

## About the MARLES company:

With more than 125 years of tradition in building environmentally friendly and innovative wood-based solutions, Marles is the leading provider of sustainable prefabricated wooden buildings in Europe. As the largest Slovenian manufacturer, the company is synonymous with modernity and excellence. Our innovative construction solutions contribute to the progress of the industry and promote sustainable living through the development of climate-friendly and energy-efficient buildings. To date, we have built more than 30,000 single-family homes, apartment buildings, commercial buildings and more than 400 kindergartens and schools worldwide.

The renewed product portfolio is based on three important pillars of well-thought-out solutions:

- the ForeverMine line with customized solutions to suit individual preferences;
- the Pure line combines utility and timelessness with lasting comfort, while
- the Prime line is characterized by a blend of comfort and elegance and a higher standard of living.

Marles's construction stands out through its certified conformity and quality marks,

- The development follows the standards of energy efficiency, earthquake-proof construction, fire protection, the use of environmentally friendly materials, modern spatial planning;
- All materials used in the production of the homes, the entire construction system and the technological process comply with international standards and are certified;
- Regular production monitoring by independent, internationally recognized experts;
- Assembly takes place in a climate-controlled indoor area and is therefore independent of the weather, which enables rapid completion and occupation;

- Marles is constantly cultivating existing potential and introducing new potential for a successful future. Due to the influence of Marles, the industrial production of buildings made from natural and environmentally friendly materials continues to develop, and buildings with a low carbon footprint are becoming the first choice of buyers of environmentally friendly timber buildings.
- Awarded SuperBrands 2024, Company Wall Gold Rating Excellence, BigSee Architecure award 2024. Ambassador of the Slovenian economy *GREEN. CREATIVE. SMART.*
- Partnering with Bramac, Hasslacher, Helopal, Hsbcad, Hundegger, Inoterm, James Hardie, Jezeršek, Knauf Insulation, Marles PSP, Pirnar, Remoplast, Schiedel, Sihga, Sto, Velux, Würth.

## Video presentations:

- About Marles what we do, and where we come from.
- Marles. You are home<sup>™</sup>

CHALLENGES OF THE COMPANY MARLES	Searching for
<b>Topics:</b> Smart home technology. Energy efficiency – new technology related. Construction system. Materials for the future. Recycled materials for construction. Safety. Comfort. Interior solutions. Interior design. Living Spaces. Modular architecture. Solutions for decreasing labour intensive works in construction.	
Marles.1: Communication of sustainable timber prefabricated homes	
<ul> <li>Many people may not be familiar with what prefabricated homes are, let alone the specific advantages of those built with sustainable timber. There can be a general lack of understanding about how modern prefabrication techniques can offer both environmental benefits and high-quality construction.</li> <li>Challenges <ul> <li>Lack of awareness</li> <li>Misconceptions about durability and quality</li> <li>Association with deforestation</li> <li>Aesthetic preconceptions</li> <li>Perceived cost issues</li> <li>Carbon sequestration benefits</li> </ul> </li> </ul>	Researchers & Students
Marles.2: The comparison / pros & cons of traditional construction VS innovative sustainable timber construction	
Analyse and compare traditional construction methods (using materials such as concrete, steel, brick) with sustainable timber construction to determine the advantages and disadvantages of both construction methods in terms of environmental impact, cost, durability and aesthetic flexibility.	

Main research areas: Environmental impact. Cost analysis. Durability and maintenance. Construction time and	Researchers & Students
efficiency. Aesthetics and design flexibility	
	E Start.ups
<b>Expected outcome:</b> The research aims to provide a balanced view that not only examines the pros and cons of	
each construction method, but also considers in which scenarios or environments one may be preferable to the	
other. This comprehensive comparison will help to understand how sustainable practises can be integrated into	
future construction projects.	
Marles.3: The origins of timber construction and its evolution into modern prefabricated building	
Trace the historical development of timber construction from its parliest applications to its surrent use in	
madern profabricated buildings. Access how tachnical progress, changing applications to its current use in	
changing architectural poods have influenced the use of timber in construction	Researchers & Students
<b>Key areas of research:</b> Historical use of timber. Development of construction techniques. Emergence of prefabrication. Technological advances, Current trends and sustainability. Expected outcome,	E Start.ups
The research will provide a comprehensive understanding of how timber construction has evolved from traditional to modern construction, highlighting key technological, cultural and environmental milestones. This comprehensive historical and contemporary overview will help to highlight the potential of timber as a sustainable building material for the future of construction.	
Marles.4: Eco-sustainable solutions in construction industry	
Investigate and analyze environmentally sustainable solutions in the construction industry, focusing on	
innovative materials, technologies and practices that contribute to the Sustainable Development Goals.	
Investigate how these solutions impact environmental, economic and social sustainability.	

<ul> <li>Key research areas: Green building materials. Energy efficiency. Water management. Waste reduction. Building certification systems. Local and global case studies.</li> <li>Expected outcome: The aim of the research is to provide a detailed overview of current solutions for environmentally sustainable construction and to illustrate their practical application and effectiveness in promoting environmental protection and sustainability in the built environment. This analysis will help to identify best practice and encourage the adoption of innovative solutions in future construction projects.</li> </ul>	Researchers
<ul> <li>Marles.5: Self-sustainable housing within the context of green villages &amp; suburbs</li> <li>Explore the concept of self-sustaining housing in green suburbs, focusing on the integration of renewable energy sources, water management systems, waste reduction techniques and community planning to achieve a self-sustaining lifestyle.</li> <li>Main research areas: Integration of renewable energy. Sustainable water practices. Solutions for waste management. Urban planning and community design. Building technologies and architectural innovations. Regulatory and policy frameworks.</li> </ul>	Researchers & Students Start.ups
<b>Expected outcome:</b> The study should provide a comprehensive overview of how self-sustainable housing can be effectively implemented in green suburbs. It will highlight successful examples and identify potential barriers and solutions. The study will also identify ways in which policy makers, developers and municipalities can work together to create environmentally friendly, self-sustaining suburbs that contribute positively to overall sustainability goals.	