

# TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING

Solvent Base (Residential) Meets ICC - AC 29

Division of Sierra Corporation ISO 9001:2008 Certified

# 1. PRODUCT NAME

TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING -RESIDENTIAL

# 2. MANUFACTURER

TK PRODUCTS DIVISION OF SIERRA CORPORATION 11400 West 47th Street Minnetonka, MN 55343 952-938-7223 952-938-8084 (FAX) e-mail: tksales@tkproduct.com Website: http://www.tkproduct.com

# **3. PRODUCT DESCRIPTION**

TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING is a rubberized polymer formulation for dampproofing and waterproofing below-grade poured concrete, CMU and precast foundation walls and preventing the penetration of water and other chemicals. It bridges small cracks up to 1/6" thick, to prevent the penetration of water and other chemicals through the wall.

This product complies with the ICC-AC29 (Acceptance Criteria for Cold, Liquid-Applied Below Grade, Exterior Damp proofing and Waterproofing Materials.)

# Basic Uses:

For residential below-grade foundation walls, CMU or poured concrete.

# 4. TECHNICAL DATA

TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING is a non-breathable, single component fluid applied foundation coating.

# **Composition and Materials:**

Rubberized polymer blend in an aromatic hydrocarbon blend solvent.

Non-Volatile Content:	48-50%
VOC Content:	< 600 g/l
Color:	Dawn Mist, Stone Gray
Flash Point:	Flammable, less than 76°F
Drying Time: Tack Free:	1 hour (recoat 2-4 hours)
Full Cure:	3-7 days

### Applicable Standards

TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING meets or exceeds the following standards:

- ASTM C1306/D5385, Hydrostatic Pressure Over Cracks
- ASTM C836-03 Section 6.10, Adhesion Strength
- ASTM D2939, Resistance to Water
- ASTM C836-89 Section 6.7, Low Temperature Flexibility and Crack Bridging
- ASTM C836-89, Film Thickness Vertical Surface
- ASTM C836-89 Section 6.12, Extensibility After Heat Aging
- ASTM E154-88 Section 13, Resistance to Decay
- ASTM E96-80, Water Vapor Permeance, water method
- A.I.M. Category: Waterproofing Sealer and Treatment - maximum VOC 600g/l.
- A.I.M. Definition: A coating formulated and recommended for application to a porous substrate for the primary purpose
- of preventing the penetration of water.

# 5. APPLICATION PROCEDURES AND INSTRUCTIONS

Preparation:

Material is ready for use and requires no mixing unless signs of separation are observed. It is unlawful to further reduce with non-exempt solvents.

A clean, dry surface is required. Surface should be smooth and free of voids, spalled areas, loose substrate, protrusions, coarse aggregate and frost. Any dirt, oil, grease, debris or other contaminants must be removed. Defects in the surface, such as spalled or poorly joined areas must be repaired. New concrete should be allowed to cure until the surface appears dry. Concrete walls poured and block laid late in the year should be allowed to gain sufficient strength for proper adhesion. All masonry joints need to be tooled and brushed. Assembly wall is to be unparged. All previous coatings must be removed.

# **Existing Concrete**

Any tie-holes, bugholes, surface abnormalities or voids which are larger than 1/2" in diameter or more than 1/8" deep, or both, should either be pretreated with TK-2002 or repaired with a lean concrete mix of grout. Refer to ASTM D5295, Preparation of Concrete Surfaces for Adhered Membrane Waterproofing Systems, for more detail regarding substrate penetration. Surfaces that are cracked, pitted, honeycombed or heavily bugholed can be filled by spraying 10-12" from the substrate. Note, however, that a higher amount of material will be consumed by utilizing this method; therefore it may be more efficient to fill the surface with a parge coat of lean mortar mix before application of TK-2002. Such gaps may also be filled with a compatible sealant or caulk.

Remove windows, protrusions and form match lines. Also remove high spots that are greater than 1/32" in height.

To remove dirt, dust or loose stones, the substrate must be wire-brushed, swept with a stiff broom or blown with low pressure air. Surfaces of poor quality and with excessive laitance may require shotblasting or pressure washing to rid it of contaminants and provide a dense, smooth surface.

# "Green" Concrete or Damp Surfaces

TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING may be applied to "green" concrete (minimum 3 days) or over damp surfaces. Remove any visible or standing water prior to application.

Do not apply TK-2002 VOC waterproofing membranes in wet weather. Once applied, the membranes will not be affected by light rain showers.

Control joints are to be filled and sprayed with TK-2002 VOC. Once cured, apply a bituthane sheet membrane that extends 1.5 foot on both sides of control joint.

#### Detailing:

# Inside and Outside Corners

Apply a double coat of TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING membrane starting in the corner and extending 6" for each side of the corner.

