## THE HIGHLY SUSTAINABLE MODULAR STUDENT BUILDING PROTECTED WITH CERTIFIED NOVENCO® CLEAR CHOICE SYSTEM



### A SUSTAINABLE CONSTRUCTION

The Lewisham Exchange, a newly constructed building located in London, United Kingdom, provides 758 student rooms and 67 affordable homes across two towers of 20 and 35 storeys.

Both towers are modular build, which means manufactured off-site from volumetric 3D structural modules, to ensure a higher quality finish, a faster construction programme and 90% less waste than traditional construction methods.

A range of commercial and student recreational spaces along the ground floor of both towers is designed to achieve a BREEAM 'Excellent' rating.

Furthermore, both towers feature photovoltaic panels on the roofs as a sustainable energy source.

## CLEAR CHOICE SMOKE CONTROL SYSTEM

NOVENCO® Building & Industry has designed, supplied, installed and commissioned the certified NOVENCO Clear Choice depressurisation systems for the whole project. The lobby smoke ventilation systems protect the three staircases in case of fire together with a system that protects the final route to the outside. A separate smoke clearance system for the basement areas is also part of the NOVENCO installation.

Unique to the smoke ventilation systems is the use of the highly efficient NOVENCO ZerAx® smoke fans, fully tested and compliant with the EN12101-3 requirements. The fans are rapidly becoming the preferred choice for BREEAM certified constructions

due to their high efficiency and 98% recyclability rate after a 20+ years life span.



Incredibly quick and efficient modular construction



# THE HIGHLY SUSTAINABLE MODULAR STUDENT BUILDING PROTECTED WITH CERTIFIED NOVENCO® CLEAR CHOICE SYSTEM

## **EN12101 SERIES COMPLIANT**

The systems consist of several supply and extract ZerAx smoke fan sets, all in accordance with the design guidance documents of the Smoke Control Association and the requirements of the BS9991 and BS7346-8. All system components comply with the requirements of the EN12101 series. Part 2 compliant natural smoke ventilators, Part 3 compliant smoke fans, complete with the Danfoss FC102 frequency drives to ensure the systems could be commissioned to run at the exact design speed in line with the CFD outcome. Part 7 compliant ductwork connect the smoke fans with the smoke shafts. Part 8 smoke control dampers serve all lobbies, and control systems are Part 9(pr) and Part 10 compliant.

The systems incorporate fast-response pressure controls to ensure that optimum air flow is maintained whenever the smoke fan system is operational.

All the systems serve dual purposes with separate fans used to extract excess heat from the corridors utilising 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



NOVENCO ZerAx fans installed on the roof of the 34 storey building



EN12101-2 compliant smoke ventilators



EN12101-8 compliant smoke control dampers

