

*For your consideration.  
With compliments*

**Bob Prince**  
Head of Daisy Commercial:

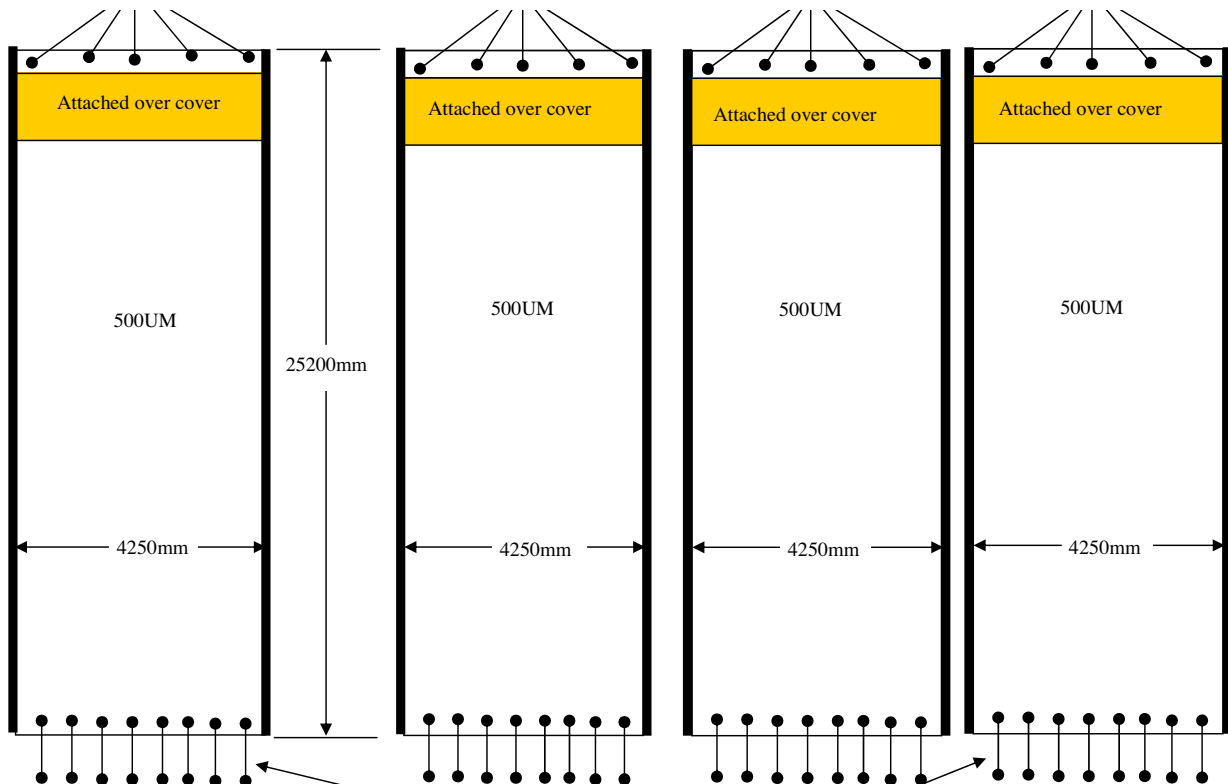
**Commercial Submission**



Depending on circumstances, each unit is approx. 5m wide.

Above is 2 units for the Hong Kong Cricket Club and below a Production Plan for 4 Units for another application

**Bob Prince**  
Head of Daisy Commercial:



4 x blankets, fully edge bound with wind skirts  
4 x ST152D52 rollers, each, 4.6m wide  
**ON SITE INSTALLATION INCLUDED**

Australia's largest supplier of commercial and domestic pool blankets and rollers  
Administration Centre: 309 Great Eastern Hwy, Redcliffe, WA 6104  
**1300 551 811** Int: +69477 3311 1155 Fax: 1300 885 242  
Email: commercial@daisypoolcovers.com.au Web: www.daisypoolcovers.com.au



## The business advantages of a Daisy Commercial Pool Cover and Roller System



*There's no off the shelf solution because every pool is different.*

**Bob Prince**  
Head of Daisy Commercial:

*The installation of a Daisy pool cover will have a significant impact on your operation. This submission highlights the key issues.*

*Firstly our products are more than up to the job - we guarantee it.*

*Secondly our products are technically advanced and doing the job for many pools, indoor and outdoor all over Australia.*

