HOMESGLEN COLLEGE OF TAFE

Hot – Dip Galvanized steel in use

Environment:	**Industrial**
Project:	**Vertical Screen Supports Concrete Pillars**
Tonnes:	**100**
City:	**Melbourne (Chadstone)**
State/Country:	**Victoria, Australia**
Date Galvanized:	**2002**

Completed in 2002, the new 5 level car park is constructed from a combination of pre–stressed concrete and architectural structural steel, at Victoria's largest TAFE institute located in the eastern suburbs of Melbourne approximately 15 km's from the CBD.
The structural steel was used to support the architectural wire mesh screens, which formed the external walls of the car park providing an aesthetically pleasing façade and also created a critical safety barrier system. The project utilised Hot Dip Galvanizing because of the long term corrosion performance in the external environment in which the product is located, overall abrasion resistance of the protective coating meaning it is not damaged during transport and on–site erection, speed of processing and overall life cycle cost.

The top level of the Car Park, which is exposed to all conditions, still has a very low corrosion rate. The readings were taken at North and South ends.

North: 221 – 254 – 298. South: 212 – 225 – 220.

These columns are located on the 1st floor at the eastern side of the Car Park. There were 4 readings, all averaging over 400 microns.

Columns East 1st Floor: 429 – 489 – 455 – 411.

These columns are located on the 1st floor at the western side of the Car Park. It was fascinating to see the readings were significantly higher than the eastern side. There were 4 readings, all averaging over 700 microns.

Columns West 1st Floor: 752 – 851 – 707 – 742.

Andcam Engineering summarized the project as "…being a very good job for Industrial Galvanizers. All of the members involved were straight and lengths of 9 –12 metres. Hot Dip Galvanizing was specified, with the quality and speed of galvanizing achieved by IG assisting in the successful completion of the project. The client was very pleased.

The analysis on this project was done in October 2005.
The majority of the readings taken on the Car Park were 200 + microns the life expectancy of this project should exceed over 50 years.
Conducted by **Marco Bazzano I G Melbourne**.