

Contemporary Slovenian Timber Architecture for Sustainability

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» auf die Merkliste

Authors, an **architect** and a **wood scientist**, we feel strongly that developments in wood products and timber construction will **shape the future** of sustainable development!

The topics presented in this text range from **green building developments** to national and international legal frameworks that impact **sustainable development and wood use**, from Slovenian forests to developing **architectural design paradigms**.

Why this book?

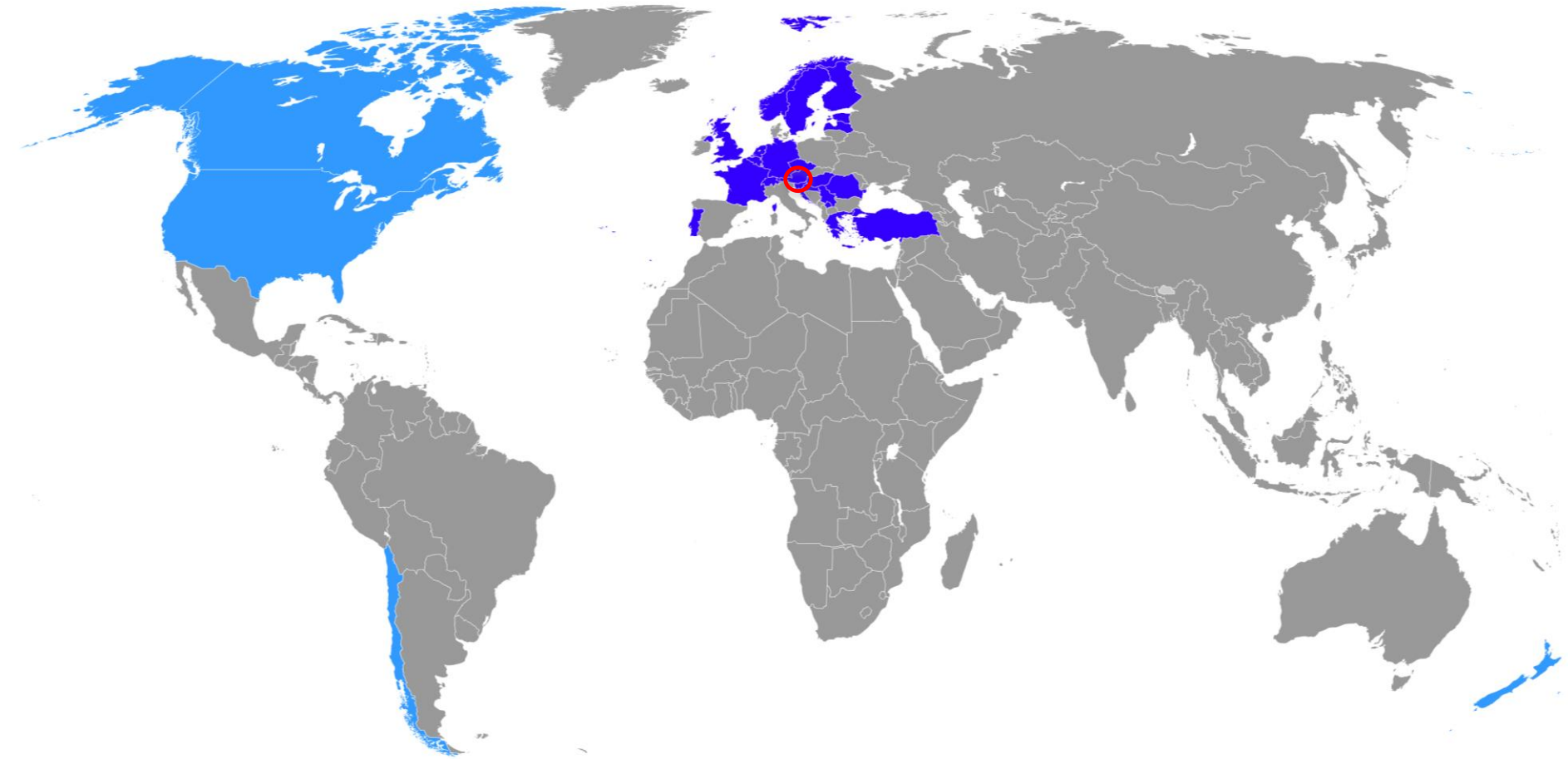
Authors, Manja Kitek Kuzman, Andreja Kutnar,
about **Contemporary Slovenian Timber
Architecture for Sustainability**



Wood is an abundantly available renewable resource, in Slovenia and many areas of the world. In order to use this resource more effectively we have prepared **this book to help promote interest and collaboration between other architects and scientists who seek to work in sustainable development.**

