

FLOOR COATING SYSTEM

Epoxy Mortar Floor Coating [DHDC-6500]



- ◆ **Use**
 - Floors where nonskid function is required such as poolside, sports stadium stand and slopes
 - Floors where water resistance, abrasion resistance and chemical resistance are required for a long period of time
 - Factory floors where heavy vehicles operate

- ◆ **Features**
 - Excellent abrasion resistance makes the floor comfortable to walk
 - Various colors make aesthetic appearance, Seamless flat layer makes the surface clean
 - Excellent durability, impact resistance, water resistance and chemical resistance

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	DHDC-6500P	100	1	Enhances plastering workability
Intermediate Coat	DHDC-6500M	5~10mm	1	Transparent /Colored
Topcoat	DHDC-6500T	300	1	Transparent /Colored
Total		5,400~10,400	3	

Concrete Densification Agent [DENSIL CDA-300(S)]



- ◆ **Use**
 - Bare concrete floor surface where dustproof, strengthening, abrasion resistance is required such as warehouse and factory

- ◆ **Features**
 - It is inorganic coating for reinforcing concrete surface
 - It will density, harden, seal and dustproof the concrete by making the concrete surface more durable
 - Penetration effect into concrete, forming a chemical reaction that covers the pores on concrete
 - Surface strength and increase abrasion resistance
 - Neutralizing alkali to prevent from the concrete aging

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Topcoat	DENSIL CDA-300(S)		1~2	Low-pressure spray

Anti-skid Pavement Coating [NOROO WAY MMA]

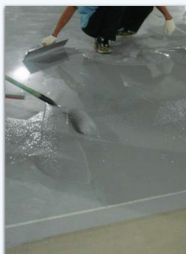


- ◆ **Use**
 - Handicap Parking Lots, Driveways, Bus Bays, Cycling Lanes, Pedestrian Walkways, Inclines, Demarcation Zones etc

- ◆ **Features**
 - Environmentally-friendly Methyl-MethAcrylate (MMA) pavement protection
 - Enhancement system for both flexible and rigid pavements with anti-skid and anti-slip properties
 - Quick-curing - cures under 1hr day/night, strong adhesion to asphalt, concrete, tiles and metal surfaces
 - Strong resistance to UV, chemicals, fuels and oils
 - It can be applied as a single color (e.g. for handicap parking lots), and as a two-color stenciled coating (e.g. for decorative pavements and demarcation)

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	NOROO WAY C-100	400	1	If necessary
Topcoat	NOROO WAY A or B-PT	1~2mm	1	Rake/Hopper
Total		1,400~2,400	2	

Sound-buffering Solvent Free Epoxy Floor Coating [DHDC-6200(LS)]



- ◆ **Use**
 - For heavy traffic area where noise control is required such as parking lot

- ◆ **Features**
 - Embossing pattern is formed to reduce tire contact area and noise from the floor
 - Solvent free type coating film has superior durability
 - Excellent workability by using texture roller

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	DNY-200	50	1~2	Depends on the surface condition
Intermediate Coat 1	DHDC-6200	1~2mm	1	If necessary
Intermediate Coat 2	DHDC-6200(LS)	1mm	1	Texture roller
Topcoat	CLEANPOXY 3100	40	1	If necessary
Total		2,090~3,090	2~5	

Environmentally Friendly Water Based Epoxy Floor Coating [SOON & SOO CLEANPOXY(W)]



- ◆ **Use**
 - Topcoat for concrete surface of interior building or basement
 - For production lines affected by organic solvent
 - Public places where solvent type product cannot be used

- ◆ **Features**
 - Environmentally friendly product made of water based epoxy resin
 - Excellent adhesiveness, water resistance, abrasion resistance and workability
 - Fast dry time and easy to blend
 - Recommend to use within 1.5 hour after mixing base and hardener

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	SOON & SOO CLEANPOXY(W) Primer	40	1~2	Depends on the surface condition
Topcoat	SOON & SOO CLEANPOXY(W) Topcoat	80	2	
Total		120	3~4	

Global NOROO is
Seeking a Larger Presence in the Global Stage



NOROO Paint & Coatings Co., Ltd.

NOROO Paint & Coatings in South Korea was established in 1945 and has been expanding its global presence. The company has the strength of producing paint products for architectural, industrial and automotive refinishing coatings.



NOROO Coil Coatings Co., Ltd.

NOROO Coil Coatings in South Korea is a company making paints for PCM and the first to develop and manufacture paints for colored steel sheets and surface treatments for plated steel sheets applying to construction material and appliances.



NOROO Paint(Shanghai) Co., Ltd.