*And finally we have the expertise and professionalism to deliver the cost saving benefits of a Daisy to your business.*

*That's why we say with confidence - "Daisy Saves"*

*A Daisy System will significantly reduce your costs for heating, cleaning, chemicals, maintenance – and, most importantly, water.*

*By reducing heat loss it will enable you to conserve substantial energy and significant costs.*

*Analysis with the specialised "Poolheat" software developed by the University of NSW consistently shows reductions in energy expenditure of between 40 to 50%.*

*A Daisy Commercial Pool Cover and Roller System can also increase your commercial returns, as increased water temperatures extend the swimming season and allow you to benefit from more paying swimmers who will stay longer and spend more in your premises.*

*Taking into account the installation cost of a Daisy Pool Cover and Roller System, the likely savings you will realise, and the opportunity of increased patronage, the 'payback' period is typically less than 12 months.*

*When you invest in a Daisy Commercial Pool Cover and Roller System, you're investing in a high-quality product that has benefited from over 23 years of continual research and development to ensure its durability and efficient, trouble-free operation.*

*Available in a choice of either advanced UltraDome™ Bubble solar material or Thermal Foam materials, Daisy Pool Covers are manufactured by a proudly Australian-owned company.*

*All Daisy products are further backed by the Daisy Service Promise. If you have a problem with any Daisy product, call us and we'll fix it.*

*We trust this submission provides all the information you need, however, should you require further assistance please don't hesitate to contact us – we're here to help.*

Yours sincerely

A handwritten signature in black ink that reads "Bob Prince".

**Bob Prince**  
Daisy Commercial

## About us.

Since its establishment in 1983, Daisy Pool Covers has grown to become Australia's largest manufacturer and supplier of quality pool covers and roller systems.

Today, Daisy products are used right across the country and in several overseas markets.

The company has manufacturing facilities in Perth and Sydney, where it produces a range of UltraDome™ Solar Pool Blankets, Foam Pool Blankets, and Roller Systems for all domestic and commercial pools from spa to Olympic size.

Daisy's success is based on one simple promise; "quality you can trust and service you can rely on" – and this is backed by a commitment to innovation and technology in order to provide the best possible products at competitive prices.

## Technology and innovation.

Daisy UltraDome™ Solar Pool Blankets are the first real advance in solar pool blanket technology for years. They are highly efficient, stronger, and last longer for many years of trouble-free use.

Daisy's technological advancement is also evident in its superior range of easy-to-use and durable Roller Systems.

All Daisy Pool Covers and Roller Systems are manufactured with the highest standard materials, components and quality control.

You have the security of a well-established Australian company with a strong track record of quality, technological innovation and service.

## Daisy Saves.

The temperature of an uncovered pool will fall as much as 6°C overnight. A Daisy cover will cut heat loss by up to 75% and potentially reduce your total heating cost by 40 to 50%.

We can provide analysis of your pool with the specialised "Poolheat" software developed by the University of NSW. This will enable us to give you an accurate appraisal of the energy saving you are likely to achieve.

A Daisy Pool Cover will also reduce evaporation by up to 97%, substantially lowering water usage. It can additionally lead to a significant reduction in chemical usage.

The pool will also be easier to clean, with less debris and leaves to remove.

For indoor pools, corrosive condensation is virtually eliminated when a Daisy Pool Cover is fitted, therefore reducing overall building maintenance costs. Substantial energy consumption and cost savings can also be made in indoor pools with a pool cover.

A credible study conducted at the Eastern Leisure Centre, Cardiff in the United Kingdom in 1994, demonstrated a 20% reduction in energy consumption and a 15% decrease in energy costs when a pool cover was used every night. Copies of this study are available from Daisy Pool Covers on request.

## Daisy Covers

All Daisy Commercial Pool Covers are fully bound on the ends and edges with reinforced PVC fabric. This increases the cover's strength and resistance to abrasion.

End PVC reinforcement is 300mm deep and includes a stitched pocket to accommodate a 40mm flotation rod, and attachments for the supplied non-tangle harness and haul cord system.

The Daisy harness is attached across the width of the blanket to distribute the load evenly. This allows one person to pull the blanket smoothly and evenly across the surface of the pool. The floating haul cord supplied is fully buoyant 8mm ski-rope, and includes a stainless steel snap hook clip.

For outdoor pools, we recommend that weighted rope wind skirts be attached to both sides of pool covers. This keeps the cover edges in contact with the pool water at all times, preventing wind from getting under the cover.

