

AVM System 620P - Pedestrian Traffic Coating



SYSTEM DESCRIPTION

The **AVM System 620P** is a two component, fast setting, rapid curing, solvent free, high performance, and high solids polyurea / urethane MMA polymer waterproofing membrane. This membrane can be used as a heavy-duty wearing surface on prepared interior or exterior concrete, under asphalt overlays, plywood and metal surfaces.

WHERE TO USE

Typical uses include Vehicular asphalt and concrete parking decks, pedestrian walkways, patios, stairways, sun rooms, metal roofs, etc.

PRODUCTS & ACCESSORIES

AVM Top Coat 620-AL: Two-component, UV stable (aliphatic) hybrid polyurea waterproofing membrane topcoat. Can be used in multiple coats for the **Aussie Coat 620V** Vehicular traffic coating system or as a topcoat over Aussie Membrane 520 for the **Aussie Coat 620P** - Pedestrian coating system.

AVM System 520: Single component cold-applied polyurethane liquid, which dries to a tough, seamless flexible waterproof membrane that exhibits excellent adhesion, strength, elongation and recovery properties.

AVM Epoxy Primer 401: Two-component, solvent-based, epoxy primer for use over concrete, plywood, metal flashings and other polyurethane and acrylic deck coatings.

Installation Instructions

Aussie Seal M: Marine-grade moisture cure polyether sealant for use as a detailing membrane and at cant strips.

Silica Sand: Used as a broadcast sand/aggregate for traction and grip as required.

LIMITATIONS

Do not open until ready to use. Any off ratio mixing of the product will affect the properties and the product may not cure. This product contains Isocyanates and Curative Material.

DELIVERY, STORAGE & HANDLING

- a. Delivery of all the system materials to the job site must be in their original sealed containers and bags, with the manufacturer's name and label intact.
- b. Handle and store containers and bags in accordance with printed instructions.
- c. Store at temperatures between 50°F and 90°F.
- d. Keep all materials out of the reach of children.
- e. If irritation occurs during use, liberally flush affected areas with water. If irritation continues, see a physician immediately.

Shelf Life of **AVM System 620** is 1 Year of date of manufacture when stored in recommended conditions.



SECTION 1 – GENERAL INSTALLATION GUIDELINES

1.1 PRIMER

If an adhesion test is completed on the deck and the results determine its needed, the following steps should be used in the application of AVM Epoxy Primer 401.

If pinholes are present in the concrete, apply AVM 401 Primer to fill in the pinholes to avoid outgassing. Allow primer to completely dry before coating in this application. Please refer to the AVM Epoxy Primer Technical Data Sheet for additional information

1. Mix part A separately for 60 seconds using a drill and clean paddle.
2. Mix part B separately for 60 seconds using a drill and clean paddle.
3. Combine Part A and Part B into a single container and thoroughly mix for 2 additional minutes using a drill and clean paddle. (Product is supplied in kits, so no pre-measuring is required. Make sure to use the entire contents of both Part A and Part B).
4. AVM Primer 401 is now ready to be applied. Do not mix more material than can be used within 20 minutes.

1.3 MOCKUP (IF REQUIRED)

Establish a 100-200 sq/ft mockup area completed with the intended materials. The mockup should be approved by a project representative for functionality, slope, slip resistance and aesthetics. Once the mockup is approved, it shall become the benchmark for the installation and finish on all the decks to be coated.



SECTION 2 – TYPICAL PEDESTRIAN ASSEMBLY OVER CONCRETE

2.1 MIXING

1. Using a mechanical mixer, premix Part-A & Part-B separately for 1-2 minutes to obtain a uniform color, making sure to scrape the solids from the bottom and sides of both containers.
2. Pour Part-B into Part-A slowly and while mixing, scrape the sides of the bucket.
3. Mix the combined Part-A and Part-B for 2-3 minutes from bottom to top until a uniformed color is obtained.

