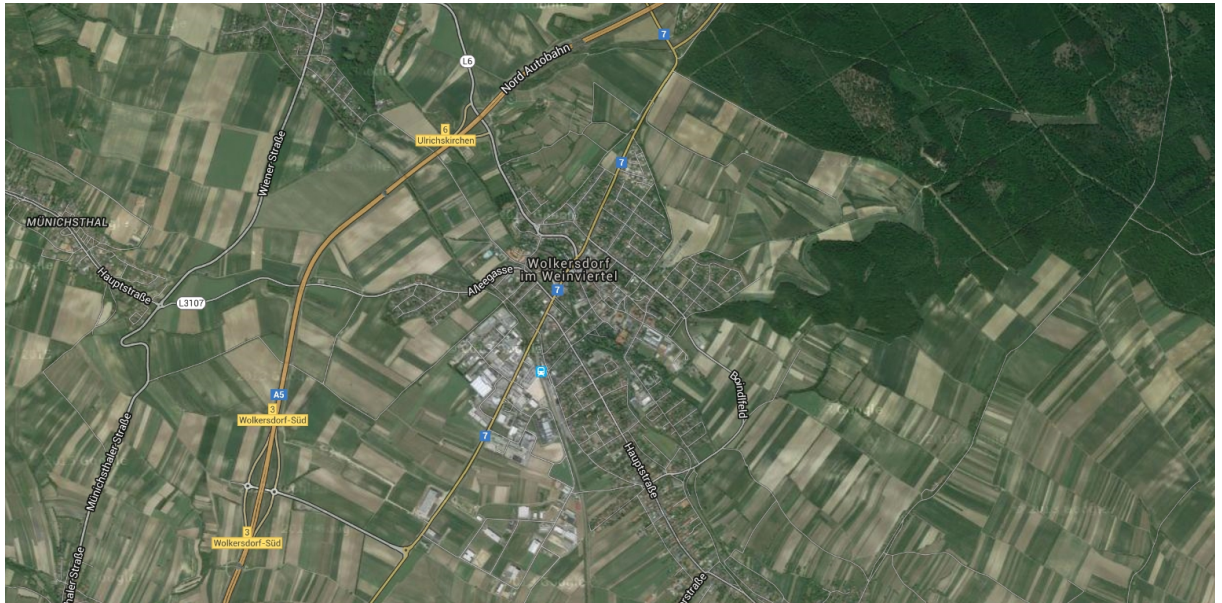
Extensive infrastructural measures were defining for the Seventies and Eighties. In 1978, the provincial government of Lower Austria set up the industrial centre of Lower Austria North/Wolkersdorf (Industriezentrum NÖ-Nord/Wolkersdorf) south of the Ostbahn (north-bound railway) and east of the Brünnerstraße. Intensive residential building activities, active youth work and the establishment of a school centre define the town as a "Gate to the Weinviertel".

Wolkersdorf successfully covers the entire range from urban character to rural structures. A town with 7,001 inhabitants (as of 1 January 2015).

The result is high quality of life, including a high-quality infrastructure, various local recreation areas as well as rest and green areas in and surrounding Wolkersdorf.

Its proximity to Vienna and the remarkable cultural landscape of the Weinviertel entice a lot of guests to visit Wolkersdorf.

It is exactly those qualities that have led to an immense influx and the high demand for property has created an increase in prices.



Source: <https://www.google.at/maps/@48.3811808,16.5179009,14z/data=!3m1!1e3>

### 1.3 Task / guiding principle of urban infill

It will be the students' task to create **a user-specific building development through urban infill or by creating new buildings and, at the same time, implementing the Active House Standards defined by VELUX.** (Defined in Article 1.4)

A new building, which has to meet today's demands and criteria regarding sustainability and energy efficiency, is not the only solution for future-oriented construction; even more so, as its financing becomes more and more challenging. More than 60 % of existing buildings worldwide are more than 30 years old. Handling those buildings and the unused space available within is the challenge that we have to face.

The objective is intelligent urban infill within a typical settlement structure, as can be found in Wolkersdorf in the Weinviertel. The aim is to intervene in functioning established structures, to improve the life quality in respect of comfort and health.

