

Building & Industry

NOVENCO 

SCHAKO Group

The highly sustainable modular student building protected with certified NOVENCO® ClearChoice™ system

A sustainable construction

The Lewisham Exchange in London, United Kingdom, delivers 758 student rooms and 67 affordable homes across two modular towers of 20 and 35 storeys. Both towers are built from volumetric 3D structural modules manufactured off-site to ensure high quality, shorten the construction programme and reduce waste by up to 90% compared with traditional methods.

The ground floors of both towers include commercial areas and student recreational spaces designed to reach a BREEAM Excellent rating. Photovoltaic panels on each roof further support the project sustainable energy goals.



ZerAx fan fully tested and compliant with EN 12101-3



The Lewisham Exchange, London, United Kingdom

ClearChoice smoke control system

NOVENCO Building & Industry designed, supplied, installed and commissioned the certified NOVENCO ClearChoice depressurisation systems for the entire development. The lobby smoke ventilation systems protect the three staircases in the event of fires together with a dedicated system securing the final escape route to the outside. A separate smoke-clearance solution for the basement areas is also part of the installation.

A key feature of the systems is the use of the highly efficient NOVENCO ZerAx smoke fans. These fans are fully tested and compliant with EN 12101-3. Their high efficiency and 98% recyclability after more than 20 years of operation make them a preferred choice for BREEAM-certified buildings.



Rooftop smoke shafts in action

EN 12101 series compliant

The systems include several supply and extract ZerAx smoke-fan sets designed in accordance with guidance from the Smoke Control Association and the requirements of BS 9991 and BS 7346-8.

All components comply with the EN 12101 series. This includes Part 2 natural smoke ventilators and Part 3 compliant smoke fans equipped with Danfoss FC102 frequency drives to ensure exact design speeds according to CFD results. Part 7 ductwork connects the fans with the smoke shafts. Part 8 smoke control dampers serve all lobbies, and the control systems comply with Parts 9(pr) and 10.

Fast-response pressure controls ensure optimum airflow whenever the systems operate. All systems serve dual purposes with dedicated fans used for daily heat extraction from the corridors through the smoke shafts.

Facts:

- Fully certified smoke control systems
- Dual-function systems - smoke control and daily ventilation
- Energy-efficient solutions
- Ultra-low sound levels
- Systems based on ZerAx fans for BREEAM certification