

# WrightWall panel system

*Precision engineered timber frame for high performance building envelopes*

Elements  
by OAK WRIGHTS®

## Overview

WrightWall is a premium pre-fabricated timber wall solution designed to integrate seamlessly with oak frame structures or serve as a standalone high performance building envelope. Combining traditional craftsmanship with modern precision engineering, this system delivers exceptional thermal performance and structural integrity for both residential and commercial projects.

## Features

### Design flexibility:

Accommodates a wide range of architectural expressions from traditional to contemporary.

### Integrated services:

Our panels are crafted with factory fitted service voids.

### Window integration:

Integration is optimised through offsite-manufactured components, including the option of windows fitted by our joinery team. This coordinated service accelerates site progress and ensures a precise fit.

### Speed of construction:

Up to 90% of our products are off-site manufactured significantly reducing on-site assembly time.

### Quality Assurance:

Workshop-controlled manufacturing environment ensures consistent quality.

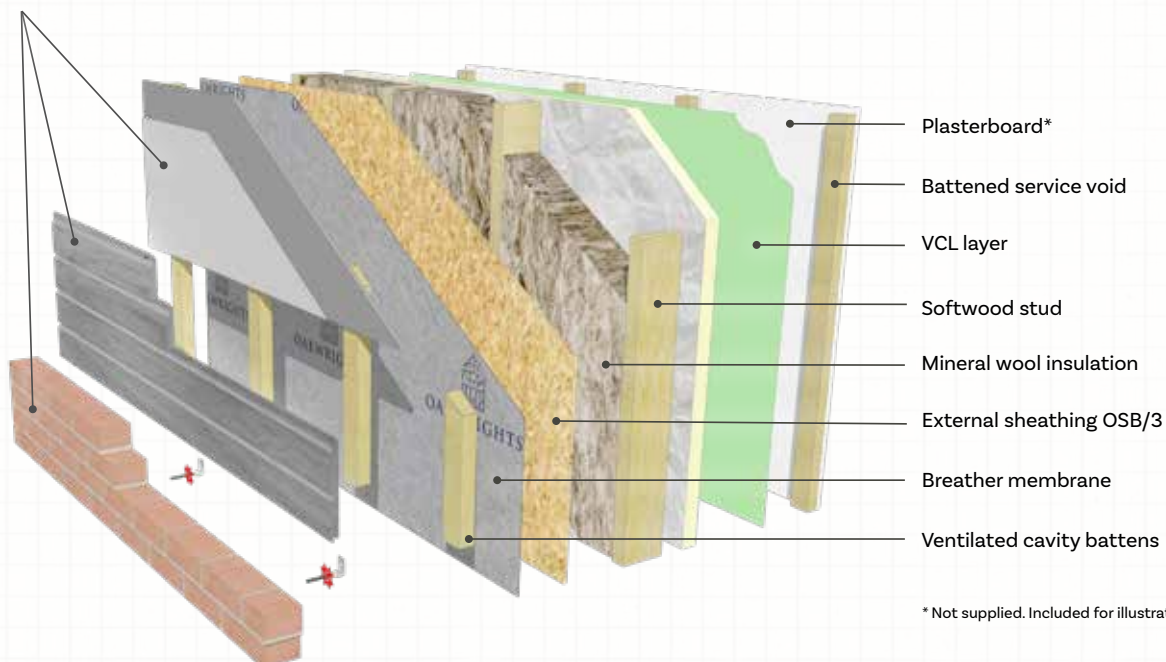
### Weather independence:

Reduced weather exposure during construction. Reaching a dry shell quicker.

### Customisation:

Bespoke panel designs to meet specific project requirements.

Choice of external finish (brick / cladding / render)\*



\* Not supplied. Included for illustrative purposes.

## Wall Build-Up

Layer	Description
Battened service void	Provides space for internal services including a membrane installed on the warm side of insulation to limit moisture ingress and prevent condensation within the building's fabric.
PIR rigid insulation	A high-performance thermal board over studs to provide excellent insulation and reduce cold bridges.
Softwood studs with mineral wool insulation between	Provides a strong structural framework while offering effective thermal and acoustic performance.
External sheathing OSB/3	Structural board adding rigidity and strength to wall and roof systems.
Breather membrane	Water resistant and vapour-permeable membrane protecting the panels during and after construction while allowing moisture to escape.
Ventilated cavity	Creates the required air gap for ventilation.

Please note: all the components listed above are fully assembled in our workshop and delivered to site ready for erection. While all internal and external finishes will be installed by others onsite.

## Performance Data

Property	Value / Information
U-value (Typical)	0.17W/m²K
Airtightness	Achieves airtightness levels below Passive House levels (<0.6 ACH), when installed in conjunction with a suitable ventilation system.
Panel Thickness (Typical)	237 mm inc. internal and external battens (not including external and interior finishes).
Fire Resistance	Fire approved to BS EN 1365-1:2012 (load bearing wall) and BS EN 1363.1:2020.
Vapour Permeability	Highly breathable system / the assessment reveals no risk for condensation within the build-up.
Embodied Carbon	Significantly lower than conventional wall systems.

## Compliance & Compatibility

- **Compatible with:** Oakwrights WrightRoof system, AeroBarrierUK and Oakwrights products portfolio.
- **Standards:** Designed to exceed UK Building Regulations.
- **STA Assure Gold certified.**

### Uses

- Bespoke residential and commercial projects
- Energy efficient developments

### Why Choose WrightWall?

- Designed and manufactured by Oakwrights' with over 25 years' experience in the construction industry.
- An In-house tech department to assist on all complex projects.
- Balances innovation, performance, and sustainability.
- Supports airtight, breathable, healthy energy efficient home design.
- Supported by a range of fully developed products and services inc. Joinery.