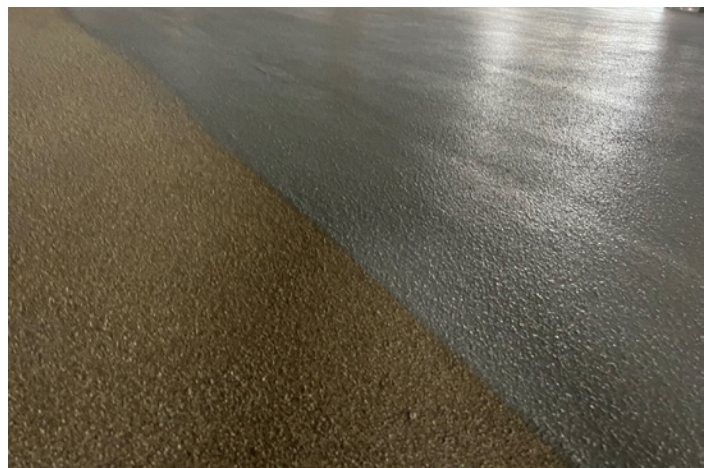
2.2 APPLICATION

1. **Preparation and Sloping:** Check area of application to ensure that it conforms to the substrate requirements as stated in AVM's System 620 Installation Instructions. If additional sloping is needed, use AVM Crete 6400/6200 as needed to create the necessary slopes. Fill joints, cracks, and flashings with Aussie Membrane 520 Pro. Penetrations and larger openings may be filled with Aussie Seal M Sealant. Recommended; On plywood decks, install a ¼" thick layer of AVM Crete 6400 reinforced with metal lath 2.5 prior to deck coating installation. Recommended; Reinforce Aussie Membrane 520 Pro with a 6" wide strip of AVM Mat 800 or Mat 570 at all joints, cracks, flashings, penetrations and other sensitive areas. For cracks over ¼" wide and/or expansion joints, contact AVM Industries.
2. **Step 2: Epoxy Primer:** When needed, prime surfaces with AVM Primer 401, or AVM GasLock Epoxy 420 vapor barrier. Allow Primer to become tack free before proceeding to Step 3. The base coat must be installed within 2-3 hours of application of the primer. Otherwise, re-prime.

3. **Step 3: Base Coat:** Apply AVM Aussie Membrane 520 Pro (base coat) in one or two coats, or as needed to achieve a minimum 24 mils dry film thickness. (Approximately 26 wet mils) If applying base coat in two coats, first coat must be fully cured and tack free before applying the second coat. Once the base coat is completed, allow minimum 12 hours (maximum 48 hours) curing time before applying the next coat. (If the base coat surface should become dirty or contaminated, or lose their surface tack, wipe clean with xylene, acetone or other safe solvent.)

4. Step 4: Aggregate Binder Coat:

- a. **Method 1:** Once the AVM 520 Base Coat has cured, apply the AVM Top Coat 620-AL Aggregate Binder Coat by roller, trowel or notched squeegee in a uniform coat at a minimum rate of 100 sq.ft./Gal (16 wet mils). While the coating is still fluid, uniformly broadcast and thoroughly encapsulate by back-rolling the proper 16 or 20 mesh aggregate into the coating at a rate of 15-25 Lbs. of aggregate per 100 square feet. For proper adhesion between 620 AL coats, re-coating must be done within 2-12 hours.



b. Method 2: Apply the AVM Top Coat 620-AL

Aggregate Binder Coat by roller, trowel or notched squeegee in a uniform coat at a minimum rate of 200 sq.ft./Gal (8 wet mils). Broadcast to refusal the aggregate onto the wet surface of the Aussie 620-AL coat. Cover the entire surface leaving no wet spots and allow to cure for 30 minutes to 2 hours depending on weather conditions. Sweep up and/or vacuum up any loose or unbound aggregate. Apply the AVM Top Coat 620-AL by roller, trowel or notched squeegee in a uniform coat at a minimum rate of 200 sq.ft./ Gal (8 wet mils). Take care to evenly apply the coating with no puddling. Allow a minimum 16 hours before permitting light pedestrian traffic and at least 48 hours before heavy traffic. Cure time will vary depending on temperature and humidity. Coating typically skins over within 15-45 minutes and cures through in 3-7 days depending on temperature, humidity, and thickness. Lower temperatures and humidity can prolong cure time. Higher temperatures accelerate cure time. Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

