

Firm Penetrating Primer

YP - 315

WATER-BASED PENETRATING PRIMER WITH NANOTECHNOLOGY FOR INORGANIC SUBSTRATES



Features

- Easily penetrates and strengthens fragile inorganic substrates (Polymer particles 30 – 50 nm, penetrates 2-3 mm)
- Since it is water-based, it does not emit organic solvents and has almost no odor (Can be used indoors)
- Ideal for repairing concrete and mortar damaged by rain and frost, suitable for difficult-to-apply substrates such as plaster, sand walls, and fiber walls.
- Since it is a one-part solution and used undiluted, there is no need to mix or dilute it.
- It can be applied at temperature as low as 0°C.

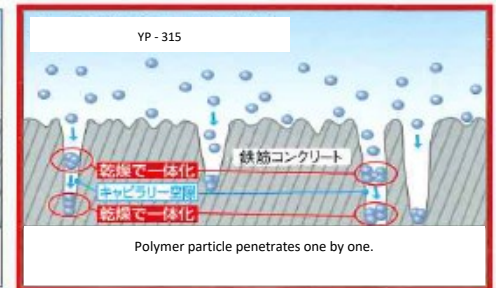
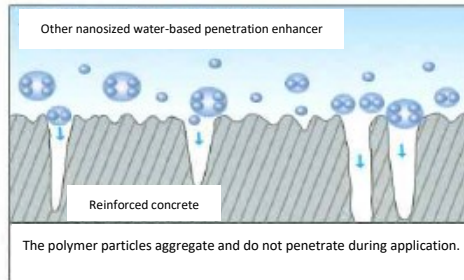
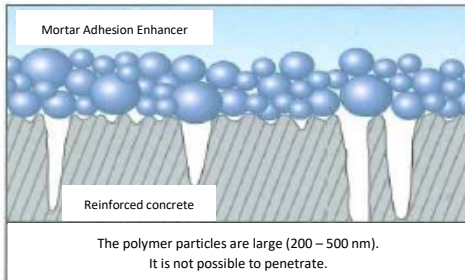
Packing

Content	Packaging	Appearance
14 Kg	Poly pale	Milky-white translucent liquid



Penetration Mechanism

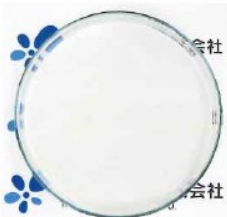
Using advanced nanotechnology, highly stable polymer particles (30-50 nm) can deeply penetrate weak layers, enhancing their strength. This penetration mechanism has been patented.



When the surface of inorganic substrates such as concrete and mortar is vulnerable, applying finishing materials on top will not achieve the expected adhesion strength and poses a risk of peeling. YP-315, a water-based primer, is penetrating and strengthening the vulnerable substrate and makes it possible to apply finishing materials.

Comparison With Other Company Products

■ Difference in Particle Size



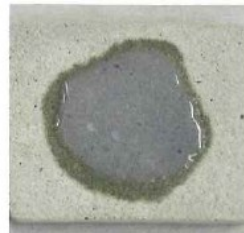
General water-based penetration enhancer



YP- 315

YP – 315 has very small polymer particles, so they reflect less light and become translucent.

■ Difference in penetration (5 minutes after application)



General water-based penetration enhancer



YP - 315

YP – 315 has a high degree of penetration, it absorbs quickly.

Plant Base Co., Ltd.

