PUMA-CRETE®

Heavy Duty, Urethane Industrial Flooring

301 AGV *PumaESD*

Static Dissipative AGV Floor Resurfacer

rev.9/1/25

Technical Datasheet

DESCRIPTION

301 AGV PumaESD® is a heavy duty, anti-static, highly flowable, urethane resurfacer. This 3 or 4 coat system is suitable for new or damaged concrete surfaces, and has a satin, anti-slip finish. There are no objectionable odors during installation. This easy-to clean floor is provides excellent resistance to abrasion and other physical aggression in manufacturing and warehouse facilities with AGV (automatic guided vehicles) or AMR (autonomous mobile robots). It handles high levels of concrete vapor emissions.

COMPOSITION

Primer: reqrd for new concrete or bare concrete (slab on grade).
Base: 301-SL (typical 1/9-3/16" for surface in typical condition).
Mid-Coat: 104-PumaPOXY MB polymeric epoxy.
Top Coat: 112-d AGV PumaESD high performance urethane with integral PumaWEAR anti-wear additive.

APPEARANCE

Satin finish. Surface is watertight and easy-to-clean. Textures available include smooth or light texture. Meets ADA Standard: Coefficient of Friction (.6)

DURABILITY

Resistant to abrasion from fork trucks, pallet jacks, AGV and AMR vehicles/equipment.

WATER AND MOISTURE TOLERANCE (MVR)

1/8-inch. Handles up to 15 lbs MVR.

1/4-inch Handles up to 25 lbs MVR and 97% concrete internal RH.

THICKNESS

Typical 1/8 to 1/4 inch (3-4 mm)

SUBSTRATES

Concrete, structurally sound toppings, and high strength polymer modified screeds such as Rapid Set (cement-all).

ELECTRICAL RANGE AND CERTIFICATIONS (static dissipative):

10e5 to 10 e8 ohms

For custom resistance ranges, please contact PumaCRETE technical support.

APPLICATION CONDITIONS

60-85° F (16° -29° C) best results are achieved at 70° F (21° C). For job site tempertures below 60° F, or above 80° F, consult Puma-Crete tech support for information on extending working time.

APPLICATION

Typically, 301-PumaESD PumaCRETE® is a three coat system. (For new concrete, the concrete must be primed and sealed to prevent off gassing/pinholes, using 103 PumaPOXY WB primer. Base coat includes a self-leveling, cementitious urethane slurry (base coat), and a polymeric intermediate coat, and an easy to clean, satin top coat.

Apply 301-SL using trowels, v-notch squeegee or cam rake. Intermediate coat of 104-PumaPOXY MB is a squeegee/roll application. 112-c PumaESD is a roller-applied top coat.

GROUNDING

System may be easily grounded, every 1500 sf, by means of conductive copper ground tape, applied before or after final coat.

PACKAGING

Manufactured in pre-measured, easy to use units.

BASE COAT/SLURRY:

301-resin, 301-hardener, 301-SL aggregate (25 lb bag)

Up to 1 qt of quartz silica may be added per unit, for enhanced body and increased coverage, if desired.

COVERAGE:

PRIMER (new concrete only) 103 PumaPOXY WB squeegee/roll applied 175-200 sf/unit

BASE COAT
301-SL 1/8 inch 50=60 ft² /unit (use #2 cam or 1/2" notch squeegee)
301-SL 3/16 inch 25-30 ft² /unit (use #3 cam rake)

MID-COAT 104-PumaPOXY MB Part A/B: 225 sf/gal

TOP COAT 112 AGV PumaESD 3-component pre-measured unit with PumaWEAR abasion additive. 1100 sf/unit

MAINTENANCE

Regular cleaning of the applied system is recommended in order to maintain slip resistant properties and cosmetics. Normal cleaning agents (such as Simple Green) w/ standard auto floor scrubber.

** Use brush or high pressure hose for rough texture finishes..*

COLORS AVAILABLE

7 standard Colors (see PumaCRETE ESD color chart)

TECHNICAL DATA

Compressive Strength	ASTM C579	8,820 psi
Thermal Distortion	Passing up to	270 dF
Therm. Coeff. of Therm. Expansion	ASTM C531	1.5x10e5
Density	ASTM C905	130 pcf
Water Absorption	MIL-PRF-3134	0.64%
Surface Hardness 85-90 Durometer "D"	ASTM D2240	
Adhesion 100% failure in concrete	ASTM D4541	400psi
Flammability-Critical Radiant Flux	ASTM E648	1.07 watts/sq cm
Flammability	ASTM D635	Self Extinguishing
Tensile strength:	ASTM C307	4,785 psi
Flexural strength:	ASTM C580	9,840 psi
Shear Strength	ASTM D732	4,965 psi
Abrasion resistance (method A)	ASTM C779	.010 in @ 60 min
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

Water based and 0 gram VOC/Liter product system. Please read the safety data sheets, for further detailed information on safe handling and use of this product.

SHELF LIFE: 1 year from date of manufacture (un-opened).

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 full. This writing constitutes the sole and only agreement of warranty relating to PUMA-CRETE products.

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