



Project name, location

Year of completion

Contractor

Architect

Engineer



Project Description

Liverpool School of Tropical Medicine, Liverpool

2007

Shepherd Construction Ltd

Sheppard Robson

Arup



The Centre for Tropical and Infectious Diseases, has recently doubled the size of the Liverpool School of Tropical Medicine. The new centre, which opened on time in 2007, is home to world-leading research into new drugs and vaccines for some of the world's deadliest diseases and for the development of new insecticides to combat the insects which carry malaria and other diseases.

Post-tensioning was selected for slenderness, deflection control and economy. The post-tensioned slabs, over four levels, total 6,400 m². The 46 by 42m floor plate encompasses three RC cores. To allow the floor to shorten as it's stressed, the slab is isolated from the smallest core with SSL's Core Temporary Movement Joint. A Slab Temporary Movement Joint is provided at one of the quarter span points to release the restraint between the other two cores.

To span the 10.5 by 9.9m grid SSL have used 300mm thick slabs.

| PT tonnage | 50t |
|--|--|
| PT system(s) and size(s) | Bonded flat duct, 5no 12.9mm strands |
| Principal benefits of using PT on this project | Slender slabs, deflection control and economy. |