# Drains and Penetrations

Once the waterproofing membrane has cured, penetration openings must be sealed and stabilized. Once sealed and stabilized, install a 1" fillet of a non-shrink butyl caulk around the protrusion. Install a bituthane membrane around the protrusion. Extend the membrane 6" onto the structural substrate and at least 2" onto the penetration.

# Application:

A typical sprayer is a Graco 733/833 45:1 airless with a 0.037 tip. May be applied by brush or roller for smaller applications or for touching up areas.

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# Application of Drainage, Protection or Insulation

Protect TK-2002 VOC membranes from other traffic, construction materials and backfill to avoid damage. Once the membrane has properly cured, use a protection/drainage composite with filter fabric.

Extruded polystyrene insulation boards also can be used and are compatible with TK-2002 VOC membranes. Allow product to properly cure before installing extruded insulation board.

#### Coverage:

Coverage rate is inversely affected by the texture and porosity of the substrate. One coat is sufficient when applied at 30-32 sq. ft. per gallon, or 50 wet mil film. Inspect the surface for continuous and uninterrupted coating. Any area that is thin may be recoated.

#### Backfill:

Backfill should not contain sharp rock or aggregate over 2" in diameter. Backfill in small loads or lifts.

### Limitations:

- TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING must be applied at temperatures between 0° F to 100° F.
- Apply TK-2002 VOC directly to structural surfaces.
- Do not apply TK-2002 VOC membranes over lightweight insulating concrete. Insulation, if used, must be installed over the membrane.
- Do not apply TK-2002 VOC on foundation walls that are more than 30 feet deep without prior approval from TK Products.

#### Cleanup of Equipment:

Use TK-00 SOLVENT. For sprayer, pump the solvent through the spray equipment to remove residue of materials which can clog the hose and wand assembly.

# Maintenance

Minimal maintenance is required. If weathering occurs, TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING can be reapplied to the affected area.

#### Precautions:

TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING contains aromatic hydrocarbon. Keep away from heat and flame.

Applicable Standards	TK-HYDROMAX® 2002 VOC Performance
ASTM C1306/D5385 - Hydrostatic Pressure Over Cracks	.310 (45.0) MPa (psig)
ASTM C836-03 Section 6.10 - Adhesion Strength	11.9 lbf/inch
ASTM D2939 - Resistance to Water	Passed
ASTM C836-89 Section 6.7 - Low Temperature Flexibility and Crack Bridging	11.9 lbf/inch
<b>ASTM D412</b> - Vulcanized Rubber and Thermoplastic Elastomers - Tension	637%
ASTM E 96-00 - Water Vapor Transmission and Vapor Permeability Test, Procedure B	0.05 Perms 0.0015 Permeability
ASTM C1305 - Exhibited no cracking or loss of adhesion upon completion of 10 cycles of movement at -15°F	Pass
ASTM C1306 - Hydrostatic Pressure Resistance	Passed long-term test
ASTM C1522 - Extensibility After Heat Aging	No cracks, tears or holes observed after extending the membrane

Prevent buildup of vapors and use only with adequate ventilation. Do not inhale vapor or spray mist. If you experience eye watering, headaches or dizziness or if air monitoring demonstrates vapor/ mist levels are above applicable limits, increase fresh air entry or wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after the application processes. Any person using a respirator must be trained on proper respirator use. Close container after each use. Avoid contact with the eyes, skin, and clothing. Wash after handling. KEEP OUT OF REACH OF CHILDREN. Do not allow vapors to penetrate into foodstuffs. In its cured state, TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING is non-toxic.

#### First Aid:

If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention immediately. If skin contact occurs, wash thoroughly with soap and water. If swallowed, do not induce vomiting and call a physician immediately.

#### In Case of Fire:

Use foam, CO<sub>2</sub>, dry chemical. Do not use water spray. Generic Name: Petroleum Distillates.

### Spills or Leaks:

Contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused content in accordance with local, state and federal regulations.

For safety controls, Material Safety Data Sheets are available from TK Distributors, the TK office or the TK website. This information should be read before using this product.

#### 6. AVAILABILITY

TK-HYDROMAX® 2002 VOC FOUNDATION WATERPROOF COATING is available through TK Distributors. Contact TK Products for the nearest distributor.

Packaged in 55-gallon drums, and 5-gallon pails.

Available in Dawn Mist or Stone Gray.

#### 7. CONDITIONS OF SALE/ LIMITED WARRANTY

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#### 8. TECHNICAL SERVICES

The TK office offers assistance with specifications, performance test data and field services.

#### 9. FILING SYSTEMS

Information Handling Services PO Box 1213 Englewood, CO 80150 Information Marketing Services 13271 Northend Oak Park, MI 48237

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# FOR INDUSTRIAL USE ONLY

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