Timber Square

Overview

Timber Square is a pioneering net zero carbon mixed-use redevelopment comprising two buildings – a partially retained, refurbished and extended former printworks (known as the Print Building) and a new building (the Ink Building) at Lavington Street in Bankside, SE1. The two buildings are separated by new public realm.

The development totals c.380,000 sq ft NIA and includes 365,000 sq ft NIA of office space plus retail, leisure and storage uses.



Location: Southwark, London

Client: Landsec

Architect: Bennetts Associates

By prioritising retention, utilising engineered timber and incorporating reused steel, Timber Square leads the way in green building practices. Carbon reduction efforts achieved a further carbon saving in the steel frame of 23% from the Stage 4 design.

Landsec's target for Net Zero Carbon is set to be reached, as well as other targets including BREEAM Outstanding, Well Platinum and a minimum NABERS UK 5-star rating.

Timber Square was the first UK project to complete a NABERS UK Independent Design Review, underscoring its commitment to excellence and sustainability in construction.





Steel reuse

Reusing steel involves taking beams or columns from a deconstructed building and reusing them on a new structure or site rather than recycling, which requires a huge amount of energy to melt and reshape the steel into new elements. By reusing steel, the upfront embodied carbon is cut by a factor of eight on average, even accounting for the extra energy involved with demolition and transportation.





Reclaimed Steel Supplier Cleveland Steel and Tubes

The potential for reusing steel was identified at the end of the design stage using the HTS Stockmatcher. Since then, 115 tonnes of reclaimed steel has been secured by the steel fabricator, who reported back that they had only been able to match such a high number of elements due to the Stockmatcher. Reclaimed steel will be used in both buildings as part of the primary steel frame. The procurement process has been straightforward, and the fabricators have received and started installing this steel with the frame due to compete in the next few months.

Steel identified for reuse

Steel Fabricator William Hare Group



The Ink Building (reused steel in green / pink)

H STOCKMATCHER

115t Procured from **Cleveland Steel**

290t Embodied carbon saved

Electric arc furnace steel (EAF)

During detailed design, Heyne Tillett Steel structural engineers made changes to the steel frame to increase the opportunities for using steel primarily produced from scrap using an Electric Arc Furnace (scrap-EAF). This method has a much lower embodied carbon footprint compared to the more common blast furnace-basic oxygen furnace (BF-BOF) process, which is coal-powered and highly carbon-intensive. William Hare were then able to increase the proportion of scrap-EAF steel beyond the initial design, achieving a reduction of 60kgCo₂e/m² across the site.



