

JOB NAME: Katoomba Aquatic Centre

NO. \_\_\_\_\_

**103**

LOCATION: Blue Mountains, NSW

Heliocol Sydney was contacted by an International Energy Conservation Company in November 2004 to provide them with a heating analysis for the Blue Mountains City Council. During the initial site inspection with the Council engineers and the facilities manager, it was determined the Council required a solar pool heating system that would not only perform well in the cooler climate of the Blue Mountains but also be robust enough to withstand the local wildlife (Sulphur Crested Cockatoos & Possums).

During the initial site inspection, the basketball stadium roof was chosen as the most suitable location for the solar panels. The roof was 83m from the plant room and 11m above the pool level.



Any issues with the site were easily overcome following a consultation with a hydraulic engineer. The biggest hurdle to overcome was the connection to the existing concrete-lined cast iron pipe. It was determined that the old pipe should be replaced with 316 Stainless Steel.

Based upon the heating analysis, the installation of the Heliocol system was expected to reduce gas consumption and carbon emissions by over 30 percent. The Blue Mountains City Council decided that the installation was not only economically viable but also an environmentally responsible option.

The installation was completed within six working days. Pressure testing and hand over of the system took place on the seventh day. The system has now been in place for nearly a decade and the feedback from the council indicates that the system is exceeding expectations. Heliocol subsequently installed systems on Springwood and Glenbrook pools in the Blue Mountains based upon the success of the Katoomba installation.

### TECHNICAL DETAILS

Pool Size 1,066 sqm

Size of Heliocol System

184 HC50 Collectors = 850 sqm

Energy Savings Over \$30,000 p/a

Payback Period 2.34 Years

