

Job Reference

MASTERTOP[®] P-15 delivers smooth and level floors at new Liverpool Hospital

High-performance self-levelling floor underlayment for use under a range of floor coverings



Project:
Liverpool Hospital

Clients:
NSW Health
Bovis Lend Lease

Contractor:
Allseal Pty Ltd

Location:
Liverpool, Sydney NSW

Completed:
2010

Product:
MASTERTOP[®] P-15

 **BASF**

The Chemical Company

The Challenge

In a hospital environment, ensuring that floors are smooth and level is of critical importance – not only to facilitate smooth and easy passage for patients and equipment throughout the hospital, but also in terms of providing an absolutely level floor for precision medical equipment. Indeed, when it comes to modern operating theatres, radiological facilities and other specialist scanning facilities, floors are generally specified with a fall no greater than 1mm/1m to assist with equipment calibration and prevent unwanted movement.

Not surprisingly, these kinds of minute tolerances can be extremely difficult to achieve during initial construction, particularly in structures incorporating post-tensioned slabs – a fact which was highlighted during the construction of the recently completed Stage 2 redevelopment of Liverpool Hospital in Sydney's outer South-West.

Glen Kealy, Managing Director of Sydney-based concrete floor preparation specialists Allseal Pty Ltd, explained: "As is often the case with structures of this type, post-tensioning the slabs in the new 6-storey section of the Liverpool Hospital had resulted in some unevenness and differences in floor levels between individual sections of the building."

"While in most buildings, the impact of these differences would generally have a negligible impact, in a hospital situation, they need to be addressed," he said.



The Result

"We're very happy with the results that we've been able to achieve at the Liverpool Hospital. We've used MASTERTOP® P-15 with great success on numerous projects - including six other major hospitals - and we've always been extremely pleased with the results," Glen Kealy said.

"And when you know that you're going to get the result you need, why would you choose anything else? It mixes well, pours well, spreads well and gives us a high quality, smooth and level finish. Most importantly, the client is also very happy with the results. The floors throughout the entire building are level, smooth and up to the required specifications," Glen Kealy concluded.

The \$390 million redevelopment of Liverpool Hospital Stage 2.1 was completed on schedule, with the first patients accommodated in the new building during November 2010. Almost 40 departments have now moved into the new facilities. The refurbishment of the hospital's current Clinical Services Building is now underway.

The Liverpool Hospital Stage 2 Redevelopment has resulted in the hospital becoming both the largest hospital and tertiary referral centre in NSW, with a total of: 855 beds, 23 operating theatres and 60 intensive care beds.



The Solution

The solution to this floor-levelling challenge came in the form of MASTERTOP® P-15, a high-performance self-levelling floor underlayment from BASF Construction Chemicals.

Specifically developed for use over poured insitu and precast concrete floors which will be covered by carpet, vinyl, ceramic tiles or natural stone, MASTERTOP® P-15 is an ultra-smooth, self-levelling, cementitious, non-structural, floor underlayment that delivers a fast setting, level and flat surface.

MASTERTOP® P-15 was applied at an average thickness of 8-10mm, to over 50,000m² of concrete floor over the building's six levels – delivering a smooth and level floor surface ready for the application of vinyl flooring, tiles and carpet. In areas of critical need, including the hospital's 23 new operating theatres, the floors were laser-levelled and pinned prior to the application of MASTERTOP® P-15, resulting in a fall of less than 1mm/1m.

