

# VC-5

## MOISTURE VAPOR CONTROL - NEW CONCRETE

SINAK VC-5 is a zero VOC, single component Moisture Vapor Control System that eliminates flooring, roofing, or coating failures due to moisture, moisture vapor, hydrostatic pressure, osmotic pressure, and alkalinity emanating from or through new concrete. VC-5 is designed for use on all structural and lightweight concrete to receive finishing flooring, roofing or coatings.

VC-5 permanently penetrates in the concrete substrate and does not leave a film or residue on the surface. VC-5 replaces all curing methods, moisture mitigation, and remediation systems. Use of VC-5 allows for same day slab access and installation of any flooring, coatings, or roofing in as soon as 7 days after concrete placement, saving weeks off the construction schedule. VC-5 is guaranteed to eliminate the costly delays from moisture remediation.

VC-5 warrants all adhesives, coating, flooring and roofing systems with a 20-year non-prorated labor, material, and adhesive bond warranty. VC-5 allows mechanical surface profiling up to 1/4" amplitude. VC-5 ensures compatibility and bond of all flooring adhesives, floor coverings, roofing systems, and surface treatments. VC-5 is non-toxic, contains no solvents, and is listed as UL GREENGUARD Gold Certified and super compliant with SCAQMD.

VC-5 will prevent and reduce moisture vapor rates up to 50lbs/1000 sq ft and RH up to 100% to well below accepted levels for subsequent application of flooring and coating systems such as epoxies, vinyl tiles, sheet vinyl, carpet, wood flooring, deck coatings and more.

## FEATURES & BENEFITS

- 20-Year Flooring Replacement Warranty
- Compatible with all Flooring, Coating & Roofing Systems
- Eliminates Off Gassing/ Pinholing
- Reduces Permeability
- Flooring/Roofing Installation 7 days after concrete placement
- Controls Hydrostatic and Osmotic Pressure
- Controls Efflorescence
- Controls Alkalinity

## WHERE TO USE VC-5

- Structural & Lightweight Concrete
- Rubber Tiles & Sheeting
- Vinyl Composition Tiles
- Moisture Sensitive Adhesives
- Sheet Vinyl
- Laminate Flooring
- Hardwood
- Sport Flooring
- Carpet Tile
- Tile
- Marble
- Terrazzo
- Hot & Cold Applied Roofing
- Membrane Roofing
- Green Roofs
- Epoxy Coatings
- Polyurethane Coatings
- Deck Coatings
- Moisture Sensitive Coatings
- Polishing Systems



VC-5 is excellent for use on interior and exterior concrete surfaces to receive a moisture sensitive floor, coating or roofing system. VC-5 penetrates deep into the concrete substrate and restricts the capillary matrix to reduce permeability and moisture intrusion.

## SUSTAINABLE DESIGN REQUIREMENTS

- Zero VOCs
- UL 2818 Gold - GREENGUARD® Gold Certified
- Environmental Product Declaration
- LBC Red List Free Declare Label
- Health Product Declaration
- Listed as Super-Compliant by the South Coast Air Quality Management District (SCAQMD)
- Exceeds the regulatory limits in the SCAQMD Rule 1113
- Meets the requirements to contribute for LEED credit in the following areas: EQ Credit 1.0, 4.1 and 4.3, EQ Credit 10 3.1, MR Credit 5.1 and 5.2

## TESTING

- ASTM C-39** (Compressive Strength)
  - Meets or exceeds 28-day water cure
- ASTM C-309/C-1315: TYPE 1 CLASS A** (Moisture Retention)
  - Exceeds water retention of less than 0.40 kg/m<sup>2</sup>
- BS 1881 Part 5** (Initial Surface Absorption ml/m<sup>2</sup>/sec)
  - Meets or exceeds 28-day water cure
- ASTM D-4262:** (Test method for pH on Concrete Floors)
  - <11.5 pH
- ASTM D-4263:** (Concrete Moisture Test)
  - Passed
- ASTM E-96:** (Water Vapor Transmission)
  - 0.08 grams/hr m<sup>2</sup>
- ASTM F-1869:** (Calcium Chloride)
  - <5lbs per 1000 sq ft
- ASTM F-2170:** (Relative Humidity)
  - 100% Covered under warranty
- ASTM F-710-21:** (Standard Practice for Preparing Concrete Floors)
  - Compliant

## PRECAUTIONS

VC-5 is for use on freshly placed concrete surfaces only. VC-5 is designed for concrete surfaces to receive a moisture sensitive coating, flooring or roofing systems. SINAK recommends that all surface preparation adhere to the coating manufacturer's written instructions prior to the coating installation. SINAK recommends the concrete be minimum International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of 3. For more information on this preparation requirement, visit the ICRI website. Hardwood and engineered glue down floors (may) require an application of SINAK V-Poxy.

