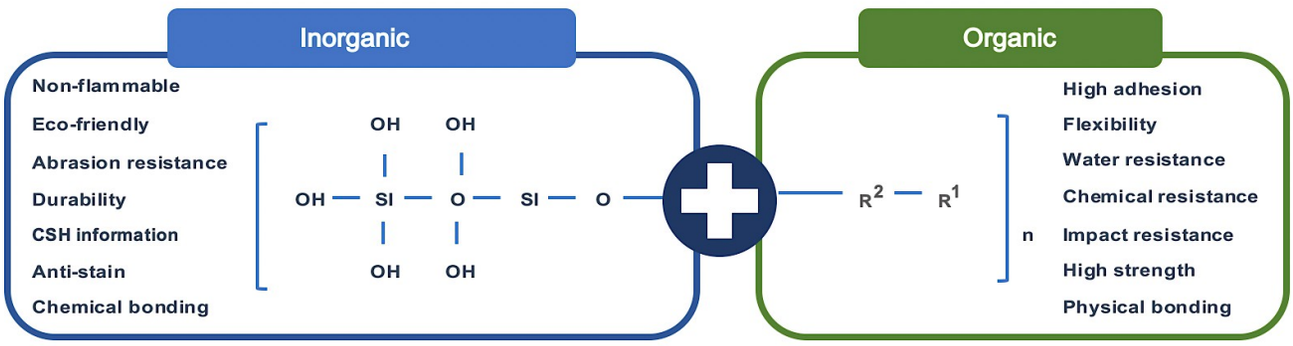
HYBRID n-COAT

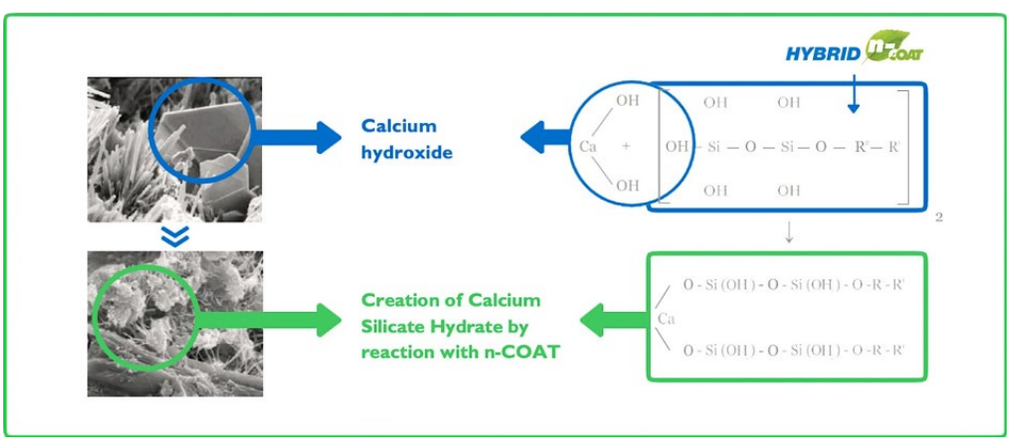
OVERVIEW

HYBRID n-COAT is a hybrid coating synthesized of inorganic components as main component and organic components as sub-component with molecular unit reaction. This hybrid reaction allows HYBRID n-COAT to possess the advantages of both inorganic and organic products, thus providing far superior hardness, abrasion resistance, chemical resistance, non-flammability, anti-bacterial and anti-stain properties compared to former organic products such as epoxy and polyurethane.



n-COAT PRINCIPLES

A by-product of cement hydration is calcium hydroxide which is soft and water soluble. Rapid erosion of calcium hydroxide causes surface dusting and leaves microscopic pits and voids in concrete floors. HYBRID n-COAT penetrates into the cementitious substrate and chemically reacts with calcium hydroxide to transform calcium hydroxide into calcium silicate hydrate (CSH) which makes the substrate stronger and more durable. Also, by penetration and its chemical reaction, HYBRID n-COAT bonds perfectly onto the floor.



