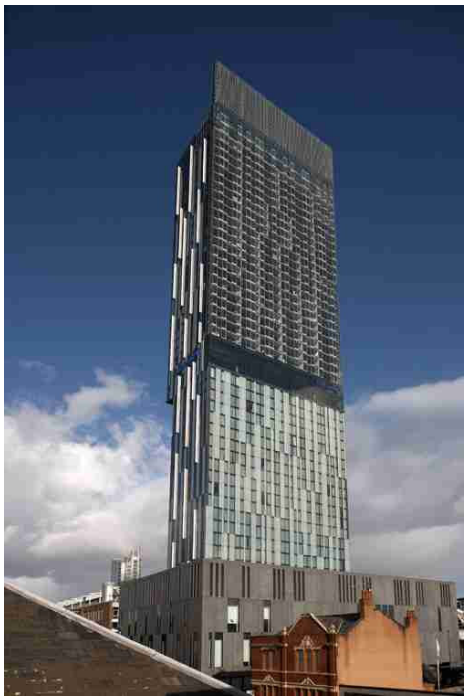
# News from Kingspan



**KINGSPAN INSULATION FOR UK'S TALLEST RESIDENTIAL BUILDING**

A landmark £150m development in Manchester is benefiting from high performance insulation from market leader Kingspan Insulation.

At 171m, Beetham Tower, topped with its distinctive glass 'blade', is a striking new addition to the Manchester skyline, visible from ten counties and from the top of Mount Snowdon, an amazing 130 kms away.

The mixed-use, glass tower, which incorporates the Manchester Hilton and 219 luxury residences, has the highest living space in the UK and offers the farthest views in Britain, with vistas stretching away to Liverpool, the Welsh mountains and Blackpool Tower.

Within the 47 storeys, main contractor, Carillion utilised 8,000m$^2$ of Kingspan Kooltherm K10 Soffit Board to achieve high standards of thermal integrity for the building.

There were a number of technical and performance requirements for the insulation products, according to a spokesperson for Carillion:

“Soffit insulation was to be retrofitted to the underside of concrete slabs, so the insulation board needed to provide a vapour barrier, and had to have Class 0 surface spread of flame.

“Concrete formed the main structural system of this building, hence there are many areas subject to cold bridging especially at shear walls and the core walls’ junctions with concrete floor slabs. We used Kooltherm products extensively on these areas.

“We knew the product would be suitable for general and straight-forward applications such as for the soffit insulation. However, Kingspan’s technical advisors were instrumental in convincing us that Kooltherm would also perform in more complicated situations and in preventing cold bridging. We had a lot of design input from the Kingspan technical team and they certainly have assisted us greatly with the complex interfacing details, which had to be tackled to achieve our requirements and to use the products successfully on the Beetham Tower.”

Fully restrained to a concrete soffit, Kooltherm will provide reliable long term thermal performance over the lifetime of the building - with a conductivity as low as 0.021 W/m K. The rigid phenolic insulation’s closed cell structure eliminates some of the problems commonly associated with open cell materials such as mineral fibre (e.g. reduced thermal performance due to air infiltration or moisture and water-vapour ingress), while its excellent fire performance can be equivalent to mineral fibre. Being non-fibrous, the soffit board is also safe and easy to install, making it a popular choice with contractors.

The Beetham Tower development, which has transformed what used to be an area of railway viaduct, has a ballroom, health club and conference facilities as well as a ‘Sky Bar’ on the 23$^{rd}$ floor. Architect Ian Simpson has given the building his own seal of approval by purchasing the duplex penthouse apartment and moving in.