

# VULKEM® 171/350NF/346/346 ELASTOMERIC, WATERPROOF TRAFFIC DECK COATING SYSTEM

#### **DESCRIPTION**

Vulkem® 171/350NF/346/346 is a modified polyurethane Traffic Deck Coating System composed of a Base coat (350NF), heavy-duty Intermediate coat (346) and a Top coat (346). This unique waterproofing system is designed to have tenacious adhesion, extreme impact and abrasion resistance, along with remarkable chemical stability. The elastomeric properties of the system's components enable the complete assembly to give and work with the concrete slab, bridging the shrinkage cracks.

Vulkem 350NF Base Coat is a single-component, low-odor, low-VOC, urethane membrane that bonds firmly to clean, dry concrete and metal. It retains its integrity even if substrate movement causes hair-line cracks of up to 1/16 inch (1.6mm). If cut or damaged, Vulkem 350NF will prevent water migration between it and its substrate. Vulkem 350NF is available in R (roller) and SL (self-leveling) grade for vertical and horizontal application.

Vulkem 346 Intermediate Coat is a single-component urethane that is applied after the Vulkem 350NF Base Coat has cured. The intermediate coat is loaded with aggregate to give the system excellent impact, abrasion and chemical resistance.

Vulkem 346 Top Coat is an aliphatic polyurethane that is applied after the Vulkem 346 Intermediate Coat has cured. Interlaminar adhesion to Vulkem 346 is exceedingly strong. The top coat affords excellent abrasion resistance, UV stability and chemical resistance to complete the Vulkem Traffic Deck Coating System.

#### **BASIC USES**

Vulkem 171/350NF/346/346 is a cold-applied Traffic Deck Coating System designed for waterproofing concrete slabs and protecting occupied areas underneath from water damage. Additionally, the System will protect the concrete from damaging effects of water, deicing salts, chemicals, gasoline, oils and antifreeze.

### APPLICABLE STANDARDS

Conforms to ASTM C957.



#### **PACKAGING**

- Vulkem 350NF
  - 5 Gallon (18.9 L) Pails
  - 55 Gallon (208 L) Drums
- Vulkem 346
  - 2 Gallon (7.6 L) Pails
  - 5 Gallon (18.9 L) Pails
  - 55 Gallon (208 L) Drums

#### STANDARD COLOURS

Vulkem 346 is available in Beige, Gray, Limestone, Maple and Slate Gray. Special colors are available upon request.

#### INSTALLATION

Concrete shall be water cured and in place for at least 14 days, preferably 28 days. Concrete finish shall be a light steel trowel followed by a fine hair broom, or equivalent ICRI #3 - #4 finish. New or existing slabs must be dry, clean, sound and free of all contaminates that may interfere with adhesion or proper curing. Chemical and/or mechanical surface preparation may be required.

Refer to the Vulkem 171/350NF/346/346 Application Instructions for complete application details. The techniques involved may require modification to adjust to the job-site conditions. Consult your Tremco Sales Representative or Technical Service for site conditions and requirements.

#### LIMITATIONS

- Do not apply to damp or contaminated surfaces.
- Use with adequate ventilation.
- Certain types of tires, particularly high performance tires, have been known to stain deck coating systems. Tremco cannot be held responsible for staining of our deck coating systems caused by these types of tires.





## **WARRANTY**

Tremco warrants its Coatings to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied,

including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE, with respect to Tremco Coatings. Tremco's sole obligation shall be, at its option, to replace or refund the purchase of the quantity of Tremco Coating proved to be defective and Tremco shall not be liable for any loss or damage.

TYPICAL PHYSICAL PROPERTIES				
Property	Test Method	Base Coat Vulkem 350NF	Intermediate Coat Vulkem 346	Top Coat Vulkem 346
Solids (by weight)	ASTM D1353	90 - 98%	72%	72%
Drying Time @ 75°F (24°C), 50% RH	ASTM D1640	25 mil film 8 - 12 hours	15 mil film 6 - 12 hours	10 - 12 mil film 6 -12 hours*
Flash Point	Set-A-Flash	> 160°F (71°C)	85℉ (29℃)	85℉ (29℃)
Hardness (Shore A)	ASTM D2240	45 - 60	85 - 95	85 - 95
Tensile Strength @75°F (24°C)	ASTM D412	220 - 460 psi	3205 psi	3205 psi
Elongation	ASTM D412	600 - 700%	120%	120%
Adhesion (Peel Strength)	ASTM D903	Unprimed Concrete 20 - 30 pli 100% cohesive failure	Vulkem 350NF Base Coat 100% cohesive failure	Vulkem 346 Intermediate Coa 100% cohesive failure
Abrasion Resistance (1000 cycles)	ASTM D4060	N/A	N/A	50 mgms
Permeance	ASTM E96 (B)	5 – 10 perms	3 perms	3 perms
Weathering Resistance	ASTM D822 Weatherometer 350 hours	N/A	N/A	No effect
Salt Spray	ASTM B117	N/A	N/A	No effect
Accelerated Aging	ASTM D573	No loss of elongation or tensile strength	No loss of elongation or tensile strength	No loss of elongation or tensile strength
Adhesion (Pull-off)	ASTM D4541	200 - 400 psi	N/A	N/A
Property		ASTM C957	Requirement	Typical Value
Chemical Resistance (Tensile Retention)		Greater than	Greater than	
Water		70%		98%
Ethylene Glycol (Anti-freeze)		70%	70%	
Mineral Spirits		45%		85%
Motor Oil		Not included as part of ASTM C957		92%
Hydraulic Brake Fluid		Not included		84%
Deicing Chemicals		Not included		99%
7% Detergent Solution		Not included		100%
Fire Rating		UL Rating – Class A		

N/A = Not applicable to component, data is applicable to System or Topcoat only. Note: These are typical values and should not be taken as specification items.

\*A minimum of 72 hours is required after cure before allowing vehicular traffic.

