



#### DESCRIPTION

401-TF is a versatile, roller applied primer and topcoat. It can be used as a primer for PumaCRETE flooring products, or as a standalone encapsulant over mastic, asphalt tiles, prior to other floor coverings such as vinyl or tile. For substrates with questionable adhesion, and powered lift traffic, it can also be applied as a composite with fiberglass reinforcement (401-TF Composite system), when applying 401-ECO topping as a finished floor.

#### COMPOSITION

Non toxic, water dispersed cementitious polyurethane resin system. As needed, may be combined with 1.5 oz chopped strand fiberglass mat (401-TF Composite).

#### HEALTH & SAFETY

This is a water based and 0 gram VOC/Liter product system. Virtually odorless and non toxic. Please read the safety data sheets, for further detailed information on safe handling and use of this product.

#### APPEARANCE and SLIP RESISTANCE

Matte finish. COF >.6 (slip resistant per ADA requirements).

#### WATER AND MOISTURE TOLERANCE

Handles up to 15 lbs of water vapor transmission and over over 99% concrete internal RH. The flooring functions as a vapor permeable, mitigation system.

#### THICKNESS and COVERAGE (neat)

5-8 mils one unit = 150-200 sq ft (depending on roughness of substrate)

**SUBSTRATES** Concrete, asphalt planks/tiles/mastic, and structurally sound toppings including cement board, plywood, ceramic & quarry tile, brick, and polymer cement screeds such as Cement-All.

#### NOTE: Special Substrates

(Asphalt planks, mastic or vinyl) in powered lift areas PumaCRETE 401-TF Composite (fiberglass reinforcement) shall need to be applied first, to provide proper durability, *For custom applications, adhesion testing may be required, to determine suitable adhesion. Contact PumaCRETE technical support for more information.*

#### SURFACE PREPARATION

Typically, a clean and dry surface, free of wax or other contaminants, is all that is required for proper adhesion. An industrial grade wax remover is highly recommended, for any surfaces that have been previously waxed.

#### APPLICATION and STORAGE CONDITIONS

(35-85° F range) Ideal storage/working temperature is 70 deg° F Materials are freezable, and must be stored above 35 deg F.

#### MIXING PumaCRETE 401-TF

1 pail 401 HF-HFB-TF resin

*optional:* pumaCOLOR tint (mix into resin 30 seconds)

1 pail 401 HF-HFB-TF hardener

1 bag 401-TF aggregate. (81 oz)

*Optional* Add 3 oz of PumaCRETE catalyst for 25% faster curing.

Mix for 15 seconds. Immediately pour out 100% of contents.

\* Catalyst shall cause materials to set extremely quickly, until it is emptied and spread onto the surfaces

#### APPLICATION PRIMER or TOP COAT

Pour in a ribbon and spread with a 5-7 mil notch squeegee (EZ Squeegee by Midwest rake, or equal), then roll with 3/8" nap paint roller. It may also be brushed on at a consistent, thin even finish.

**Optional:** fiberglass mat may be embedded into the primer coat (401-TF Composite) for additional strength.

When used as a primer, additional buildup coats can be applied, which add 1/16" thickness for each layer. Broadcast a layer of graded quartz sand (20/40 or 40/60 mesh) into the wet primer, to rejection. When dry, sweep/vacuum excess quartz sand, and apply additional layers as needed.

#### CURE SCHEDULE @77 deg F

12 hours foot traffic, 24 hrs full cure

\* Using PumaCRETE Catalyst: 2-4 hrs cure foot traffic; 12 hours full cure

#### PACKAGING

1 pre-measured unit: 1 pail 401 HF/ECO/TF Resin + 1 pail 401 HF/ECO/TF Hardener + 1 bag 401-TF aggregate/powder

**Optional Colors:** 6 oz liquid 120-PumaColor

(or 6 oz black 121-PumaTINT powder black or red only).

#### COLORS AVAILABLE

Colors: Natural (no color), Black, or any PumaCOLOR tint.

*Caution: lighter colors shall readily fade and discolor from UV light*

#### MAINTENANCE

Regular sweeping, mopping or floor scrubber may be employed.

New surface may be waxed with any type of floor wax, such as acrylic floor finish, to provide shine and increased cleanability. Waxing is not required to maintain surface or extend life.

#### PHYSICAL PROPERTIES 401-TF Composite system

Tensile Strength	ASTM C507	4,900 psi
Flexural Strength	ASTM C580	3,600 psi
Shear Strength	ASTM C732	5,100 psi
Abrasion resistance (method A)	ASTM C779	.019 @ 60 min
Thermal Distortion	Passing up to 160 deg F	
Coeff. of Thermal Expansion	ASTM C531	1.5 x 10 <sup>-5</sup>
Water Absorption	MIL-PRF-3134	0.64%
Hardness	ASTM D2240	90 Durometer "D"
Adhesion	ASTM D4541	400 psi 100% failure in conc.
Flammability-Crit Rad Flux	ASTM E648	1.07 Watts/sq cm
Flammability	ASTM D635	Self Extinguishing
Impact Strength	ASTM D4226	> 160 in-lb
VOC	ASTM D3960	0 lb/gal
Coefficient of Friction		>.6

#### WARRANTY

PumaCRETE® 401-TF materials have a limited warranty.

**TERMS OF WARRANTY:** Modification to any of PUMA-CRETE's products voids the warranty. The installer shall maintain a written contemporaneous record of field conditions (including, without limitation, surface and atmospheric conditions, usage rates, and lot numbers of products installed). PUMA-CRETE reserves the right of inspection of any installed product, installation and maintenance records and records of field conditions and may conduct additional testing as is reasonably required to investigate any warranty claims. Warranty shall only apply for products or materials that have been paid for in full.