



PLUMPTON MARKETPLACE SAVES NEARLY \$60,000 P.A



Skycool is confident that the success of a cool roof coating program at a western Sydney shopping centre will open the door to retail properties Australia wide.

The Sydney program was carried out for DEXUS, one of Australia's leading property groups with \$13 billion in assets under management.

Following an energy efficiency opportunity audit a year ago, the 18,500 sq.m roof of the DEXUS managed Plumpton Marketplace shopping centre was coated with Skycool's heat reflective paint, a

Roof Coating saves more than 700 tonnes of CO₂

cool roof coating that draws heat out of the building.

The project, which included modifications to the air conditioning and the installation of energy efficient LED lighting, saw Plumpton become

Before Skycool, temperature at the a/c intake was 50 degrees. Since the installation the temperatures have been at ambient.



Businesses Turn To Proven Power Savings

From a virtual unknown new technology only a few years ago, the Australian-developed SkyCool roof cooling membrane system has grown in popularity, particularly within clubs, to become an industry leader.

Now, on the back of forecast increases in electricity costs of the order of 20% p.a. for the next few years, SkyCool is experiencing unprecedented demand from wider commercial circles, so much so that the company fears by next summer a waiting list may become the norm.

SkyCool Managing Director Mr Rex Lehmann said that extraordinary results by SkyCool customers such as Woolworths and Melbourne Airport have prompted a lift in inquiries from a broad range of industries.

“Certainly the threat of dramatically increasing electricity prices has been a major motivator, but the scientifically proven ability of SkyCool to reduce greenhouse gas emissions has also

been a factor,” Rex said.

Woolworths supermarkets conducted a comprehensive two-year trial using a SkyCool coated supermarket that enjoyed a 47% reduction in the cost of running air conditioning units.

Melbourne Airport applied SkyCool to a massive 42,000m² roof area. Immediately the results were such that 16 auxiliary air conditioning units were decommissioned and instead of running four chillers at 100% during summer they need only three at 80%.

The airport’s research calculated that SkyCool was reducing greenhouse gas emissions by 40,000 tonnes a year.

Clubs up and down Australia’s east coast are saving dramatically. An analysis by Energy Action of Club Menai’s energy costs after the application of SkyCool revealed a saving of \$13,440 in energy costs over just seven months.

And the savings aren’t just power. The spray-on polymer means prolonging maintenance cycles and deferring roof replacement costs:

- Castle Hill RSL saved more than \$500,000 by deferring roof replacement costs
- Manly Wynnum Leagues Club’s savings on roof repairs and air conditioning expansion topped \$250,000 before it even took into account reduced energy bills.

Even before the threat of crippling power costs, SkyCool’s client list in Australia read like a corporate and institutional who’s who including: Amcor, Anglican Aged Care, ANZ Bank, Bovis Lend Lease, BP Australia, CFMEU, Country Energy, Perth Airport, Darwin Airport, Department of Defence, Fujitsu, Grosvenor Engineering, Honda Australia, Linfox Property Group, Macquarie Bank, McDonalds, Melbourne International Airport, Metcash, Target Australia, Westfield and Woolworths.

Green Building Funded

Shopping Centre Reaps Huge Benefits

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one of the first retail centres to obtain Green Building Fund funding.

Plumpton Marketplace Operations Manager, Barry Thomson, said that the centre was now enjoying energy savings in the order of \$60,000 per annum.

He said the biggest improvement attributable to Skycool is in the operating efficiency of the air conditioning system.

In a long career in building management, Barry has worked with all manner of air conditioning systems and breakdowns invariably come back to roof temperatures around the air conditioning plant building up and the plant being unable to cope.

"At Plumpton before the Skycool installation we measured temperatures around the a/c air intake at 50 degrees. Since the installation the temperatures have been at ambient," he said.

The Skycool project is being closely scrutinised by the Green Building Fund. So far its performance has exceeded expectations, such that Barry is confident the shopping centre will receive a four star NABERS energy rating.

As well as the roof itself, Skycool coated all air conditioning ducting for measurable improvements.

"I have a sophisticated, fully computerised Building Maintenance System and we're showing improvements in return air temperature up to 10% purely and simply because the duct work is no longer sitting up there frying.

Barry said that during a recent three day heatwave he measured the return air temperature of a non-coated, new unit at 30 degrees when the actual air temperature had dropped to 24 degrees.



In a recent study of roofing, Lend Lease's Graham Carter identified SkyCool as having widespread applications for air-conditioned buildings.

