NXT Cool Zone® is a remarkable heat reflecting roof coating utilising revolutionary Thermal Protection Technology® developed by Nutech Paint to keep buildings cooler in hot weather.

for the first time, you can reduce the temperature of your roof and live more comfortably without sacrificing colour choice. This will save energy and reduce the impact of your home on the environment.

It's a scientific fact — with Nutech NXT®
Technology your roof will last longer, save you money, protect our environment and promote healthy, comfortable living.

Australian roofs are inspired by the rich dark colours found in our diverse natural landscape. When renovating, owners and designers want to restore these original dark colours or upgrade to match the latest design trends. Unfortunately, dark roofs soak up the Sun, becoming hotter as the day progresses. On hot days roof spaces super heat up to 90°C and rooms below become unbearable even with ceiling insulation. Air conditioning is overworked and roof structure durability is affected.

Keeping houses cool in hot weather has become very expensive due to rising electricity and maintenance costs. Air conditioning also adds to greenhouse emissions, uses our valuable resources and damages our environment.

Now you can choose your roof colour knowing that dark colours don't need to be hot colours, so aesthetics and functionality go hand in hand. This will change your thinking about roof paint and home cooling costs!

#### How does NXT Cool Zone® work?

NXT® is manufactured by multi award winning Nutech Paint, Australia's largest and oldest roof coating specialist with more than 40 years experience. Nutech spends more on R&D than all the competition combined.

Dark painted and unpainted roof tiles and coloured metal roofs absorb up to 95% of the Sun's heat. Until now white roof paint was the only cool option, but not everyone wants a white roof.

In contrast, NXT® reflects between 30% and 91% of the Sun's heat subject to colour. NXT® Charcoal has a Total Solar Reflectance of 35% reflecting 500% more heat than conventional charcoal roof paint. NXT® White has a TSR of more than 90%.

NXT® also cools the roof space at night by emitting heat significantly better than galvanized metal, reflective aluminium paint and most conventional paint. NXT® reflects heat in the day and emits heat at night maximizing cooling efficiency.

In fact, NXT® is better for your roof than new cement roof tiles and metal sheeting, which do not have **Thermal Protection Technology®**.

NXT® works just like shading your roof. External blinds on windows can reduce heat gain by up to 80%. The same principle applies by preventing the roof space heating up, rather than trying to control heat transfer with ceiling insulation, saving money over the building life. Ceiling insulation will still be required for an energy efficient home, but it will work more efficiently at lower peak temperatures.

Simply put, NXT Cool Zone® keeps your roof up to 30°C cooler, meaning rooms below will be kept a comfortable 6 to 10°C cooler.\*



HEAT REFLECTIVE ROOF COATING



Contains nano-technology for improved water beading and a cleaner, longer lasting roof.

### NXT® Saves You Money and provides these Environmental Benefits:

- Eco-friendly green technology 100% acrylic polymers with ultra low VOC's for healthy homes.
- Advanced cross linking polymer chemistry for ultra durability and dirt resistance.
- Enhanced with surface cleaning nano-technology for improved dirt resistance and water beading.
- fade resistant pigments saturated with colour & highly resistant to chemicals, UV light and heat.
- Advanced formula with new defoamer and biocide technology to eliminate micro foam, bacteria and biological growth.
- 100% waterproof reducing thermal conductivity in cement tiles to improve thermal insulation in cold wet weather.
- Full colour range including dark earthy colours that blend with the urban environment.
- Satisfy Council Planning and Environmental controls for visual amenity.
- Contribute to compliance with 5 Star House and similar State and Federal energy saving policies.
- Conform to USA EPA Energy Star® Cool Roof requirements for roofs above 10° (+30% TSR).
- Safe for the collection of drinking water and save evaporative air conditioning water use.
- Use less electricity and downsize plant and equipment to conserve energy & valuable resources, reduce maintenance & replacement costs and extend roof structure life and roof-located appliances such as hot water services and electronics.
- · Encourage recycling of older viable roof structures.

## Help Protect our Environment with a Socially Responsible Roof Coating

NXT® reduces summer cooling costs, peak energy usage, extends building life and will help reduce greenhouse gases, global warming, resource usage and land fill. Air quality will be improved due to reduced VOC levels, there are no Hazardous Air Pollutants and low odour. Unused liquid coating, dry coating and containers are recyclable.

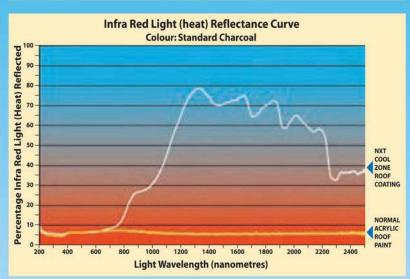
NXT® is the first Australian eco-friendly roof paint compliant with EU and USA regulations regarding VOC and biocides. Volatile Organic Compounds are found in paint, fuel and some household products. VOC's contribute to ozone, which studies show can aggravate pulmonary disease and respiratory problems including asthma. Low VOC coatings help young children, elderly, and persons with heightened sensitivity to chemicals.



