



DESCRIPTION

PumaCrete 401-HF® is an extra heavy duty floor with matte finish, available in light to aggressive texture. It is a low odor, cement urethane based, screeded floor. It can restore a very rough surface, and is designed to provide excellent resistances to abrasion, chemical attack, physical aggression and thermal shock. Designed for industrial facilities, it handles forklifts and other types of heavy loads with commonly used rubber wheels.

COMPOSITION

Water dispersed polyurethane resin system combined with graded silica aggregates, and optional 2-part polymer topcoat.

APPEARANCE

Matte finish. Texture may be specified as: LIGHT, MEDIUM or HEAVY. Note: heavy texture requires brush cleaning or high pressure water.

DURABILITY

Resistant to impact, abrasion, and heavy loading from fork trucks, pallet jacks and carts, commonly found in industrial facilities.

WATER AND MOISTURE TOLERANCE

Handles up to 25 lbs of water vapor transmission and over 99% concrete internal RH. The flooring functions as a vapor permeable, mitigation system.

CERTIFICATIONS

401-HF is accepted by USDA, FDA, SQF, HACCP, BRC, and many other agencies.

THICKNESS

Typical 1/4" to 3/8" (6-9 mm).

TYPICAL APPLICATIONS

Industrial Manufacturing and Processing Facilities

SUBSTRATES

Concrete and structurally sound toppings including ceramic, quarry tile and brick. Other structurally sound substrates may be suitable, based upon testing of the substrate for suitable adhesion. Fiberglass reinforcement of substrate may be required, for some applications.

SURFACE PREPARATION

To be assured of maximum adhesion and properties of Puma-Crete resin products the correct surface preparation is essential. Please refer to technical data sheet "Surface Preparation". In order to ensure the finished system remains fully bonded to the sub-floor, it is recommended that the floor perimeter is saw cut and keyed-in 1/2" deep into the substrate, to produce a structurally durable edge. This shall run along all terminations of the new flooring, which are not adjacent to vertical surfaces (e.g.- doorways, edges, drains, cleanouts).

APPLICATION CONDITIONS

(35-85° F) Ideal working temperature is 70 deg° F

APPLICATION

PC401-HF - one pass, urethane screed.
(applied 1/4-3/8 inch thickness)

COVERAGE RATES

1/4 inch	one unit = 20-22 ft ²	(2.25m ² 6mm)
3/8 inch	one unit = 13-15 ft ²	(1.10m ² 9mm)

PACKAGING

Part A	1 pail
Part B	1 pail
Aggregate	52 lb bag

SPECIFICATION DETAIL

Please refer to Engineering/Architectural Details.

MAINTENANCE (see Puma-Crete Cleaning Instructions)

Regular cleaning of the applied system is recommended in order to maintain slip resistant properties and cosmetics. Normal proprietary cleaning agents w/ standard auto floor scrubber. Steam cleaning may be employed, if needed. Waxing may be employed, for enhanced shine and cleanability.

CURE SCHEDULE (70 deg F)

401-HF®: 12 hours foot traffic, 24 hrs full cure *

*catalyst available for faster curing, if faster cure time required.

CHEMICAL RESISTANCE

Excellent resistances to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents. Please refer to Puma-Crete® chemical resistance guide.

COLORS AVAILABLE

Standard colors are: *Red and Steel Gray**

* Premium colors are available (see color chart).

TECHNICAL DATA

Compressive strength:	ASTM C579	9,620 psi
Tensile strength:	ASTM C307	4,900 psi
Flexural strength:	ASTM C580	3,601 psi
Shear Strength:	ASTM D732	5,100 psi
Abrasion resistance	ASTM C779 (method A)	.019 in @ 60 min
Density lb/ft ³		130.41 lb/ft ³
Impact Resistance		IR>4
Thermal Distortion		Passing up to 300 deg F
Thermal Coeff. of Thermal Expansion	ASTM C531	1.5x10e5
Water Absorption	MIL-PRF-3134	0.64%
Surface Hardness	ASTM D2240	85-90 Durometer "D"
Adhesion	ASTM D4541	400psi 100% failure in conc.
Flammability-Critical Radiant Flux	ASTME648	1.07 watts/sq cm
Flammability	ASTM D635	Self Extinguishing
Impact Strength	ASTM D4226	>160 in-lb
VOC	ASTM D3960	.083 lb/gal
Resistance to Fungi Growth	ASTM G21	Rating of 1, passes
Coefficient of Friction		> 0.60

HEALTH AND SAFETY

This is a water based and 0 gram VOC/Liter product system.

STORAGE, MIXING & APPLICATION

The storage, mixing and application conditions can affect the quality of the finish produced. Materials are freezable, and therefore must be stored above 35 deg F. Optimum application temperature is 70 deg F.

CONDITIONS OF USAGE:

Installation of all products purchased must be by professional installers periodically published by PUMA-CRETE or otherwise approved by PUMA-CRETE in writing. 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.