

PORTLAND STREET ESTATE, SOUTHWARK, LONDON

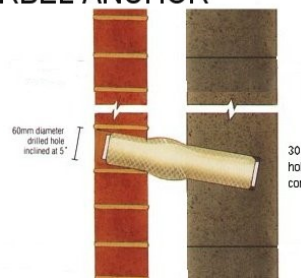


The four blocks - Studland, Woodford, Lulworth and Broadmayne are 1970's built flats having a reinforced concrete frame with a concrete nib projecting at each floor level upon which the external brickwork is seated. Over the years the concrete nib had deteriorated to a point at which there was the real likelihood of it detaching along with the brickwork.

Structural engineers Arup were appointed by London Borough of Southwark to undertake a survey and report of the condition of the concrete nib supporting the external brickwork.

The report recommended the installation of the Cintec corbel anchor Type WSA30 to relieve the load of the brickwork on the nib and to transfer the load into the concrete floor above the nib.

CORBEL ANCHOR



04P73	ARUP	Calculation sheet	Job No.	Sheet No.	Rev.
			229295	SK-S001	
Job title	PORTLAND ST ESTATE		Member Location		
	Drg. Ref.		Made by	Date	Chd.
			YSH	APR 2013	RJH
<u>Brickwork facade repairs/replacement</u>					
<u>Option 1</u>					

The selected repair option of using the Cintec Corbel anchor was chosen for its serviceability and proven durability along with economical cost. The system uses micro-concrete injected into a fabric sock surrounding a substantial stainless-steel structural member. This system is approved for use where there is a risk of fire and has been tested to 1200 degrees C by the BRE.

The corbel anchors were placed in diamond core drilled hole set into the main concrete slab to take the load from the nib and transfer the load of the brickwork to the main reinforced concrete slab.

This meant that the brickwork did not require replacing on a new concrete nib or steelwork thereby saving an enormous length of time and cost.

The work was carried out without the need to decant the occupants of the flats.



Left: Drilling operation through brickwork into concrete floor slab.

Right: anchor prior to insertion with grout nozzle placed for injection of grout.