Daisy Commercial Pool Covers include a heavy-duty reinforced PVC protective overcover as standard.

The overcover is permanently attached to the cover, so it's not a separate item that staff can 'forget' to use. It's always there, ensuring it is used to protect the cover from damaging UV rays and heat when it is rolled up off the pool.

## UltraDome™ Bubble Solar Pool Covers

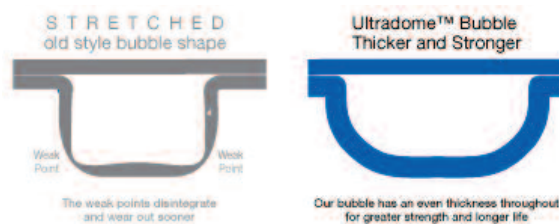
Daisy UltraDome™ Bubble Solar Pool Covers are manufactured from commercial grade 500 micron PE (polyethylene) blue bubble material and have a 5 year pro-rata warranty.

This material has an R-value (thermal resistance) of 0.067 m<sup>2</sup>/K, thermal conductivity of 0.080 W/mK and a weight of 460g/m<sup>2</sup>.

Daisy's advanced UltraDome™ bubble is the key to the outstanding thermal efficiency and long life of Daisy Solar Pool Covers.

Daisy UltraDome™ technology has been recognised by the Pool and Spa Association of NSW with its prestigious Most Innovative New Product Award.

Unlike other bubble materials, UltraDome™ is a perfectly-formed hemispherical shape – not 'stretched' into shape.



Stretching creates 'weak points' that eventually break down compromising cover durability.

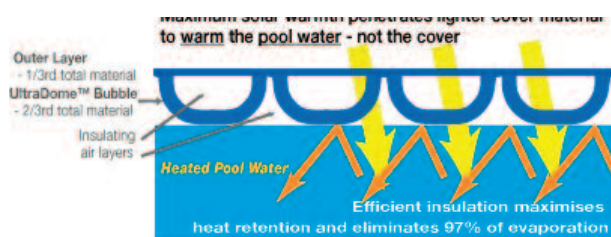
Daisy's exclusive UltraDome™ bubble is the same thickness throughout – eliminating weak points – and that means a stronger cover that will last longer.

Additionally, the specially formulated polyethylene material used by Daisy Pool Covers in the manufacture of its UltraDome™ Solar Pool Covers contains maximum UV absorbers and quenchers as well as tougheners to minimise the effect of solar and chemical degradation.

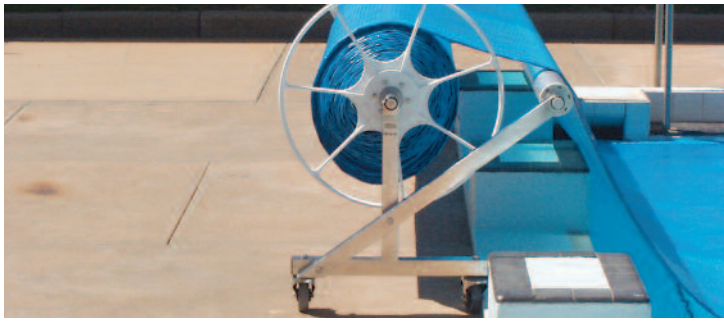
## Free solar heating

In an outdoor pool, a Daisy UltraDome™ Solar Pool Cover can warm the water by up to 8°C – FREE.

The translucent top layer allows solar energy to penetrate into the pool water and warm it, and the excellent thermal efficiency of the UltraDome™ material maximises heat retention.



In order to allow maximum heating of the pool water, Daisy's light-coloured blue or green UltraDome™ material maximises transmission of the infrared end of the solar



spectrum through the cover and into the water.

Once this solar energy enters the water it is converted to heat and absorbed by the water molecules. The UltraDome™ cover then stops heat loss back to the atmosphere.

Irrespective of the method used for heating your pool, a Daisy Commercial Solar Pool Cover has been consistently shown to dramatically reduce heating costs. Its efficiency can significantly increase the effectiveness of any pool heating system. This can lead to a reduction in the pool heating capacity required (and therefore its capital cost).

It is worthy of note that no other thermal cover of any type, and irrespective of cost, has been proven more effective in either heating or thermal retentive properties than Daisy UltraDome™.

