



# **INDIAN W.R.**

***The ART of construction chemicals!***



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**INDIAN W.R. IS A SINGLE COMPONENT SILICONE BASED CLEAR WATER REPELLENT.**

- INDIAN W.R. is recommended for the Hydrophobisation (water repellency) of facades.
- Facade damage is always due to moisture, rain, and surface water. Saltwater damage occurs in porous building materials, only when moisture is present.
- The sources of salination are de-icing salts, rising dampness, and reaction between the binder used in facade materials and paints.
- In addition to that, building materials have an inherent salts content.
- The moisture transports these salts to the surface of the substrate where it crystallizes out.
- Salts not only deposits on the surface but it causes the hydration and crystallization pressure to build up and finally leads to embrittlement and crumbling away of the surface.



Attack by moss and micro-organisms such as fungi & algae which are the consequence of protracted wetting of facade surfaces.

The above mentioned facade damages can be diminished by impregnation with water repellent agents. The main aim of this is to form a 'hydrophobic' or dry zone on the surface. The dry surface are not ideal biotopes for mosses, fungi and algae.

The Silicone Molecules of INDIAN W.R. do not clog the pores and so the surface retains its permeability to water vapour and 'breathes'. Therefore treated buildings do not suffer from condensation damage. Buildings treated with INDIAN W.R. may absorb very little water and can release it again readily in drier conditions.

# FEATURES/ADVANTAGES:-

- Clear (transparent) in colour

- Easily applicable by brush or spray or roller.

- Impermeable - prevents penetration of water & moisture through the surface.

- It aids in retaining the heat insulation properties of the wall because the loss of heat through the wet brick is 1 ½ time greater than when it is dry.

- It protects the surface from the attack of a salty and acidified atmosphere.

- It prevents the formation of efflorescence.

- It prevents surface damage from water and frost attacks.

- Microporous allows the substrate to breathe (Good water vapor permeability)

Prevents the growth of microorganisms such as fungi & algae.

Their low viscosity & surface tension enable them to penetrate deeply into the material.

It bridges the hairline cracks up to 0.3mm wide.

It remains unaffected by UV rays and weathering conditions.

It performs well in a temperature ranging from  $-20^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ .

## ***Typical Applications***

INDIAN W.R. is highly recommended for the impregnation of external vertical facades and steeply sloping surfaces.

INDIAN W.R. - Water Based

- Impregnation of alkaline substrates, pH value up to 9
- Absorbent (porous) substrates
- Brickwork
- Highly absorbent brick facing
- Sand lime brickwork.
- Ceramic articles
- Aerated (gas) concrete.
- Cement plaster
- Cement paint painted substrates.
- Clay tiles
- Sandstone



## Typical Characteristics: INDIAN W.R. - WATER BASED REPELLENT

|   |                            |
|---|----------------------------|
| • Nature                                    | : Single component.        |
| • Colour                                    | : Translucent liquid       |
| • Viscosity of flow cup B4 at 30°C, seconds | : 13 ± 15                  |
| • Specific gravity, at 30°C, gm/cc          | : 1.1 ± 0.02               |
| • pH value                                  | : 7-8                      |
| • Dilution ratio                            | : READY TO USE PACK        |
| • Surface dry time, minutes                 | : 25-30                    |
| • Inter coat period                         | : Single coat applicable   |
| • Coverage, Sq.-ft/lit/coat                 | : 40 TO 60 SQ ft./PER lit. |
| • Water repellency                          | : Excellent                |
| • Breathing efficiency, %                   | : Min. 70                  |
| • UV resistance & weather durability        | : Excellent                |
| • Efflorescence resistance                  | : Excellent                |

## Direction for use

### Surface Preparation

1. Surface preparation is the most important step before application to get the best Results and to avoid failure.
2. The surface must be free from any loose materials, crumbling powdery encrusted walls, fungus, moss, oil, greases, and mold release agents.
3. Clean the surface using scrappers and wire brushes.
4. Then clean the walls with high-pressure water, wait for two days for the surface to dry.
5. The walls must be dry before application.
6. Use of acidic or alkaline chemicals, detergents, and cat-ionic surfactants should be avoided.
7. It is advisable to wait for 28 days for curing the fresh masonry / new concrete.

# Method of application

Visible cracks must be sealed by INDIAN P.S (G) Polyurethane sealant or Indian crack fillers

These sealants are not attacked by the repellent INDIAN W.R...

Brush application is the simplest method. Flat brushes or rollers can be used for the application, while application with brush make sure that sufficient solution is applied, as the success or failure of such treatment depends on this factor.

The flooding method is used for treating large areas. Ordinary spraying device or airless spray can be used. Spraying pressure should be as low as possible... It is advisable to use 1 to 2 coats in case of highly absorbent surfaces. Coats can be applied wet on wet.

Whichever method of application, the water repellent must be applied from the bottom to upwards until the surface is saturated.



## Cleaning of the tools and equipment :

Tap water can be used to clean the tools of water-based – INDIAN W.R.



## Storage and shelf life

In order to preserve all the properties, store the material in the original unopened containers at a temperature between -20°C and 30°C. It must be used as soon as the containers is opened.

The shelf life of INDIAN W.R. is 24 months from the date of manufacture if stored as per the above storage conditions.



## Packing

1 Ltr ,5 Ltr & 20 Ltr .



## PRECAUTION

In case of accidental contact with the skin or mucous membranes, wash thoroughly with water.

In case of contact with eyes, wash immediately with water and consult the doctor.