As circumstances require, new space and new possibilities for its use and users are to be created.

#### Create new room for ...

- Living and working under the same house (e.g. home office; medical practices...)
- "Generation living together" Child comes back with young family; living together with the parents ensuring privacy for both generations
- Extra living rooms to rent or even sell – to create an extra income

The objective of this students' competition is to find operational and economic solutions regarding urban planning and architecture, which meet the requirements of the future. The concept of sustainability has to be considered. Particular emphasis has to be put on the economical use of land and resources.

#### The main aspects are:

- Revaluation of the existing ensemble, development of a compelling design solution and an individual identity
- High functionality
- Urban infill and healthy living in the context of the Active House principles represented by VELUX

#### 1.4 Active House Principles and criteries

Holistic approach – not architecture exclusively, not energy exclusively but the interaction between:

- **HEALTH & COMFORT**
- **ENERGY**
- **ENVIRONMENT**

All descriptions and requirements on the topic of Active House are available at VELUX and the participants will be given an understanding of this topic through training courses (online and expert lectures). Active House is a visionary building concept that creates healthy and comfortable indoor living for its occupants without impacting negatively on the climate – a step towards a cleaner, healthier and safer world. The Active House concept defines highly ambitious long-term goals for the future building stock.

The purpose of the concept is to unite interested parties based on a balanced and holistic approach to building design and efficiency. The Active House Alliance aims at facilitating co-operation on such activities as building projects, product development, research initiatives and efficiency targets that can move us further towards this concept.

**The Active House principles** provide the conditions for designing and renovating buildings that contribute positively to human health and well-being by focusing on indoor and outdoor conditions, the environment and the use of renewable energy.

An Active House is evaluated on the basis of the interaction between energy consumption, indoor climate conditions and impact on the environment.

##### **Comfort requirements**

- a building that provides an indoor climate that promotes health, comfort and sense of well-being
- a building that ensures good indoor air quality, satisfactory thermal climate and appropriate visual and acoustical comfort
- a building that provides an indoor climate that is easy for occupants to control and at the same time encourages responsible environmental behavior.

##### **Energy**

- a building that is energy efficient and easy to operate
- a building that substantially exceeds the statutory minimum in terms of energy efficiency
- a building that exploits a variety of energy sources integrated in the overall design

##### **Environment**

- a building that exerts the minimum impact on environmental and cultural resources
- a building that avoids ecological damage
- a building that is constructed of materials that can be recycled

In the course of the competition we will organize two seminars focused on the design of active houses. The ACTIVE HOUSE AWARD – “IDEA” seminar and the ACTIVE HOUSE AWARD – “TECHNIC” seminar targeting the idea and technical solution for the building and the utilization of renewable energy sources.

##### **General approach of the building:**

To protect as much as needed against weather (heat, cold, storm, rain) but to open as much as possible towards outdoor.

© Peter Holzer, Institute of Building Research & Innovation

## 2. Initial situation

### 2.1 Location

The aim is an intelligent redensification in a typical structure of a settlement of single family houses.

#### Location plan summary map



Fig. 1: Cadastral Map – 2120 Wolkersdorf im Weinviertel  
The processing perimeter is the area within the red lines.