He said that the adoption of cool roof technologies is critical where the mechanical plant is air-cooled and roof mounted as the heat island effects on cooling efficiency and ventilation loads are potentially significant.

SkyCool Managing Director Rex Lehmann said that extraordinary results by SkyCool customers such

as Woolworths and Melbourne Airport have prompted excited interest in many sectors.

Woolworths's a two-year trial at a SkyCool coated supermarket saw a 47% reduction in the cost of running air conditioning units.

Melbourne Airport applied SkyCool to a 42,000m² roof. Afterwards, 16 auxiliary a/c units were decommissioned and instead of running four chillers at 100% during summer they required only three chillers running at just 80%.

For information about SkyCool call the company on 02 9477 4095 or www.skycool.com.au

HVAC Experts Use Skycool

One of Australia's fastest growing air conditioning, heating and mechanical services companies, the multi-faceted Grosvenor Engineering Group, is actively recommending a unique roof coating system to its clients nationwide after proving the system with astounding results on its own building.

With their 100 amp supply at capacity in their head office and a need to accommodate an additional 25 employees, Grosvenor was faced with a \$80,000-plus expenditure on a 200 amps supply and additional air conditioning equipment.

Directors Steven Gallagher and Peter Souflias reasoned a solution would be to decrease the heat load on the building and thus decrease the energy consumption of existing air conditioning units.

After spending a mere \$10,000 on SkyCool's patented heat reflective coating and \$20,000 on the additional air conditioning units, Grosvenor was not only able to accommodate their additional 25 staff, but saw power bills drop by an average of 10%.

"We actually avoided an \$80,000 outlay, spending just \$30,000 for a saving of \$50,000 and ongoing savings in power consumption," Peter Souflias said.

"These are the types of savings we promote to our clients by encouraging them to spend a little to save a lot."

The savings are commensurate with countless others Peter has seen. In some cases they have been so dramatic that his clients have asked Grosvenor not to publicise them as the firms believe they have gained a competitive edge both in terms of their reductions in energy costs and improved productivity.

One case that provided measurable results was a western Sydney warehouse employing 200 people. Grosvenor was called in 2008 to devise a solution for a mezzanine area so hot no one wanted to work there, production was down and things weren't getting done.

After applying the SkyCool product only to the roof above the mezzanine, Peter realised he had a unique site

Installation Avoids \$80,000 Outlay



Grosvenor Engineering Group: engineering@geggroup.com.au or call 1300 255 247

to actually measure the product's effectiveness.

On a 35 degree day he measured the surface temperature of the roof sheets at 62 degrees. A metre beneath the unpainted roof with its 50mm of insulation the temperature was 40 degrees while under the SkyCool painted mezzanine it was a mere 28 degrees.

So enamoured of the product is Grosvenor that they have started to find additional uses for it including the protection of east and west facing walls and even to improve the efficiency of roof mounted ducting.

Peter said that until now they have done a lot of work improving the performance of warehouses and factories, buildings with enormous roofed areas that act as a heat sink, but their recent outstanding success using Skycool to reduce air conditioning and power costs for Plumpton Marketplace shopping centre is expected to create yet another niche for Grosvenor.

"The coating has been on for under 12 months and they are seeing improvements of the kind experienced elsewhere by Woolworths and Coles supermarkets.

The Directors have grown Grosvenor dramatically since buying the business in 1994.

They started with eight technicians and six office staff in Sydney. Today they look after more than 7000 buildings, have more than 230 staff and are in Newcastle, Tamworth, Coffs Harbour, Wollongong, Melbourne and

Canberra.

Their clients cover both private enterprise and government buildings and include DEXUS, AMP, CommBank, Mirvac, Lend Lease and facilities management company UGL, for whom Grosvenor has looked after NSW Police buildings for 18 years.

Grosvenor's core business is built around maintenance contracts and it has expanded on the back of an ever increasing range of services offered by the company.

"Most of our larger contracts are based on providing services covering air conditioning maintenance, repairs, design, installations and upgrades but we have gone way beyond that," Peter Souflias said.

"In the last two years we have started Grosvenor Sustainability and we do everything from energy and water audits, NABERS energy ratings and lighting assessments for Building Energy Efficiency Certificates.

"We have also opened a Fire Division and we provide a full range of environmental services along with some very special control software."

Peter said that central to the business was a focus on cost and energy savings and as a result the recommendation to clients of the SkyCool solution is a perfect fit.