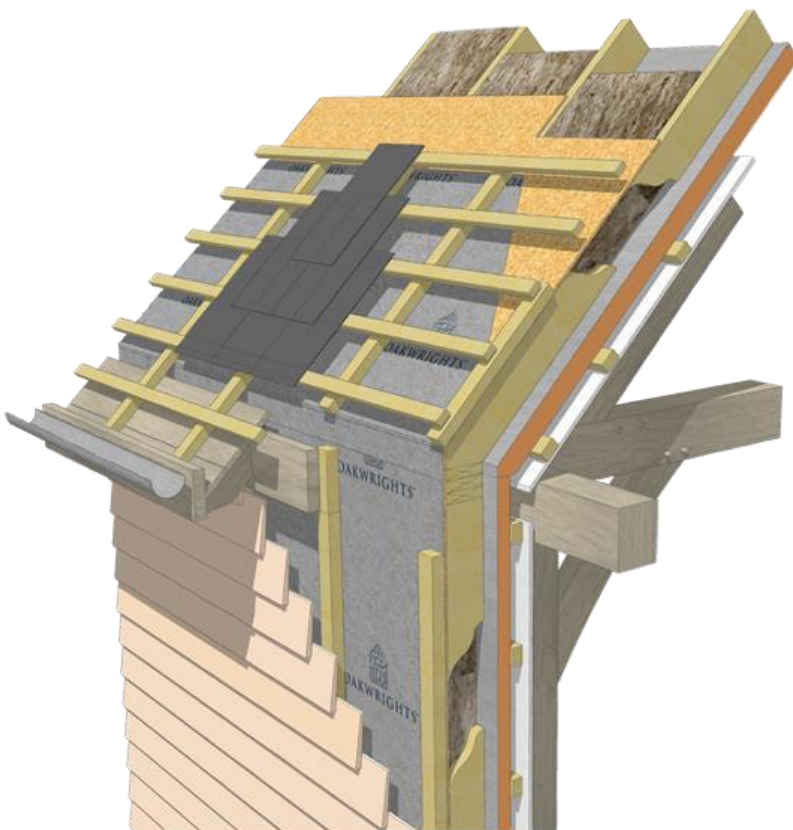


## Sustainable Construction Statement

### Oakwright's Oak Frame and Encapsulation

Our proposal is for a new-build house, built using sustainable materials. Oakwright's 'post and beam' style oak frame, i.e. the oak structure inside the building, wrapped using Oakwright's energy efficient encapsulation system, achieving excellent U-values.

Utilising the principles of "Fabric First", the proposed dwelling is to employ superior wall, floor and roof systems in conjunction with fenestration in excess of the efficiency required for Building Regulations. This will provide a highly insulated, well-detailed envelope that will give the dwelling a high level of energy efficiency and internal comfort. The majority of the systems proposed are to be manufactured off-site in our factory, which reduces waste and improves quality, thus reducing the build time, processes, associated noises and to reduce the negative impacts on the environment. A safe, clean, considerate and environmentally conscious site would be operated where noise, vibration and air quality are actively controlled. The waste hierarchy of reducing, reusing and then recycling waste would ensure that minimum volumes of materials are used.



WrightWall provides a slim and efficient wall build up, designed to accommodate multiple external finishes. WrightWall is designed to ensure a fully integrated process between frame and shell, using the same innovative software employed to design your oak frame means the two fit seamlessly together resulting in exemplary airtightness. WrightWall is manufactured off site, within a factory environment ensuring excellence. The Pre-fabricated large components, as well as negating cold-bridging,

# OAKWRIGHTS®

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also reduce onsite construction time, which in turn reduces the need to travel to and from site and reduces carbon during construction. Our specialist site team who will assemble the system; ensuring the highest level of attention to detail throughout the process. The WrightWall encapsulation system provides exceptional thermal performance, ensuring an energy efficient, warm home.

## **Energy Consumption**

Oakwright's encapsulation system provides good airtightness in order to minimise energy consumption. The use of heating systems designed with variable output from renewable resources to meet only the required demand will be installed. The very high fabric performance (in excess of building regulations) means that the house can either be built with a range of integrated renewables or they can be readily added or upgraded in the future, allowing the house to adapt to a changing energy/renewables mix as technology progresses.

Natural light has been considered throughout the layout of this home, the design maximises the dappled light on north elevation and allows shading to the south elevation via a protruding roof over a balcony, which protects the elevation from solar overheating.