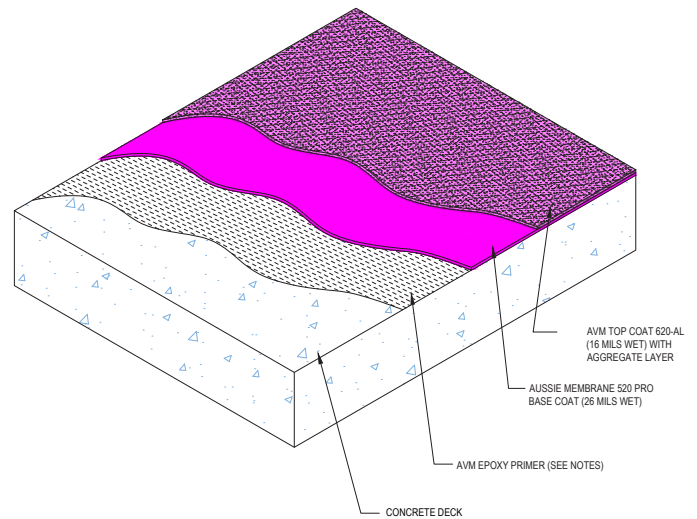


FIGURE 2.2 - TYPICAL ASSEMBLY OVER CONCRETE

5. Grid the area making sure you are applying the adequate amount of the material in the designated area.
6. The pot-life of 620-AL is 8-10 minutes.

Aussie Coat 620P Technical Information

Property	Results	Test Method
Specific Gravity	Side A: 1.05 ± 0.1 Side B: 0.99 ± 0.1	
Hardness	80 ± 3	ASTM D-2240 Shore A
Pot Life (min @ 75°F [24°C], 50% RH)	15 ± 5 minutes	
Tack Free Time	3-4 Hours	
Tensile Strength	2500 ± 100 pli (17.2 ± 0.7 kN/m)	ASTM D-412
Elongation	800 ± 100%	ASTM D-412
Tear	300 ± 25 pli (52.5 ± 4.4 kN/m)	ASTM D-624
Viscosity, at 75°F (24°C)	Side A: 1500-2500 cps Side B: 50-150 cps	
Total Solids by Volume	97%	ASTM D-2697
Volatile Organic Compounds	<0.49 lbs/gallon (59 gm/liter)	ASTM D-2369-81

Packaging

Item	Packaging	Approx Shipping Weights	No. of Kits per Pallet	Pallet Weights	VOC
520 5-Gal Bucket	5 Gallons	60 Lbs	36 Buckets/Pallet	4050 Lbs	75 g/l
620-AL 1 Gal Kit Part-A	0.8 Gallon	9 Lbs	180 Part-A on Pallet 1	1,680 Lbs	0.00 lb/gal
620-AL 1-Gal Kit Part-B	0.2 Gallon	21 Lbs	180 Part-B on Pallet 2	465 Lbs	0.00 lb/gal
620-AL 5-Gal Kit Part-A	4 Gallons	45 Lbs	48 Part-A on Pallet 1	2,220 Lbs	0.00 lb/gal
620-AL 5-Gal Kit Part-B	1 Gallon	11 Lbs	48 Part-B on Pallet 2 (12 Boxes)	598 Lbs	0.00 lb/gal

Coverages

Item	Coverage Rate
AVM 520 – Applied as a Base Coat Layer at 24 Dry Mil Thickness	67 sqft/gal
AVM 620-AL Aliphatic @ 30 Mils	55 sqft/gal
AVM 620-AL Aliphatic @ 20 Mils	80 sqft/gal
AVM 620-AL Aliphatic @ 15 Mils	105 sqft/gal

Note: These are theoretical coverage rates and may vary depending on substrate types or if used as a topcoat over sand.

AVM Epoxy Primer 401 Technical Information

Coverages: The following coverages are based on controlled tests. Actual coverages may vary.

