

# INTERNATIONAL STUDENT COMPETITION FOR ACADEMIC YEAR 2012 / 2013

## OPEN COMPETITION PURSUANT TO ARTICLE 847 OF THE CIVIL PROCEDURE CODE OF THE CR AND THE SRNC ACT No. 263/99

The Organizer of the competition would like to thank Mr Ivan Husák, mayor of Zichovec, for his helpful approach and cooperation in preparation of the 18<sup>th</sup> student competition / 10<sup>th</sup> international student competition

### Competition Organizer:

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### Competition Secretariat:

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## Competition secretaries:

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## Professional Guidance:

Ing. arch. Jaromír Veselák  
Atelier Aeroplan, Plzeň

## Competition Objective:

is to support individual creative work of university students by competitive confrontation of ideas and views, creating and presentation of contemporary architecture with the support of professional jury, deepening of knowledge concerning Ytong construction system, Ytong Multipor heat-insulation boards and Silka lime-sand building blocks, and possibilities of their practical application.

## Participants:

Students (and/or students' working groups) of Architecture and Structural Engineering at technical colleges, art schools and universities who have not been granted diploma of the 2nd level of university studies in either of these fields of study

## Registration:

Timely registration: from the first week of October to the first week of December 2012

Later registration: from the first week of January 2013 to the last but one day prior to submission deadline

## Prizes and Sponsor Gifts:

1st prize	1 500 EUR
2nd prize	1 000 EUR
3rd prize	500 EUR

Unless the jury decides otherwise, three projects will be awarded a gift worth 150.- EUR based on the decision of the Organizer and the jury. The gift can be awarded to any of the projects which met

the competition terms, regardless ranking. The jury has the right not to award some of the prizes and/or to distribute the allocated sum in a different way. Information on venue and time of the award ceremony will be sent to the participants at least 14 days in advance. All competition prize-winners are obliged to take part in the award ceremony to give a brief presentation of their projects. Each project that meets the competition terms will be awarded a sponsor gift of 35 EUR per project. This financial contribution will cover students' expenses incurred in relation with the project preparation. The sponsor gift will be payable through individual faculties based on a deed of gift issued by the faculty and sent to the Organizer by 31.03.2013 at the latest. A specimen of this deed of gift will be available on the Organizer's websites.

### **Jury:**

Aleš Brotánek – CR  
Ivan Husák – CR  
Lubo Králík – SR  
Jaromír Kročák – CR  
Ivan Kubík – SR  
Vlado Milunić – CR  
Peter Moravčík – SR  
Jaromír Veselák – CR  
Lubomír Závodný – SR

### **Alternate members:**

Radek Dragoun – CR  
David Havránek – CR

The jury membership is arranged for by the Organizer and his representative will introduce the jury to the competition participants during public session prior to publication of its decision. The chairman of the jury will be elected by the jurymen before the beginning of the judging panel's session. All decisions of the jury are free and uncontestable and there is no legal appeal admissible.

### **Guidelines for Project Submission:**

Each and every part of the project must bear six-digit identification code (1 cm high and 4 cm long) placed in the upper right-hand corner. For sake of anonymity the projects have to be submitted in a neutral way in rolls of A1 format and in electronic version on CD. These rolls and CDs must also bear appropriate digital code. Inadmissible are the following digital codes: a sequence of digits 1 2 3 4 5 6, etc. and vice versa, or a sequence of the same digits, such as 1 1 1 1 1 1 or 4 0 4 0 4 0. Participant's name, surname, date of birth and exact address (including e-mail address and telephone number, where possible) with the author's signature shall be submitted in a sealed envelope bearing only the identification code (the number shall also be mentioned next to your name inside the envelope). The university, field of study and the lecturer's name under whose guidance the project originated, if applicable, have to be mentioned, too.

### **Competition Background Information:**

Background information (general outline of the issue, the task and expected competition achievements) will be given at disposal of the universities and through relevant lecturers to the participants. Background information will also be available on the Organizer's websites [www.ytong.cz](http://www.ytong.cz) and [www.ytong.sk](http://www.ytong.sk)

### **Additional Information and Questions:**

Registered participants can ask the Organizer or the expert advisor questions related to the competition terms of reference by means of FAQ in the course of the competition, i.e. from its beginning till 15 January, 2013.