A Daisy UltraDome™ Solar Pool Cover will reduce heating costs – and we can provide analysis prepared with the specialised “Poolheat” software developed by the University of NSW that consistently shows reductions in energy expenditure of between 40 to 50%.

A Daisy Pool Cover can also extend your swimming season by several months – providing additional time in which to earn returns from patrons.

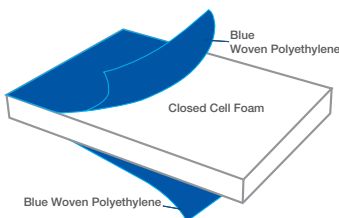
For these compelling reasons, the installation of a Daisy Pool Cover and Roller System should be considered an investment that will deliver a tangible return, rather than a cost.

*For a more technical description of how a Daisy UltraDome™ Solar Pool Cover works, please see Appendix 1.*

## Daisy Foam Thermal Pool Covers

Daisy Pool Covers manufacture top-quality closed cell polyethylene (PE) foam Thermal Covers. They are made from 3mm thick, cross linked PE closed cell polyolefin foam.

This foam consists of 3 layers, and is flame-bonded each side to a UV-stabilised, waterproof, non-toxic and chemical resistant blue woven material called Canvacon.



If a Daisy Foam Thermal Cover is installed on a symmetrical pool – a great advantage of encasing the foam in this blue material is that the cover can be inverted to significantly extend its lifespan.

Daisy Thermal Foam Covers have an R-value (thermal resistance) of 0.088 m<sup>2</sup>/K.

As with Daisy’s UltraDome™ covers, our Foam Thermal Covers come with full edge binding and end reinforcing, a flotation rod, floating haul cord and attachment harness. Weighted rope wind skirts are also available and we recommend their use on outdoor pools.

**Daisy Commercial Foam Thermal Covers carry a 5 year pro-rata warranty.**

## Daisy Pool Cover Specifications

Specifications	Foam	UltraDome™ Bubble
Material Thickness	3mm	500 micron
Total height	3mm	15mm
Thermal resistance (R-value)	0.088 m <sup>2</sup> /K	0.067 m <sup>2</sup> /K
Warranty period	5 years pro-rata	5 years pro-rata
Weight	536 g/m <sup>2</sup>	460 g/m <sup>2</sup>

## Daisy Commercial Roller Systems

All Daisy Roller Systems can be fitted with a motorised winch and outriggers for starting blocks are available.

Rollers are provided with four stainless steel 360° full-swivel castors for maximum mobility. Castors are fitted with secure brakes. Rollers can also be made stationary if required.

Daisy Rollers consist of a heavy-wall anodised aluminium tube either 203mm in diameter by 3mm wall thickness, or 152mm x 2mm or 125mm x 2mm. Spindles are fitted with stainless steel axles set in cast aluminium end-caps. Delrin bearings ensure smooth operation over a very long life.

Each roller is fitted with two anodised and white powder coated cast aluminium handwheels. Roller frames are manufactured from either marine-grade (316) stainless steel or white powder coated aluminium.

All bolts and connections are stainless steel, so there is no component that can rust.

Daisy Commercial Roller Systems are engineered to the highest quality, and designed for maximum durability and ease-of-use, and have a 10-year warranty covering faulty workmanship and materials.

## Commercial Motorised Winches

For larger pools, a motorised winch system should be considered a necessity. It will protect your staff from the need to manually deploy and retrieve large pool blankets.

This can be quite physically demanding, particularly when the cover is wet, and there is always a risk of injury.

