

# CASE STUDY: MAR 04

## KOOLDUCT IS THE COMPLETE DUCTING SOLUTION FOR CALCUTTA HOUSE AT LONDON METROPOLITAN UNIVERSITY

The benefits of the Kingspan Koolduct System of pre-insulated ducting, the latest in air ducting technology, made it the ideal choice for a challenging project at London Metropolitan University.

Calcutta House, a former tea warehouse that is the Social Science Building on the City Campus of Britain's second largest university, has been totally refurbished as part of a development that includes a brand new adjoining building for the teaching of law.

The interior lay-out of Calcutta House has been totally transformed to house the library of the law building as well as provide a state of the art learning environment and superb student services,

The extremely short contract period and the need to carefully synchronise the work of the various contractors on site meant that the ducting installation was time critical. Unlike traditional sheet metal ducting, which needs to be lagged with insulation as a second operation, Kingspan Koolduct requires only a single fix installation, making it a high speed operation that was vital for this project.

In addition the compact and lightweight properties of Kingspan Koolduct proved to be the only viable option for the section of the project in which a mezzanine floor was installed to create a new level for additional classroom accommodation.

The Koolduct had to be installed in an extremely confined space between the internal floor and a system of preformed Metsec lattice beams of lightweight steel construction. The limited load bearing capacity of the beams and the need to run the ducting through the tight gaps of the lattice system made Koolduct the ideal solution.

In addition, with a void of only 400 mm to accommodate all services, the space saving advantages of the lightweight yet strong pre-insulated Kingspan Koolduct system came into its own on this project.

A total of 400 square metres of Kingspan Koolduct was installed by Greenhall Insulation Contracts Limited, who worked closely with M & E Services Engineer Clancy Consulting who were involved in the design of both the M & E services and the structural engineering for the project.



Colin Perry, of Clancy Consulting who specified the ducting, said " The severe limitations on space and weight beneath the new floor level meant that Koolduct was the only choice. In addition, the product was undoubtedly the best option from a point of view of the tight time schedule and cost effectiveness."

A recent independent analysis by highly respected consultants Bucknall Austin concluded that Kingspan Koolduct can be installed up to three times faster than sheet metal ductwork. Furthermore, it singled out Kingspan Koolduct as the most effective option for projects where weight is an issue.

As part of Kingspan Insulation's commitment to combine product innovation with social responsibility Kingspan Koolduct now has zero Ozone Depletion Potential (zero ODP) as standard, being fabricated from CFC/HCFC-free rigid phenolic insulation panels. The panels are faced with reinforced aluminium foil on both sides making Kingspan Koolduct zero OPD very durable and also aesthetically pleasing in internal applications.

Other benefits of Kingspan Koolduct 'complete system technology' enhance its appeal to specifiers. The System's low level of air leakage and superior insulating properties can result in electrical consumption savings. With the Kingspan Koolduct System, ventilation air flows over aluminium surfaces and does not have contact with any material containing loose fibres, making it ideal for high specification projects.

Rigid phenolic insulation offers several further advantages, including excellent fire resistance with negligible smoke emission and first class moisture resistance.

A CIBSE accredited CPD presentation – which addresses key issues such as running costs and environmental implications for all insulation related applications – is available from Kingspan Insulation Limited.

Also available are product-specific presentations, featuring the revolutionary Kingspan Koolduct System. These can be adapted to suit individual audience requirement.

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