## CASE STUDY: JAN 04/B

## KOOLDUCT SERVES UP IDEAL LIGHTWEIGHT SOLUTION KENSINGTON ROOF GARDEN RESTAURANT

The lightweight qualities of the Kingspan Koolduct System of pre-insulated ducting, the latest in air ducting technology, made it a vital ingredient in a refurbishment project that has created one of Central London's most spectacular dining venues.

The famous roof garden club has been transformed by the Virgin Group into The Roof Gardens and Babylon Restaurant. Set among one and a half acres of exotic high-level flora and fauna, the new eatery and night spot provides staggering views of the capital and far beyond.

The project involved the refurbishment of the existing internal sections of the roof garden level as well as the creation of an additional level to provide further leisure facilities.



Because the redesign removed the original roof void, the existing interior ducting had to be replaced with an exterior system installed on the roof of the newbuild section. A number of options were considered, but the limited loading capacity of the lightweight roof construction meant that only a product of the weight of the Kingspan Koolduct System could be accommodated by the new structure.

John McHale, of Service Engineers JMS who specified the Koolduct System, said: "A number of sheet metal systems were considered but design calculations revealed that only a product of the weight of Koolduct could be accommodated by the new structure.

"Without the option of Koolduct a substantial redesign of the whole project would have been necessary."

A total of 1,000 square metres of the lightweight yet strong Kingspan Koolduct System was installed by Sterling Thermal Ltd. The ducting, which serves the existing and new facility, was coated with a protective waterproof membrane on completion.

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

Other benefits of Kingspan Koolduct zero COP's 'complete system technology' enhance its appeal to specifiers. Unlike traditional sheet metal ducting, which needs to be lagged with insulation as a second operation, Kingspan Koolduct zero OOP requires only a single fix installation making it a high -speed option for projects where time is critical. The System's low level of air leakage and superior insulating properties can result in electrical consumption savings. With the Kingspan Koolduct zero OOP 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 CPO 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 requirements.

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