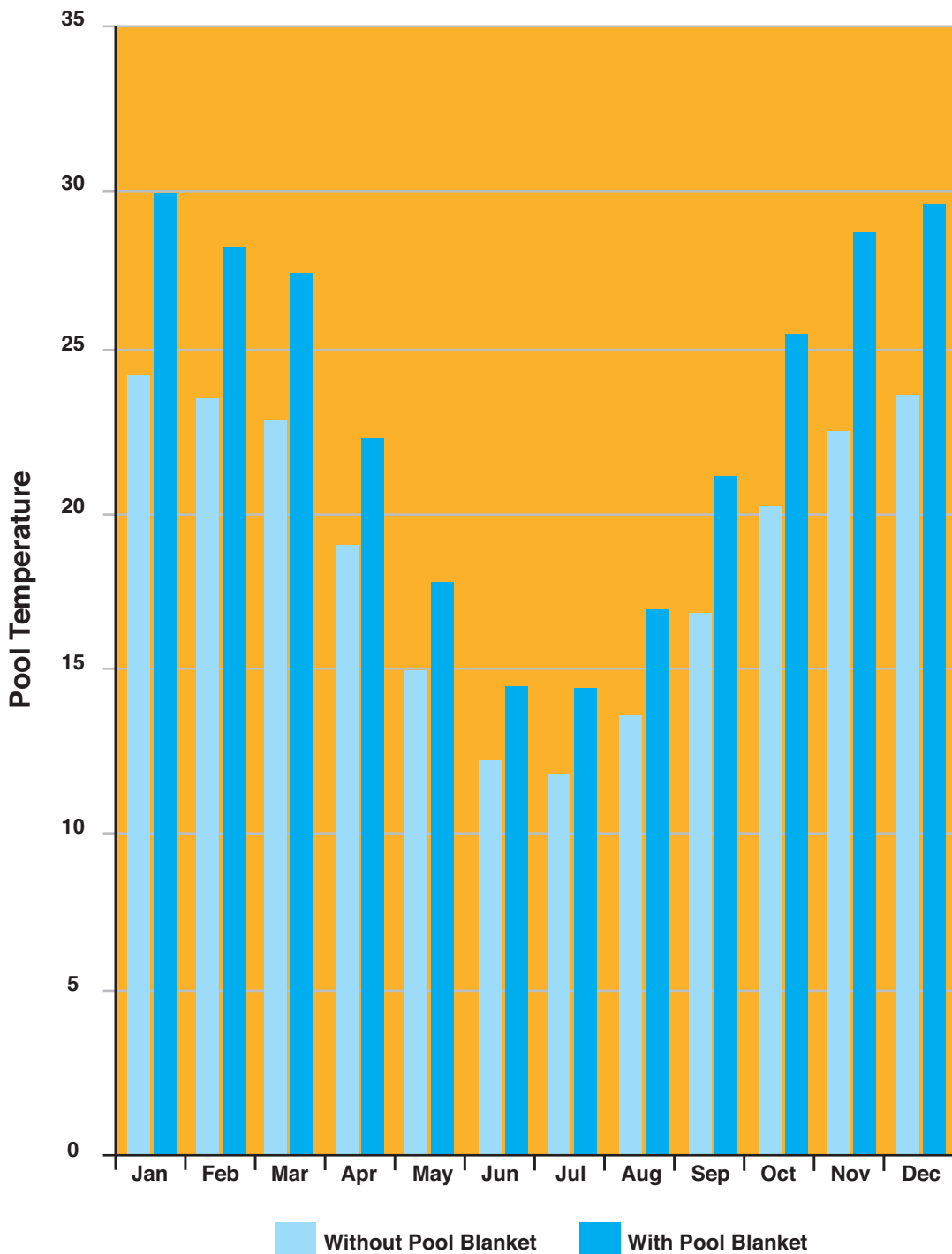
The winches Daisy supply remove this task, and are efficient, sturdy and durable. A motorised winch will typically recover a 50 metre blanket onto the roller in less than 3 minutes – and deploy the same blanket onto the pool in just over 2 minutes.

Our winches use 24 volt battery power – for safety near water – and batteries are fully sealed. Each is supplied with in-built motor overload protection, and its own integrated battery charger. Normally charging is required once a week and uses a normal 10 amp GPO. The winch is fully contained in an easy-to-manoeuvre weatherproof stainless steel housing.

The complete unit is mounted on stainless steel castors which make it very easy to move around the pool area.

Winch units connect to the roller system to recover the blanket and rewind it onto the roller, and feature a rotating drum which also allows the operator to winch the blanket onto the pool.





## Appendix 1

### Technical information on Daisy UltraDome™ Solar Pool Covers

In 1978 JT Czarnecki of the CSIRO Division of Mechanical Engineering published a paper entitled "Swimming Pool Heating by Solar Energy". In this report Czarnecki uses the heat balance approach to examine the mechanisms which cause temperature change in swimming pools.

Czarnecki's paper reinforces Daisy's design philosophy in the development of the UltraDome™ Solar Pool Cover for both domestic and commercial applications.

The heat balance approach shows that Daisy Solar Pool Covers act to inhibit the heat loss processes resulting in the maximum water temperature for a given amount of solar radiation that strikes the pool.

The three mechanisms of heat loss are:

### Evaporation

This is the major heat loss mechanism. The specially formulated material used by Daisy Pool Covers in its UltraDome™ Solar Pool Covers form an effective barrier that can be fitted closely around the pool walls to reduce evaporation to a minimum.

