

Broad Span Roofing - Shopping Centre*

OBJECTIVE:

Improve customer comfort to the upper food court level which was not air conditioned - relying on ceiling fans for cooling.

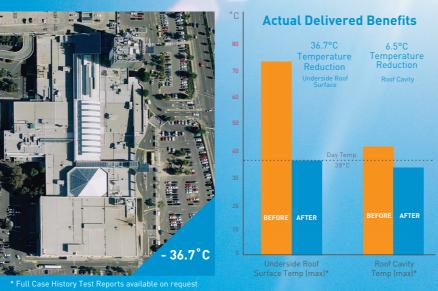
SCOPE

External Roof - Weathered zinc & aluminium flat deck with sisilation

Ceilings - Various: Corrugated sheet or Plasterboard.

SPECIFICATION:

Surface preparation and application of AcraTex Cool Roof White with InfraCOOL™ Technology



Workshop Environment - Crash Repairer*

OBJECTIVE:

Improve Worker Comfort and Productivity Workshop Environment - high activity, no air conditioning

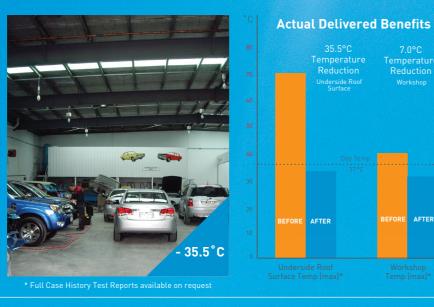
SCOPE:

External Roof: Galvanised metal roof

Ceiling: Sisilation, No cavity

SPECIFICATION:

Surface Preparation and application of AcraTex Cool Roof White with InfraCOOL Technology



Ideal for • Retail • Health & Education • Industrial & Warehousing • Commercial



InfraCOOL™...heat reflective coatings



Visit **acratex.com.au** for full system and colour range information. For general enquiries call **13 23 77**



Reflects Radiation Lessens Heat

Reduces **Cooling Costs**

Improves Occupancy Comfort

Lowers **Carbon Footprint**

InfraCOOL™ Technology from Dulux®

Reflects more of the Suns Light Energy by working beyond the visible light spectrum to maximise reflection of the suns invisible infrared rays.

Total Solar Reflection

(TSR) Over 50% of the suns total light energy is invisible infrared. InfraCOOL focuses on that portion so even dark colours can be made cooler

Reflect Heat BEFORE

it can be absorbed. By reflecting heat in the first instance surfaces don't super-heat and capture the heat load. Insulation (by contrast) is "after the event".

COOL Roofs

Due to their large surface area and angle of exposure, Roof Surfaces capture enormous amounts of the Suns energy and COOL ROOFS offer maximum cooling & energy efficiency.

COOL Roof White

Dulux COOL ROOF White reflecting over 90% of the suns total light energy maximises reflection of both visible (colour) and invisible (infrared) providing maximum cooling efficiency.

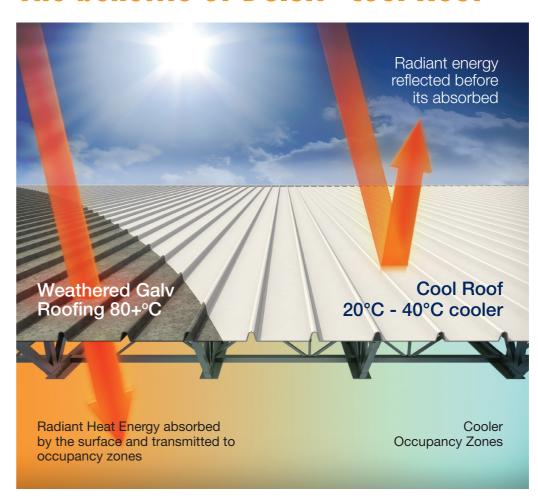
7% (only) by Convention

lair temperature and

& Conduction

direct contact)

The benefits of Dulux® Cool Roof



Maximum Solar Reflection

Weathered Galv and Dark Coloured roofs absorb massive amounts of solar radiation which in-turn transmit heat into occupancy zones. Cool Roofs reflect heat energy in the first instance - before heat is absorbed, meaning insulation & cooling efficiencies are maximised

Reduced Cooling Costs

Less Heat penetration means lower cooling costs. Comparative studies identify cooling energy savings of 20-40% are possible using Cool Roof technology.

Improved Occupancy Comfort

In non-air conditioned facilities such as workshops and warehousing, cool roofs translate immediately to cooler working and warehousing facilities, improving productivity and stability of stored goods.

Lowers Carbon Footprint

Less use of air conditioning reduces power consumption and associated greenhouse gasses which is good for the environment and for you.

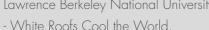
The need for Cool Roofs

Roofs represent 20-25% of Urban Surfaces

"Cool Roofs.... can offset 24 billion tonnes of CO₂ - the equivalent of taking half the cars in the world off the road "

"The offset provided by cooling urban surfaces affords us a significant delay in climate change "

Lawrence Berkeley National University



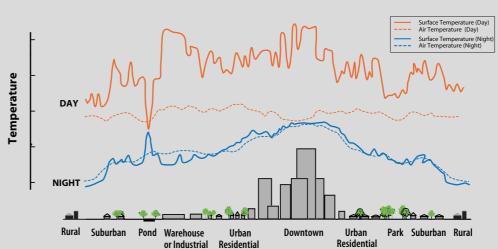


It makes sense...

.. to design a barrier that combats the specific Heat Source - and that means reflecting the suns rays BEFORE they're absorbed, converted and magnified as heat

Urban Heat Island Effect





Studies in regions of the USA such as California and Florida (with similar climate patterns to Australia) quantify significant potential benefits that Cool Roofs offer: • Energy Savings • Lower Peak Energy Demand • Improved health & Comfort • Cost Benefits of installation • Greenhouse emission reductions and improved health and comfort.

Information and Graphic from US EPA : Reducing Urban Heat Island — Compendium of Strategies
Further data and information: Heat Island Group - Laurence Berkeley University , California

The annual mean air temperature of a city with 1 million people or more can be 1-3°C warmer than its surroundings.

In the evening, the difference can be as high as 12°C as the built environs' absorbed heat is released back as it

Heat islands can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions.

COOL ROOF technology reduces HEAT ABSORPTION in the first instance, minimising the built environs stored heat energy and thus its ability to artificially increase surrounding air temperatures.