

BARACADE® SILANE 40 IPA

VOC Compliant Silane Based Water Repellent

WATER REPELLENTS
THERMAL AND MOISTURE PROTECTION

TAMMS INDUSTRIES
NOVEMBER 2003 (Replaces 4/02)

1. **DESCRIPTION:** BARACADE SILANE 40 IPA is a breathable, ready-to-use, colorless, non-staining, non-yellowing, deep penetrating concrete and masonry water repellent.

FEATURES AND BENEFITS

- Alkylalkoxysilane concentration of greater than 40%
- Penetrates deep into capillaries of treated surface
- Reduces intrusion of water, deicing chemicals, and airborne contaminants
- Improves freeze-thaw resistance
- Will not alter texture or appearance of treated surface
- Colorless, Non-staining, Non-yellowing
- Breathable
- Will not leave a residue on most non-porous substrates, such as, glass, metal frames and painted surfaces
- VOC Compliant

APPLICATIONS

For use on above grade, vertical or horizontal surfaces such as:

- Brick Walls
- Concrete Block & CMU
- Brick Pavers
- Bridge Decks
- Concrete Surfaces
- Parking Decks
- Precast Concrete
- Concrete Ramps

Material Properties @ 75° F (25°C)		
Flash point - min		53°F (11°C)
Active Solids by Weight		>40%
V.O.C.		<600 g/l
Resistance to UV		Excellent
Abrasion Resistance		Excellent
ALBERTA TRANSPORTATION & UTILITIES RESULTS		
Specification B388, Type 1a and 1b		Passes
Waterproofing, % reduction of absorption		85.6
Waterproofing after abrasion, % reduction of absorption		87.7
Alkali Resistance, % reduction of absorption		86.1
NCHRP 244 SERIES 1 TESTS		
	<u>Minimum Requirement</u>	<u>SILANE 40</u>
Reduction in Water Absorption	75%	83.8%
Water Vapor Transmission	100%	111.4%
Reduction in Chloride Intrusion	75%	82.7%
NCHRP 244 SERIES IV TESTS		
Northern Climate		97.6%
Southern Climate		97.6%
ASTM C666		
Freeze Thaw Durability		95.3%
ASTM C672		
Scaling Resistance		0
ASTM E514		
Wind Driven Rain		
Reduction in Leakage	Brick	100%
	CMU	95%

sealed with an elastomeric joint sealant. Non-moving cracks and voids wider than 1/64 inch (0.4 mm) must be filled with a suitable patching material. Do not apply product to a wet surface. Surfaces must dry a minimum of 24 hours following rain or exposure to other sources of moisture. Install caulking before product application. For surfaces that have had prior coatings or treatments, contact TAMMS Technical Service Center.

TAMMS INDUSTRIES
NOVEMBER 2003 (Replaces 4/02)

WATER REPELLENTS
THERMAL AND MOISTURE PROTECTION
07190

3. **COMPLIANCE:** BARACADE SILANE 40 IPA meets the requirements of Alberta Transportation and Utilities (AT&U) Specification B388 Sealer Types 1a and 1b. BARACADE SILANE 40 IPA meets NCHRP 244 specifications. VOC level is 585 grams/liter which is compliant with national AIM VOC regulations.

4. **SURFACE PREPARATION:** Cure new concrete 28 days before application. Surface must be clean, dry, open capillary, structurally sound, free of curing or form release compounds and other contaminants that will prevent the proper penetration of product. Prior to application, joints and moving cracks must be properly

5. **APPLICATION TECHNIQUES:** Flood the surface with BARACADE SILANE 40 IPA using a low pressure sprayer, roller or broom. Distribute material evenly. Do not allow the material to puddle. If a second coat is required, apply after the surface absorbs the initial coat of BARACADE SILANE 40 IPA. Use low pressure spray equipment for application. Do not vaporize the material. Use solvent resistant equipment and gaskets. When applying to horizontal areas brush out puddles or excess material. For vertical surfaces apply from top down to produce a 6" – 8" rundown.

6. **COVERAGE:** Because of variations in surface density, the following coverage rates are approximate and are intended for estimating purposes only. Use test applications on actual surfaces to accurately determine coverage rates. Extremely porous surfaces may require two coats of BARACADE SILANE 40 IPA.

	Sq. ft. per gal. per coat
<u>Surface Type</u>	
Concrete Block	50-75
Concrete Masonry Unit	50-75
Smooth Concrete	150-250
Exposed Aggregate	100-200
Decks/Ramps	100-125
Brick	100-250
Stone	100-250

7. **CAUTIONS:** Do not dilute. Do not apply to a frost filled surface. Do not apply if rain is expected within 12 hours. Use in a well ventilated area. Caution should be taken with specialty coated glass, plastic windows or dirty windows. Check compatibility before application of BARACADE SILANE 40 IPA. Certain types of concrete block, particularly those which contain integral water repellents, may exhibit a darkening effect when Baracade Silane 40 IPA is applied. A test area is always recommended prior to application to confirm performance and appearance.

8. **CLEAN-UP INSTRUCTIONS:** Clean tools and equipment with alcohol, mineral spirits or similar solvent immediately following use. Clean drips and over spray while still wet. Clean glass and other non-absorbent materials soon after application.

9. **PACKAGING:** 5 gallon and 55 gallon steel DOT approved containers. Store at temperatures between 40°F and 90°F (4.4°C-32.2°C). Shelf life is one year in proper storage. Freight class is 60.

10. **ENVIRONMENTAL AND SAFETY PRECAUTIONS:** Industrial Use Only. BARACADE SILANE 40 IPA contains alcohol solvent and is FLAMMABLE with a flash point of 53°F. Avoid fire, open flame and sparks. Avoid breathing vapors or mist. BARACADE SILANE is irritating to eyes and skin. Avoid splashing into eyes and prolonged contact with skin. In case of eye contact, flood eyes repeatedly and call a physician immediately. DO NOT RUB EYES. Wash hands with soap and clean water immediately after use and before eating or smoking. Protect shrubbery, plants and grass during application. Protect asphalt and rubber surfaces from spills and over spray. KEEP OUT OF REACH OF CHILDREN. Consult Material Safety Data Sheet for complete product safety information. EMERGENCY RESPONSE PHONE NUMBERS ARE (800) 862-2667 TAMMS OR (800) 424-9300 CHEMTREC.

11. **TECHNICAL SERVICE:** For application procedures or surface conditions not specified above, please contact:

TAMMS INDUSTRIES, INC.
3835 State Route 72, Kirkland, IL 60146
800-862-2667 FAX: 815-522-2323
www.tamms.com

WARRANTIES: Seller warrants that the Products do not infringe upon any copyright, patent, or trademark or trade secret, nor violate the proprietary information rights of any third party. Seller warrants that its Products will conform to and perform in accordance with the Products' specifications. THE FOREGOING WARRANTIES, ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THOSE CONCERNING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. **LIMITATION ON LIABILITIES:** Because of the difficulty of ascertaining and measuring damages hereunder, it is agreed that, except for claims for bodily injury, Seller's liability to the Buyer or any third party for any losses or damages, whether direct or otherwise, arising out of the purchase of Product from Seller by Buyer shall not exceed the total amount billed and billable to the Buyer for the Product hereunder. **IN NO EVENT WILL SELLER BE LIABLE FOR ANY LOSS OF PROFITS OR OTHER SPECIAL OR CONSEQUENTIAL DAMAGES, EVEN IF SELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.**