### **Deliverables:**

Competition drawings (colour and/or black-and-white) shall be submitted rolled not folded in rolls; use of backing paper is not allowed. Unified A1 format of sheets is required. The drawings shall also be handed-over in digital form on CD in pdf format and A1 size. Maximum two numbered competition drawings are admissible. Legends and all explanatory notes on drawings shall be only in the English language, except for local geographical names and other identification given in the official competition terms of reference.

### **Copyright:**

Copyright belongs to the project's author. By taking part in the competition the Organizer acquires the right to publish the projects and mention the author's name without his/her consent. The ownership of prize-winning projects passes to the Organizer. To enable copying and publishing by the Organizer, each participant shall temporarily make available first copies of his/her drawings and/or the electronic version thereof.

### **Submission Deadline:**

Submission deadline: 18.2.2013, 16.00 hours

Projects shall be delivered to the competition secretariat:

in the Czech Republic to: Ing. Arch., Ing. Petr Šíkola, katedra architektury Fsv ČVUT Praha, místnost D-2111 / atelier D, Thákurova 7, 166 34 Praha 6,  
and

in the Slovak Republic to: Mgr. Silvia Frimmelová, Xella Slovensko spol. s r.o.,  
obchodnoporadenská kancelária, Bajkalská 25, 827 18 Bratislava.

By submitting the competition graphic outcomes pass into permanent possession of the Organizer and they are non-recoverable. By submitting the competition project bearing the identification by a digital code and the sealed envelope containing personal data as per the above-mentioned terms the participant expresses his/her unqualified consent to given regulations and terms of this competition and waives his/her right to any legal action.

### **Judging Criteria:**

As per the terms of reference individual anonymous projects prepared by the competition participants will be judged by an independent jury based on generally valid standards and criteria of the applied architectural solution to the given task. Verdicts of the jury are outcomes of close majority deliberation of the jurymen; all decisions of the jury are final and uncontestable and there is no legal appeal admissible. Verdict of the jury concerning winning projects, including ranking and prize award with brief reasoning is, nevertheless, made public together with the participant's identification data. The competition open evaluation session will be held within 90 days after the competition deadline at the latest. To ensure the right of participation, the Organizer is obliged to publish the date, time and venue of announcement of the jury's verdict through individual faculties 7 days in advance. The Organizer has the right to give publicity to the award ceremony and results of the competition based on its deliberation. The Organizer is obliged to issue written certificate of participation and ranking in the competition to each prize winner within 14 days after publication of the results.

Individual projects will be judged according to the following criteria:

- urban-planning and landscape design in context of the area as a whole
- extent and pertinence of the impact on the landscape, relation to the site morphology

- the design idea, ideal elaboration of topics given in the terms of reference
- architectural solution
- energy efficiency and a possibility of the project's optimizing in its further stages
- general layout and functional scheme of designed buildings, construction logic
- comprehensibility, force of graphic interpretation and quality of the design concept

# INTERNATIONAL STUDENT COMPETITION FOR ACADEMIC YEAR 2012/13

## **COMPETITION THEME: FOREST SCHOOL ZICHOVEC**

Basic task of the competition is an architectural idea of the background of Forest School at Zichovec

The design should conceive the theme of school not only as a protected place intended for education, but interpret it mainly in sense of an open intellectual space for concentrated search of a young individual for his/her relation to the world, people and him/herself.

***MOTTO: "I have never let my schooling interfere with my education."***

Mark Twain

## A. COMPETITION TERMS OF REFERENCE

### ***/ Reasoning***

Human society represents a complex network of relations that binds individual members to each other and moulds them. It may be why we spend more than a quarter of our life in various educational institutions.

