PROGRESSIVE MATERIALS

PREMIUM COATING SYSTEMS

Acrylic Coatings Spray Guide

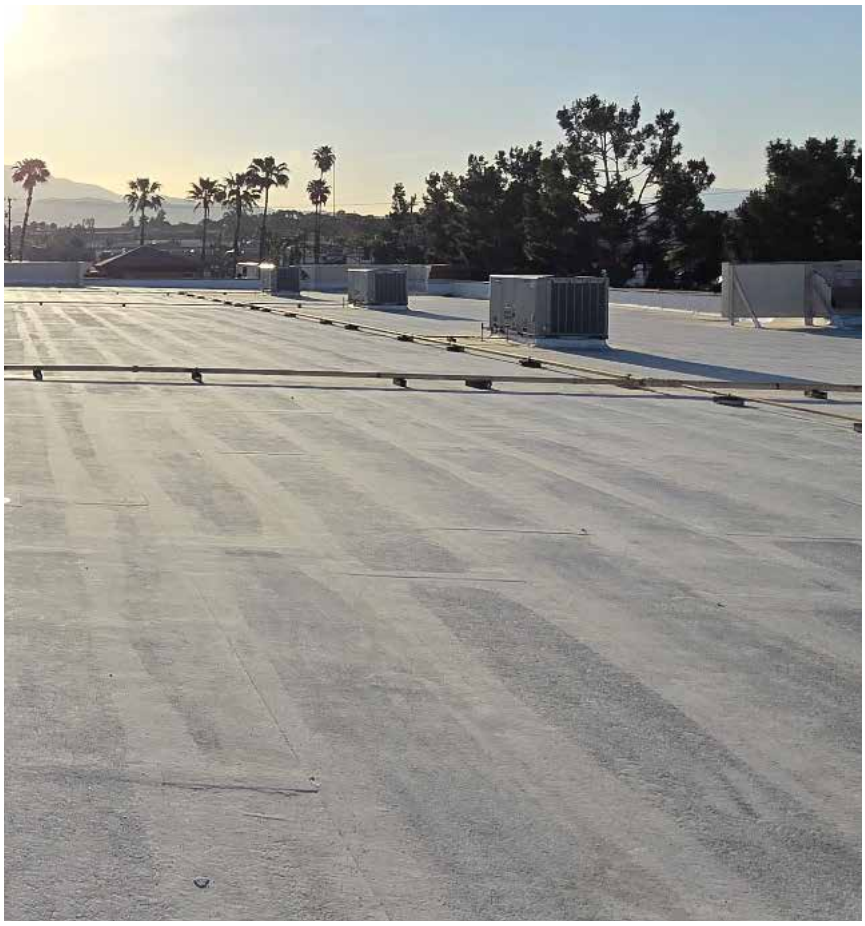
This guide should be used to provide basic instructions for spray applying the acrylic coatings produced by PM. In addition to the safety procedures identified in this document, all OSHA, EPA and any other local governing authority should be consulted to ensure compliance with their requirements. Any personnel applying these acrylic coatings should also familiarize themselves with all applicable Technical Product Data Sheets and Material Safety Data Sheets.

HEALTH & SAFETY

While water borne acrylic roof coatings can be applied via roller, brush, squeegee or spray, the most cost efficient (especially for large jobs) is the airless spray. Here the coating is pumped from the container to a pump where it is pressurized to several thousand pounds per square inch. The coating is sprayed through a gun with a small orifice (usually 0.025- 0.040 inches). When the pressurized coating comes out of the gun and is at atmospheric pressure, the pressure reduction causes the coating to atomize into small discrete droplets. All recommended safety procedures should be strictly followed. The PM silicone coatings are not specifically designed for interior applications. Additional safety procedures will apply for application under these conditions.

PROTECTIVE EQUIPMENT

1. During most outdoor spraying applications, chemical exposure levels will be below the OSHA permissible limits, thus, respiratory protection may not be required. Air monitoring should be performed by a qualified person to identify the hazards. Should respiratory protection be required, use a NIOSH approved air-purifying or positive pressure supplied air respirator.
2. Fabric Suit
3. Impervious gloves
4. Safety glasses



SPRAYING PRECAUTIONS

1. Keep spectators and all non-critical personal away from spray area.
2. Be certain not to spray over open energized electrical circuits.
3. Turn off all air intakes within 100’ of spraying. During some conditions, a greater distance may be required. If air intakes cannot be shut off, charcoal filters may reduce In order to eliminate overspray on nearby surfaces and objects, a fully enclosed windscreen should be used.

