COMING UP ROSES

Known for its bright pink natural ventilation towers, Stoneleigh Road Managed Workspace in Tottenham, North London has injected new life into a derelict housing community

Hudson Architects designed this 750 sq m purpose built building after winning the support of local residents and businesses in April 2005 following a public consultation process. The building provides workspace for small and medium businesses, housing nine units with a total capacity of 72 desk spaces over three floors with shared secretarial and reception facilities. Commissioned and managed by Haringey Council, and funded in partnership with the London Development Agency and Government Office for London, the building will be leased to small and medium enterprises in the creative industries and the community sector, bringing a much-needed boost to the local economy in a borough of London where unemployment levels are twice the national average.

The signature pink ventilation towers make a statement of the building's passive stack ventilation system, which allow air to rise naturally through the building. John Farrell, Director at XCO2 Energy Ltd (M&E Engineers on the project), says the building's green credentials stem from the very low U-values of the polycarbonate external façade, which actually created the winter buffer space, and the stacks. "The U value of the façade was 1 so it was pretty low. For glazing or normal windows to meet building regulations you usually have to achieve around 2, so we actually halved the U values of that element of the building." In the winter time a buffer space is created, so the building benefits from free heating from the sun which reduces the effective heat loss from the building.

However, the main feature in terms of the environmental performance of the building is the three stacks. "In the summer, they allow cool air into the building at a low level to rise up and exhaust out through the roof. All the stale air from each of the floors is taken as the stacks are continuous down through each floor. Also, it provides a method of night-time free cooling in an area where security might be a bit of an issue." When it gets warm in the afternoon the building fabric itself soaks up heat and releases cold energy back. "It's a method of providing free cooling to a building that would have otherwise needed air conditioning. So we have reduced the need for air conditioning and eliminated the need for comfort cooling. The benefit of stack ventilation in an urban environment is that you don't necessarily get cross flow wind as you would in a rural environment where you would be able to open windows on both sides of the building. With stack ventilation we can actually use the heat build-up within the building itself to promote the ventilation strategy for the entire building. It takes away control from the occupants and creates a stable environment."

The building has already proved to be a success - two thirds of the units have been leased and it is expected that the courtyard area will be a shared place featuring a café market stall, allowing the building to take on a civic role serving the wider community. ■

Client:
London Borough of Haringey
Architects:
Hudson Architects
Design Team:
Anthony Hudson, Dieter Kleiner, Rahesh Ram, Holly Lewis
Structural Engineers:
Alan Conisbee Associates
M&E Engineers:
XCO2
Contractor:
Breyer Construction