### 2.2 The site that is subject to this project

#### Aerial photo

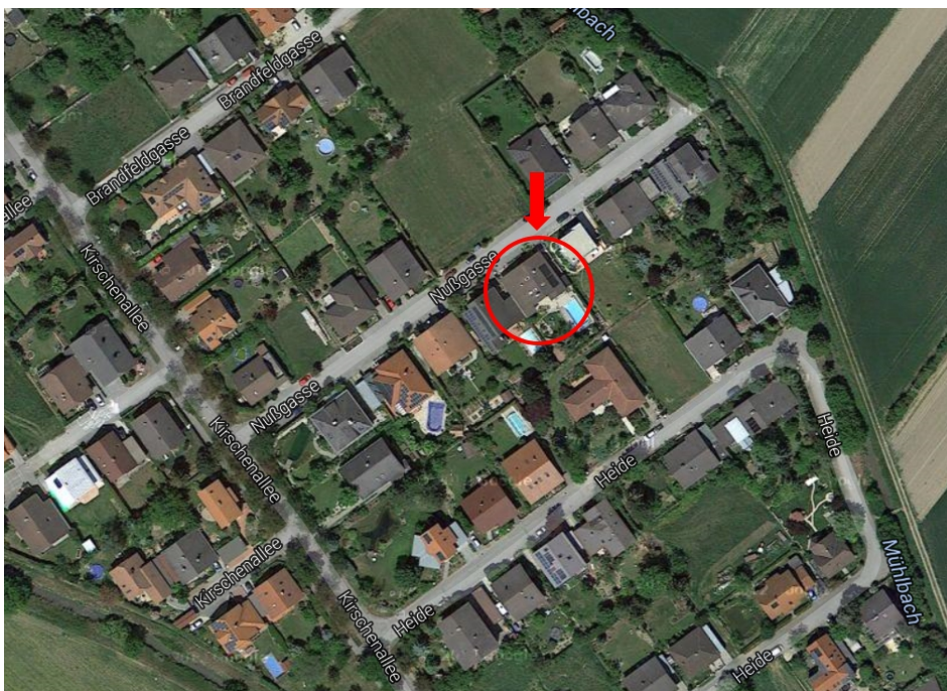


Fig. 2: Orthophoto / Nugasse

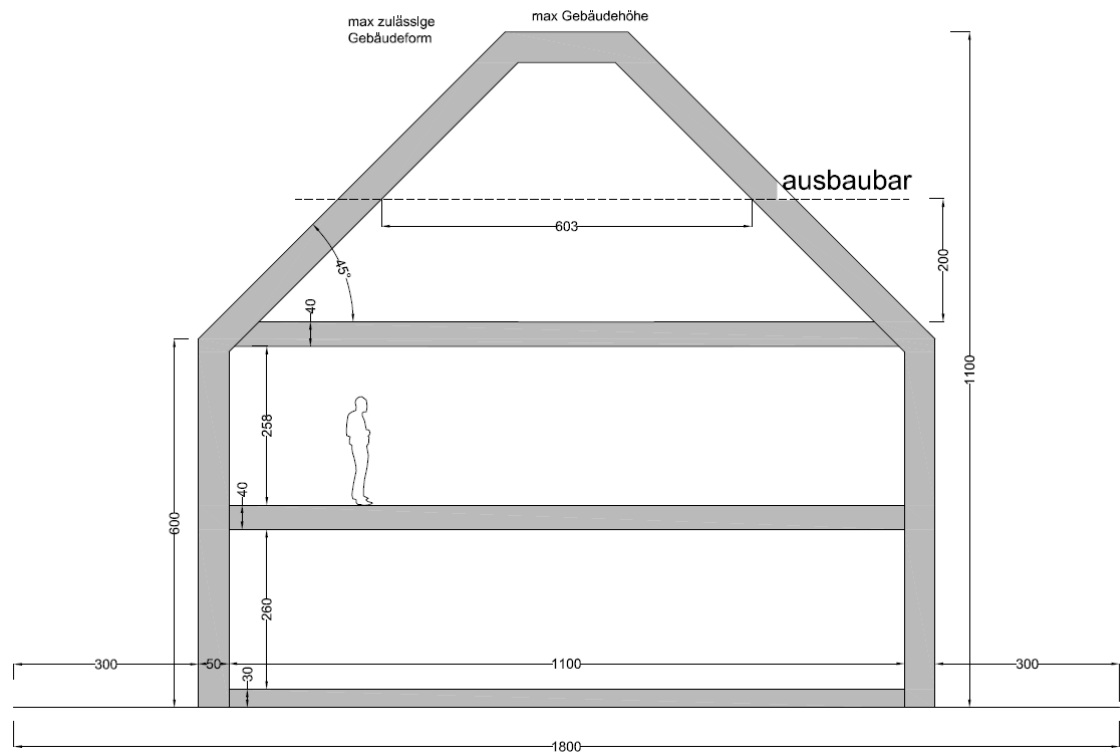
## 2.3 Requirements and local building regulations / ensembles

### General requirements: Lower Austria

In this settlement the building regulation is so called "class 2":

- Maximum height of the side wall: 8 m
- Maximum height of the building: 11 m

Distance from the border of the plot to the wall: 50 % of the height of the wall.  
Minimum 3 meters. If the wall is 7 m the distance has to be 3,5 meters.