Besides family it was just school that instilled a number of basic psychical and social behavioural patterns and social skills into our mind. This is the place where we often find friends for life and with some luck even among teachers. We go through ups and downs, exhilaration from success, carry along a burden of minor losses, and learn to work both for accomplishments and at ourselves. Unfortunately, it may also be the place where we are deprived of our illusions, first dreams and purest desires never spoken out. Instead of inspiration, natural creativity and originality there is nothing but stupefying stereotype, everyday routine, "adulthood". Something has ended off....

Let us then ask a question what role the image of the place where education takes place can play in all this.

### ***/ Task***

The task is to create a space for education in its original sense – it means the space for mutual creative transfer among people: the Place full of inspiration able to support the origin of a real community among children and adults with the feel of openness and unbiased alternative to the majority educational and social system; aloofness from social conditionality of prevailing consumer way of life; sobriety and frugality as spontaneity

An original background for cognisance and development of human knowledge balanced with practical experience and integrated into its general enjoyment. Return to the roots of spatial craft for development needs of pure child's perception.

A construction as an educational aid in and of itself – providing, for instance, clear information about relation between exterior and interior, expression of weight, composition of parts, importance of light as immaterial essence among things, work with dimensions and quality of space... Shelter in its original, pure sense referring to partly forgotten basics of architecture...

The Place that will provide resort for groups of children as well as offer relaxation stays for families with children (active spending of so-called leisure time) and possibility of restoration of traditional family relations and/or drawing new inspiration for children's upbringing. An opportunity to rest, stop and take just the present moment fully in..

Therefore there is stress put on children's stay outdoor in the open air with authentic and live knowledge of natural patterns. Strong link to the landscape of the Place, woodland environment,

overlap of the Place to its broader surroundings by means of a pathway, percept of movement and standstill.

Development and communication of the terms of reference's idea and its concrete form shall be integral part of the designed solution. There is also a number of issues to be investigated – for instance, when a human being ceases to be a child and when the real adulthood starts, how communicated experience differs from one's own enjoyment, how not to lose pleasure from learning and/or from life on the way...

### **/ Competition Idea**

is to prepare a landscape and architectural study of the Forest school area at the municipality of Zichovec.

Non-voluminous extent of the terms of reference relates to minimalistic needs of in principle not demanding operation of an institution of this kind. The point is not primarily to "design a house". The crucial thing will be to find the right link between the construction and the landscape and (always) unique place affected by the construction activity which can be on confines of architecture, landscaping and land-art.

The construction as embodiment of silence and simple being, an instrument of enjoyment of conscious present..

Self-sufficiency, environmental friendliness, non-complexity and frugality as one of bases of the area operation become an important principle of education.

Expected is a thorough comprehensive design preparation from the landscape scale to the necessary detail and balance between details of the construction's exterior and interior design.

There is free option of articulation into more buildings, spaces, spots or areas in the landscape connected by pathways, rounds or routes that should give sufficient space for expressing a pure architectonic idea.

The competition objective is to offer future architects an opportunity for straightforward creative self-reflection in comparison with others, but first of all for an attempt at getting insight into the educational process as such, realizing their position in it and being given a chance to express their own individual point of view.

To strengthen the architect's capacity to look at the world and a house as such with children's eyes, i.e. without prejudice, in pure and authentically strong way and proceed accordingly in designing the image of the place.

To create an architectural space for the first meeting with a tree, a pebble, a flower,...and a house as such..

### **/ Content**

A base - Habitable place in the landscape - Inter-relation of school and day kindergarten "in nature", or better in the landscape offering holiday stays (art, music, sports, outdoor and other after-school activities for pre-school- and school-age children).

We expect a design of a space suitable for providing education using alternative teaching methods and systems – for instance, by means of creative and topic-oriented games, project teaching, team and working groups, etc.

Relation to the concept of so-called Forest school and the Scandinavian model of forest kindergartens for children in close link to the landscape of given locality – maximum of all activities and "schooling" takes place in the open air regardless weather. They follow the slogan:"There is no bad weather just bad clothing...."

Adequate all-season use of the place is inevitable; the design should, therefore, take specific features of regular changing of seasons into account in an increased extent.

The size of the designed construction as well as the whole area has to be considered with regard to the basic idea of the terms of reference – the Forest school which in fact does not need much.....