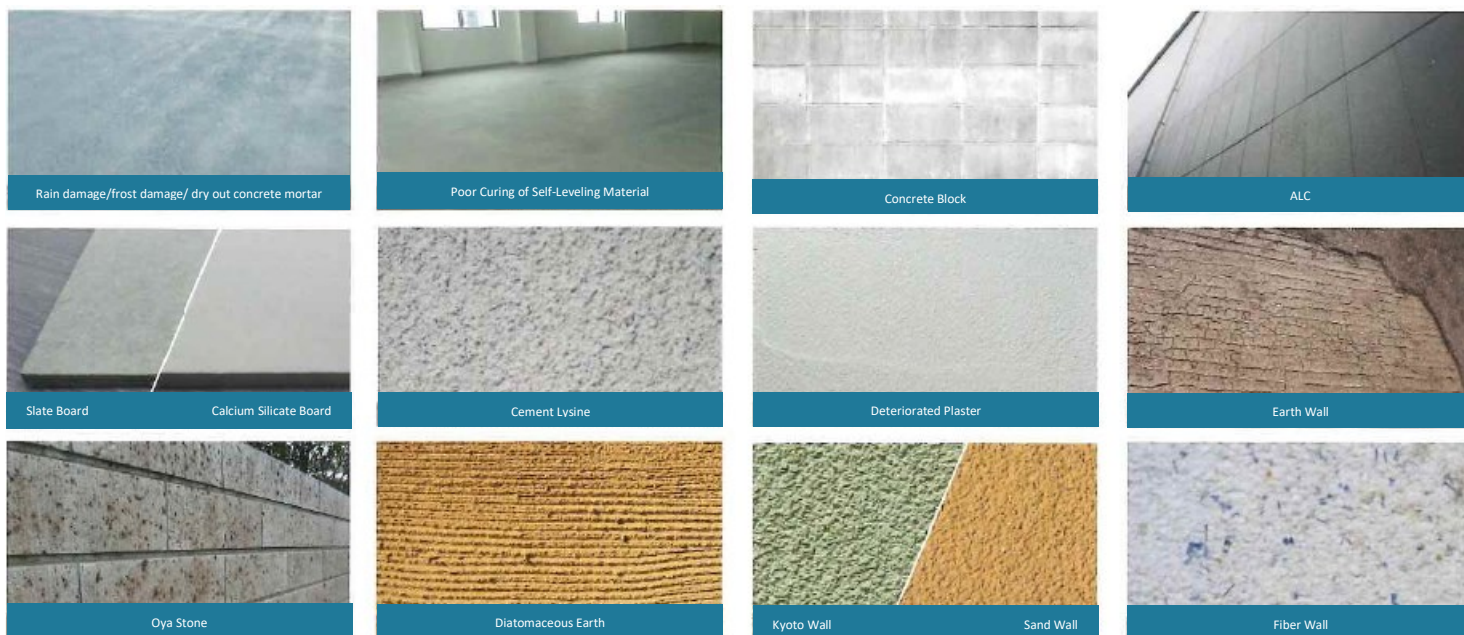
53-2 Sanrizuka, Narita City, Chiba Japan,
286-0111
Tel: +81476 35 3160 Fax: +81476 35 3170
<http://plant-base.com/>



Yabuhara Sangyo Co., Ltd.

546 Angyokitaya, Kawaguchi City, Saitama
Japan, 334-0054
Tel: +8148 297 4111 Fax: +8148 – 290 – 1198
<https://www.yabuhara-ind.co.jp>





In addition, use YP-315 for strengthening the penetration of inorganic bases, weathered surfaces, neutralized bases and for dust proofing. Also, please use it as a water absorption adjustment material for inorganic material.

- No effect can be expected for organic coating like paint, and non-absorbent materials such as wood, metal and plastic.
- Oil-based or polished lime plaster, high-strength concrete and GRC boards may not absorb the product well. Surface treatments like sanding might improve application.
- Some types of bricks absorb water without limit, so there may be cases where no improvement in strength can be expected. Please conduct a test application in advance to check.
- While the product penetrates and strengthens surfaces like Kyoto wall and Fiber walls, it does not enhance the adhesion strength of the underlying substrate.

How to use

1. Handling weak substrates
 - Remove latency and fragile parts with a disc sander, polisher, or peel and clean it.
 - If you wash it with water, make sure the surface is sufficiently dry (It will not penetrate if it is not dry).
2. Apply YP – 315
 - Use wool roller, brush, watering can, sprayer to apply YP 315 until it remains on the surface.
 - If the substrates is highly absorbent, apply several times within 1 hour depending on the situation¹. Then, let it dry².

¹Estimated application amount Interval: 1 hour

Application amount (g/m ²)	Standard construction area
200 - 500	28-70 m ² /14 kg

Substrates	Consumption (kg/m ²)	Application (times)
Kyoto wall, sand wall	0.2 – 0.5	1 – 2
Concrete block, Oya stone	0.5 – 0.8	2 – 3
Frost & rain damaged concrete	0.2 – 0.5	1 – 2

² Cure at 23°C for 2 to 3 hours (after the water has evaporated) before proceeding to the next process. For thicker applications such as mortar, wait until the next day.

