

World's tallest timber residential building gets support from Eurofox

For the exterior of the Stadthaus – the world's tallest timber residential building – architects Waugh Thistleton wanted to create a façade that provided interest. To achieve this, they specified rainscreen cladding in a pattern inspired by pixelated images and to hold the panels firmly in place, Eurofox Engineering's cladding support system was chosen.



A £3.86 million scheme, the building comprises 29 apartments, being a mix of private and affordable. For the exterior façade, Waugh Thistleton turned to the style of pixelated images inspired by artists Gerhard Richter and Marcus Harvey. Whilst the pattern looks random, it was in fact created by recording the changing sunlight and shadows formed on the vacant site using sun path animation. The resulting image was pixelated, picked up, stretched and wrapped around the building. To hold the cladding panels firmly in

place, specialist contractor Cladding UK used Eurofox engineering's innovative Macfox MTK (Structural Adhesive) rainscreen cladding support system. Robust and with a proven track record, the system is produced from hard wearing aluminum and can be used to fix a variety of cladding materials.

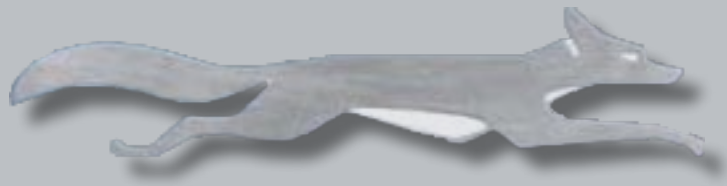
Easy to install, the system allows cladding to be secretly fixed in place using SikaTack Panel Adhesive from Sika. A high performance adhesive system, it allows cladding panels to be fixed in

place without the need for unsightly mechanical fixing systems which often protrude through the cladding panels, thus ensuring nothing spoils the impressive façade.

“With both the Eurofox system and the SikaTack Panel Adhesive being BBA (British Board of Agreement) approved, this combination of products provides specifiers with total confidence of a cladding support and fixing solution that is tried and tested and has a proven track record.”

Project:	Stadthaus
Location:	Hackney, London
Architect:	Waugh Thistleton
Product:	Macfox MTK (Structural Adhesive) rainscreen cladding support system





Contractor Cladding UK fitted the vertical Macfox cladding support system to the building's timber structure, on to which they fixed the 5,000 individual black, grey and white rainscreen panels. Measuring 1,200 x 150mm, the Eternit Natura Pro panels are made from 70% waste timber and provided the architects with the ability to create their pixelated design.

Eurofox Engineering produces a comprehensive range of cladding support systems to suit most applications including vertical fix, horizontal fix and secret fix. The Macfox system enables standoffs and cladding zones from 40 to 340 mm to be realised. A highly versatile system, it has been designed to comprise a series of standard 'off the shelf' components. Not only does this approach help to provide an easy method of installation but it also ensures immediate availability of products.

Each Macfox bracket is punched to allow for fixing to the building substrate. They are also holed and slotted to allow for dead load and dynamic wind load. The Eurofox bracket allows for complete alignment and lining and leveling adjustment.

Eurofox systems are designed to be 'installer friendly' and have been designed with the specifier and the installer in mind and as such is supported with a comprehensive package of design and installation tools and services. This includes the provision of drawings showing optimum set out of bracket components, rails and grids, the ability to calculate structural requirements of the back framing system and accurate details of cladding materials requirements.

Now complete, the building, which was built using KLH cross-laminated timber panel system, has become the first building in the world of its height to build not only load-bearing walls and floor slabs but also stair and lift cores completely from timber.

The project has demonstrated the viability of timber for tall buildings meaning more high density buildings can be built with carbon neutral materials such as timber. Timber absorbs carbon throughout its natural life and continues to store carbon when cut. The fabric of the Stadthaus will store over 186 tonnes of carbon. Additionally, by not using a reinforced concrete frame, a further 124 tonnes of carbon were saved.

Using Eurofox Engineering's aluminium cladding system, which is easy to recycle when the building comes to the end of its life and, being aluminum, needs only 5% of the energy required for primary production, has enhanced the building's sustainability whilst ensuring the impressive cladding will be securely held in place for decades to come.



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