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Horizon 2020

## Life Cycle Assessment, EPDs and modified wood COST Action FP1407 1<sup>st</sup> Conference

Koper, Slovenia  
August 25<sup>th</sup> – August 26<sup>th</sup>, 2015

### **The use of modified wood in Slovenia**

Kitek Kuzman M, Kariž M

*Understanding wood modification through  
architect's eyes*

*Modern architecture does not mean the use of immature new materials;  
the main thing is to refine materials in a more human direction.*

Alvar Aalto

## Producers in Slovenia

**Silvaprodukt** , *Silvapro wood*. The process uses special modification chamber, where modification starts with an initial vacuum phase. The chamber capacity is 4 m<sup>3</sup> and the treatment time per cycle is from 18 - 36 hours, depends on the thickness of wood and desired treatment temperature (170 °C - 230 °C).

**I-Les**, uses Wood Treatment Technology's (WTT) process. The chamber capacity is around 4 m<sup>3</sup> and uses treatment temperatures around 160 - 180°C.

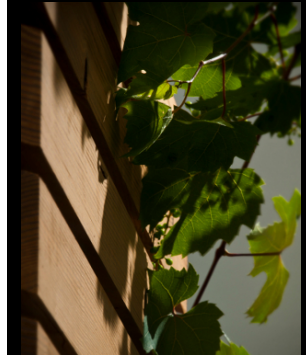
# What architects think about wood modification

1. Are you familiar with modified wood?
2. Are you familiar enough with its advantages and disadvantages?
3. Do you have enough information about it? Do you know for what purpose would be used?
4. Products of thermally modified wood are already available on the market. Did you use any of them?
5. Do you know any Slovenian producer of modified wood?



## Modified wood is ideal for

use as a cladding, terrace flooring, railings, windows, doors, and anywhere wood is exposed to the environment, but not loaded.





Simplicity and repose are the  
qualities that measure the true  
value of any work of art.

*Frank Lloyd Wright*

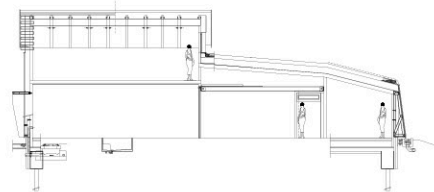


# Wood in Slovenian Contemporary Architecture



# The Tango House

Ljubljana



SECTION



GROUND FLOOR PLAN



## Residential building

Location | Ljubljana

Year | 2014

Architect | **Boštjan Debelak**

Architectural firm | **Boštjan Debelak, samostojni arhitekt**

Structural engineer | **CBD d.o.o.**

Energy efficiency | **low-energy**

Surface | **142m<sup>2</sup>**

Site area | **548m<sup>2</sup>**

Construction system | **solid timber Xlam construction**

Construction company | **CBD d.o.o. s kooperanti**

Construction time | **7 months**

House technique | **heat water to water heat pump, floor heating, open fireplace**



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Thank you

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# Contemporary Slovenian Timber Constructions: an Architectural Design Approach

How to increase use of modified wood?



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