3. Finishing material construction

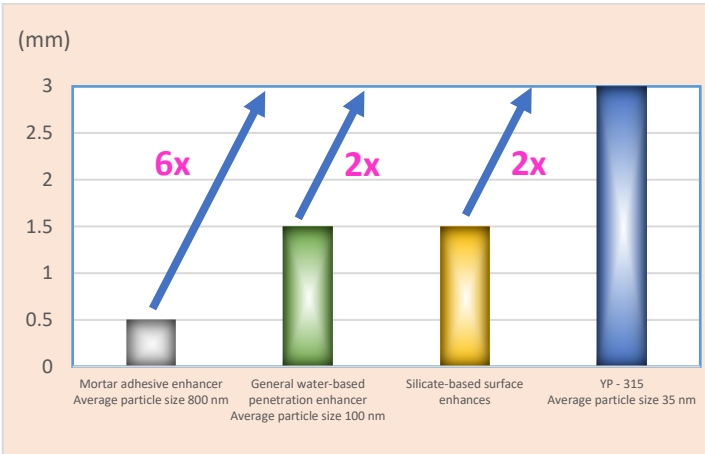
Apply the finishing materials such as mortar, exterior materials, flooring, and waterproofing materials according to the standard specifications for intended use. (In principle, if you have a special primer, please apply it).

³If using a solvent-based primer as an undercoat over YP-315, ensure that the solvents are thoroughly evaporated and dried before applying the top coat. (Please contact for more information)

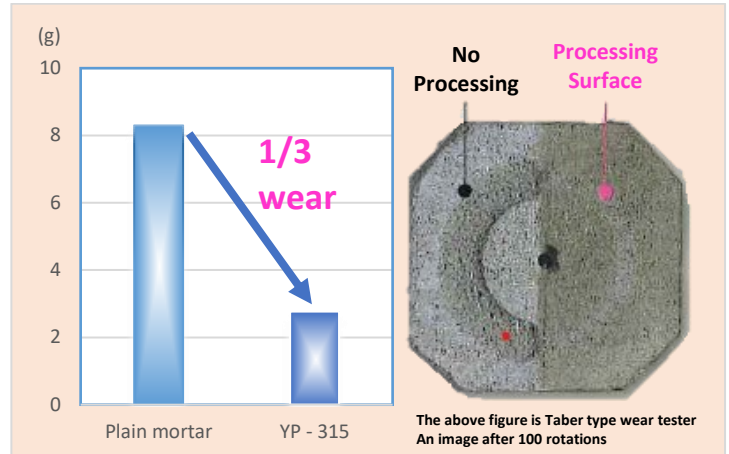
Type of finishing material	Necessity of Special Primer (Water absorption adjustment for cement-based materials)
Cement material	Not required ³ (Self-leveling material is required)
Water-based paint	Not required ⁴
Weak solvent paint	Required
Strong solvent paint	Required

As general rule, if there is a special primer for finishing material, please apply it.
⁴For waterproof material (elastic materials), be sure to apply special primer.