NOROO Paint in Shanghai, established in December 2002, makes NOROO able to compete with the world famous companies and aims its sales growth. NOROO Paint in Shanghai provides the best service in the paint market in China.



NOROO HUALUN Advanced Materials Co., Ltd.

NOROO HUALUN Advanced Materials in China, a joint venture between NOROO and HUALUN, manufactures polyester, acrylic, alkylid, urethane, epoxy resins and hardeners and supplies PCM, industrial, architectural, marine and heavy duty coatings to the market.



Shanghai KINLITA Chemical Co., Ltd.

Shanghai KINLITA Chemical in China, which NOROO has invested in, manufactures and sells quality coating products for metal and plastic parts of automobiles, light industries, home appliances, electronic equipment and construction materials through China.



NOROO KAYALAR Paint Co., Ltd.

NOROO Kayalar Paint in Turkey, a joint venture between NOROO and Kayalar Kimya, is expanding its market from the industrial coatings to the automotive plastic paint market through NOROO's high quality products and Kayalar's business network.



NOROO Automotive Coatings Co., Ltd.

NOROO Automotive Coatings (NAC) in South Korea was established in 1995 as a joint venture company between NOROO and Nippon Paint. As a specialized company for automotive OEM coatings, NAC provides the world-class products with their market-leading technology. NAC is currently supplying their products to Hyundai, KIA, Renault Samsung, GM Korea and SSangyong.



NOROO Coil Coatings (Thailand) Co., Ltd.

NOROO Coil Coatings (Thailand) Co., Ltd. has been established for the purpose of expanding its business in Asia area. The company manufactures and sales Pre Coated Metal (PCM) and surface treatment focusing on the coil coating business.



NOROO-NANPAO Paint & Coatings (Vietnam) Co., Ltd.

NOROO-NANPAO paint & Coatings in Vietnam, a joint venture between NOROO and NANPAO, produces architectural, industrial, automotive refinishing coatings and surface treatment.



NOROO VINA

NOROO established NOROO VINA in Vietnam for rapidly growing Vietnamese mobile coating market in 2012. Based on the strong technology of NOROO Paint, the company is constantly expanding its market share in Vietnam.



SHEENLAC-NOROO Coatings India Pvt., Ltd.

SHEENLAC-NOROO Coatings India Private Limited, in India, a joint venture between NOROO and SHEENLAC, has been established for the purpose of increasing the sales in India. The core business of the company is automotive, industrial and architectural coatings.



NOROO KOSSAN Paint Sdn. Bhd.

NOROO KOSSAN Paint in Malaysia, a joint venture between NOROO and KOSSAN, has been established for the purpose of increasing the sales in the Southeast Asia region. The company develops markets for industrial coatings including PCM and surface treatments for plated steel sheets.

NOROO Paint & Coatings Co., Ltd.

351, Bakdal-ro, Manan-gu, Anyang-si, Gyeonggi-do, 430-849 Korea Tel : (82-31) 467-6471 E-mail : bypark@noroo.com

Website : <http://www.noroo paint.com/en/>

Paint guide : <http://www.noroo paint.com/paintguide/eng/>

WATERPROOFING
FLOOR COATING
SYSTEM

NOROO

NOROO Paint & Coatings

FLOOR COATING SYSTEM

Solvent Type Epoxy Floor Coating [CLEANPOXY 3100]



- ◆ **Use**
 - Floors where dustproof is required such as warehouse and factory
 - Interior floor of various buildings
 - Floors where aesthetic appearance is required such as an office
- ◆ **Features**
 - Excellent abrasion resistance and adhesiveness make the floor comfortable to walk
 - Various colors make aesthetic appearance
 - Excellent stain resistance and detergency help lower the maintenance cost

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	DNY-200	50	1~2	Depends on the surface condition
Topcoat	CLEANPOXY 3100	80	2	
Total		130	3~4	

Solvent Free Epoxy Type Flooring for Intermediate and Topcoat [DHDC-6200]



- ◆ **Use**
 - Floors where dustproof is required such as electronic part & precision machine factory
 - Factory floors where heavy vehicles operate
 - Floors of underground parking lot, electrical room and various factories
- ◆ **Features**
 - Seamless flat layer makes the surface clean
 - Excellent leveling, image sharpness, gloss and scratch resistance
 - Able to adjust the film thickness within 1~3mm depending on usage and feature

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	DNY-200	50	1	Depends on the surface condition
Intermediate and topcoat	DHDC-6200	500	1	Scraping
		2~2,5mm	1	Rake, Spray
Total		2,550~3,050	3	

Acid Resistance Solvent Free Epoxy Floor Coating [CLEANPOXY Acid Resistant Lining]



- ◆ **Use**
 - Battery-handling facility, plating factory, acid etching treatment facility, etc.
 - Semiconductor manufacturing factory, chemical plant and laboratory
- ◆ **Features**
 - Acid resistance is significantly improved than the existing solvent free epoxy
 - Special epoxy floor coating system with excellent chemical resistance to sulfuric acid, hydrochloric acid, nitric acid, acetic acid, phosphoric acid, alkali, etc.