Deviating from the local building regulations of the "open settlement" (certain distance from one house to the next one) students can take the liberty to create ensembles of houses or even a row of houses which has been tradition in this area for centuries.



### 3. Procedure

---

#### 3.1 **Organiser of the competition** (filled out by each country)

VELUX Österreich GmbH  
 Veluxstraße 1  
 2120 Wolkersdorf

In cooperation with VELUX Switzerland, VELUX Czech Republic and VELUX Slovakia.

#### 3.2 **Type of competition and Registration**

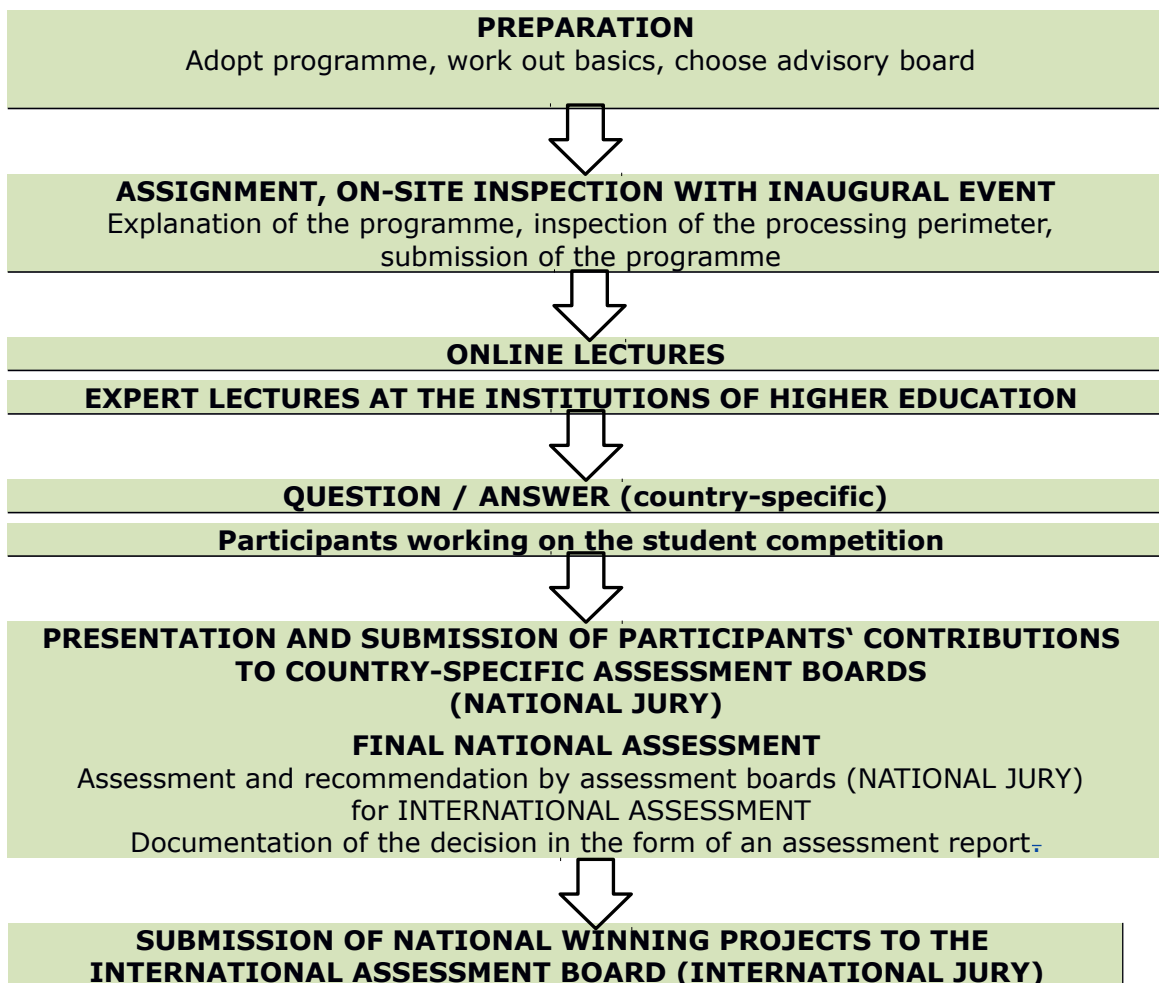
The procedure applied is a student competition which does not conform to country-specific professional standards of professional associations and chambers. The participation requirements of the organiser of the student competition (VELUX) apply according to enclosure.

