



ECOPRIME NPS

SINGLE-COMPONENT, WATER-BASED, ZERO-VOC NON-POROUS SURFACE PRIMER

WATERPROOFING & COATING PRIMERS

High adhesion water-based primer for Non-Porous Surfaces

KEY FEATURES

- General primer for liquid waterproofing systems
- Excellent adhesion over non-absorbent surfaces
- Easy application by roll or brush
- Single component
- Water-based
- Fast drying
- Zero-VOC

APPLICATIONS

Concrete
Metal
Tiles

Single-component water-based primer composed of acrylic resins supplemented with special mineral additives to greatly increase surface adhesion for acrylic coatings. The material is characterized by excellent adhesion on extremely smooth and non-absorbent substrates such as ceramics, metal surfaces, and smooth concrete. The product is a specialized zero-VOC primer for interior and exterior liquid waterproofing and coatings.

TECHNICAL DATA

FEATURES		UNIT
Yield	396	ft ² /gallon
Aspect	Liquid	-
Color	Transparent	-
Dilution	Maximum 5% (Distilled Water)	-
Application Temperature	40-95	°F
Drying Time (T=70°F(20°C); RH=40%)	4	Hours
Storage	12 (Dry location away from sunlight in original container)	Months
Pot Life	12 (Cover surface of liquid in layer of plastic to prevent activation)	Months
Packaging	Bucket: 3.10 gallon (44lbs - 20kg) Pallet: 48 buckets (2115lbs - 960kg)	-

TEST RESULTS	RESULTS	UNIT	REGULATION
Adhesion to Concrete (Adhesion Test Pull-Off)	240	Psi	ASTM D4541 - EN ISO 4624
	1.66	MPa = N/mm ²	
Adhesion to Concrete (Adhesion Test Pull-Off)	604	Psi	ASTM D4541 - EN ISO 4624
	4.17	MPa = N/mm ²	
Adhesion to Concrete (Adhesion Test Pull-Off)	217	Psi	ASTM D4541 - EN ISO 4624
	1.50	MPa = N/mm ²	
Adhesion to Concrete (Adhesion Test Pull-Off)	192	Psi	ASTM D4541 - EN ISO 4624
	1.33	MPa = N/mm ²	
Water Vapor Permeability	S _d = 0.49	m	EN ISO 7783

*The above data, even if carried out according to tested methodologies, are indicative and may change when specific building site conditions vary.

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KINGFIELD CONSTRUCTION PRODUCTS – 20 NORTH 4TH STREET, SUITE 300, MINNEAPOLIS, MINNESOTA 55401

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PREPARATION OF THE SUPPORT

The support must be completely hardened and resistant enough. The surface must be thoroughly clean, dry, without debris, detaching parts, and without vapor drive. In case of vapor drive, use a Kingfield approved liquid vapor barrier primer for acrylic products (contact your Kingfield Representative).

The support must be as regular and as workable as possible. Before the application, it is recommended to protect any objects or areas that will not be coated.

Concrete

In presence of a new or green concrete substrate, it is not recommended to use this product. See Ecoprime CVB. If the concrete has cured for a minimum of 28 days and is not damp, Ecoprime NPS may be used.

Restore damaged or loose concrete with non-shrink hydraulic cement.

On screeds in contact with the ground or subjected to rising damp, use Ecoprime WP (see PDS) instead of Ecoprime NPS.

Tiles

Old tiles must be well bonded to the support (otherwise remove them and fill with non-shrink cement mortar) and must not present on the surface any debris or detaching parts such as greases, waxes, oils, or chemical products, etc.

For application over glazed tiles, Ecoprime NPS can be applied directly to surface, but it is recommended to sand the surface with diamond slitting wheel before application.

Given the wide range of tiles that can be found on the market, it is recommended to perform an adhesion test in order to verify Primer and Coating Adhesion. If there is the need to re-plaster the joints, use a non-shrink hydraulic mortar as filler (contact your Kingfield Representative).

Metal

For Iron or Steel surfaces that may form rust, before the application of Ecoprime NPS, apply the anti-rust pre-primer Rust Shield (see technical data sheet).

If the metallic surface is painted, it is recommended to perform an adhesion test to verify the suitability of the application, or remove paint with non-solvent based remover or sand-blast surface.

For non-rusting metals, clean the surface to remove any oils or residues before coating with Ecoprime NPS.

**For all those supports not mentioned in technical data sheet please contact Kingfield technical department.*

MIXING

Mix perfectly the product to make it homogeneous. In case of extremely hot climatic conditions it is possible to add maximum 5% of clean water.

The addition of a higher water percentage could compromise the efficiency of the product. Never add other substances to the mixture.

APPLICATION

Apply Ecoprime NPS in one coat by long-haired roller or by brush, taking care to completely cover the surface.

DRYING TIME

At a temperature of 68°F (20°C) and 40% relative humidity, the product dries in about 4 hours.

- Drying time is influenced by environmental relative humidity and by temperature and may significantly change.
- Once the product is dry, protect it from sun, ice, and water.
- If applied over metal surfaces, Ecoprime NPS curing time may double. It is recommended to do a test area to check the curing time.
- If applied with a higher yield than the recommended, drying time may significantly increase.

Once Ecoprime NPS is completely dry, it can be coated with Kingfield acrylic, polyurethane, or epoxy resin coatings, as well as Kingfield walkable, reflective, or vehicle accessible coatings.

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APPLICATION SUGGESTIONS

- Do not apply when the temperature is lower than +40°F (+5°C) or higher than +95°F (+35°C).
- During summer season apply the product in the cooler hours of the day.
- If used outside, do not apply with imminent threat of rain or ice, in conditions of strong fog or with relative humidity levels higher than 70%.
- Do not wet the surface treated with the primer before the application of the waterproofing or surface coating.

CLEANING PROCEDURE

Primer is water-based and needs only water to clean the tools or any over-application. Wash tools with water before the product hardens. Soap is not required.

STORAGE

Store new and used product in its original container and ensure the top is sealed closed, keep in well ventilated areas, away from sunlight, water, and ice. Store at temperatures between +40°F (+5°C) and +95°F (+35°C).

Pot Life & Storage Time: 12 months

HEALTH & SAFETY

While handling always use personal protective equipment (PPE) and follow instructions described in SDS.

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