Material	Over Concrete or Metal Surfaces	Over wood, sealed or textured surfaces	Over Porous Surfaces (CMU)
AVM Epoxy Primer 401	300 sq. ft./gal.	250 sq. ft./gal	150 sq.ft./gal

Packaging:

Item / Component	Packaging	Approx Shipping Weights	VOC
2 Gal Kit (Epoxy Primer 401)			
AVM Primer 401 Part A	1 gal.	11.0 lbs.	90 Grams/Liter
AVM Primer 401 Part B	1 gal.	16 lbs.	90 Grams/Liter

Technical Properties:

Physical property	Results	Test Method
Pot Life 75° @50% RH	60-90 minutes dry film	
Dry Film Thickness Per Coat	4±1 mil	
Specific Gravity	A-Side: 1.27±0.1	
	B-Side: 1.85±0.1	
Total Solids by Weight	90%±2%	ASTM D-2369
Total Solids by Volume	84%±2%	ASTM D-2697
Volatile Organic Compounds	0.75 lbs/gal (90 g/L)	ASTM D-2369-81

AVM System 520 Technical Information

Technical Information	Test Method	Test Results
Color		Gray
Solid Content		≥ 95%
VOC Content		75 g/L
Low Temperature Flexibility		No Cracking at -40° (-40°C)
Tensile Strength		2.79 MPa (405 psi)
Elongation at break		726%
Tearing Strength		15 N/mm
Water Impermeability (at .03 MPa, 30 mins)		Impermeable
Resistance to Water	ASTM D 2939	PASS
Low Temperature Crack Bridging	ASTM C836	PASS
Extensibility After Heat Aging	ASTM C836	PASS
Adhesion Strength	ASTM C836	17 lbf/in
Remains in Place During Application	ASTM C 836	PASS (2 coats vertical @ 30 mils wet)
Resistance to Decay (Requirement: ≤ 10%)	ASTM E154-99	5% change
Water Vapor Transmission (Requirement: ≤ 1)	ASTM E96-13	.67 perms
Hydrostatic pressure over 1/8" crack	ASTM 1306-95	17.5 psi
Service Temperature		-25°F to 177° F (-31°C to 80°C)
Application Temperature		40° to 100° F (4°C to 38°C)
Tack Free Time (hours) ¹		≤ 10 hrs.
Curing Time (hours) ²		≤ 20 hrs.

1. Based on controlled tests. Tack free times vary based on thickness, temperature, humidity, and other job conditions.
2. Based on controlled tests. Cure times vary based on thickness, temperature, humidity, and other job conditions.

AVM's Aussie Membrane 520 material was evaluated for compliance with ICC-ES AC29:
Acceptance Criteria for Cold, Liquid-Applied, Below-Grade, Exterior Dampproofing and Waterproofing Materials.

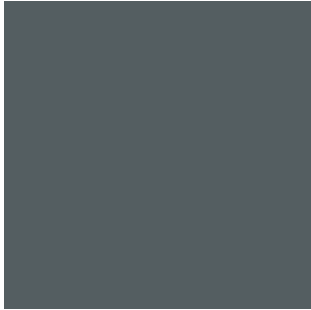
Coverages (Varies depending on substrate)	Thickness
125 sq/ft per 5gal pail	60 mils

Item/Component	Packaging	Approx. Shipping Weights	Qty / Pallet	Weight / Pallet	Pallets/ Truck	VOC
Aussie Membrane 520	5-Gal Pail	60 lbs.	36	2260 lbs	20	75 g/L

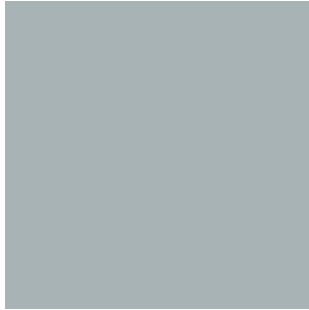
of pallets per truck varies if shipped to or in USA or to or in Canada and/or if shipped in a shipping container or standard truck. Qty/Truck listed above shows maximum pallets per 40 GP shipping container shipped in or to the USA. Call AVM for details.

Aliphatic Top Coat Colors

Standard Color (Stocked Item) : Medium Gray
All other colors are special order



Dark Gray



Medium Gray



Light Gray



Chocolate



Ash Brown



Brick Red



Dark Tan



Tan

Note: Colors shown are as accurate as possible. Applied color appearance may vary due to surface texture, lighting, size, shape, method of application and adjacent colors. AVM Industries, Inc. reserves the right of reasonable variation. Colors might vary from batch to batch. Custom colors and color matching are available subject to extra charge and minimum order quantities.