## B. LOCATION

The municipality of Zichovec, a rural settlement in sight of the Říp Mount, one of the smallest municipalities of the Central Bohemian Region, is situated at the altitude of 225 m a.s.l. in slightly rolling countryside at the border of Džbán Nature Park, 15 km north-west of Slaný, half-an-hour drive from Prague. The first documentary evidence dates back to 1238.

Active community life, sports clubs and associations; the population is about 120 permanent residents with exceptional neighbourhood solidarity.

Currently the municipality undergoes a unique development process: in connection with planned family housing development resulting in almost doubled number of inhabitants there is the municipality centre with extensive amenities being built first (new village green with an amphitheatre, community hall, an inn with own brewery, a small town hall hosting an information centre, and another two houses intended for services and communal or rental housing).

The locality subject to terms of reference is a forested elevation north of the municipality and a meadow delimited from the east by road III/23723, route Zichovec – Žerotín. Direct contact with the woodland is closely linked with the theme of the Forest school. Prevailing pine forest hides sandy marl outcrops and works of amateur sculptors. Dynamic landscape creates a number of specific and spatially clearly defined places in reasonable walking distance.

Considered is also the use of existing public sports facilities – turf football grounds, tennis courts, newly founded pond with the Fishermen Fort restaurant or biologically treated water body for swimming in a place of former concrete firewater reservoir.

For purposes of this competition the following plots are intended for the Forest school design: plot no. 408/1, 407/1 and 407/3, cadastral territory of Žerotín, i.e. the existing meadow and mixed forest with former small sand quarry. Plots no. 405/2 and 405/1 in the north-west part of the locality can also be involved as adjacent scattering areas. The Forest school operation plans to use primarily the forested plots south-west of the competition locality. .

## C. REGULATORY TERMS

- Assess specific landscape character of the locality and thoroughly consider the scale and extent of potential construction activity.
- Respect topographic location of the rise, handle dominant features or on the contrary purposeful merge of the designed area into the surrounding environment responsibly
- Consider the context of Zichovec municipality in its historical as well as development part.
- Respect cadastral borders of the plots and forested land (meeting of the forest protection zone is not required); to preserve existing forest pathway along the south-west border of the plot.
- Possibilities of long-distance view of Říp or the surrounding landscape in general may also be taken into consideration.
- Transport connection and parking shall be situated along the Zichovec – Žerotín road, individual motor-vehicle transport directly to the area is not considered.

## D. CONSTRUCTION PROGRAMME

### Forest school

- Planned school capacity – about 20 pre-school-age children (1-2 groups) and max. 60 school-age children
- Interior tutorial spaces – adequately big hall, clubroom, classroom and a playroom at the same time; a nucleus and a social “heart” of the building; expected are: variability or different setting according to the needs of certain activities, for work in small groups as well as together in the whole team; the interior shall again be in direct contact with the landscape and have a possibility to be interconnected with the exterior
- Quiet rooms – relatively separated “classrooms” for individual teams, including necessary background facilities and storage space
- Reference library and reading room
- Music hall – mainly for training of children’s own skills, singing, playing musical instruments, investigation of sounds and tones; the form of the space itself may already contribute to the acoustics
- Art studio with a workshop – playful basics of craftwork, becoming familiar with means of art and art techniques; work in day-light is expected
- Dining hall with a small preparatory and a storage, tearoom – full meal preparation is not considered; hypothetically the kitchen capacity in Zichovec brewery will be used and ready meals delivered; as to the designed capacity quadruple turn of 1 place is considered.
- Entrance area – a vestibule with a change-room can also serve as a temporary “refuge” in case of extremely severe weather in winter time; important transition space between the interior and exterior, heat screen
- Technical facilities of the building – extent as per designed energy concept and applied energy-saving technologies considering the year-round operation
- Operational facilities of the building – in minimum extent; use of sufficient capacities of municipal means for the facility management is considered
- Change-room and day-room for the staff
- Small office with reception desk
- Necessary sanitary conveniences
- Anything else seen by the competition participants reasonable in given context