Topic of global importance

Slovenia – best practice



Foreword – worldwide established persons

- **Prof. Dr. Peter Gabrijelčič**, Slovenia
- **Dr. Franz Dolezal**, Austria
- **Prof. Dr. Alfred Teischinger**, Austria
- **Prof. Dr. Parviz Navi**, Switzerland
- **Dr. Andreas Kleinschmit von Lengefeld**, France
- **Prof. Dr. Mark Hughes**, Finland
- **Dr. Lone Ross Gobakken**, Norway
- **Dr. Dennis Jones**, Sweden
- **Prof. Dr. Dick Sandberg**, Sweden
- **Peter Wilson**, United Kingdom
- **Prof. Dr. Callum Hill**, United Kingdom
- **Prof. Dr. Frederick A. Kamke**, USA
- **Dr. Guillermo Martínez Pastur**, Argentina
- **Prof. hon. Julius Natterer**, Switzerland
- **Prof. hon. Roland Schweitzer**, France
- **Robert Widmann**, Switzerland
- **Prof. Dr. Olga Popovic Larsen**, Denmark
- **Prof. Ljubomir Miščević**, Croatia
- **Univ.-Prof. DI Dr.techn. Gerhard Schickhofer**, Austria
- **Alberto Cayuela, P.Eng., PMP, LEED AP**, Canada
- **Prof. Dr. Klaus Richter**, Germany

21 experts, 15 countries



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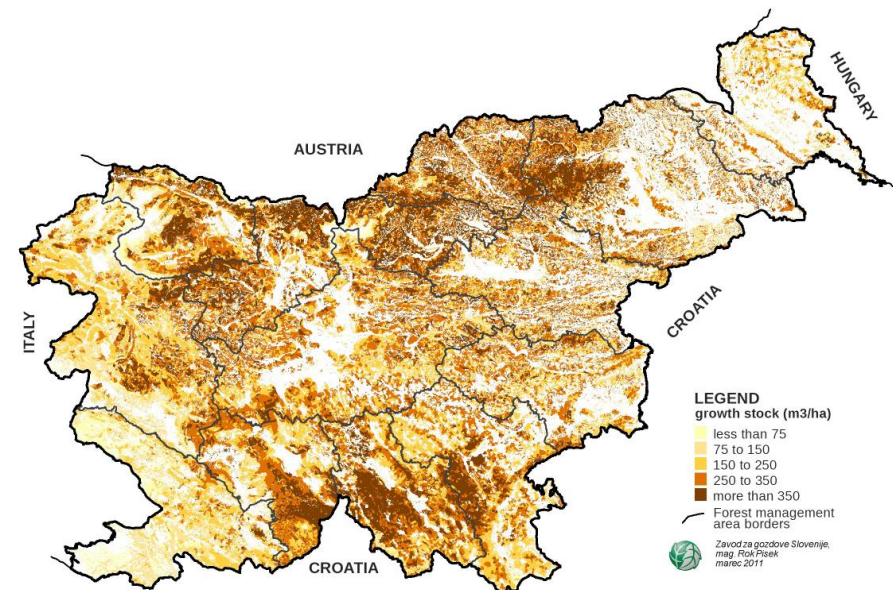
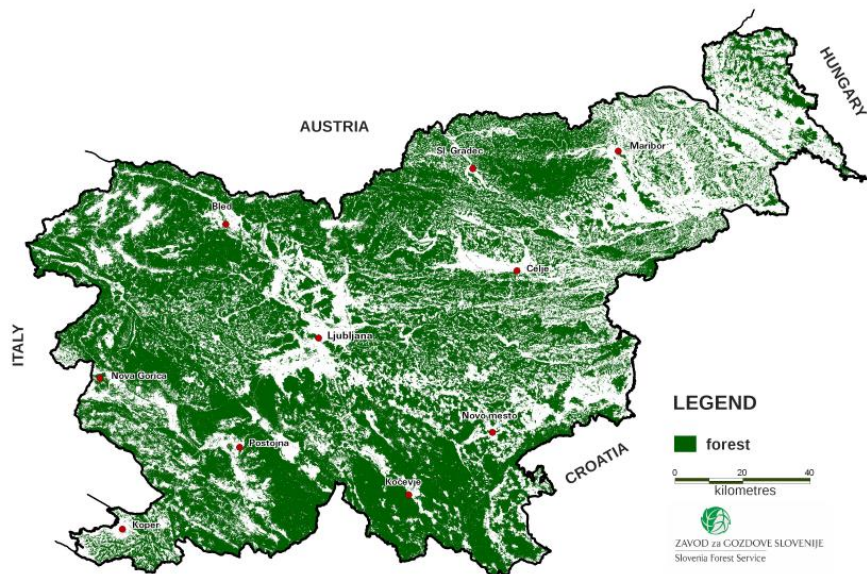
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1.1 Prologue

