

Cool Roof Impact

2023 was the hottest year on record, continuing an 8-year trend of continual increases. Cool roof application can provide carbon-zero heat relief in the built environment.



Heat waves in cities are intensifying, with temperatures up to **6 °C higher** than rural areas



A cool roof will stay **at least 13 °C cooler** than a dark roof and reduce peak outdoor temperature



Air conditioning consumes **15% of buildings' total energy use**



Cool roofs could **cut air conditioning use by up to 40%** in Sydney



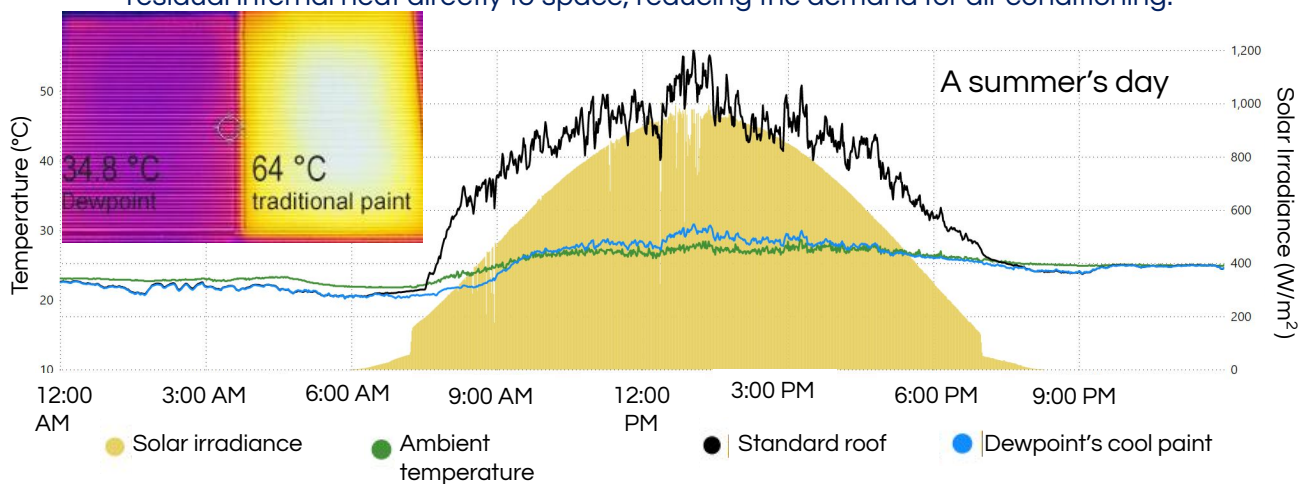
The built environment is currently responsible for **28% of global energy-** related carbon emissions



By lowering energy consumption and carbon footprint, **applying a cool roof is part of a Green Star Building certification**

The Dewpoint Difference

Dewpoint's paint is uniquely designed to use deep space as a heat sink both day and night. Acting as a passive heat pump, the paint reflects **90%** of the sun's energy and radiates **95%** of residual internal heat directly to space, reducing the demand for air conditioning.



During the day, Dewpoint's cool paint keeps the roof up to 30 °C cooler than a standard roof.* **This is estimated to reduce home energy bills by up to 34%.**

* Validated on a rooftop in Sydney, Australia over a 3-month period, late 2023

Benefits

- ✓ Easily applied solution: self-priming paint, retrofittable, quick, no disruption to existing operations
- ✓ Lower energy bills
- ✓ Lower carbon footprint
- ✓ Stable internal environment for temperature-sensitive goods e.g. food, data centers
- ✓ Improved comfort for building occupants

Contact Us

Dewpoint Innovations is a next-generation paint company borne out of advanced research at the University of Sydney, Australia.

Dewpoint is looking for early adopters and partners to commercialise its paint technology in Australia.

Contact info@dewpointinnov.com for enquiries.

Technical Data Sheet

Product Description

Dewpoint "Sydney Snow" is a water-based cool roof paint designed to combat heat build-up in industrial and commercial buildings. It does this with maximal solar reflectance and emittance of internal heat, providing an optimum cooling benefit.

Technical Specifications

Solar Reflectance Index (SRI)

110 – 114 (Medium wind conditions)

Emittance

0.95

Drying time at 25 °C @ 200 micron (wet)

60 min touch dry

Recoat time at 25 °C

2-4 hours

Volume solids

46% v/v

pH

8.5 – 9.0

Total Solar Reflectance (TSR)

88% - 90%

Gloss

4 @ 60 degrees

Recommended thinner/clean-up

Water. Thinning is generally not necessary and not recommended, however product could be thinned up to 15% maximum required.

Theoretical coverage @ 100 micron D.F.T5 m²/L**Volatile organic carbon**

< 50 g/L

Appearance

Opaque white liquid

Suitable Surfaces

Dewpoint "Sydney Snow" is ideal for previously painted or primed ferrous metal, aluminium, galvanised steel, zincalume, masonry, concrete and terracotta tiles, and compressed fibre cement sheets. Dewpoint "Sydney Snow" is self-priming and can be applied directly onto most substrates.

Application Precautions

All surfaces to be painted must be clean, dry and free of contaminants. Scrape any loose or flaking paint on existing painted surfaces and sand any glossy surfaces to ensure adhesion. Perform a cross-hatch adhesion test on a small patch before performing a full-scale application.

Do not apply to surfaces that have had wax or silicone-based materials previously applied.

Do not apply when ambient temperature is expected to fall below dewpoint temperature. Do not apply when relative humidity is or predicted to be greater than 85%. Avoid application when the ambient temperature is below 10 °C or above 35 °C.

Application Method

Brush, roller or airless spray (recommended)

Recommendation on tip selection for airless spray is provided in our TDS. Please refer to the application section for further details.

Safety Directions

Keep out of reach of children, provide adequate ventilation during use and do not dispose of left-over paint in any drainage systems. Brush any leftover paint onto newspaper and allow to dry in a well-ventilated area. Dispose of the dry paint via domestic waste disposal. Empty cans should be left open and allowed to dry then disposed of in accordance with your local recycling legislations.

Warranty and Durability

Matching industry standards, Dewpoint "Sydney Snow" is backed by a 10-year warranty against failure, reflecting our confidence in its durability and performance.