

JOB NAME: Knox City Council

NO. _____

106

LOCATION: Wantirna South, Victoria

In 2008, Knox City Council allocated funds to build a new warm water hydrotherapy pool at their existing community swimming centre in the Melbourne suburb of Boronia

Antarctica Design Group was commissioned to design and specify the new pool and associated plant and equipment with an emphasis on sustainable energy input. They, in turn, contacted Heliocol Victoria and asked them to submit a detailed proposal to successfully add temperature to the new pool in line with the council's requirements.

After viewing the plans and following subsequent site visits, Heliocol Victoria submitted a detailed proposal which included long term infrastructure, defined reduction in water heating costs and a positive payback on investment.

Council were suitably impressed and requested Heliocol Victoria to submit a further proposal to suit the existing 50 metre indoor pool at the same complex, eventually both submissions were combined into one project.

In December 2009, a purchase order was issued to Heliocol Victoria to supply and install solar heating to both pools.

In April 2010, work commenced at the site. Over a six week period, 224 HC50's were fitted to the flat traydeck roof for the 50m pool and 63 HC50's fitted to the 15 deg traydek pitch roof for the new hydrotherapy pool.

100mm PVC supply and return lines were installed underground from the plant room to the rooflines for both arrays. 6hp and 4hp 3 phase pumps were connected to the filtered water return lines and these were managed by auto controllers with flow switch protection and filter pump failure lockout.

The 6hp pump can deliver 1470 l/min at 8m head and allowing for greater actual roof height and pipe friction loss, this met our requirements. The 4hp pump delivering 935 l/min at 8m head was suitable, also allowing for pipe friction loss.

The project was commissioned by Heliocol Victoria and handed over to Knox Council on Friday 28th May 2010.



TECHNICAL DETAILS

Pool Size 1,550 sqm

Size of Heliocol System

287 x HC50 Collectors = 1,325 sqm

Pumping Equipment 2 x Maxim 3PH Pumps

Solar Control Mechanism 2 x Dontek Controllers

