Includes the visit of timber construction companies and timber buildings.

Day 1
- Kulmer Bau
- Stora Enso Timber
- Velox Werk

Day 2
- Observation tower Pyramidenkogel
- Construction technology centre TU Graz Timber Research
- Centre of Reininghaus South
- Communal flats Hummelkaserne
- Nursing home Peter Rosegger
- Headquarters - Mayr-Melnhof Holz Holding

Date: Friday, August 26, 2016 – Saturday, August 27, 2016
Time: Friday 7:30 – Saturday 21:00 hrs
Start & End: University of Vienna
Duration: 2 days
Number of participants: min. 20 persons / max. 25 persons
Price: 290 € per person (incl. guides, bus, hotel with breakfast, lunch provided by Stora Enso, lunch at Pyramidenkogel, snack packages in the bus, and dinner in Villach)

Kulmer Bau

Glulam Production
Products: Glulam Products and Kielsteg Elements
Factory tour guided by civil engineer, incl. presentation, afterwards lunch.

The company Kulmer Holz-Leimbau GmbH in Austria has about 240 employees. Their factory in Pischelsdorf, with a floor area of about 14,500 m², produces Kielsteg elements (one of the most recent and innovative building elements consisting of timber and plywood), prefabricated houses up to 4 storeys and a range of standard and customized prefabricated wall and structural glulam timber elements. The recent development efforts focus on prefabricated wooden construction elements for wall, floor, and roof constructions for commercial buildings. The company has its own design office with strong structural engineering competence.

Stora Enso Timber

**Product:** Biomaterials, paper, packaging and wood products

*Factory tour guided by civil engineer, incl. presentation, afterwards lunch.*

Stora Enso is a leading provider of biomaterials, paper, packaging, and wood products. In 1998, it took over the Schweighofer Group and became one of the largest and most important European and global players in timber industry. The factory in Bad St. Leonhard is a production site for Cross Laminated Timber (CLT), providing an innovative solid building system for single or multi-story residential, industrial, or commercial building projects. It consists of elements of different visual qualities, with dimensions up to 16 x 2.95 m and 40 cm thickness, as well as pre-cut ready-to-fit panels. A visit of the CLT production site or/and the sawmill will be possible during the excursion.


Velox Werk

**Cement-bonded Chip-boards**

*Factory tour guided by civil engineer, incl. presentation.*

Deliberations on how wood-chips from sawmills might be processed economically marked the starting point of the company foundation. Meanwhile, the family-owned enterprise from Carinthia has been producing building and insulation boards from mineralized wood chips for more than 55 years. The boards are made of natural raw materials, based on up-to-date ecological knowledge and, therefore, this natural building material is characterized by an excellent life-cycle assessment. 90 % of the building material is natural wood, which regrows and is sustainable. It is mixed with cement and water.

Source: www.velox.at
Observation tower Pyramidenkogel

**Design:** Klaura + Partner Architekten  
**Timber and steel construction:** ARGE Pyramidenkogel Rubner - Zeman  
**Completion:** 2013  
**Holzbaupreis Kärnten 2013, Award „Timber Engineering“**

Ascent and guided tour, afterwards lunch.

The 100 meter high panoramic tower in the town of Keutschach am See in Carinthia is the world's tallest observation tower built of wood. The structure exhibits an elliptical layout with sixteen powerful columns forming a basket structure that spirals into the sky above the landscape as an immense and spectacular piece of sculpture. The structure is supported by sixteen glulam columns reinforced by ten elliptical rings and eighty diagonal struts. From the top, visitors can use a spectacular slide that, from a height of fifty metres, will take them directly back to ground level.

