

iDOMUS III
engineered timber construction

SOLID TIMBER HOUSES

Vol. 2

by iDomus Construction

IDOMUS CONSTRUCTION

INTRODUCTION

iDomus Construction was formed in 2009 by Dainius Prakapavicius, Lithuanian national who moved with family to Ireland, Cavan in 2005.

Dainius Prakapavicius have over 15 years experience in Construction Business working in renovations and new build sector.

Holds Btech diploma from DIT in Construction Site Management 2014.

Jurgita Prakapaviciene – Holds Interior Design and 3D diploma from Dublin Institute of Design, 2011. She takes Marketing and Project Manager position in the Company.

After 2014-2016 training in Germany for Energy Efficiency Building Systems, we are **concentrating in Sustainable and Ecological Construction.**

In Irish construction marked Company is working more then 15 years, and in Mass Timber construction we been involved for the last 7 years.

- Our aim is, within international industry experiance, train and teach architects, builders, developers to **use Mass Timber Engineered Construction system** in Ireland
- Main task and focus to domectic construction sector, as well as schools, hospitals, recreational projects.



Excellence
IN BUSINESS

Excellence in Construction
Eco-friendly Building Products
Sustainable Building Solutions

iDomus offers sustainable building solutions using Glulam timber, wood-fibre insulation and timber cladding. HBE (glulam) is a construction system comprising mass timber panels and GL beams.

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UNDERSTANDING SOLID TIMBER RANGE

The family of engineered wood components known as MASS TIMBER is used instead of steel or concrete to create a structure that provides durable, cost-effective performance with **less embodied carbon**.



GLULAM BEAM

Timber lamellas are glued together with grain all running in the same direction. Also known as glue-laminated timber, can be used as beams, roof structures, posts. It is incredibly versatile; glulam can be arched, used to support long spans, paired with other building materials, or just left exposed to provide beautiful structure.



GLULAM PANEL (HBE)

Glulam panels has double rebate on both sides. Produced in long 12m lengths and cut with CNC according to project. Typically used to build solid timber walls, ceilings, mezzanines and roofs. As all grain runs in the direction of the primary span, a strong, structurally sound panel is produced. Panels are exceptionally strong and can be used for any size and type of construction project.



CROSS LAMINATED TIMBER (CLT)

Timber lamellas are glued together in layers (usually 3, 5 or 7), with the grain in each layer running at right angles to the adjacent layer. Typically used for floors, walls and roofs. Mostly suitable for large scale commercial projects.

SOLID WOOD BUILDING ELEMENT AND GLULAM BEAMS SUPERSTRUCTURE

Solid Wood Construction System is based on **Solid Wood Building elements** - **Glulam Panels** with rebate on both sides for easy connection in vertical application.

Panels are used in conjunction with **Glulam beams** for wall plate and top beams as a ring beams, which are acting as opening lintel as well.

All materials fixed with screw fixings, meaning all components can be:

- **Fully reused**
- **Fully recycled**
- **Eco-friendly**
- **Healthy buildings**

This building system works well for **circular economy**.





WHY IS THE SUSTAINABLE CONSTRUCTION SYSTEM SMART?

- **Sustainable** materials construction method
- Sustainable building method – **less transportation**
- **Less** site trash
- **No cold** bridges
- Flexibility and **easy** adaptation
- **BIM compatible**
- Prefabrication – **accuracy** and minimal place for error
- Extended internal **temperature** change cycle up to 12 hours
- Fast track – Lego principle. 10-15 times **faster** than traditional construction methods (block & brick)
- Mass timber structure **resists fire** in case of fire longer than steel
- **Healthy living** environment for people with allergies, respiratory, skin problems
- Timber for irish climate and construction is **ideal construction** material
- **Forest** development

SIMPLIFY YOUR NEXT PROJECT WITH IDOMUS
FAST-TRACK BUILDING SYSTEM!

WHAT IS IDOMUS WOOD ONLY ENVELOPE?

This building system consisting from only natural materials:

- Solid Wood Building elements - Glulam Panels and Glulam beams **superstructure**
- **Woodfibre** external insulation
- **Natural timber cladding** for ventilated facade

