

CASE STUDY: MAY 03

KINGSPAN KOOLDUCT HELPS TO EXPAND EASTGATE SHOPPING CENTRE AT INVERNESS

The Kingspan Koolduct System of pre-insulated ducting, the latest in air ducting technology, has played a major role in the exciting £70 million expansion of the Eastgate Shopping Centre in Inverness.

An additional 365,000 square feet of retail floor space, including a Debenhams flagship store, has been created by the project in order to almost double the size of the original indoor shopping centre built 20 years ago close to the city centre.

Consulting engineers, Blyth and Blyth, needed a ducting solution that, did not only offer excellent air leakage rates to maximise the efficiency of the air conditioning system, but had lightweight properties to help minimise loads. The Kingspan KoolDuct System, at about 15% of the weight of traditional sheet metal ducting offered the best solution.

A total of 600 square metres of the lightweight yet strong Kingspan Koolduct System was installed by the Galloway Group Ltd along the exterior of the flat roof of the new shopping area which spans both sides of the high street and is linked by two pedestrian bridges.

Neil McNeil, of Blyth and Blyth, said: "We had previously chosen KoolDuct for external roof installations at two other shopping centre projects. We were impressed with the speed of installation and totally satisfied with the performance of the Koolduct system, so we had no hesitation in specifying it for this project."

The Kingspan Koolduct System is fabricated from Kingspan Kooltherm CFC-free rigid phenolic insulation panels and a CFC / HCFC-free version with zero Ozone Depletion is also available. The panels are faced with reinforced aluminium foil on both sides making it very durable also aesthetically pleasing in internal applications. However, as the installation at Eastgate Shopping Centre was external, a high performance resin-based membrane coating was applied to provide the ducting with complete and long-term protection against the elements.

Other benefits of Kingspan Koolduct'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 requires only a single fix installation making it a high-speed option for projects where time is critical. The system's extremely low level of air leakage and superior insulating properties can result in electrical 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 requirements.

