

makin headlines...

9 July 2008

Carbon Zero First for Manchester.



Award winning architects Makin Architecture have just achieved planning for Manchester's first carbon zero-rated apartments.

The Xantium building located on the Ancoats / Northern Quarter border, will have 61 apartments designed to meet 'Code 6', the highest possible rating in the new system to measure the sustainability of new homes against categories of sustainable design. What is more, the four commercial units at street level will be constructed to 'BREEAM Excellent', the highest current BREEAM rating.

Makin Architecture director Dragana Opačić said... "The significant cost of achieving a high quality carbon zero development is not for the faint hearted. Luckily our client has a passion to create a 'first' for Manchester, and for himself, in pioneering a low energy, sustainable development on this site rather than the nominally 'green' buildings created in Manchester so far".

Zero carbon new homes are critical in achieving the governments target to cut CO₂ by at least 60% by 2050 and by 2016 all new homes in England will have to be carbon neutral. Makin Architecture are grateful for the efforts made by the planning department to ensure the smooth passage of this application.

Dragana Opačić continues... "We are extremely pleased that planning permission was granted. In achieving 'Code 6' for this type of development, eight years ahead of the government's target, we are actively demonstrating that it is possible to build carbon neutral buildings today. It is true however, that compared to a standard development, in terms of capital and it is far more expensive. Nevertheless, this type of project should be viewed as true investment in our future. These apartments will provide a lifestyle choice that was previously only dreamed about".

In order to achieve net carbon emissions of zero, every component used in the building has to be renewable, sustainable and/or ecologically sound. Mostly rated A or A+ in the Green Guide. The comprehensive code also considers health, wellbeing and ecology and to address these issues at the Xantium building, a green area on the roof will support English native wildflowers and grasses and encourage biodiversity. There will even be an area specifically designed to encourage protected Black Redstart birds. Every apartment has a larger than usual balcony, providing further amenity space, with ample room for planters and bike storage. Large windows take advantage of daylight whilst punched copper screens provide privacy, solar shading and give the building a distinctive translucent green hue.

High levels of thermal mass will keep occupants cooler in summer and warmer in winter and with thermal insulation up to 0.1 W/m² K energy usage will be reduced to the absolute minimum. All heat and electricity needs will be produced on-site through a combination of photovoltaic cells, Bio-fuel and Biomass generators. Rainwater and grey water will be captured and recycled; this along with reduced flow sanitary fittings will mean that water consumption will be drastically slashed.

Makin Architecture's primary objective was to achieve Code 6, but they haven't lost sight of their roots. The building design is innovative, aesthetically pleasing and what's more will be a great place to live, safe in the knowledge you will be doing your bit to help save the environment.