Austin Hospital Car Park Extension

Melbourne, Australia





The six-story, multi-level extension was a major development for the Austin Hospital and involved the construction of an 18,000 square meter structure above the existing operational car park. It provided an additional 752 car spaces by utilizing a steel-framed, cast concrete structure. The method of construction involved the erection of a steel framework, which was then topped with Bondek formwork and reinforced concrete to create the floors and roof. Bondek sections were fixed to the steel structural beams by stud welding—requiring a clean (un-galvanized) steel surface. Stop-off paint in different widths was applied to specified beams to prevent zinc coating the steel during galvanizing.

Hot-dip galvanized (HDG) steel was specified for fast assembly, long life, minimal maintenance and low life-cycle cost. With limited laydown area and the need for fast erection, pre-fabricated and galvanized steel was

delivered in scheduled load-lots, enabling efficient delivery and rapid erection. In its urban environment, it is expected the galvanized coating will exceed the expected life of the building, which is 50 years.

The Austin Hospital Car Park extension once again shows the use of galvanized steel sections can allow a vital existing asset to remain operating while major additions are made to it. The method of construction was not only fast and efficient, but made galvanizing an ideal coating solution for the steel sections. Longlasting, minimal maintenance and with the lowest lifecycle cost, galvanized steel is increasingly the material of choice for multi-story buildings. The innovative external design of the car park has delivered a modern, attractive façade - and the use of galvanized steel ensures many years of useful and attractive life.





Galvanizer

Valmont Coatings Industrial Galvanizers

Architect

Clarke Hopkins Clarke

Engineer

Walton Constructions/Built

Specifier

Robert Bird Group

Fabricator

Page Steel

Owner

Austin Health



