



Slabstress

Blenheim Centre, Hounslow, London

Client

Blenheim Centre

Principal Contractor

Norwest Holst

Frame Contractor

Lancsville Construction

Specialist Contractor

Freyssinet

Contract Value

£1.6 million

Contract Duration

10 months

Works Completed

February 2006



Phase 1 of the Blenheim Centre is a 55,550sqm construction that will provide a residential area with 487 flats, a retail development which includes a supermarket, management centre and medical centre in the mezzanine level and a 415 space car park in a single level below ground beneath the retail development on the main building.

Freyssinet were responsible for the design, supply and installation of the post-tensioned system used in the slabs of the two buildings forming phase one of the project.

The main building is a structure comprising a mixture of steel and RC columns with post-tensioned slabs at all levels. Special design consideration was given to the ground floor slab to isolate it temporarily from the columns and perimeter retaining/support walls, thus solving restraint problems until the slab had finished all movements at which point the slab was "locked" to the columns by grout infill.

Next to the main building is an 8 level block of residential apartments in an L-shape with 200thk concrete slabs employing a bonded post-tensioning system, the slab spanning between blade columns.

The slabstress 4S15 bonded system was the main choice for the general construction as this is well suited to the regular square shaped pattern of the majority of the floors. The exception is the residential levels on the main crescent shaped building whose curved shape lends itself more effectively and economically to the 1F15 unbonded system.

Freyssinet Ltd. Innovation House, Euston Way, Town Centre, Telford, Shropshire, TF3 4LT
Phone +44 (0) 1952 201901 Fax +44 (0) 1952 201753 Email info@freyssinet.co.uk