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	DNY-200	50	1~2	Depends on the surface condition
Intermediate and topcoat	CLEANPOXY Acid Resistant Lining	2~3mm	1~2	1st coat is scraping
Total		2,050~3,050	2~4	

Elastomeric Urethane Floor Coating for Athletic Stadium [Elastomeric Urethane Series]



- ◆ **Use**
 - Places where elastomeric floor system is required such as sports facilities, tennis court, athletic track, etc.
- ◆ **Features**
 - Excellent abrasion resistance and tensile strength
 - Performs various colors to make aesthetic appearance
 - Seamless flat layer enables the floor comfortable to walk and easy to clean
 - Best athletic performance is possible with excellent elasticity and shock absorption
 - Excellent durability, impact resistance, water resistance and chemical resistance

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	DHDC-1000P	50	1	Transparent
Intermediate Coat 1	DHDC-2000TM	1mm	1	Scraping
Intermediate Coat 2	DHDC-2000TH	2mm	1	Rake, Scraper
Topcoat	DHDC-3000(H)	40	1	Rake, Scraper
Total		3,090	4	Brush, Roller, Spray

High Functional Concrete Floor Coating [ECO-CRETE]



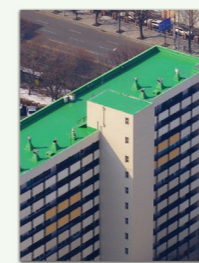
- ◆ **Use**
 - For cold and frozen warehouse, food processing factory, beverage factory and distillery
- ◆ **Features**
 - Three-component product composed of base, hardener and powder
 - Excellent abrasion, chemical and impact resistance
 - Solvent free type environmentally friendly product with excellent boiling resistance
 - Able to make at least 4mm thick film in one coat
 - Able to apply on a concrete floor with high percentage of water content

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	ECO-CRETE 200	0,5mm	1	
Topcoat	ECO-CRETE 200	3,5~5,5mm	1~2	
Total		4~6mm	2~3	

WATERPROOFING COATING SYSTEM



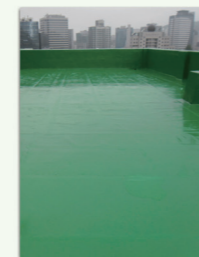
Elastomeric Urethane Waterproofing System [Elastomeric High Hard]



- ◆ **Use**
 - Exposed water-proofing on concrete building
- ◆ **Features**
 - Superior abrasion resistance and tensile strength
 - Various colors make aesthetic appearance
 - Seamless flat layer makes the floor comfortable to walk and easy to clean
 - Best athletic performance is possible with excellent elasticity and shock absorption
 - Superior durability, impact resistance, water resistance and chemical resistance

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	DHDC-1000P	50	1~2	Depends on the surface condition
Intermediate Coat	DHDC-2000TSH	3mm	1~2	Scraping(0,5mm)
Topcoat	DHDC-3000(H)	40	1~2	
Total		3,090	3~6	

One Component Elastomeric Urethane Exposure Type Waterproofing System [NEW SINGLETHANE]



- ◆ **Use**
 - Waterproofing system for rooftops of apartment and building
 - Waterproofing system for rooftops of small and middle size concrete building
- ◆ **Features**
 - Easy-to-use one component type without blending process between base and hardener
 - Excellent abrasion resistance and adhesiveness
 - Semi-permanent in one coating with excellent elasticity and elongation
 - Partial repair is possible and economical with low maintenance

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	DHDC-1000P	50	1~2	Depends on the surface condition
Intermediate Coat	NEW SINGLETHANE	2mm	2	
Topcoat	Cleanthane 3000K	40	1~2	
Total		2,090	4~6	

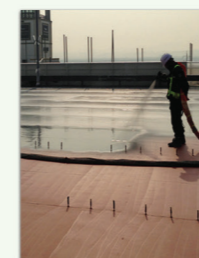
Waterbased Elastic Waterproofing System [SUTHANE BANG]