### Lodging Space

- Accommodation for school staff – capacity of about 5 adults with necessary conveniences
- Accommodation for children team – capacity of about 30 - 40 pre-school/school-age children (one class); concrete type of accommodation should be in line with the whole concept of the Forest school; the way and extent of interconnection with the school as such is up to the competitors
- Necessary sanitary conveniences

## Open-air areas

- Outdoor educational spaces and areas – a yard or a terrace with some kind of shelter – not only as a complement to the building, but as in fact the most important place at the confines of the house and the landscape
- Playground – outdoor area for games that may contain related equipment, etc. - again with stress put on interconnection with the environment; use of existing public sports facilities is also considered (large turf playground and tennis courts are in walking distance of half a kilometre).
- Summer camp site – a place for tents or any other light shelters for about 40 children
- Garden – experimental beds, orchard – becoming familiar with basic approach to soil and agriculture
- Tearoom and/or a separate tea pavilion
- Cycle store
- The design is expected to solve landscaping of open-air areas in the vicinity of the Forest school for educational purposes, relaxing, recreational and sports activities.
- Routes adequately equipped for movement through the landscape - forest pathways, view and observation points, refreshment stops; possible and advisable hiking routes through the countryside should be indicated (for the competition purposes property relations on lands need not be taken into consideration)

## TERMS OF REFERENCE SPECIFICATION:

- The concept of the Forest school is not in conflict with the new development drive of Zichovec; checking feasibility of its implementation by means of the competition outcomes and following agreement on using the winning project is, therefore, not excluded.
- Designed landscape solution should stem from contemplation on features of traditional construction development in given region, however, in broader context of contemporary architecture.
- Idea of flexibility and variability of the Forest school as well as the whole area in space and time; individual described functional units in the buildings may be interlinked.
- Interiors of the buildings shall be barrier-free and accessible for the handicapped to maximum extent possible.
- In the scope of the competition project parking, connection of buildings to technical infrastructure and a design of technical facilities of the buildings as such are not required. .

## E. CONSTRUCTION AND MATERIAL SOLUTION

- is not restricted in any way; nevertheless, responsible choice of construction means adequate to the place, specific concept and purpose of the construction which does not exclude application of Xella – Ytong, Silka, Fermacell, and Multipor construction material assortment is required.
- Increased attention should be paid to the use of natural and local materials (wood, clay, stone...)
- Separate drawings of construction system details are not required.
- Considering required energy performance a basic design of the building shell composition shall be prepared.

## F. ENERGY PERFORMANCE SOLUTION

- Increased attention paid to energy efficiency of the construction as well as operation of the whole area has to be convincingly demonstrated.
- Integral part of the architectonic study shall be a basic energy performance assessment of the whole design of the Forest school and accommodation facility. The objective is to involve application of tools for the building's energy performance optimization already into the process of architectural design in a natural way.
- Chosen concept shall be presented in a concise and well-arranged way – diagrams, description of basic principles (e.g. volume compactness, i.e. surface-to-volume ratio, orientation and size of glassed-in areas, solar gains, type of shading, ventilation, use of renewable materials, etc).
- For purposes of the competition calculation tool PHPP (Passive House Planning Package) shall be used with certain values pre-set so that the competition participant could prove his/her approach, individual competition projects were comparable from the energy performance point of view, but at the same time the elaborateness of the design itself would not exceed acceptable level.
- To make registered competition participants familiar with buildings energy demand and application of the PHPP calculation tool the Organizer shall arrange for special lectures in cooperation with the Passive House Centre.
- For purposes of this competition the Organizer shall make the official version of the PHPP calculation program available to individual faculties.
- The purpose of this competition is not energy performance solution of the designed building or reaching parameters of a passive house at any cost, but first of all proving the energy conservation level and illustration of a possibility of the project optimization in following stages of the project preparation, if any.
- The intention of the Organizer is to encourage interest in sustainable construction development, to enhance capacity and skills of future architects in this line and enable them further professional application of acquired knowledge.