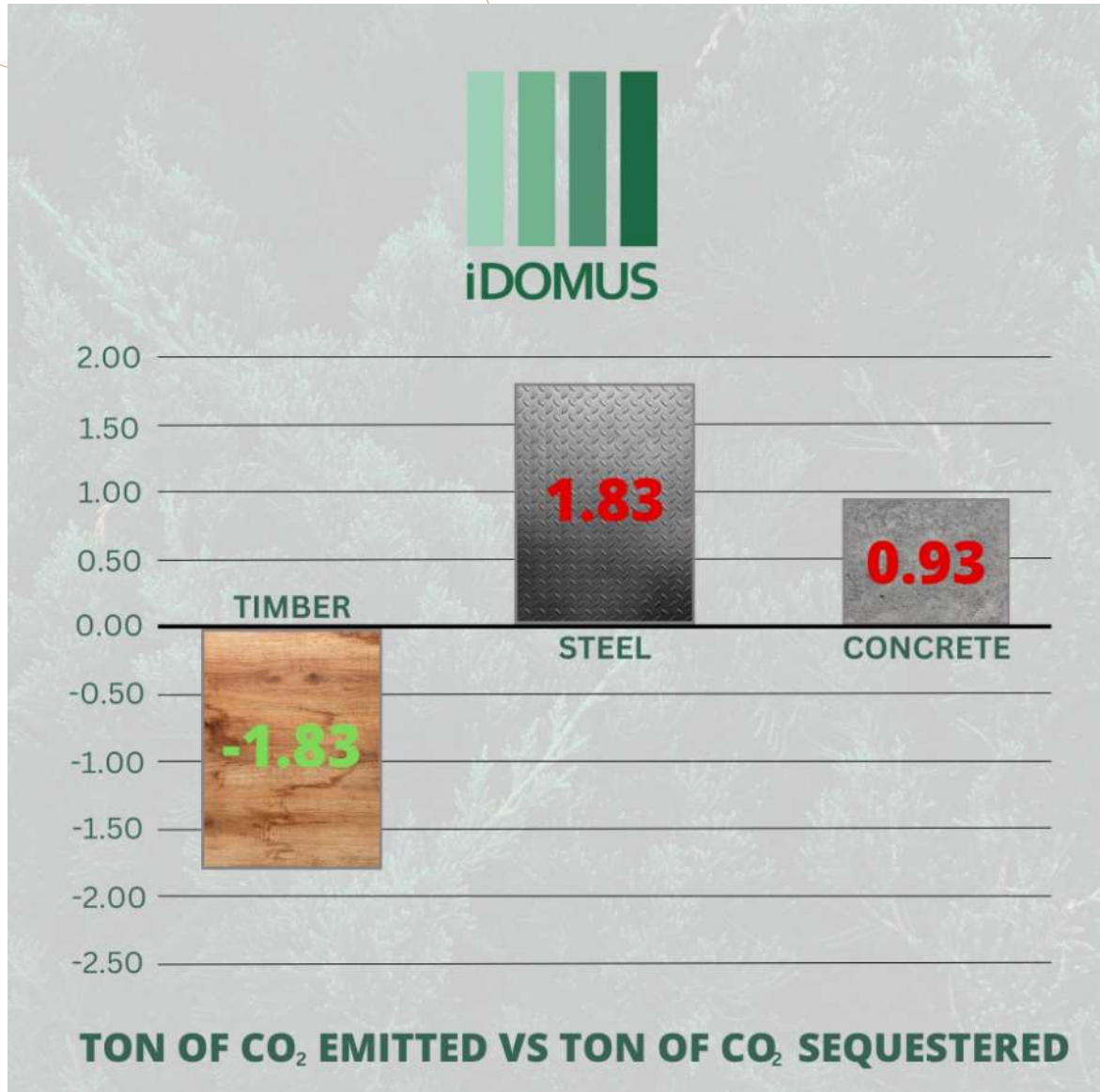
WHAT ARE THE BENEFITS?

- Naturally breathing building, easy temperature control
- Building physics works well when in collaboration Solid wood superstructure and woodfibre insulation
- Wood Fiber insulation is rigid and is coming as sheets, which are easy to install or re-install, which means **reuse**.
- At the end of its life, such structure **doesn't pollute** the environment due to the possibility of complete recycling.
- Elements are fixed together with **self-drilling screws**, no glue or chemicals used.



- iDomus Wood Only envelope can achieve **any thermal** requirement for the project.
- Typical build up for **Passive standard U value 0.15** - 100mm Glulam superstructure + 200mm Woodfibre insulation 0,037 thermal conductivity.

CO2



Did you know that in the wood production process, the balance of CO2 emissions is negative? 🤖

What does this mean? It means that the wood production process releases less CO2 into the environment than it absorbs or removes. ♻️

Achieving a negative balance is an important part of a climate change mitigation strategy to reduce anthropogenic CO2 emissions to the environment. 🍊

SOLID WOOD BUILDING ELEMENTS SUPERSTRUCTURES



WOOD FIBRE EXTERNAL INSULATION



NATURAL TIMBER CLADDING

To keep in the same sustainable style, iDomus recommends usage of various **natural and thermo treated timber cladding** types for contemporary, easy maintenance ventilated facades:

- Charred Larch Timber cladding
- Charred Spruce Timber Cladding
- Natural kiln dry timber
- Thermo wood cladding



MODULAR CONSTRUCTION

iDomus also offering a single and multistory easy adaptable solid wood built **MODULAR UNITS** that can be used for various purposes, such as:

- **School units/playschool prefabs**
- **Hospital staff accomodations**
- **Permanent slow living**
- **Tourism and recreation**
- **Yoga/health treatment units**
- **Refugee camp sites**

All our modules are:

Sustainable builds

Fully reusable

Fully resycable

Low impact on enviroment



EXIBITIONS AND CPD

We are continuously participating in yearly trade shows, educating customers and trade colleagues about sustainable construction methods, as well as giving event talks on the subject.

