NIPPON PAINT

TECHNICAL DATA SHEET

WEATHERBOND SOLAREFLECT EXTREME

(formerly known as Weatherbond Solareflect)

Updated July'25

Weatherbond Solareflect Extreme is a **premium pure acrylic exterior wall paint** designed with **Solar Reflective Technology**, **Quartz Technology**, and **Colour Care Technology** to combat intense heat and UV exposure. Engineered for superior **solar heat reflectivity**, it reduces exterior wall surface temperatures by up to **5°C**, helping to lower indoor heat buildup and air-conditioning costs.
Formulated for long-term exterior beauty and resilience, this **sheen-finish** coating offers high **UV resistance**, **excellent colour retention**, and protection against **dirt**, **watermarks**, **algae**, **fungus**, and **acid rain**. Independently tested by SERI, UKM for its thermal reflectivity, this paint is ideal for modern homes, sustainable buildings, and tropical projects requiring energy-efficient cooling.

Product Features:

- **Solar Reflective with Sunblock Technology**
  Reduces wall surface temperature by up to **5°C**, delivering better thermal comfort and reducing indoor heat gain. (Tested by SERI, UKM)
- **Quartz Technology**
  Enhances surface hardness for improved **dirt resistance**, reduced water absorption, and longer-lasting film protection.
- **Colour Care Technology**
  Maintains colour vibrancy over time with strong UV protection, even under prolonged sun exposure.
- **Sheen Finish**
  Offers a smooth, refined surface with gentle reflectivity, suitable for modern architecture.
- **Watermark & Rain Protection with Keep Clean Technology**
  Excellent water resistance reduces visible watermark streaking after heavy downpours.
- **UV & Acid Rain Resistance**
  Protects surfaces from sunlight degradation and acidic rainfall, maintaining film strength and finish integrity.
- **Anti-Algae & Anti-Fungus with Microblock Technology**
  Effectively resists biological growth for cleaner, longer-lasting walls—especially in humid or shaded areas.
- **Efflorescence Resistance with Keep Clean Technology**
  Prevents white salt deposits from appearing on cement-based walls.
- **Environmentally Friendly, Green Choice Product**
  Low VOC formulation. Certified by **SIRIM Eco-Label** and **Singapore Green Label**.

Paint Type	Product Type	Finishing	Recommended Substrate	Pack Size
Water-based	Exterior	Sheen	Masonry, brick, plastering substrate and fibreboard	1 Litre, 5 Litres, 15 Litres, 20 Litres

Composition

Pigment	: Mainly Titanium Dioxide, functional extender, inorganic metal oxide and high-performance organic pigment
Binder	: Pure Acrylic Emulsion
Thinner	: Water

Technical Data

Drying Time	: Touch Dry	: 20 minutes (Dependent on temperature and humidity)
	: Hard Dry	: 1 hour (Dependent on temperature and humidity)
Recoating Time	: 2 hours (Dependent on temperature and humidity)	

Dry Film Thickness	: Around 30 µm per coat
No. of Coats	: 2 coats
Theoretical Coverage	: 10 – 12 m^2 per litre per coat (Actual coverage is dependent on substrate condition, application method, application condition and finishing appearance)
Volume Solid	: ~ 40%
Shelf Life	: Up to 36 months in a tightly sealed container

Application Method

Brush / Roller : Dilute the paint with not more than 5% of water. Preferably not dilute for best performance.

Recommended Coating System

Sealer / Primer	: 8100 Weatherbond Sealer/ 5100 Wall Sealer / 8000 Expresskote Sealer / Acrylic 5170 Wall Sealer / Hi-Bond Wall Sealer (on powdery or skim-coated surface)	: 1 Coat
Top Coat	: Weatherbond Solareflect Extreme	: 2 Coats

Surface Preparation

Remove all loose, defective paint or powdery residues, loose chalk, dust, fungus, algae and foreign matter. Treat any areas affected by fungus growth with Fungicidal Wash Solution. Repair cracks, uneven surfaces with Nippon CrackREPAIR 1000 Compound or suitable exterior grade fillers. Smoothen the filler areas with sand paper. Surfaces to be painted must be cleaned thoroughly and dry, it must be free from dirt, grease and other foreign matters. Allow all surfaces to dry completely prior to painting. Avoid painting when the moisture content and alkalinity of the walls are still high. (Recommended painting specification requires the moisture content of the walls to be below 16% measured by protimeter and alkalinity of the walls to be below pH9.) Spot prime with Nippon Paint Exterior Wall Sealer.

Cleaning

Clean up equipment with water immediately after use.

Certificates

Complies to Singapore Green Label and SIRIM ECO-Label

Certified by: ***Singapore Environment Council (SEC) and SIRIM QAS***

Tests

1. **ASTM E903, ASTM C1371 & ASTM E1980** on Solar Reflectance, Emittance and Calculation of Solar Reflectance Index (SRI) of Paint Measurements
2. **Test on Energy Simulation (Energy Saving)** for Impact of External Paint Coatings on Typical Apartment Building by Solar Energy Research Institute (SERI), UKM
3. **ASTM D3719** on Dirt Pick-Up Resistance by Natural Weathering, tested in-house
4. **ASTM G154** on QUV-A Colour Retention Resistance, tested in-house
5. **ASTM G155** on Xenon Arc Accelerated Weathering, tested in-house
6. **ASTM D2486** on Wet Scrub Resistance, tested in-house
7. **SGLS Category 032** on Singapore Green Label
8. **ECO 019:2012** on SIRIM ECO Label

Safety Precautions

- Keep container tightly closed and keep out of reach children or away from food and drink.
- Ensure good ventilation during application and drying.
- When applying paint, it is advisable to wear eye protection.
- In case of contact with eye, rinse with plenty of water immediately and seek medical advice.
- Remove splashes from skin by using soap or water.

- Paint must always be stored in a cool place.
- When transporting paint, care must be taken. Always keep container in a secure upright position.
- Dispose off any paint waste in accordance with the appropriate Environment Quality Regulations.

Note

* Theoretical Coverage is based on a mathematical formula

$$\left[\frac{Volume\ Solid\ \%\ x\ 10}{Dry\ Film\ Thickness}\right] = m^2/lit/coat$$

and does not consider LOSS FASTORS.
Variables like porosity of substrate, application method, dilution ratio, dry film thickness, opacity and so on will affect the loss factor and can vary from 30% - 50% or even more.

Disclaimer

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Users are encouraged to consult Nippon Paint for specific guidance on the suitability of this product for their intended use and application method.

In case of discrepancies between language versions, the English (United Kingdom) version shall prevail.