1.2 Sustainable Development and Buildings

1.3 Slovenian Forests

1.4 Legislations Supporting Timber Constructions



Forest coverage in Slovenia and Slovenian growing stock in m³/ha in 2011 (Slovenia Forest Service, 2014)



2 Sustainability with Respect to Building Materials

2.1 Wood Based Building Materials

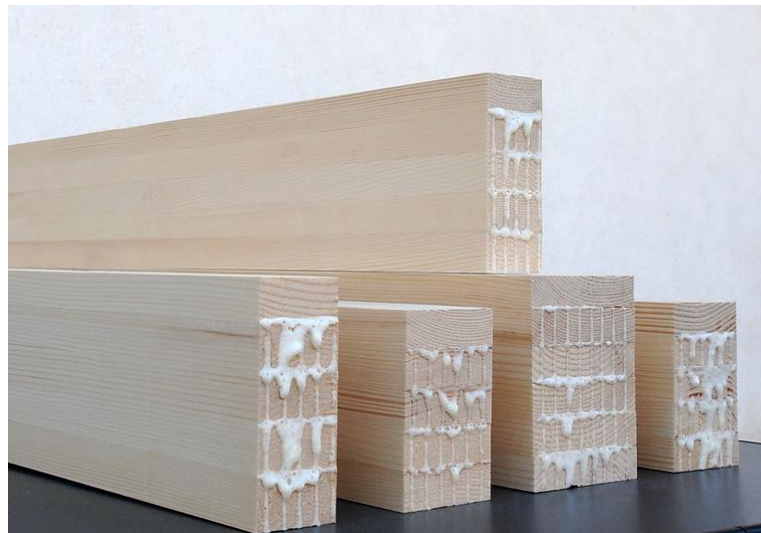
2.1.1 Slovenian Primary Wood Products

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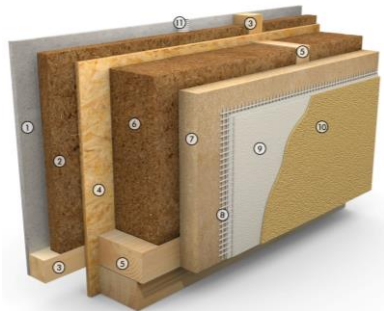
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4 Timber Architecture – Case Studies

4.1 Individual and Residential Areas

4.2 Public Objects



RESIDENTIAL BUILDINGS

Lokacija | [Location](#) | Vrhnika

Leta | [Year](#) | 2011

Arhitektura | [Architect](#) | Edvard Blažko, Marko Volk

Projektivno podjetje | [Arhitekturni studio](#) | SoNo arhitekti

Statika | [Structural engineer](#) | Mejra Ogris, Projektivni biro Mejra Ogris s.p.