- ◆ **Use**
 - Exposure type waterproofing for rooftops of apartment and concrete building
- ◆ **Features**
 - Environmentally friendly product made of water-based acrylic emulsion
 - Excellent adhesion to concrete, resistance to water, cracks due to shrinkage & expansion of concrete
 - Excellent in self-leveling property up to 1mm coating film thickness
 - Excellent durability, chemical resistance
 - The coated layer features elasticity enough to hold against cracks or damage

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	CLEANPOXY(W)	50	1~2	Transparent
Topcoat	SUTHANE BANG	1mm	4	Brush/Roller
Total		1,050	5~6	

Fast-curing Waterproofing System [PROTECH]



- ◆ **Use**
 - Rooftop waterproofing, Swimming Pools, Restaurant Kitchens, Basements and Underground Structures, Outdoor car parks
- ◆ **Features**
 - Protects and reinforces structures, strong adhesion to substrates
 - Can be applied on concrete, metallic and tiled surfaces
 - High elasticity and compression strength
 - Strong resistance to chemicals
 - Seamless and air-tight seal

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Primer	Primer	50	1	
Intermediate Coat	DHDC-1000P	1mm	1	
Intermediate Coat	CLEANTHANE 2100	2mm	1	Graco equipment
Topcoat	DHDC-3000(H)	40	1	
Total		3,090	4	

WATERPROOFING COATING SYSTEM



Two Component Elastomeric Urethane Exposure Type Waterproofing System [Cleanthane]



- ◆ **Use**
 - Exposure type waterproofing for rooftops of apartment and concrete building (KS F 3211 Urethane rubber type 1)
- ◆ **Features**
 - Finish the surface with seamless and flat layer
 - Excellent physical property such as adhesion and waterproof
 - Semi-permanent in one coating with excellent elasticity and elongation
 - Forms a perfect waterproof layer and easy to patch up
 - Can make a thick film in one coat
 - Waterproofed layer is little affected by cracks on the substrate
 - Superior dustproof function and fouling resistance enable the surface always be kept clean

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	Cleanthane 1000	50	1~2	Depends on the surface condition
Intermediate Coat	Cleanthane (KS F-3211)	3mm	2	Scraping(0,5mm)
Topcoat	Cleanthane 3000K	40	1~2	
Total		3,090	4~6	

Two Component Non-Tar Urethane Non-Exposure Type Waterproofing System [Blackthane 2100NT(KS)]



- ◆ **Use**
 - Non-exposure waterproofing for various buildings (KS F 3211 Urethane Rubber Type 2)
- ◆ **Features**
 - Forms seamless and flat layer
 - Non-exposure type waterproofing system without harmful tar ingredient
 - Superior physical properties (elongation rate, adhesiveness, elasticity and impact resistance, etc.)

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	Blackthane 100	50	1~2	Depends on the surface condition
Intermediate Coat	Blackthane 2100NT(KS)	3mm	2	Non-Tar Type
Total		3,050	3~4	

Two Component Energy Saving Urethane Exposure Type Waterproofing System [Energy Saver Urethane(R)]



- ◆ **Use**
 - Exposure type waterproofing system for rooftops of apartment and building (CRRC, ENERGY STAR)
- ◆ **Features**
 - Functional product with high reflectivity and low heat conductivity
 - Excellent energy saving effect during air conditioning and heating
 - Semi-permanent in one coating with excellent elasticity and elongation
 - Forms a perfect waterproof layer and easy to patch up
 - Finish surface with seamless and flat layer
 - Excellent physical property such as adhesiveness and waterproof
 - Can make a thick film in one coat

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	Energy saver urethane(R) Primer	50	1~2	Depends on the surface condition
Intermediate Coat	Energy saver urethane(R) Base Coating	3mm	2	Scraping(0,5mm)
Topcoat	Energy Saver Urethane(R) Topcoat	40	1~2	
Total		3,090	4~6	

Elastomeric Urethane Waterproofing System [Elastomeric Hard Type]



- ◆ **Use**
 - School, hospital, library and other places where noise-proof function is required
- ◆ **Features**
 - Excellent abrasion resistance and tensile strength
 - Various colors make aesthetic appearance
 - Seamless flat layer makes the floor comfortable to walk and easy to clean
 - Best athletic performance is possible with excellent elasticity and shock absorption
 - Superior durability, impact resistance, water resistance and chemical resistance

Process	Description	Dry film thickness(μm)	Number of coat	Remark
Surface preparation	Eliminate foreign matters (such as dust and oil) and dry			
Undercoat	DHDC-1000P	50	1~2	Depends on the surface condition
Intermediate Coat	DHDC-2000(TH)	3mm	1~2	Scraping(0,5mm)
Topcoat	DHDC-3000(H)	40	1~2	
Total		3,090	3~6	