## G. FORM OF DELIVERABLES – FORMAL REQUIREMENTS:

- Documentation shall be prepared in form of urban-planning and architectural study on maximum 2 sheets of A1 format (vertical orientation)
- Calculation part shall be submitted in a transparent folder of A4 format rolled together with the drawings, the sheets shall be stapled and marked with the digital code the same way as the other enclosures.
- Submitting of a physical model of the project or part thereof is not obligatory, but it is not excluded from the jury judgement (ground plan dimensions: maximum A1 format; the model has to be protected against damage during transport).
- Explanatory note and legends, if any, shall be part of the drawings and shall be in the English language. This does not apply to local names and terms mentioned in the official competition documentation.
- Competition sheets and calculation part shall be recorded in pdf data format of A1 size (A4 for the calculation part) on CD bearing the digital code.

### **Sheet no. 1**

#### **Forest school design – the building exterior, selected part of the interior**

- Spatial image of the design - options:  
Visualisation, drawings, drawings in a photograph or photo-documentation of the building(s)´ model
- Typical image of the interior – visualisation of selected part of the interior
- Ground plans of individual floors in adequate scale

- Characteristic cross-sections with positioning in the terrain
- Views including surrounding landscape

## **Sheet no. 2**

### **Forest school design in the landscape context**

- General layout of the area in question showing broader relations and landscape and urban-planning links in an adequate scale
- In case of need a more detailed layout of the designed area
- Spatial image of the project area including adjacent landscape and designed areas and constructions – options:

Visualisation from perspective (scenographic) view

Photo-documentation of the model

Drawings in photographs

- Image of a landscape or architectural detail, if any
- Legends and/or accompanying text or description of the designed energy performance principles, diagrams, etc.

### **Energy performance assessment – calculation part**

- Graphic outcome of the PHPP calculation program – year-round energy performance assessment of the house, calculation of specific heat demand for heating
- Design of composition of basic structures
- Brief description of principles of the designed solution, diagrams, etc.

#### **SPECIFICATION OF THE FORM OF DELIVERABLES:**

- The competition projects shall use uniform abridged English title of the competition theme:  
**Forest school Zichovec**
- The scope of required documentation is binding.
- Graphic form of the documentation (digital/manual, colour/black-and-white) is not specified.
- Ground plans and cross sections shall bear basic dimensions or scale of reproduction to make main dimensions of the building evident.
- Requirements of the Organizer shall be specified in detail during lectures held at selected schools at the beginning of winter semester.

## **H. ANNEXES TO THE TERMS OF REFERENCE**

will be available on the Competition websites and at the Organizer's representatives:

- Terrain survey plan in 2D / 3D
- Photographs of the locality
- Part of the Urban-planning Study of Zichovec Development Area by Doc. Ing. arch. Ivan Vorel CSc.

- Atelier V, 2009
- Aerial pictures of Zichovec – author of the photographs: Ladislav Šeiner
- Cadastral map
- Ortho-photomap

### **Useful references:**

- Municipality of Zichovec (history, photo-gallery, new development...)

<http://www.zichovec.cz/>

- Forest schools and kindergartens:

<http://www.alternativniskoly.cz/category/lesni-skola/>

<http://www.lesnims.cz/>

[http://wiki.rvp.cz/Knihovna/1.Pedagogick%C3%BD\\_lexikon/A/Alternativn%C3%AD\\_pedagogick%C3%A9\\_sm%C4%9Bry](http://wiki.rvp.cz/Knihovna/1.Pedagogick%C3%BD_lexikon/A/Alternativn%C3%AD_pedagogick%C3%A9_sm%C4%9Bry)

[http://en.wikipedia.org/wiki/Forest\\_schools](http://en.wikipedia.org/wiki/Forest_schools)

<http://www.foresteducation.org/>

[www.forestschools.com](http://www.forestschools.com)

- Passive House Centre, PHPP:

<http://www.pasivnidomy.cz/>

<http://www.pasivnidomy.cz/software-pasivni-domy/planovaci-nastroj-phpp-2007-cz-ceska-verze.html>

### **Recommended literature:**

- Forrest Carter: Škola malého stromu (The Education of Little Tree)

### **Competition websites:**

[www.xella.cz](http://www.xella.cz)

[www.xella.sk](http://www.xella.sk)