

ZELENI SVINČNIK / GREEN PENCIL



DAVID MIŠIČ, SAŠO ŽOLEK, ALEŠ KOPRIVŠEK, BRIGITA ČAS, KAJA KOTNIK

Komisija je izoblikovala stališče, da so za nagrado zeleni svinčnik primernejši projekti z višjo stopnjo kompleksnosti in tisti, kjer so trajnostni vidiki najjasneje izraženi. Komisija je soglasno odločila, da sta sporočilna vrednost, ki jo izzareva Hiša Vrhe v odnosu do stavbne dediščine in trajnostne gradnje, ter doslednost izvedbe nanjo naredili največji vtis, zato si izbrana arhitekturna realizacija zaslubi priznanje zeleni svinčnik 2016 za inovativno trajnostno gradnjo.

V ospredju je zavestna in premišljena odločitev po ohranitvi in vnovični uporabi stare lesene konstrukcije skedenja, ki ni povsem samoumevna, saj prvotni objekt ni bil spomeniško zaščiten. V stavbni dediščini so prepoznane lastnosti sodobne trajnostne gradnje, ki stremi k posegom s čim manj odpadki, čim manjšo porabo energije in čim manjšim okoljskim vplivom. Star skedenj je bil v celoti razstavljen, skrbno pregledan in očiščen ter vnovič uporabljen za konstrukcijski obod novogradnje, znotraj katerega so uredili sodoben bivalni ambient. Tudi pri novogradnji so uporabili lokalne materiale: smrekov in macesnov les ter naravni kamen. Ohranjene in lepo prezentirane so stare lesne zvezze, ki v dialogu z novimi arhitekturnimi elementi tvorijo skladno in logično arhitekturno celoto. Velike steklene površine so umaknjene pod napušče, ki učinkovito ščitijo pred poletnim soncem, v zimskih dneh pa spuščajo svetlobo globoko v notranjost. Toplotni ovoj je iz naravnih topotnoizolativnih materialov. Trajnostnim usmeritvam sledijo tudi ogrevanje s pečjo na lesno biomaso, zbiranje deževnice in naravno prezračevanje objekta.

The committee took the position that the projects that best meet the criteria for the Green Pencil Award are complex and offer clearly defined and well expressed aspects of sustainability. The committee unanimously decided that the communicative value expressed by House Vrhe, in terms of building heritage and sustainable construction, and the consistency of execution, made the most profound impression and deserving of the Green Pencil Award 2016 for innovative sustainable construction.

Commendable is the conscious and well thought out decision to preserve and reuse the old wooden structure of the barn, especially because the original facility was not even listed as protected. The architectural heritage comes through also in the modern sustainable construction process that seeks to produce minimum waste, achieve minimum energy consumption and inflict minimum impact on the environment. The old barn was fully disassembled, carefully examined and cleaned for reuse for the peripheral structure of the new building that now houses a contemporary live-in space. Local materials like spruce and larch wood with natural stone were used for the new building. The old wooden connections are preserved and well presented; in dialogue with the new architectural features they form a harmonious and logical architectural whole. Large glass surfaces are moved under the overhangs, which efficiently protect against the sun in summer and allow the light to penetrate deep inside in the winter. The thermal envelope is made of natural insulation materials. Sustainable guidelines have also been observed with the inclusion of the wood-biomass-burning stove, rainwater harvesting and natural ventilation.

PRIZIDEK K BIOTEHNIŠKI  
FAKULTETI, ODDELEK ZA  
LESARSTVO

Rafael Draksler, Jurij Jančar, Bruno Dujč

**POROČILO ZELENE KOMISIJE**  
REPORT BY THE GOLDEN COMMITTEE

Komisija je izoblikovala stališče, da so za nagrado zeleni svinčnik primernejši projekti z višjo stopnjo kompleksnosti in tisti, kjer so trajnostni vidiki najjasneje izraženi. O preostalih prijavljenih projektih pa je komisija izoblikovala naslednja stališča:

The committee took the position that the projects that best meet the criteria for the Green Pencil Award are complex and offer clearly defined and well expressed aspects of sustainability. The committee's positions on the other nominated projects are as follows:

Lesena stavba ima močno sporočilno vrednost tako za študente kot celotno lesarsko stroko. Uporaba materialov in konstrukcij vključuje lesne produkte, ki so plod raziskovalnega dela fakultete, in deluje kot učna pot za študente. Konstrukcija nad temeljno armiranobetonsko ploščo je v celoti lesena, narejena kot kombinacija križnolepljenih plošč in okvirjev. Zasnova konstrukcije omogoča tudi nadgradnjo objekta za dodatni etaži. Stavbno pohištvo, lesena fasada in dekorativni stebri so iz termično modificiranega lesa. Toplotne izolacije so iz celuloze in lesnih vlaknen. Načini ogrevanja in prezračevanja ter gradbeno-fizikalne lastnosti stavbe sledijo standardom pasivne gradnje.

The wooden building communicates a powerful message both to students and the wood science and technology profession in general. The materials and structures employed include wood products that are the result of the Faculty's research work and that function as a study trail for students. The structure above the base reinforced concrete slab is made entirely of wood and executed as a combination of cross-laminated timber panels and frames. The structure design allows for two additional floors to be built in the case of subsequent vertical extension. The façade, windows, external doors and decorative columns are made of thermally-modified wood. Cellulose and wood-fibre insulation boards were used for thermal insulation. Principles relating to heating and ventilation, construction, and physical properties of the building follow common standards for passive houses.