Coating Specification & Properties	Nutech Paint NXT Cool Zone®	Competition Roof Paint
Application	Exterior/Roofs	Roofs
Dry Time @25°C & 50% Relative Humidity	30 to 60 minutes	30 to 60 minutes
Minimum Film Formation Temperature	3°C	10°C +
Re-Coat	2 hours +	2 hours +
Wet Film Thickness - 2 coats	500 microns	400 microns +
Dry Film Thickness - 2 coats	200 microns	140 microns +
Dirt Pick Up Resistance	Excellent	Poor to Good
Waterproof	100%	Possible
Flammable	No	No
VOC - Volatile Organic Compounds	Extremely Low	High
Environmentally Friendly	Yes	Possible
Repaint	12-15 years	5-10 years
Estimated Investment per year per sq.m.	34 cents	\$2.84
Saves You Money \$\$\$	Yes	No
Cross Linking technology	Yes	No
Nano-Technology	Yes	No
Heat Reflective Pigments	Yes	No
High Emmissivity	Yes	Some
Reduce Urban Heat Island	Yes	No
Lower cooling costs	Yes	No
Socially Responsible	Yes	No
Reduces Summer Building Temperature	Yes	No
Unlimited Colour Range	Yes	No
Advanced Defoamer and Biocide Package	Yes	No
Pigment Acid & Temperature Resistance	High	Low
Satisfies Council Urban Design Requiements	Yes	Possibly
Contributes to 5 Star House Energy Rating	Yes	No
12 Year Manufacturers Warranty	Yes	No

Thermal Properties		
Infrared Reflectance	30-91	
Thermal Emmittance	88-94	
Total Solar Reflectance	>30% to 91% * **	
* US EPA Energy Star threshold for Steep Slopes(>10 Degrees) = 25% ** Subject to colour - dark colours lower, white highest		

Physical Properties		
Water Resistance	ASTM D 358	Passes
Alkali Resistance	ASTM D 3273/3274	Passes
Scrubability	ASTM D 2486	Passes
Flexibility	ASTM D 522	Passes
Cracking	ASTM D 661	Passes
Blistering	ASTM D 714	Passes
Water vapour Transmission	ASTM E 96	15 Perms
Accelerated Weathering	ASTM G 90-98	Passes

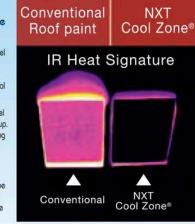


To demonstrate NXT Cool Zone® Heat Reflective Roof Coating technology, we painted two cement panels in the same terra cotta colour.

The panel on the right is coated with NXT Cool Zone® and the panel on the left is coated with a competitor's premium roof paint. The panels were placed an equal distance from an infra-red light source for several hours. The photograph was taken with a thermal imaging camera focused on the back of the coated panels.

The infra-red heat signature shows the back of the standard panel radiating obsorbed heat indicated by the glowing pink as it heats up. In stark contrast the panel coated with NXT Cool Zone® incorporating Thermal Protection Technology® remains a cool black, except for the heat halo from the infra-red heat source behind the panel.

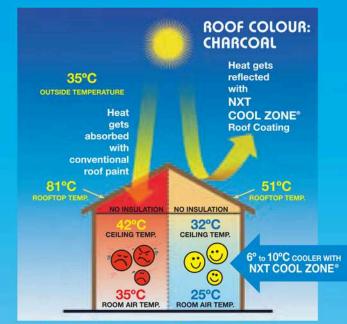
The NXT (ool Zone® panel remains 20 to  $30^{\circ}$ C cooler, subject to colour, because it reflects away the light energy before it can be converted to damaging heat. Independent testing has confirmed that cooling the roof surface by 20 to  $30^{\circ}$ C will mean a temperature reduction of between 6 to  $10^{\circ}$ C in the rooms below.



NXT® and Cool Zone® are registered trademarks used under license by Nutech Paint Pty Ltd



HEAT REFLECTIVE ROOF COATING



# 30°C cooler on the roof means 6 - 10°C cooler inside!\*

NXT Cool Zone® - advanced technology from Nutech Paint good for our quality of life, energy conservation and our environment.
Revitalise your roof, help our environment, save money and live
more comfortably. Now that's a smart coating!
\*Subject to colour - Refer Nutech NXT® Colour Temperature Guide.



For a Perfect Finish!



Manufacturer & Sales:

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