

# TECHNICAL DATA AND APPLICATION GUIDELINES

# RESTRUCTOR

Penetrating - Non Destructive - Internally Reactive & Permanent  
Utilized On Concrete, Masonry, Plasters (all types),  
& Calcareous Based Stone

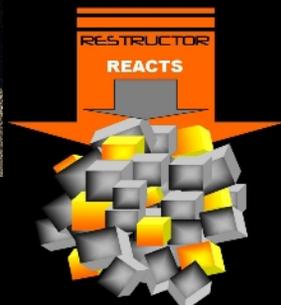
## Rehabilitation, Densification, Stabilization And Restructuring



**RESTRUCTOR**  
01. Penetrates



Restructor  
& Sprayer



**RESTRUCTOR**  
02. Reacts



Applying  
Restructor



**RESTRUCTOR**  
03. Restores & Preserves

TECHNICAL DATA AND APPLICATION GUIDELINES

**BEFORE**



**RESTORES & MAINTAINS pH INTERNALLY**

**AFTER 8 MONTHS ACIDIC EXPOSURE**



**RESTRUCTOR**

**APPLICATIONS**

- POOLS
- SPAS
- WASTE WATER
- KOI PONDS
- POTABLE WATER
- ABUTMENTS
- SEA WALLS
- WALLS AND FLOORS
- BALCONIES
- DECKS
- PILINGS
- COLUMNS & BEAMS
- DRIVEWAYS
- SIDEWALKS
- ROOF TILE
- PAVERS

**MATERIALS**

- NEW CONCRETE
- OLD CONCRETE
- SHOTCRETE
- GUNITE
- CAST IN PLACE
- PLASTER
- STUCCO
- MORTAR
- GROUT
- BRICK
- STONE
- PRECAST
- MASONRY
- LIMESTONE
- BRIDGE DECKS
- PATIOS

**RESTRUCTOR**  
APPLIED USES

**LIMESTONE DENSIFICATION**

300X Magnification

**BEFORE**



**AFTER**



**RESTRUCTOR**

**EFFLORESCENCE STOP**

**NO TREATMENT**



**RESTRUCTOR TREATED**



**RESTRUCTOR**

**RESULTS**

- Stop micro cracking on new concrete, plaster, etc.
- Densify existing concrete, plaster, stucco, etc.
- Stop carbon dioxide diffusion
- Increase compressive and flexure
- Increase abrasion resistance
- Increase chemical resistance
- Exfoliate salts
- Stop spalling

**RESULTS**

- Reduce moisture transfer
- Stop efflorescence
- Stop reinforcing steel oxidation
- Breathable
- Improve bonding
- Inhibit mold and mildew growth
- Stop chloride or salt migration
- Improve freeze-thaw resistance
- Permanent
- Environmentally Safe

**RESTRUCTOR**  
RESULTS FROM USE

**TECHNICALLY DRIVEN LABORATORY PROVEN**



**INCREASING COMPRESSIVE AND FLEXURE STRENGTHS**

**RESTRUCTOR**



# RESTRUCTOR

## TECHNICAL DATA AND APPLICATION GUIDELINES

TECHNICAL  
BULLETIN:  
RTD 4-15-2015

### ENVIRONMENTALLY SAFE & EFFECTIVE CURING, DENSIFYING AND STABILIZATION FOR CONCRETE, MASONRY, STONE & PLASTER

#### RESTRUCTOR TECHNICAL DATA SHEET

#### 1.0 PRODUCT

RESTRUCTOR

#### 2.0 MANUFACTURER

Valcon Industries, LLC 1-866-311-9737  
Suite 11, 6321 Porter Road, Sarasota, Florida 34240  
Distributed by Valcon Industries

#### 3.0 PRODUCT DESCRIPTION

##### 3.1 RESTRUCTOR

Restructor is a specifically formulated and precisely manufactured product that stabilizes, densifies and restores concrete, masonry and calcareous based stone materials. Restructor aids in the curing and hydration of new concrete, masonry and plaster materials.

#### 4.0 MODE OF OPERATION

##### 4.1 SURFACE PREPARATION

**A. Surface Preparation Of New Cement Based Materials** The surface shall be clean and free from dirt etc. Can be applied to fresh concrete once final set has taken place and finishing operations complete.

**B. Surface Preparation Of Aged Cement Based Materials** Surface shall be permeable, free of all dirt, laitance and any substance that would prevent the penetration of water.

**C. Surface Preparation Of Limestone Materials** Surface shall be clean and dry.

##### 4.2 Restructor FUNCTIONS

The formed reaction product as a result of alkali and silicate combination ( $CH + SiO_2 = CSH$ ) within the matrix of the cement based substrate increases density by filling the micro-pores and capillaries with water impermeable calcium silicate. Restructor will allow the substrate breathability of moisture vapor however it will not allow carbon dioxide diffusion to enter from the surface of the treated material.

##### A. EXISTING SUBSTRATES

On existing substrates Restructor will strengthen and densify cement based materials, stopping efflorescence, increasing compressive and flexural strengths as well increasing the pH to better than new levels within the treated substrate. Restructor prepares such surfaces for re-coating or overlays by providing a bondable surface that is stable.

**75-200 square feet per gallon coverage rate**

##### A. NEW CONCRETE PLACEMENTS

On new placements the Restructor will penetrate quickly and deeply into the surface of the new concrete materials. Once the material is placed and reached its final set and finishing operations are complete, Restructor will keep the moisture within the matrix and im-

prove the curing capability of the concrete itself. **150-250 square feet per gallon coverage rate**

#### 4.3 Precautions

Care should be taken not to allow over spray on adjacent materials. Protect all surfaces such as glass, glazed tile and aluminum from application of Restructor. Remove immediately before it dries as removal may be impossible.

#### 4.4 Clean Up

Clean up with soap and water. Rinse tools and equipment with clean water.

#### 4.5 Safety

Restructor is non hazardous, environmentally and user safe. A standard dust mask is adequate protection to keep from inhaling any atomized vapors that may be airborne during application.

#### 5.0 APPLICATION OF Restructor

1. Open container and use directly as provided.
2. Apply by spray application (low pressure) garden type sprayer. Set nozzle at fine mist.
3. Apply to a clean and properly prepared surface.
4. Spray Restructor on to the substrate wetting out the surface without ponding or puddling.
5. All excess material must be removed and cleaned from the surface. If allowed to dry this material can be a bond breaking condition for any additional material to be placed over the treated area.
5. Repeat this process as needed to attain the desired effect. *Note: If surface is excessively dry, hot or windy, the surface may have to be dampened with water to avoid flash setting of the material on the surface. Restructor is a penetrant not a surface coating. It reacts and works internally on the substrate as well as the surface.*

#### 5.0 FAVORABLE CHARACTERISTICS

Increases compressive and flexural qualities, Improved Freeze-Thaw Resistance, Improved Abrasion Resistance, Improved Chemical Resistance, Breathable, Stops Dusting and Pitting, Paintable, Excellent U. V. Resistance, Non Toxic, Non Flammable, Odor Free, Water Based, No VOC/VOS, User Safe, Environmentally Safe, GRAS Certified Ingredients (Generally Accepted As Safe) by the FDA

#### 6.0 PACKAGING

Available in 1 gallon jugs, 5 gallon pails, 55 gallon drums or 275 gallon totes

#### 7.0 STORAGE & HANDLING

Do not freeze. Shelf life 3 years.