

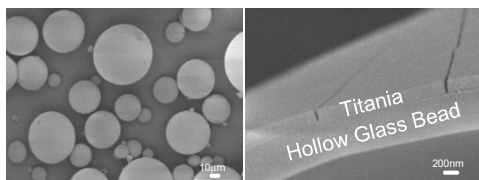
NIPO THERMOSHIELD+ Thermal Silica Coating

DESCRIPTION

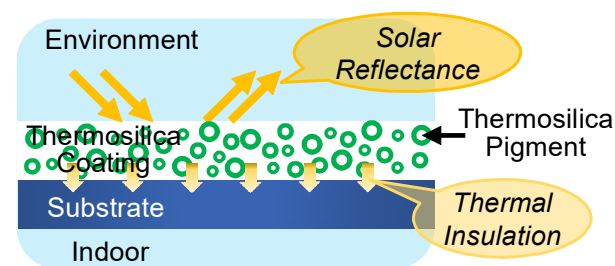
NipoThermoShield+ is designed through the state-of-the-art technology for excellent solar reflectance, thermal insulation and waterproofing properties.

Solar Reflectance

Unlike the common Hollow Glass or Ceramic Bead technology, the unique technology makes use of core-shell structured titania coated hollow glass bead as pigment.



This brings with it, excellent results in Total Solar Reflectance (TSR) Index in order to reduce surface temperature of buildings.

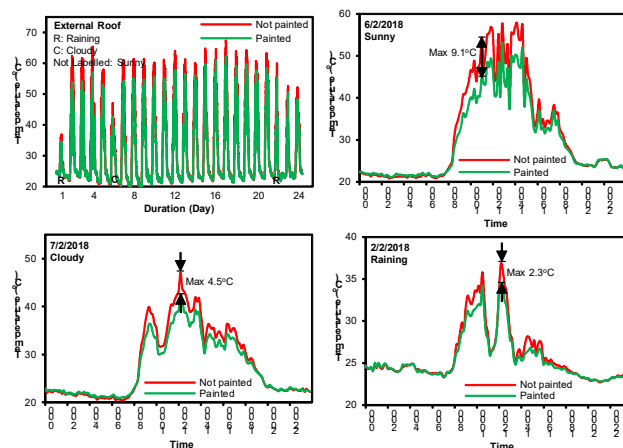


Whilst every effort is made to ensure that the contents of this material is accurate and current, it is the user's responsibility to satisfy itself of the suitability of products for its own particular purpose. As the actual use by others is beyond our control, we do not provide any guarantee, implied or expressed, as to the effects of such use. No liability is accepted by Nipo International Pte Ltd, its staff and/or its distributors, for any loss or damage, direct or indirect, that may result from using the product, information or adopting recommendations and/or suggestions as actual conditions for use are beyond our control. This information is not to be construed as absolutely complete since additional information may be necessary or desirable for exceptional or particular circumstances. Dated July 2020

RECOMMENDED USES

- Old and new concrete or metal roofs
- Refurbishment of old roofs
- Roof tiles
- Vertical (concrete/brick) wall

24-DAY ACTUAL DATA LOGGED



These charts above showed actual temperature variation over a 24- day period :

- On a sunny day, it is observed that the temperature between a *NipoThermoShield+* coated and non-Nipo coated external roof experiences a 5°C to up to 12°C variance

Imported and Exclusively marketed in India by

Nohara Trading & Services India Pvt. Ltd.

CIN: U74900DL2016FTC290800

F-6 (Basement), Lajpat Nagar III, New Delhi 110024, India

Email: info@nohara.in

NOHARA

www.nohara.in

An actual Field Record at beta-site showed 13.1°C difference

The higher the exterior temperature, the better the effect

Please refer observations below

- The effect is most significant on hotter days
- It may increase the life guarantee of roof system
- Potentially, it reduces electricity consumption

As a waterproofing coating, *NipoThermoShield+* offers:

- UV resistance and good waterproofing properties
- Excellent adhesive strength to prevent peeling
- Excellent elongation to conceal hairline cracks
- A good sealant to fill building cracks

APPLICATION

Surface Preparation

Ensure surface is clean from dust, oil, rust, grease, loose materials, moss etc. Surface should be dry for homogeneous material quality.

New concrete must be cured for at least 28 days.

Where required, treat all expansion joints, pipe joints and down pipes with *NipoClad Putty*.