- **National Construction Summit**
- **Architecture and Build Exhibition**
- **SelfBuild Live Dublin, Belfast, Limerick**
- **Ideal Home Show, RDS – Spring and Autumn**

Colaborating with **Universities**

- University of Galway
- ATU Sligo

Members

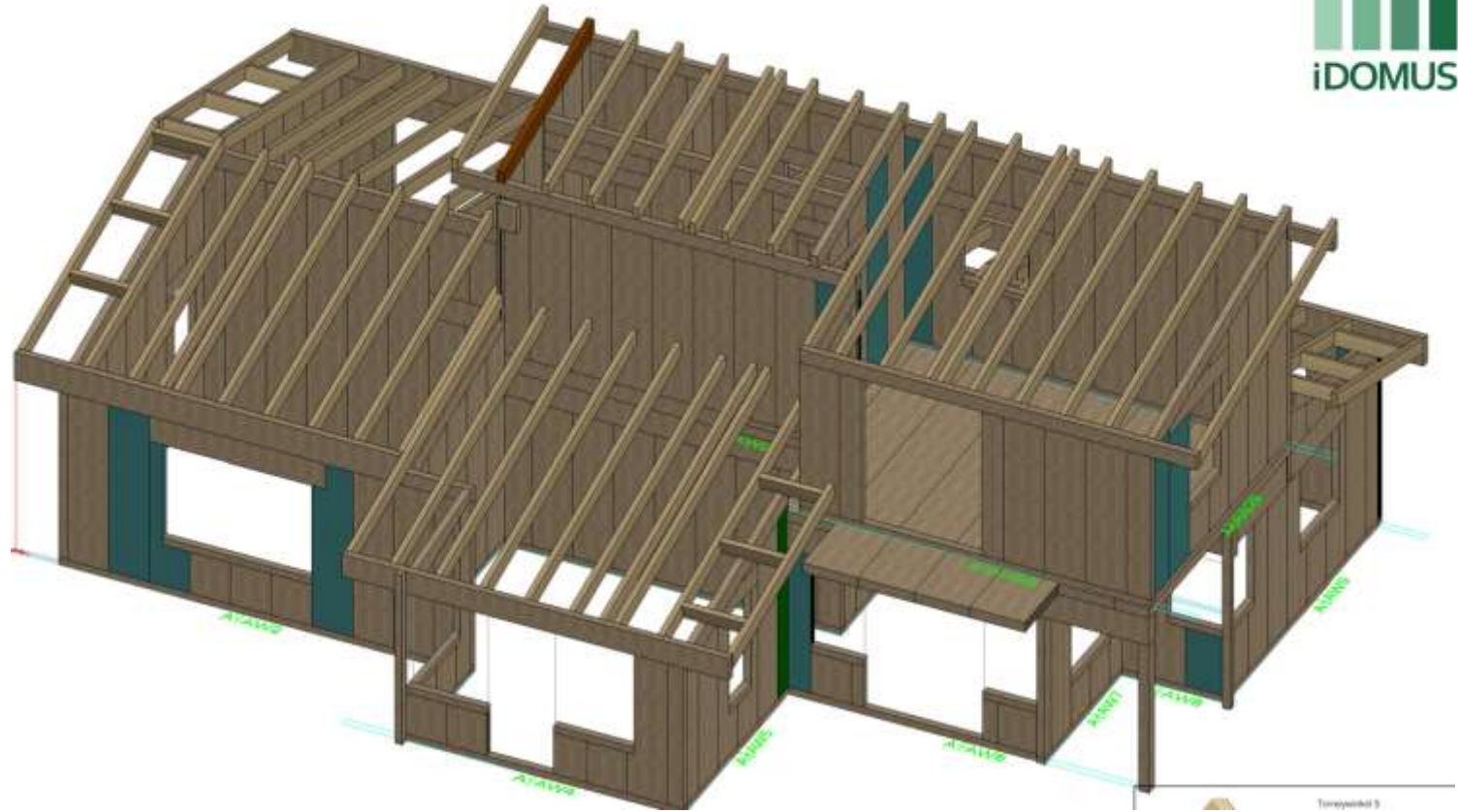
- **Irish Green Building Council (IGBC)**

Running **CPD COURSES** for

- Architectural Practices
- Trade Professionals



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