CHARACTERISTIC

	Non-Flammable High temperature resistance
	Reduce accumulation dust, Super Easy to Clean and Quick Dry
	3-5 times Stronger Surface Hardness Compared with Epoxy
	High Abrasion Resistance
	Superior Anti-Bacterial Properties without any Antimicrobial Agent
	Eco-Friendly, Low Odour
	Tyre Noise Reduction
	Superior Resistance to Solvents, Oil and Chemicals
	Anti-Stain, Anti-Graffiti
	Fast Drying Time Reducing Project Downtime
	High Penetration Cured Simultaneously
	Easy to Maintain Long-term Durability
	Water Resistance
	Flexible Application on Multiple Surfaces

RECOMMENDED USE

	Manufacturing Plants and Warehouses Fast curing, Anti-stain, Non-peeling, Easy maintenance
	Restaurants, Coffee shops, and Shopping malls Abrasion resistance, Anti-stain
	Hospitals, Infant & Elderly care facilities and Schools Eco-friendly, Non-slip, Anti-stain, Non-flammable
	Parking lots, Emergency Stairs Non-slip, Abrasion resistance, Noise reduction, Anti-stain, Non-flammable

METHOD OF APPLICATION

1) Substrate Preparation

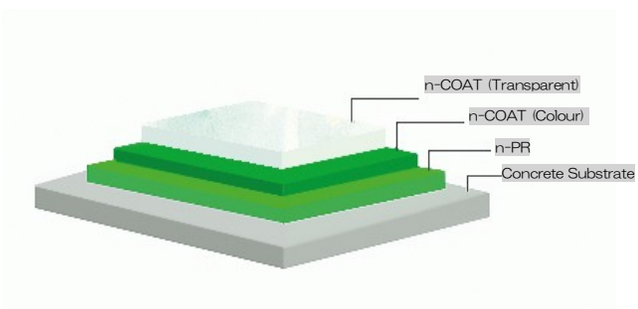
- Remove dust, water, grease, and all other foreign substances completely by grinding & sanding
- In case of water repellent surface, check adhesion before coating
- Concrete or screed substrate should be a minimum 25N/mm2, free from laitance, dust and other contamination. The substrate should be surface dry to ISO standards and free from excessive moisture vapor transmission

2) Before Application

- Put the hardener in the main resin, and mix for approximately 2 minutes using a high-speed electric mixer before application
- If working under low temperature, warming the mixture prior to application can help workability
- For larges cracks and pinholes, seal them before application using putty

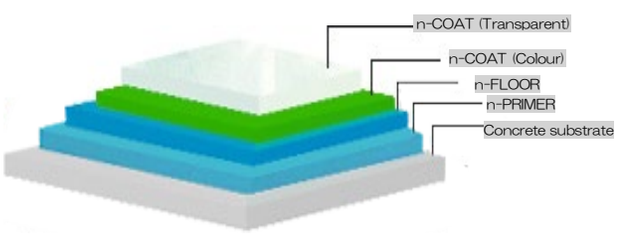
APPLICATION STEPS

1. **Standard n-COAT System - Renew Use**



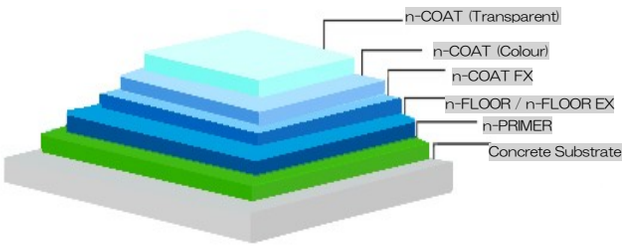
STEPS	PRODUCT	CONSUMPTION(KG)
4th Coating	n-COAT (Transparent)*AS NEEDED	7 – 8 m^2
3rd Coating	n-COAT (Color)	6 – 7 m^2
2nd Coating	n-COAT (Color)	6 – 7 m^2
1st Coating	n-PR	5 – 6 m^2

2. **Fully Set of n-COAT System - Normal Use**



STEPS	PRODUCT	CONSUMPTION(KG)
5th Coating	n-COAT (Transparent)*AS NEEDED	7 – 8 m^2
4th Coating	n-COAT (Color)	6 – 7 m^2
3rd Coating	n-COAT (Color)	6 – 7 m^2
2nd Coating	n-FLOOR (Grey, White, Black etc.)	3 – 4 m^2/3mm
1st Coating	n-PRIMER	5 – 6 m^2

3. **Full Set of n-COAT System - High Performance Use**



STEPS	PRODUCT	COMSUMPTION (KG)
6th Coating	n-COAT (Transparent)*AS NEEDED	7 - 8 m^2
5th Coating	n-COAT (Color)	6 - 7 m2
4th Coating	n-COAT (Color)	6 - 7 m^2
3rd Coating	n-COAT FX	0.3 - 0.5 m^2 (0.8 - 1 mm)
2nd Coating	n-FLOOR / n-FLOOR EX	3 - 4 m^2 / 3 mm
1st Coating	n-PRIMER	5 - 6 m^2

1. After cleaning the substrate, apply 1st coat (primer) with oil-based roller.
2. After 1st coat has penetrated into the substrate, micro-cracks and pinholes will appear on the substrate. Apply **n-COAT FX** (100 – 150grams per sqm) using rubber squeegee to seal the micro cracks and pinholes.