Whilst every effort is made to ensure that the contents of this material is accurate and current, it is the user's responsibility to satisfy itself of the suitability of products for its own particular purpose. As the actual use by others is beyond our control, we do not provide any guarantee, implied or expressed, as to the effects of such use. No liability is accepted by Nipo International Pte Ltd, its staff and/or its distributors, for any loss or damage, direct or indirect, that may result from using the product, information or adopting recommendations and/or suggestions as actual conditions for use are beyond our control. This information is not to be construed as absolutely complete since additional information may be necessary or desirable for exceptional or particular circumstances. Dated July 2020

Protect the *NipoClad Putty* from rain and water when wet.

NipoThermoShield+ can be applied using brush, roller or sprayed.

POLYURETHANE MATERIALS ARE **NOT** COMPATIBLE WITH THIS PRODUCT.

Priming

Prime the surface with *NipoClad Primer*.

Where substrate is old and porous, prime twice.

Coating

Once the priming coat is dry, apply the 3 neat coats of *NipoThermoShield+*; each coat at right angle to the previous coat.

Allow *NipoThermoShield+* to dry for 1 to 2 hours in between coats.

Protect from rain and frost until cured. Materials will be washed off when not fully cured.

COVERAGE

- For vertical surface, the coverage is about 0.3 to 0.5kg/m² per coat
- For roof (metal/concrete/tile), the coverage is about 0.5 to 0.8kg/m² per coat
- For best result, a minimum of 3 coats will be required

Imported and Exclusively marketed in India by

Nohara Trading & Services India Pvt. Ltd.

CIN: U74900DL2016FTC290800

F-6 (Basement), Lajpat Nagar III, New Delhi 110024, India

Email: info@nohara.in


www.nohara.in

PACKING

NipoThermoShield+ comes in approx. 19kg (20L) pail.

NOTES

Actual Measurement may vary due to the condition of the substrate. This information is only a guide.

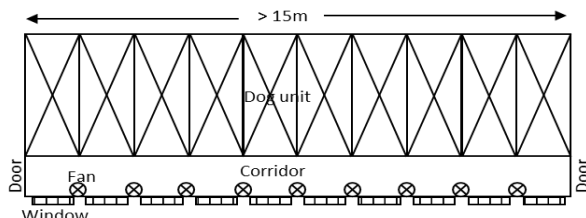
Special *PASTEL* Colours are available on demand.

1 DAY OBSERVATION

ACTUAL FIELD RESULTS AT A SINGAPORE TRIAL SITE

Schematic illustration of building structure and the weather conditions for that day :

- Size: L>15m, W~4m, H~3m (rough estimate)
- Flat metal roof coated with cool paint
- Open space: 2 doors & many windows (all open)
- Many electric fans
- Temperature testing site: External roof
- Date: Nov 9, 2017 & Time: 10am-12pm
 - Address: Dog Unit, Singapore
 - Temperature: 32 °C (Sunny)
 - Feel like: 38 °C
 - UV Index: 10
 - Wind: NW 3 km/hr
 - Humidity: 66%



Whilst every effort is made to ensure that the contents of this material is accurate and current, it is the user's responsibility to satisfy itself of the suitability of products for its own particular purpose. As the actual use by others is beyond our control, we do not provide any guarantee, implied or expressed, as to the effects of such use. No liability is accepted by Nipo International Pte Ltd, its staff and/or its distributors, for any loss or damage, direct or indirect, that may result from using the product, information or adopting recommendations and/or suggestions as actual conditions for use are beyond our control. This information is not to be construed as absolutely complete since additional information may be necessary or desirable for exceptional or particular circumstances.

Dated July 2020

Other Paint	<i>ThermoShield PLUS</i> Coated	Cooling Performance (°C)
64.9 ± 1.7	51.8 ± 1.3	Δ 13.1

TYPICAL PROPERTIES

Appearance	White
Thermosilica Pigment	55µm particle size, averages
Titania Content	Approx 20% by weight
Total Solar Reflectance	Approx 85%
Elongation	Approx 500%
Total Solid Content	Approx 55%
UV Exposure	Good
Water Penetration, Average	Zero mm. No water penetration
Drying Time	Approx 1 hour to dry Approx 24 hours to cure
Feel : By Touch	Slightly Tacky when cured

Imported and Exclusively marketed in India by

Nohara Trading & Services India Pvt. Ltd.

CIN: U74900DL2016FTC290800

F-6 (Basement), Lajpat Nagar III, New Delhi 110024, India

Email: info@nohara.in



www.nohara.in