



## Out of the Blocks!

Irish limber up for Olympics contracts race

## Are 'U' Ready?

New code puts it up  
to timber framers

School building gets massive boost  
Steely performance from Fusion  
BREEAM winners revealed  
Ice cool in the Antarctic!  
What's happening show-wise?

# Safe Smart Solutions with Invisible Connections

J&P Building Systems Ltd has been trading in the UK for over ten years and has established a reputation for providing "Safe Smart Solutions" for fixing and connection details within the UK construction market.

AS A DAUGHTER COMPANY to two highly respected German companies, Jordahl [J] the original channel profile manufacturer at 100 years old and Pfeifer [P] manufacturer of lifting and transportation systems for over 400 years, we have a wealth of knowledge and product quality to offer.

"Modern Methods of Construction," "Off Site Construction" and "Scaffoldless Construction" are terms that are attracting ever increasing focus throughout the construction industry and are resulting in a substantial change in the way buildings are conceived, designed and erected. In order to optimise the increasing use of concrete, in this process- whether it be insitu, precast or a combination of the two- J&P Building Systems are actively participating in the development of systems which form mechanical structural connections between these elements, thus serving to realise the potential of hybrid assemblies. The end result is to the ultimate benefit of the overall build program by creating efficiencies in the utilisation of site plant, a reduction in the necessity for wet trades plus considerable contribution towards the improvement in site safety.

As J&P Building Systems we can offer a number of products which when used within concrete frames or claddings, allow connections to be constructed in an innovative and cost effective manner which assists the client, contractor or sub-contractor.

One product group within the J&P range which is at the centre of the hybrid construction philosophy is the SB Produksjon range. As exclusive distributors for SB Produksjon within the UK and Eire we are proud to offer the BSF/BCC beam column connector and the RVK/TSS stair bearer. Produced in Norway, the connectors have been successfully sold across many continents and countries of the world, as far apart as Iceland and South America.

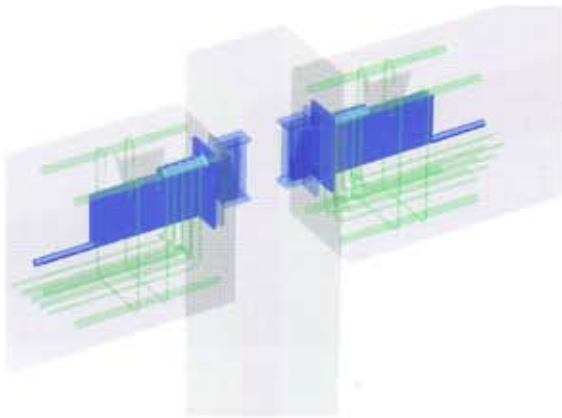
The RVK/TSS bearer is primarily used as a support detail for locating and supporting precast landings/stairs within a concrete core. The system is very easy and accurate to install, cost effective and aesthetically pleasing. The RVK/TSS is manufactured from two mild steel rolled hollow sections one inside the other.

The inner tube is extended once the landing is in position by using a rope pulley system or a projecting bolt. Products are generally supplied as HDG but stainless steel can be made to order if required. The RVK/TSS is incorporated into the precast landings at designed locations with an amount of additional reinforcement around the unit fitted during the casting process.

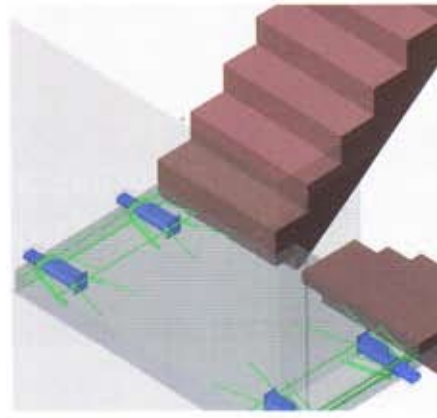
Corresponding voids are created in the walls of the core which may be poured insitu or precast. At the appropriate time the landings are lowered into the core and the inner support is moved across from landing to wall to locate into the void. Advantages are many- reduced crane time, easy levelling by



