



StoraEnso

# Hall Street Ridgeway, Australia

In 2020, when this house was built, it achieved the highest level of air tightness in the State. It was made with a Sylva™ kit of parts manufactured in Austria.

The prefabricated Sylva™ [CLT Walls, Floors, and Roof](#) components were manufactured from [cross-laminated timber](#) in Ybbs, Austria, and then shipped to Hobart, Tasmania.

Each individual piece was CNC cut with precision, ensuring they met the highest standards of quality and sustainability. The use of [PEFC-certified](#) timber guaranteed that the wood was sourced from sustainably managed forests, promoting responsible forestry practices and contributing to the preservation of natural ecosystems.

To enhance the durability and facilitate a safe and rapid installation, this project took advantage of our [Sylva Services](#). An end grain sealer was applied to protect the wood from moisture getting trapped in the wood during transit and construction and lifting screws and anchors were preinstalled to facilitate easier and safer handling during assembly.

## Logistics

The prefabricated kit of parts was carefully packed into two sea containers. Long-distance transportation was made feasible due to the lightweight nature of CLT. The use of sea freight is more energy-efficient than air or road transport, which further minimises the carbon emissions of long-distance shipping. (Source: [ScienceDaily](#)).

To manufacture the CLT elements, only four tonnes of greenhouse gases (CO<sub>2</sub>e), were generated which meant it was possible to ship long-distance while still having a small carbon footprint. (Source: [EPD](#), [SLU](#)).

## Installation

Prefabrication allowed for a swift and efficient assembly process, reducing on-site construction time and minimizing disruption to the surrounding community. The precision of the prefabricated pieces ensured a perfect fit, contributing to the structural integrity and energy efficiency of the building.

## Why Australia imports Sylva

Australia imports Sylva for several reasons, primarily driven by the material's low carbon footprint as third-party verified [environmental product declarations](#).

The application of Sylva aligns with Australia's commitment to sustainable building practices. The material's versatility and strength make it suitable for a wide range of applications, from residential buildings to large-scale commercial projects. Importing CLT from countries like Austria, where the technology and expertise are well-established, allows Australia to leverage advanced manufacturing techniques and high-quality materials that may not yet be widely available domestically. ([Architecture & Design](#))

## Energy-efficiency

The house was built to Passive House air-tightness standards and uses Proclima Membranes, Zehnder MHRV system, Unilux Triple glazed windows and doors.

[Watch more about this project](#) and how it achieved such a small carbon footprint.

[View more projects made with a Sylva kit in Australia](#)



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## General

### Delivery year

2019

### Area (m<sup>2</sup>)

600

### Units

1

### Building type

1-2 Family Dwellings

### Storeys

2



Photo credit: Rob Maver

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## Products

### Products and Services

[Sylva™ CLT Floors and Roofs](#),  
[Sylva™ CLT Walls](#), End Grain  
Sealer, Preinserted lifting  
devices

### Product quality

IBI, INV, | PEFC certified

### Product volume (m<sup>3</sup>)

81

### Number of deliveries

2

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## Team

### Architect

[Next 50 ArchitectS Project](#)  
Architect: [Stuart McKenzie Hall](#)

### Main contractor

[O'Connor Construction](#)