➔ **Separate file "Conditions of the Competition".**

Participation in the student competition is anonymous. To this end, the organiser will allocate name codes directly to the participants. These codes must be indicated in all documents and work results to be submitted without any further indication of names.

#### 3.3 **Approach**

The student competition consists of the following sub-steps:





**FINAL INTERNATIONAL ASSESSMENT**

Assessment and recommendation by the assessment board  
for the purpose of INTERNATIONAL ASSESSMENT.  
Documentation of the decision in the form of an assessment report.

**CLOSING EVENT & PUBLICATION**

**3.4 Dates and deadlines**

See separate file "Conditions of the Competition"

**3.5 Answers to the questions posed**

Questions and answers are formulated in writing by the national support team.

**3.6 Binding character**

This programme including enclosures and answers to questions posed are binding for participants, the organiser and the assessment board (all parties to the procedure). The parties to the procedure also acknowledge the decisions taken by the assessment board.

By signing and submitting the declaration of participation, the participant undertakes to accept the abovementioned binding character of the programme.

**3.7 Publication of work results**

The organiser reserves the right to publish all and/or individual parts of the work results produced in the course of the student competition in daily newspapers or specialised journals and/or the media and to display them in public. The participants cede any and all rights of use and exploitation required for this purpose to the organiser. The name of the person responsible for the project as well as the name of the corresponding faculty will be indicated on the work results.

By participating in the procedure, the participants give their consent regarding this provision.

**3.8 Prizes, prize money, compensation and travel expenses of the participants**

The participants' contributions awarded by the assessment boards is mentioned in the separate file "Conditions of the Competition".

All other participants will neither be compensated for participating in the student competition nor for submitting documents nor for any expenses related to their participation in the competition. The organiser of the student competition is exempt from any further financial obligation vis-à-vis the participants.

The organiser will invite the participants personally by means of individual written invitation to the events relevant for the student competition (e.g. inaugural and closing event). The organiser is responsible for organising the trips. In case of a personal invitation and acceptance of the invitation by the participant, travelling and accommodation expenses as well as costs for food will be borne by the organiser.

The participants give their consent by taking part in the procedure.

### **3.9 Assessment boards (jury)**

#### **National assessment board (jury)**

The national jury will be announced during the competition from each countries on their Homepages.

#### **International assessment board (jury)**

The international jury will be announced during the competition.

### **3.11 Assessment criteria for the assessment board (jury)**

- **Active House Criteries**
- **Design** (town planning, architecture, materialisation and surroundings)
- **Functionality** (operation, technology, functions and workflows)
- **Daylight concept**

Detailed information are determined in the separate file "Conditions of the Competition".

### **3.12 Documents for the participants**

The participants will be provided with the following documents by the organiser of the student competition:

- Information material about Active House Principles
- Planning documentation in digital form (pdf, dxf and dwg...)
- Graphical material (pictures)
- Requirements and local building regulations

The documents are available by on [www.activehouseaward.velux.com](http://www.activehouseaward.velux.com).

The Velux logo consists of the word "VELUX" in a bold, white, sans-serif font, with a registered trademark symbol (®) to its upper right. The text is centered within a solid red rectangular background.

**VELUX®**