Do not allow VC-5 to come into contact with any glass, metal, or painted surfaces. VC-5 left to dry on the surface may result in streaking, whitening, or staining. Immediately wipe affected surfaces with a clean water-saturated cloth, then wipe dry with a second clean cloth. For questions regarding VC-5, contact SINAK. SINAK allows for a MAXIMUM of 0.50 water to cement ratio for warranty compliance.

## COVERAGE RATES

Two-coat coverage rate is 300 sq ft per gallon (7 sq m per liter) for horizontal surfaces.  
Two-coat coverage rate is 300 sq ft per gallon (7 sq m per liter) for vertical surfaces.

## INSTALLATION

Installation should be continuous. VC-5 application should begin after the surface is firm enough to tolerate foot traffic or immediately after the early entry saw cutting. Apply a small test area to confirm penetration. If rain should occur at any time during this process, see '*Interrupted Installation*' at the end of this section.

1. Protect objects and areas not to be treated from spillage or overspray.
2. Apply first coat of VC-5 uniformly wetting the surface with an airless or tank-type sprayer.  
**DO NOT** allow VC-5 to puddle or flood the surface.
3. Immediately after the first coat is dry, apply a second coat. Apply the second coat perpendicular to the first coat to create a crosshatched pattern. Drying time will vary from 10 to 30 minutes depending on temperature and environment.  
**NOTE:** "Dry" means dry to the touch.
4. Pay special attention to apply material in joints and on slab edges. Treatment of these areas will eliminate slab curl.
5. Clean all equipment with warm soapy water.

## VERTICAL CAST-IN-PLACE INSTALLATION

For vertical applications DO NOT allow the material to run down the surface.

## INTERRUPTED INSTALLATION

If the application should be interrupted by rain, mark the place of interruption and continue the application as soon as weather permits. If the delay exceeds 4 hours contact SINAK immediately.

## HOT WEATHER INSTALLATION

In hot (above 100°F or 38°C), dry and/or windy conditions apply VC-5 shortly after loss (evaporation) of surface water. Contact SINAK for additional information.

## COLD WEATHER INSTALLATION

Do not apply below 34°F (1°C). Allow ample time between coats for drying. Contact SINAK for additional information.

## STORAGE & HANDLING

VC-5 has an infinite shelf life when stored in a cool dry area out of direct sunlight. Must be kept in tightly secured containers to prevent evaporation and contamination. VC-5 MUST be protected from freezing. Product that has frozen will not function as intended, and should be discarded.

## AVAILABILITY

VC-5 is available in 5-gallon (18.9-liter) pails, 55-gallon (208.2-liter) drums and 275-gallon (1041-liter) totes from selected distributors.

## TECHNICAL ASSISTANCE

Technical assistance is available from the manufacturer.

## WARRANTY

A 20-Year non-prorated labor and materials warranty is available. Concrete must be placed in accordance with ACI manual section 302.1R-15 with a water to cement ratio of less than 0.50. Contact SINAK for warranty requirements.

SINAK warrants its products to be free from manufacturing defects and to meet the technical properties on the current product information sheet. To the maximum extent permitted by law, this express warranty and the remedies specified below are exclusive and in lieu of all other warranties and remedies. Any implied warranties including without limitation implied warranties of merchantability and fitness for a particular purpose are excluded. SINAK's liability under this product warranty shall be limited to a refund of purchase price or replacement of the product. SINAK shall have no liability for any loss of use, interruption of business, lost profits or goodwill, or for any special, incidental or consequential damages of any kind arising from the purchase or use of the warranted product, even if SINAK has been advised of the possibility of such loss, interruption or damage. This limited warranty may not be modified by representatives of SINAK, its distributors or dealers. Any claim made under this warranty must be made within one (1) year of purchase and shall be accompanied by any reports or test results that form the basis of the warranty claim. Prior to settlement of a warranty claim, SINAK shall have the right, but not the obligation, to conduct site inspections and perform tests pertaining to the customer's warranted product and its manner of use.