# **FORTIFIER Plus™**

IMPREGNATING, PERMANENT CONSOLIDATOR AND WATER REPELLENT.
PREMIUM PROTECTION FROM SALT SPALLING & FREEZE-THAW SPALLING.

Superior protection for very porous building materials, including natural stone, which are exposed to saltwater or freeze-thaw conditions.

#### **SUITABLE SURFACES**

- Horizontal and vertical surfaces, including building envelopes (verticals), saltwater pool surrounds, cladding, paving, blockwork, brickwork.
- Appropriate for new and restored materials, including: Travertine, sandstone, limestone, precast concrete, cast stone, Saltillo, terracotta, grout, concrete blockwork and very porous bricks.

## **ADDITIONAL BENEFITS**

- Non film forming and retains natural colour.
- Keeps surfaces looking new for longer, makes cleaning easier.
- Fully breathable, allowing water vapor to escape freely, avoiding harmful moisture build-up inside the material.
- Designed for indoor and outdoor surfaces on residential and commercial projects.
- Negligible change to slip resistance when applied according our written instructions and guidelines.
- High resistance to alkaline (high pH) environments. Concrete is highly alkaline / base and can severely shorten the life of other technologies.
- Totally resistant to UV

## **HOW TO USE**

- ALWAYS TEST PRODUCT ON A SMALL AREA FIRST and allow a 24-hour cure time to determine the ease of application and desired results. Note: Fortifier Plus™ takes 2 to 4 weeks to fully cure inside the pores of the material and reach maximum hardness.
- Wear suitable solvent-resistant gloves, protective clothing, safety goggles and an organic vapour respirator during application.
- Ensure surfaces to be treated are dry, clean and free of residues.
- Surface temperature should be 40 95° Fahrenheit / 5 35° Celsius.
- Product is not to be diluted / thinned.
- Mask or otherwise protect surrounding surfaces such as window frames from overspray. If
  they receive overspray, clean immediately with clean, dry white cotton or other suitable
  absorbent cloths. Alcohol, methylated spirits or acetone can be used, taking care not to
  damage paintwork or other coatings.
- On very porous materials, apply the product using a low-pressure sprayer with a fan spray nozzle, working from the lowest sections upwards. On dense surfaces, such as marble, apply with a natural bristle brush or lamb's wool applicator. If you use a brush or applicator made from synthetic material, test to ensure it is not dissolved by Fortifier Plus™.



- Horizontal surfaces: Apply 2 generous coats, at least 10 minutes apart. For the best results, wait longer between coats, but it is important to apply each coat before the previous coat has dried.
- Vertical surfaces: To minimize dripping and running it is best to apply 4 lighter coats rather than 2 heavy coats and to begin at the bottom of a surfaces and work upwards.
- The material must be allowed to cure for at least 2 weeks before it comes into contact with salt water or solvents.
- Total application rate (total of all cots) varies widely depending on the material, porosity and finish: 4 to 12 sq. m. per litre (160 480 sq. ft. per gallon).
- Thoroughly polish off any excess product residue on the surface with clean, white absorbent cloths before the final coat dries.
- Clean equipment with methylated spirits, alcohol or acetone
- IMPORTANT DIP SEALING: Surface materials which are in regular contact with salt water, including the splash zone around salt water pools, must be dip sealed prior to installation to achieve the best result. The material must be fully submerged for a minimum of 15 seconds.

## **LIMITATIONS**

- WARNING: Fortifier Plus™ will not prevent acid etching or physical wear of the surface.
   Fortifier Plus™ increase the strength of the surface by up to 40% this may not be enough to
   make a very soft, unsuitable stone fit for purpose in a salt water or freeze-thaw
   environment.
- Fortifier Plus™ is breathable, so will not resist static water pressure and should not be used as a waterproof membrane.

## **ADVANCED APPLICATION GUIDELINES**

- <u>Testing and cure time</u>: It can take up to 4 weeks for Fortifier Plus™ to build a structure which is fully cured deep inside the pores of the stone, so it is recommended to let treated surfaces cure for at least 3 weeks before testing.
- Applying the right amount of product consistently on a large area:
  - Only tackle one small area at a time so that you can apply additional coats before surface residue from the previous coat dries.
  - Measure out an area before starting application and monitor how much product you
    use, to get a visual gauge and feel for how much product to spray for each coat.
  - At regular intervals measure the area you have treated, and the amount of product used, to check that you are consistently applying the desired amount of product.
  - When applying additional coats, apply each coat perpendicular to the previous coat, to ensure all areas of the surfaces receive a consistent amount of product.

## • Excess product (product residue):

- o It is VERY IMPORTANT to thoroughly remove all product residue from a surface with clean, white cotton or microfibre cloths before it dries as the consolidator can be very difficult to remove once cured. If the product has dried on the surface, damp a cloth with Fortifier Plus™ to remove.
- The amount of product left on the surface, once the sealer has had time to penetrate, will vary depending on the surface type, porosity and finish. More porous surfaces with a honed (matte) or rougher finish will often absorb all the product applied, leaving no residue, while surfaces such as marble, especially if they have a



highly polished finish, will be less absorbent and there will be plenty of excess product to remove. Apply the second coat even if there is product left on the surface from the initial coat.

- o If the product has dried, damp a cloth with a small amount of product and use this to soften the residue, then polish off with a clean dry cloth.
- <u>Cleanup of equipment / spills:</u> Ensure you have a good supply of alcohol, methylated spirits
  or acetone and clean white absorbent cloths, paper towels to clean your equipment and any
  overspray.
- Applying to vertical surfaces: On vertical surfaces, to minimize dripping and running it is best to apply 4 lighter coats rather than 2 heavy coats and to begin at the bottom of a surfaces and work upwards. Place tarp or plastic sheets below to catch the excess drips. Have plenty of clean white absorbent cloths handy to wipe up runs as they happen.
- Quick method for avoiding overspray:

  Have a light rectangular piece of board handy which you can hold with one hand to protect surfaces while you spray with the other hand. This is quicker than masking off areas.
  - Note: If product overspray lands on adjacent surfaces such as window frames, it will
    cause these to become water repellent, so overspray should be removed with clean
    white absorbent cloths immediately (methylated spirits, alcohol or acetone can be
    used but take care not to damage any paint or coating).

#### **SHELF LIFE AND STORAGE GUIDELINES**

- Best within 3 years of manufacture.
- Keep container tightly sealed, in a well-ventilated place, at 2 30° Celsius (36 85° Fahrenheit).

## **PACK SIZES**

5L (1.3 gallon), 20L (5.3 gallon)

## **YIELD**

3 to 7 sq m. per litre (120 - 280 sq. ft. per Gallon).

#### **TECHNICAL DATA**

- Active Content: >50%.
- SG: ~0.89
- VOCs >400g/L
- 5L (1.3G) = 4.8Kg (10.6Lb), 20L (5.3G) = 19Kg (41.9Lb)
- Typical Penetration: 5 20mm depending on application rate and surface porosity.

FLAMMABILITY

HIGHLY FLAMMABLE LEL 3.3% (Ethanol)
Flash Point < 23°C UEL 19% (Ethanol)
Hazchem Code ●3YE



## **TRANSPORT**

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE Shipping name FLAMMABLE LIQUID, N.O.S. (contains ethanol) UN number 1993
Packing group II
DG Class 3
Subsidiary Risk None allocated

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