Energetska učinkovitost | [Energy efficiency](#) | low-energy 50kW /m²a

Površina | [Surface](#) | 307,9 m²

Parcela | [Site area](#) | 850 m²

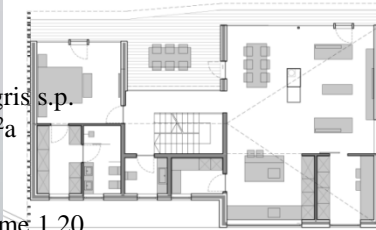
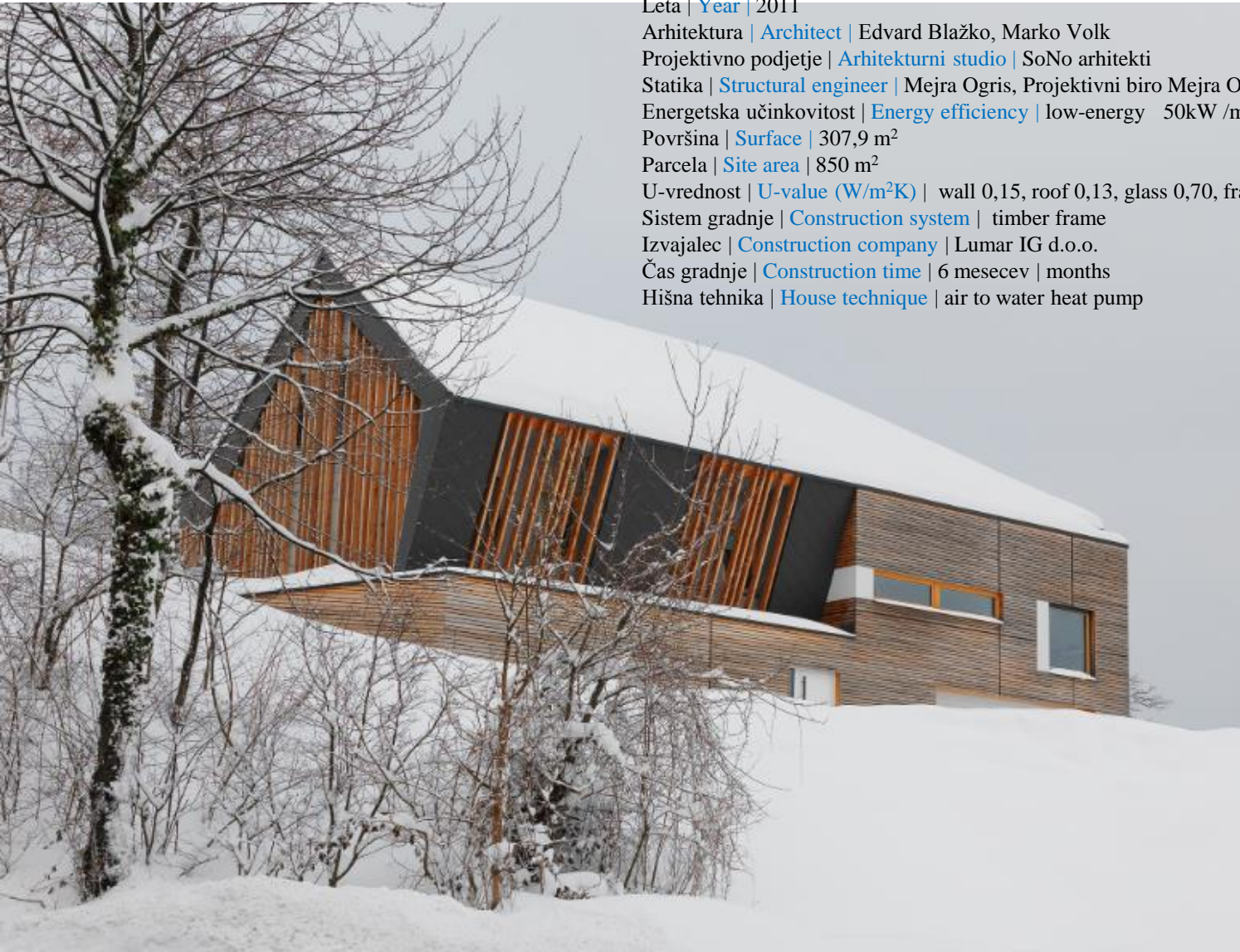
U-vrednost | [U-value \(W/m²K\)](#) | wall 0,15, roof 0,13, glass 0,70, frame 1,20

Sistem gradnje | [Construction system](#) | timber frame

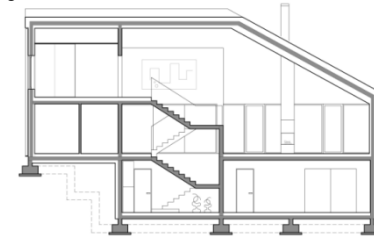
Izvajalec | [Construction company](#) | Lumar IG d.o.o.

Čas gradnje | [Construction time](#) | 6 mesecev | months

Hišna tehnika | [House technique](#) | air to water heat pump



ground floor



section

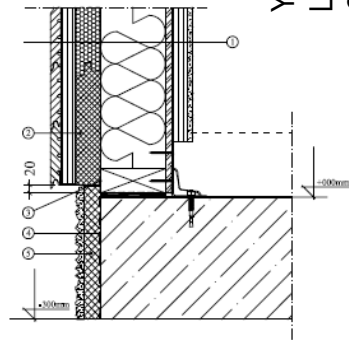




New directions- timber healthy material for schools

- 1 ... mavčno vlaknena plošča
Inštalacijska ravnina 40mm
OSB plošča, d=15mm
lesena okvirna konstrukcija, d=160,200,240mm
toplotna izolacija med konstrukcijo
toplotna izolacija na konstrukciji
fasada
- 2 ... vodoodporna izolacija
- 3 ... bitumenska folija - Elotene 1000
- 4 ... hidroizolacija temeljne plošče
- 5 ... izolacija temeljne plošče

Year | 2011
Location | Slovenia
Constructor | Riko hiše d.o.o.
Construction System | Panel construction



1st price

The 1st National award for the best wood construction 2013

Youth Hostel

Year | 2012

Location | Slovenj Gradec

Massive cross-laminated timber construction



A. Kutnar; Brussels, September 24nd 2014

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