Case study

13/08/14

Schöck Isokorb for ArtHouse alternating and stacked balconies

Structural thermal break units from Schöck continue to feature strongly in many significant new build projects that involve the thermal partitioning of balconies and other cantilever connections. One of the latest completed projects being 'ArtHouse', part of the King's Cross Central Regeneration project, located just north of St Pancras International and Kings Cross stations. It offers 143 high quality one, two, three and four-bed residential apartments; 29 of which are allocated for affordable housing. ArtHouse is an intriguing design. The façade utilises part glazed terracotta tiles and there are four residential clusters with interconnecting towers finished in polished stainless steel. The combination of towers and private roof terraces form an interesting castellated roofline to the building – with a further unusual feature being the incorporation of alternating and stacked balconies.

It is here that the prevention of thermal bridging was an early design consideration. Not only to minimise any resultant heat and energy loss, but to prevent condensation and mould growth forming, which can result in potential health and respiratory problems for the occupants.

The Isokorb type K from Schöck, for concrete-to-concrete connectivity, is incorporated into the ArtHouse development. In addition to providing an efficient thermal break between the varied connection profile and the concrete structure, it also transfers bending moment, stress and shear forces. The type K provides BBA Certification and LABC Registration, as well as comfortably exceeding the requirements of BRE IP1/06 and Part L of the Building Regulations. Here the temperature factor used to indicate condensation risk (f_{RSI}), must be greater than, or equal to, 0.75 for residential buildings. A stipulation comfortably exceeded by incorporating the Schöck product into the design. To guarantee

the accuracy of its current performance values, Schöck recently submitted the type K for independent evaluation by the Oxford Institute for Sustainable Development (OISD), at Oxford Brookes University.

For a copy of the full test results (Reference 121212SCH) and for your copy of the Schöck Specifiers Guide and / or the Technical Guide, contact the company on 01865 290 890 or visit www.schoeck.co.uk

- Ends -

Architect:	**dRMM**
Structural Engineer:	**Arup**
Services Engineer:	**Aecom**
Sustainability Consultant:	**Aecom**
Landscape Architect:	**Townshend Landscape Architects**
Main Contractor:	**Kier Group**

Press Contact for Schöck Ltd:
Michael Revans Communications
47 Barn Rise, Wembley Park,
HA9 9NH

tel: 020 8904 9733
e:michael.revans1@btinternet.com

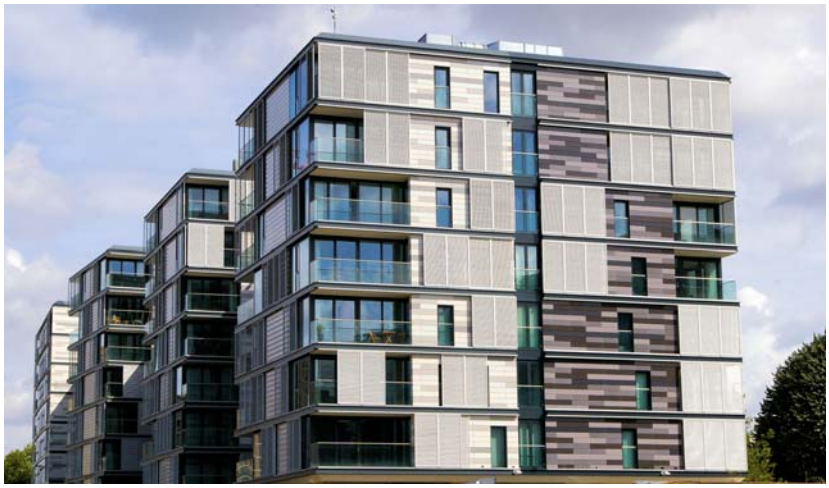
Notes to the editor

A leading European supplier

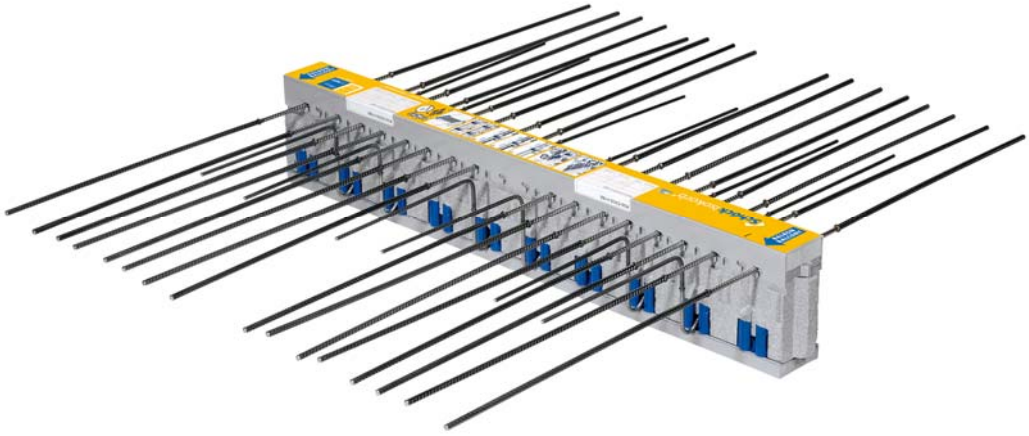
Schöck has grown to become Europe's leading supplier of innovative structural load bearing insulation products. The main product is the Schöck Isokorb – a thermal break for various types of cantilever constructions in new buildings and for renovation. Its headquarters are at Baden-Baden in southern Germany and there are subsidiary companies in Great Britain, France, Austria, Switzerland, Italy the Netherlands, Belgium, Poland, Hungary, Russia, Japan, Canada and the USA. Sales teams and partners operate in many other European countries and also Australia and South Korea. Schöck is committed to providing the highest level of technical back up and comprehensive customer service to the construction industry.

Pics and captions

Alternating and stacked balconies insulated with Schöck Isokorb



Arthouse: Intriguing design, high quality apartments and effective prevention of thermal briding



The type K provides BBA Certification and LABC Registration, as well as comfortably exceeding the requirements of BRE IP/06 and Part L of the Building Regulations