

ILEX

Technologies

We have combined several active and passive technologies to deliver an optimal environment for focussed work with as light a footprint as possible.

Construction

The Blok is structurally assessed and constructed from an engineered timber (laminated veneer lumber - LVL) to ensure stability and natural carbon lock up.

Security

WiFi-connected smoke/CO and door-opening sensors ensure you have peace of mind and can be alerted on your phone to unwanted events.

Thermal performance

Achieving good thermal performance depends on the type and thickness of insulation chosen, good air tightness and good detailing.

The ILEX Blok incorporates a range of high-performance insulation materials technologies: triple-glazed K-glass, vacuum insulated panels and woodfibre insulation (220 mm thick). Engineering calculations show this delivers heating energy requirements below 35 kWh/m²/yr, depending on orientation, outperforming almost all UK commercial office space.

The ILEX Blok also includes air tightness seals and low thermal-bridging interfaces.

Overheating

The internal temperature of heavily-glazed buildings can become prohibitively high for significant portions of the year. We have worked with thermal engineers to design a system of insulation, glazing, natural ventilation and external shuttering that will maintain the internal temperature to reasonable levels (<25°C), even for a south-facing orientation.

Lighting

Floor-to-ceiling glass in all three windows creates a high degree of natural lighting, three times that recommended by RIBA, and highly beneficial to focus and wellbeing.

Stylish integrated LED uplighters provide additional lighting.

An external LED strip provides subtle low-energy access assistance.

Internal environment

Mechanical heat recovery ventilation maintains a high level of air quality and relative humidity without compromising thermal performance. This helps to maintain good health and concentration.

Thermostat-controlled underfloor heating provides a heating boost when needed.

Integrated sensors allow the air quality, temperature, humidity and light levels to be monitored via an ILEX app and build an understanding of what makes a good work environment.

Servicing

We have ensured that the Blok can be serviced annually to ensure its performance is maintained, and its core is easily refurbished for future use.

ILEX

ILEX Block Dedicated work space