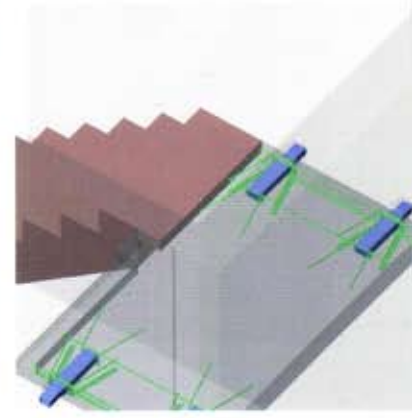
## BSF SYSTEM



## RVK SYSTEM



## TSS SYSTEM



use of shims prior to insertion, efficient planning as the delivery of stairs/landings is taken off the critical path. No visible angle detail can be seen from below and due to a number of bearer sizes capable of carrying shear loads up to 140kN, most stair weights can be accommodated. The ideal INVISIBLE CONNECTOR.

The BSF/BCC is designed as a beam/column connector. It consists of three parts, the column box, the beam insert and a knife. The column box is cast insitu or precast, the beam insert is cast in the yard. At the erection site the knife is placed within the beam insert and when the beam is lowered into its correct position the knife is moved from the beam to the column providing a shear load connection point capable of carrying shear loads up to 950kN. This is a truly innovative method of structurally connecting two major concrete components. It replaces the more traditional methods of introducing corbel details on the columns or steel bearer support details which may involve drilling, welding or encast plates which are labour intensive, costly and unsightly. The architect realises clean uncluttered lines, the engineer has an extensive range of sizes to work with to achieve the desired loads, construction planning is made easier as components are cast off site and delivered just in time, erection is quick, efficient and accurate. The ideal invisible connector!

Several jobs have been completed in the UK using a combination of both RVK/TSS and BSF/BCC main products such as the Jennie Lee Library for the Open University in Milton Keynes, Trafford Centre in Manchester, Step Free Access at Waterloo Station London, University of Central England in Birmingham and Islington Wharf, Manchester. Major companies included in the design and construction of the above include Laing O'Rourke, Trent Concrete and Buchan Concrete Solutions. All have been delighted with the manner in which the contracts were constructed and have since gone on to use the same connection details on subsequent projects. The use of the above products is limited only by the imagination of the designers and more recent contracts are detailing the RVK as a connector for a precast balcony slab to precast fin walls, the TSS as a bearer for small individual T beams as part of a redevelopment of a concert hall and as a means of connecting precast floors to the outside of concrete core walls.

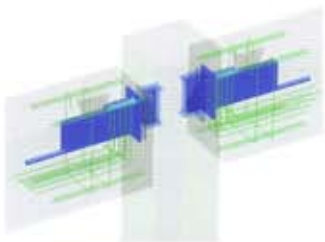
As a company J&P Building Systems is continually evolving their products and applications, working closely with all members of the design team clients, engineers and architects plus the construction professionals to produce the "Safe Smart Solution" for the project.

For more visit [www.jandpbuildingsystems.com](http://www.jandpbuildingsystems.com)

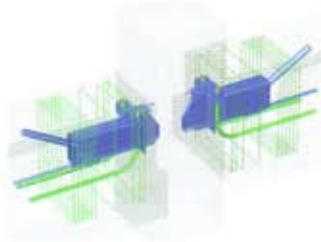
# Invisible Connections



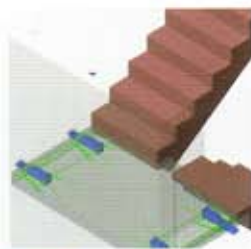
Introducing the RVK/TSS and BSF/BCC units from SB Produksjon and J&P Building Systems.



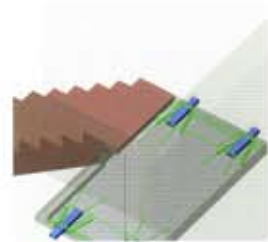
BSF System



BCC System



RVK System



TSS System

BSF 150/20 - 200kN  
BSF 200/20 - 300kN  
BSF 200/30 - 450kN  
BSF 200/40 - 600kN  
BSF 200/50 - 700kN  
BSF 250/50 - 950kN

BCC 250 - 250kN  
BCC 450 - 450kN  
BCC 800 - 800kN

RVK 40 G - 40kN  
RVK 100 G - 100 kN

TSS 40 G - 40kN  
TSS 100 G - 100kN

*Invisible connections that allow designers to be limited only by power of their imagination.*

Safe Smart Solutions...

For more information on the RVK/TSS and BSF/BCC range of products:

**J&P Building Systems Limited**

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