### Convection

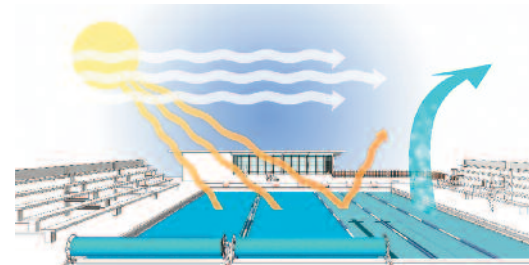
Daisy's design effectively creates a barrier to convection between the pool water and the outside air. It inhibits convection in much the same way as double glazing prevents heat loss through windows.

### Radiation

A Daisy UltraDome™ Solar Pool Cover allows short wavelength solar radiation to enter the pool where it is absorbed – heating the water. The UltraDome™ cover then acts as an effective insulator keeping the heat loss from the pool to a minimum.

In heated pools this results in substantial savings in the energy devoted to heating – typically in the region of 40 to 50%. By inhibiting these three heat loss mechanisms we make proper use of the swimming pool as a giant solar collector, and conserve the heat generated as a thermal retention cover.

For indoor pools, reduction in evaporation resulting from the use of a Daisy UltraDome™ Solar Pool Cover greatly reduces condensation and accompanying corrosion, while considerably reducing the load on heating and airconditioning of the pool area.



# Swimming Pool Heating by Solar Energy

Locality	Pool	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Adelaide</b>													
	A	22.5	22.5	20.2	16.8	13.8	11.1	10.9	12.7	15.6	17.7	20.0	21.8
	B	28.8	28.2	24.7	20.1	16.3	13.1	13.1	15.7	19.8	22.6	25.8	28.1
	C	27.8	27.8	25.3	21.5	17.7	14.9	14.7	17.0	20.3	23.0	25.2	27.0
<b>Brisbane</b>													
	A	27.0	26.4	25	21.9	18.2	15.7	15.3	17.1	20.3	23.0	25.2	27.0
	B	33.3	32.2	30	25.9	21.3	18.6	18.4	20.9	25.0	28.5	31.3	32.5
	C	31.3	30.7	29.1	26.5	22.6	20.2	20.1	22.3	25.8	27.9	30.1	30.7
<b>Canberra</b>													
	A	24.6	23.9	20.9	16.2	11.2	7.8	7.5	10.2	14.9	18.4	21.2	25.1
	B	31.1	29.7	25.5	19.8	14.0	10.0	9.9	13.4	19.4	23.7	27.4	31.8
	C	30.9	30.3	27.4	22.9	17.1	13.7	13.7	16.4	21.6	25.0	27.7	32.2
<b>Darwin</b>													
	A	29.7	29.5	30.1	28.5	26.7	25.0	24.5	26.7	28.8	30.1	30.3	30.0
	B	34.3	34.2	35.0	33.1	31.6	29.8	29.3	32.2	34.6	35.9	35.6	35.0
	C	33.1	32.7	33.9	32.8	30.6	29.2	29.0	31.3	33.1	34.3	34.1	33.5
<b>Hobart</b>													
	A	19.5	19.0	16.4	12.9	9.2	6.8	6.5	8.8	11.8	14.8	16.7	18.9
	B	25.3	24.0	20.2	15.6	10.9	8.1	7.9	10.9	15.1	19.3	21.9	24.7
	C	25.1	24.3	21.4	17.4	13.1	10.6	10.5	13.4	16.7	20.3	22.1	24.3
<b>Melbourne</b>													
	A	21.8	21.3	19.0	15.2	11.3	9.1	9.0	10.7	13.3	16.3	18.7	20.7
	B	28.0	26.7	23.2	18.1	13.1	10.7	10.7	13.1	16.6	20.9	24.2	26.8
	C	26.9	26.1	23.8	19.7	15.1	12.6	12.5	14.9	17.9	21.3	23.6	25.6
<b>Perth</b>													
	A	23.5	23.1	21.6	18.6	15.3	13.3	13.0	14.2	16.5	18.6	21.1	22.9
	B	30.3	29.4	26.8	22.3	18.0	15.7	15.6	17.6	20.9	24.2	27.8	30.1
	C	28.1	27.7	25.9	22.6	19.3	16.7	16.7	18.4	21.2	32.5	25.7	27.5
<b>Sydney</b>													
	A	24.3	23.5	22.8	19.0	15.1	12.3	11.9	13.7	16.9	20.2	22.6	23.7
	B	29.9	28.2	27.4	22.3	17.8	14.6	14.5	17.0	21.1	25.6	28.7	29.5
	C	28.8	28.2	27.4	25.3	19.5	16.2	16.4	18.4	22.0	24.9	27.5	28.3

Predicted average temperatures of the water in °C, in open swimming pools exposed to full sunshine and wind velocity equal to 1/3rd of the mean monthly values shown in Table 1: State of Pool.