➢ Puttying can be skipped depending on the substrate condition

➢ Epoxy putty can be used instead of **n-COAT FX**

3. After curing of the putty, sanding is recommended for better surface finish.
4. Make a new mixture of n-COAT and apply 2nd coat and 3rd coat (color).
5. Apply 4th coat (transparent) using oil-based roller of airless sprayer.

Attention

- Recommended coating condition is at over 5°C and below 85% relative humidity. Failure to meet this condition can cause problems such as reduction of glossiness, curing delay, surface defects, etc.
- Pot-life must be strictly followed.
- Final curing takes 72 hours at 20°C.

Packing

- (Main Resin + Hardener)

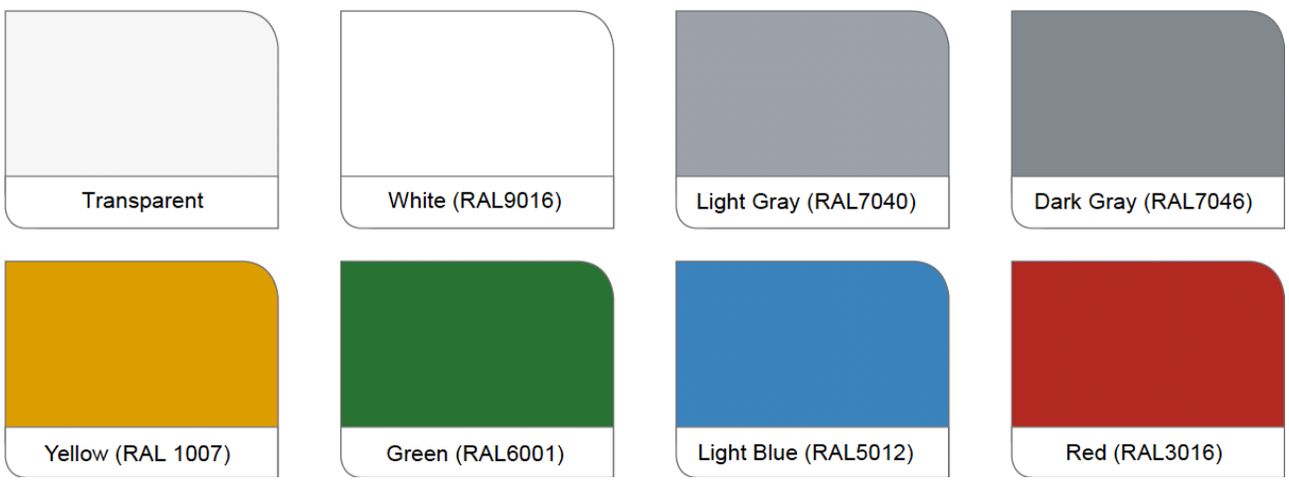
  1kg/set, 2kg/set, 3kg/set, 4/kg/set, 18kg/set

6. Properties

Finishing status	Gloss/Semi Gloss/Matt		
Color	RAL code coloring MOQ may apply		
Solid content	≥ 60%		
Gravity	1.0 ~ 1.2 (Transparent Main resin & Hardener)		
Packing	Two Package system (Main resin / Hardener)		
Mixing ratio (By weight)	〈Clear〉 Main resin : Hardener = 3.5 :1 〈Colored〉 Main resin : Hardener = 1.5 :1		
Coating frequency	2~3 times		
Dry coating thickness recommended	100 ~ 300㎛ (Changed depending on surface condition)		
Theoretical coating dimensions	3㎡/kg (3 times)		
Drying time (set-to-touch)	10℃	20℃	30℃
	6 hours	4 hours	2 hours
Pot-life	10℃~20℃	30℃	
	1 hour	30 mins	
Recoating interval	1 ~ 24 hours (set-to-touch recommended)		
Shelf-life	1 year guarantee for unopened products		

STANDARD COLORS

* Custom Colour Available



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