*http://www.nextroom.at/building.php?id=36077*

Construction technology centre TU Graz Timber Research

**Testing Site:** Lignum Test Center, Graz belonging to Construction Technology Centre University of Technology, Graz, AT  
**Research:** Timber engineering and wood technology  
*Interior visit guided by Prof. Schickhofer and Dipl.-Ing. Ferk, incl. presentation.*

The Institute of Timber Engineering and Wood Technology, led by Prof. Schickhofer is an institution that brings together education, engineering, and research. By the development and utilization of the renewable building material wood, the Institute contributes to a resource-efficient and environment-friendly building industry. A crucial objective of the research at the institute is the further expansion of the utilization of timber as a material used for building. With the Lignum Test Centre the institute runs a facility for testing the physical, mechanical, and dynamic properties of wood and wood-based materials as well as for testing connection means. Also included in this tour is the visit of the Laboratory of Building Physics guided by Dipl.-Ing. Ferk.

Centre of Reininghaus South

**Design:** Nussmüller Architekten ZT GmbH  
**Timber construction:** Kulmer Bau GmbH  
**Scientific support:** TU Graz, Department for Urban Development, Department for Sustainable Technologies  
**Completion:** Autumn 2016

Guided visit, walk through the residence.

A mixed use plus energy district is being developed for the building site Reininghaus Süd. The combination of energy efficiency measures, energy production on site, and energy exchange between the buildings will establish a plus energy housing estate. The multi-storey residential buildings meet the passive house standard and are built as timber clay construction. Offices and commercial spaces are situated next to Peter Rosegger Straße. In the residential area, located in the back of the commercial area, the public and semi-public spaces are defined as car-free zones.

Source: https://www.researchgate.net/publication/282622213_ERS__Plus_Energy_Network_Reininghaus_Sud_A_pilot_project_towards_an_energy_self-sufficient_urban_district  
http://www.aktivklimahaus.at/de/projekte/graz_zentrum_reininghaus_sued  
http://www.nussmueller.at/projekte/reininghaus-sud/  
http://www.proholz.at/architektur/detail/zentrum-reininghaus-sued

Communal flats Hummelkaserne

**Design:** Architekt Simon Speigner, sps-Architekten  
**Timber construction:** Kaufmann Bausysteme  
**Completion:** Summer 2016

Guided visit, walk through the residence.

Four new six-storey residential buildings are currently being built at Graz Reininghaus – Hummelkaserne. With its six stories, the project is currently Austria’s highest housing project built in wood. The social housing project meets the passive house standard and is built as solid wood construction. The design was developed in close cooperation with the timber companies Kaufmann Bausysteme – a cooperation with a timber construction company was a condition for participation in the architectural competition.

Nursing home Peter Rosegger

**Design:** Dietger Wissounig Architekten  
**Timber construction:** Strobl Bau – Holzbau GmbH  
**Completion:** 2014  
**GerambRose 2014, Bauherrenpreis der ZV 2015, Nomination**  
*Guided visit, walk through the residence.*

The two-storey nursing home on the grounds of the old Hummelkaserne barracks is a compact and square-shaped building with asymmetrical cut-outs serving to divide the house into its spatial concept of eight housing communities. The nursing home is constructed as a prefabricated passive house wooden construction with a basement. A timber frame construction with cross laminated timber and wooden beams was used to meet the static and structural demands of the building. The exterior façade is made of untreated Austrian larch, while many of the wooden panels used for the interior are still visible.


Headquarters - Mayr-Melnhof Holz Holding AG

**Design:** Nussmüller Architekten  
**Timber construction:** Raimund Baumgartner GmbH  
**Completion:** 2008  
**Steirische Holzbaupreis 2009 – Award “Public and Commercial Buildings”**  
*Interior visit is programmed depending on timetable.*

Mayr Melnhof is one of the biggest wood-processing companies in Austria. The office workplaces of Mayr Melnhof are housed in a two two-storey wooden building next to the company’s sawmill. The two tube-shaped office wings encompass two stories braced by massive visible supports. They contain well-lit, user-friendly workspaces, connected by communication and circulation areas. With the aid of glulam panels (products developed by the company), it was possible to realize projections of up to 8 meters. The close co-operation of the architect and the structural engineer, combined with the innovative will of a dynamic company, guarantees high-quality building in a short time (ten months to completion).