A = unheated and uncovered

B = covered with a double clear plastic cover

C = uncovered and heated with collector of equal area to the swimming pool area facing north and of inclination equal to latitude.





Sun's warmth reduces heating and energy costs 50 - 70%

Wind Evaporation increases as wind speed increases and humidity decreases.

Evaporation extracts chlorine gases adding to chemical costs.

Even an average domestic pool will lose one and a half times the total water capacity per season.

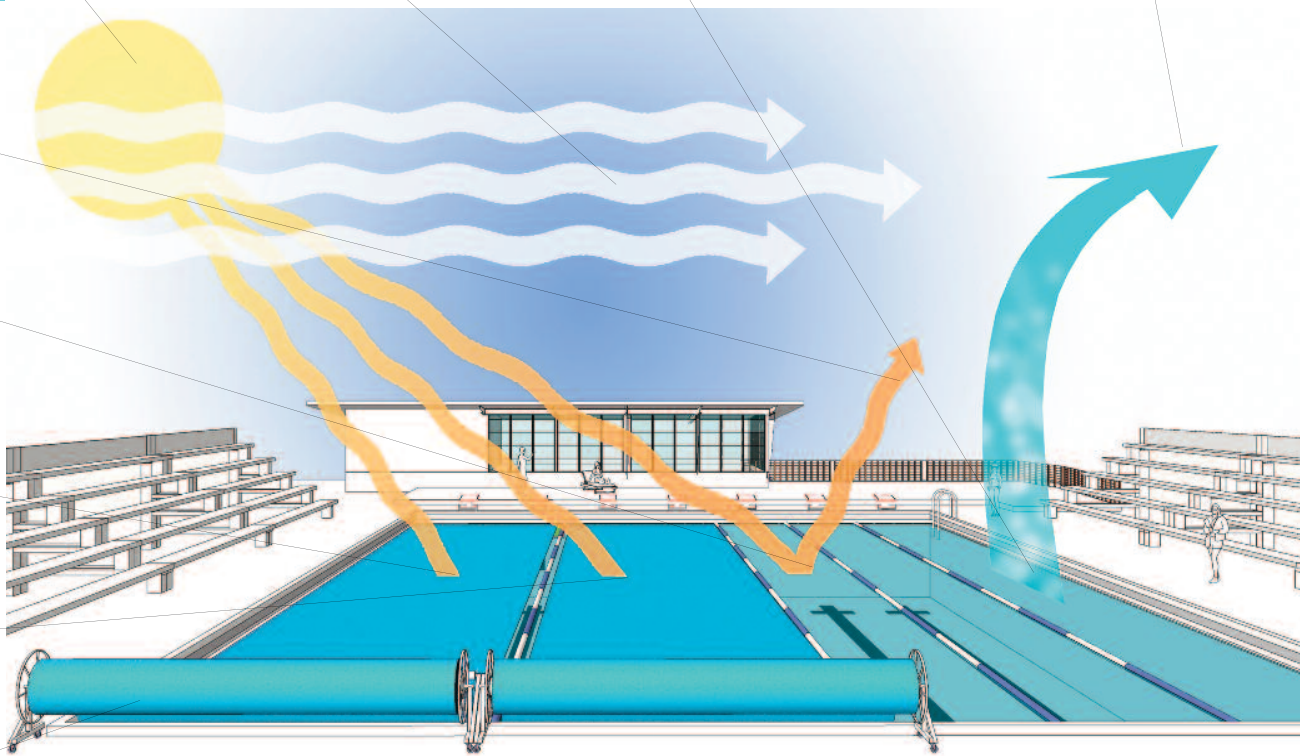
Overnight water temperatures try and equal atmospheric conditions resulting in higher evaporation and heat loss.

Uncovered a lot of the sun's warmth is lost depending on atmospheric conditions.