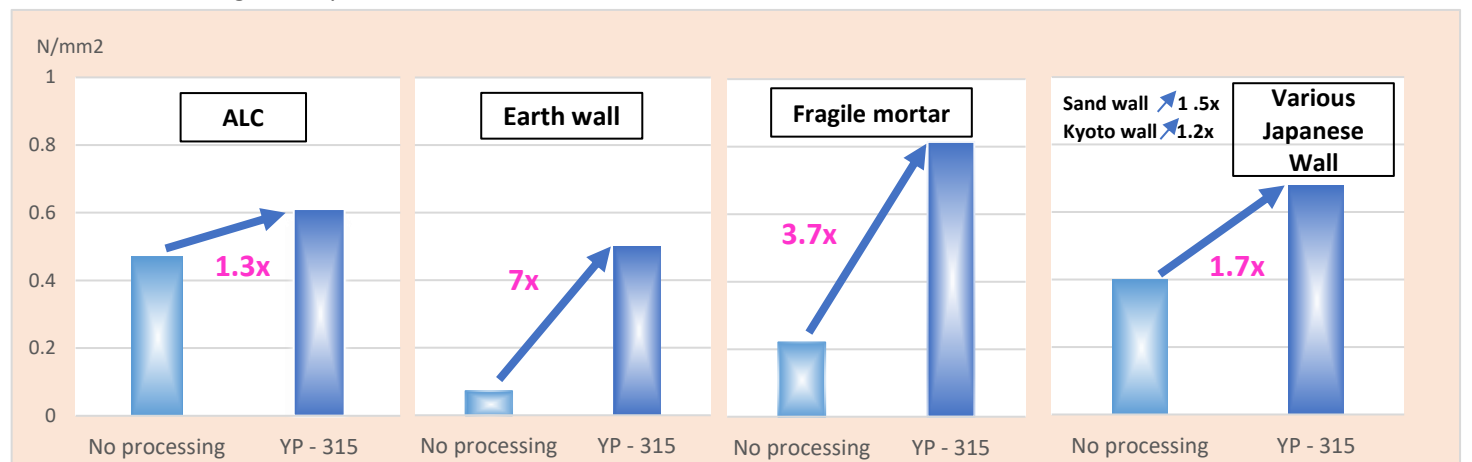
■ Penetration Depth Comparison Test with Various Primer



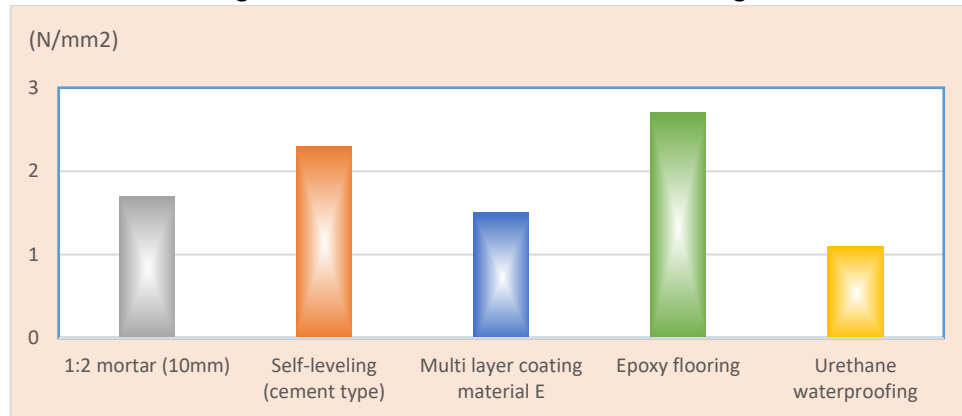
■ Wear Resistance Comparison Test



■ Adhesive strength comparison test for various substrates



■ Adhesion strength between YP - 315 and various finishing materials



Handling and Safety Precautions

Handling Precautions

- Not suitable for locations that are constantly flooded.
- It may gel if it reacts with acid.
- If YP-315 is applied and the application interval has passed, or if it is reapplied to a substrate that has reached saturation with the primer, it may not penetrate and could form a film-like layer.
- If you apply too much and there is a buildup, wipe it off with a cloth.
- Ensure application is done at temperatures above 5°C.
- If organic elastic adhesives for tiles are used in the next step, please be aware that certain types may cause issues.

Safety Precautions

- Handle in a well-ventilated place to prevent inhalation and contact with eyes and skin. Therefore, please wear protective equipment (safety glasses, gloves, etc) depending on the situation.
- If it gets into the eyes, rinse with clean water a few minutes and see a doctor immediately.
- If it adheres on the skin, it may cause skin irritation, so wash with water immediately.

- The storage temperature should be 0°C to 40°C
- Avoid direct sunlight and store at room temperature.
- Please take measures to prevent the load from collapsing to prevent it from falling or being damaged.
- In case of spills, absorb with a cloth or mixed with cement, sawdust, or sand to form a mortar-like material for solid recovery
- Do not dispose into drainage systems, river, lakes, etc. Dispose of as industrial waste appropriately
- Use within 1 year.

- If you feel unwell after inhaling, move to a place with fresh air immediately and gargle with water or warm water. Seek medical attention if needed.
- If accidentally swallowed, rinse your mouth, do not force vomiting, and seek medical attention immediately.

For detailed information, please refer to the Safety Data Sheet (SDS).