## MEZZANINSKA HIŠA

Mika Cimolini, Igor Kebel, Nina Selan

Do nedavnega je veljalo nenasljano pravilo, da trajnostno gradnjo predstavljajo pretežno stavbe, ki pred estetsko vrednost arhitekture postavljajo njene energetske in okoljske značilnosti. Vendar je prav lepota ena od bistvenih lastnosti arhitekture, ki ohranja stavbe in mesta v funkciji še dolgo po izteku njihove običajne življenjske dobe. Namen avtorjev Mezzaninske hiše je bil s standardnimi in cenovno dostopnimi materiali ustvariti kakovostno bivalno okolje in arhitekturno atraktivni objekt. S premisljeno prostorsko umestitvijo in izvirnim oblikovanjem je bil ta namen tudi dosežen. Hiša je pretežno grajena kot klasična AB-konstrukcija, iz lesa je narejen njen konzolni del. Lesena so tudi okna. Kletni del je izoliran s ploščami iz ekspandirane polistirena, preostali del pa s kameno volno. Hiša se ogreva z mestnim plinom. Zaradi talnega gretja in prisilnega prezračevanja z rekuperacijo so obratovalni stroški nizki. Za zalivanje vrta in izplakovanje kotičkov se uporablja deževnica.

Until recently it was taken as a matter of fact that sustainable construction was all about energy efficiency and environmental benefits rather than architecture's aesthetic value. But it is beauty that characterises architecture and preserves buildings and cities in use long after their usual lifespan has expired. The aim of the architects behind the Mezzanine House was to use standard and affordable materials to create a quality living environment and an architecturally attractive building –something they succeeded in achieving through careful siting in the residential area and through their original design. Built mainly as a conventional AB structure the house employs cantilevers made of wood. Windows are wooden as well. Other than the basement, which is insulated with expanded polystyrene panels, the house is insulated with rockwool and heated via the district gas system. Floor heating and forced ventilation with heat recovery ensure low operating costs. The rainwater collected from the roof is used to water the garden and flush toilets.

## MESTNI PARK RAKOVA JELŠA

Rok Žnidaršič, Samo Mlakar, Klara Bohinc, Andraž Keršič, Martin Kruh, Aljoša Lipolt, Dino Mujić, Tamara Németh

Nov park na mestu nekdaj degradiranega območja ob južni vpadnici poskuša z minimalnimi posegi povrniti podobo kulturne krajine na robu mesta. Park pomeni nov vhod v Krajinski park Ljubljansko barje. S čiščenjem prostora odstranjenih je bilo 300 ton nevarnih in drugih odpadkov ter invazivnih tujerodnih rastlinskih vrst park ozavešča obiskovalce o ranljivosti območja. Program parka ponuja prostor za prostočasne dejavnosti, glavno vodilo druge faze projekta pa je samooskrba z vrtički in javnim sadovnjakom. Ohranjene so temeljne plošče starih lop, ki so skupaj s klopmi iz fasadnih prefabrikatov iz Ravnikarjeve stolpnice namenjene prostorom za piknike. Lope, narejene iz leseni pilotov, so oblikovane kot skupne nadstrešnice in so namenjene zbiranju vode in hrambi orodja. Nova oprema je iz ožganega macesnovega lesa domačega izvora. Zasnova parka spoštuje, uporablja in poudarja naravne danosti prostora ter s tem pomaga ohranjati krhko naravno ravnovesje barjanske krajine.

The new park, located on the once degraded area along the southern radial road aims to restore the image of the cultural landscape on the edge of the city. The park thus stands as a new entrance to the Ljubljana Marshes Landscape Park. The clean-up project, during the course of which they removed 300 tons of hazardous and other waste and invasive alien plant species, raised particular awareness of the vulnerability of the site. The park programme offers space for recreational activities, while the second stage of the project focuses on self-sufficiency and public orchards. The foundation slabs of old sheds have been preserved and now serve as picnic grounds, paired with benches made of prefabricated façade components from Ravnikar's high-rise. Resting on wooden piles the sheds are designed as joint overhangs and serve to facilitate water capture and provide storage space for tools. The new street furniture is made of local, charred larch wood. The park design observes, employs and showcases the natural characteristics of the space, thus facilitating preservation of the fragile natural balance of the marsh landscape.

## POGON 2 - ENERGETSKA

### PRENOVA OBJEKTA

Marjan Poboljšaj, Anton Žižek

Cilj naloge je bil izboljšati energetsko učinkovitost objekta in oblikovati nov fasadni ovoj, ki bo izražal novo identiteto stavbe. Oblike na fasadi izhajajo iz strojnega zobnika, ki je eden od proizvodov podjetja. V sklopu energetske prenove je bilo uvedeno ogrevanje s toplotno črpalko zrak-voda, zamenjana so bila okna, ki imajo zdaj troslojno zasteklitev, energetsko učinkovito je narejena tudi razsvetjava.

The purpose of the project was to improve the energy efficiency of the existing facility and create a new façade envelope that would express the building's new identity. The façade shapes are reminiscent of a mechanical sprocket, one of the company's products. The energy retrofit project introduced heating with an air-water heat pump, triple glazed windows and energy-efficient lighting.