Solar energy passes through the transparent S8 Daisy cover to heat the pool water by up to 8° C.

The cover traps heat and prevents the warmth from escaping overnight.

Commercial rollers are designed to be easily handled by one person

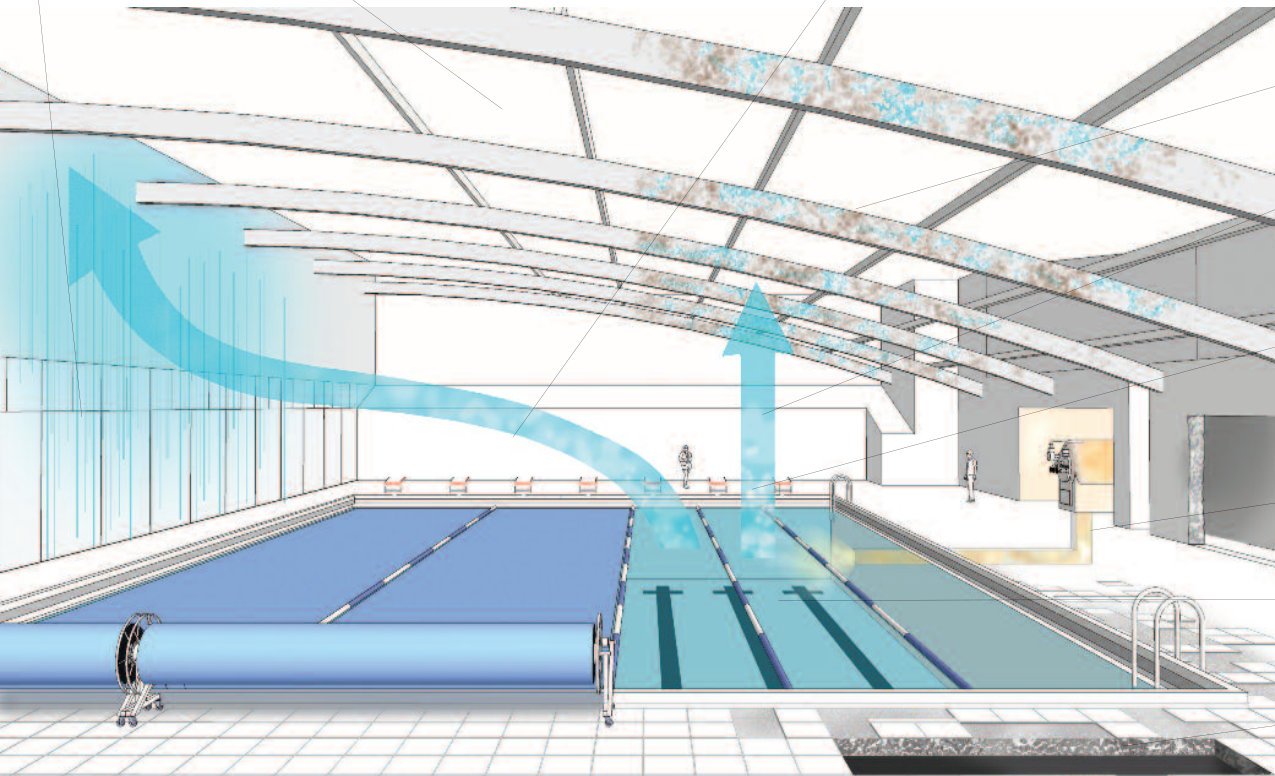


Moisture is attracted to cooler surfaces adding to water loss.

A roof only partially protects a pool from the atmosphere.

A pool cover is far more efficient than an enclosed pool.

Cooler internal temperatures attracts warmer pool water temperatures forming condensation.



Condensation penetrates roof structure.

Moisture penetrates painted surfaces and wall structures and causes corrosion.

Evaporation of chemical gases adds to costs and volatile chemical by-products requires expensive ventilation ducts adding further to heat loss.

Expensive heating costs can be reduced dramatically

Water loss can be more than outside pools

Protected from drying wind, moisture seeps under tiles and into concrete.

S8 B  
Series 8  
translucent Blue  
5 Year pro rata  
warranty  
500 micron  
Most effective

TT  
F

ThermoTech  
Foam  
Insulation Blanket  
Blue Opaque  
5 Year pro rata warranty  
3mm  
Heated and Indoor



To proceed to installing a Daisy to your operation please contact us on: +618 9477 3311

