

## Post Tensioning – New England Quarter, Brighton



Completed structure

**Bonded post tensioned design chosen for prestigious residential development in the heart of Brighton.**

Main Contractor	Denne Construction
Frame Contractor	O'Halloran & O'Brien
Consulting Engineer	Cameron Taylor
PT Design	Gifford
Post tensioning specialist	Balvac
Site programme	Jan to Oct 2008
Sub-contract value	£ 390,000

In Nov 2007 Balvac won the sub-contract to supply and install the post tensioning system to two residential blocks, one 11-storey and the other 8-storey. PT slab design was by Gifford and Partners, working for Balvac.



Tendon installation

The post tensioning scheme was based on the use of 4/15.7mm tendons within 70x20mm galvanised steel ducts. Tendons were challenging to install due to the irregular floor layout and the unusually high PT density necessitated by strict floor deflection criteria.

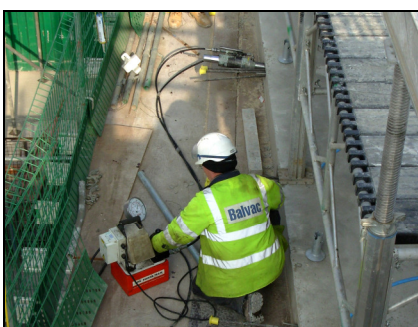
Automatic gripping jacks, calibrated traceable to National Standards, were used to stress tendons one strand at a time. On completion of stressing strands were cropped by disc cutter and anchorage recesses filled with proprietary non-shrink mortar.



Stressing jack

Fully detailed records of the stressing and grouting work in accordance with the NSCS Specification and the latest CARES Scheme requirements were kept and passed on to the contractor.

Balvac, the UK and Ireland licensee of the MK4 Post Tensioning System, can offer a full range of internal and external, bonded and unbonded, post tensioning systems for a wide range of structures such as bridges, building slabs, tanks and silos. In addition to new build work Balvac can also undertake tendon monitoring and strengthening works on existing structures.



Stressing Operation

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