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STORAGE & HANDLING

1. Containers should be left unopened until ready to use.
2. Store material between 40*F and 100*F to prevent from freezing.
3. AC 1200 has a recommended shelf life of 12 months.
4. Store away from any sparks or open flames.

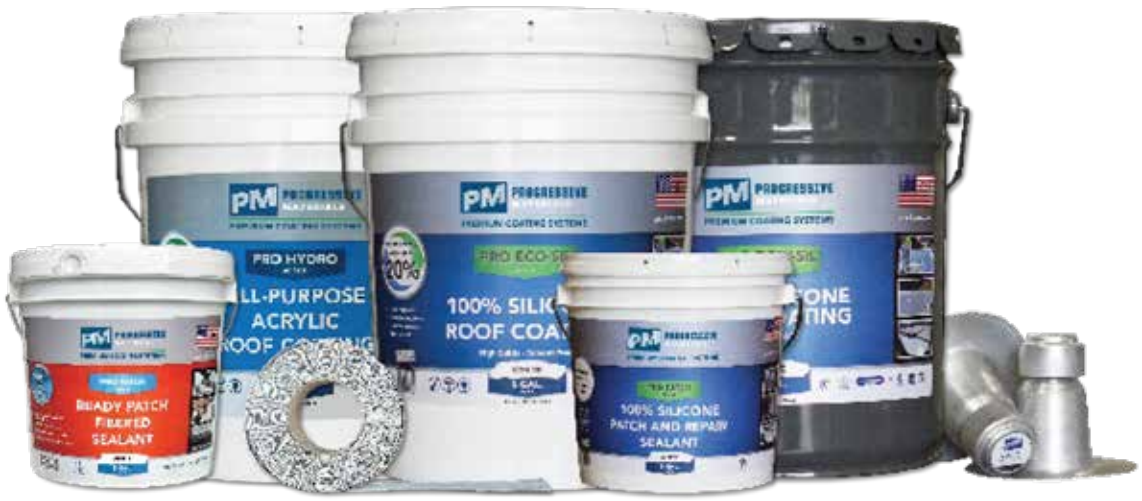
COMPOSITION AND MATERIALS

AC 1200 Series Acrylic Roof Coating is a one-part, ready-to-use material that can be applied easily to a dry, frost-free surface, and cures at normal temperature in 1 to 4 hours by reacting with the heat from the sun. For applications with lower-than-normal temperature expect the cure time to be longer.

- Care should be taken to ensure roof has positive drainage. Product not intended for use in areas where standing/ponding water occurs.
- Yield (1 gal to 100 sq ft): 8.5 dry mils
- Dry Time (70*F) 90 min @ 50% Humidity
- Re-coat Window >6 Hours
- Apply the AC 1200 series at the rate of 1.5 gallons per 100 sq. ft. (24 wet mils). Surface textures and wind will affect applied mil thickness.

MIXING

AC 1200 Series Acrylic Roof Coating is a one-part, ready-to-use material that can be applied easily to a dry, frost-free surface, and cures at normal temperature in 1 to 4 hours by reacting with the heat from the sun. For applications with lower-than-normal temperature expect the cure time to be longer.



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SPRAY EQUIPMENT

Airless spray equipment can dramatically increase production when spraying acrylic coatings. Be certain that the spray equipment is properly maintained and operated in accordance with the equipment manufacturer's instructions.

GENERAL EQUIPMENT RECOMMENDATIONS

- For successful roof coating spraying, the unit should have a delivery rate at 1 1/2 gallon per minute and a tip size of 0.029 inches. Pressure should be at least 2,000 psi. Larger units will allow for longer hose runs. This can be helpful on large jobs where the coating and the airless spray unit can be kept on the ground and only the hose and gun are actually on the roof.
- Filters should not be used.
- Airless spray units are powered by either an eletric motor or gasoline engine. While the electric motor may be less prone to the complexities associated with gasoline engine, it may require a very long extension cord. There is an appreciable electrical current drop when the long extension cords are used. This can adversely affect the motor's efficiency. By contrast the gasoline airless sprayer is fully self contained.
- Two units that have proven very reliable have been the Graco GH-733 and the Graco GH-833 pumps. A "Reverse-A-Clean" tip with a minimum tip size of 0.029" is recommended. The tip size can be increased to 0.045" for greater throughput.

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APPLICATION

- Proceed with installation only when existing and forecasted weather conditions permit roofing systems to be installed according to manufacturer's written instructions and warranty requirements.
- Do not install Acrylic coating under the following conditions:
  - When ambient temperature is below 50* F or could fall below 32* F within 24 hours of application.
  - When rain or dew is likely to occur before the product dries.
  - In late afternoon, when facing conditions of high humidity, as overnight dew can cause product wash-off.

GENERAL EQUIPMENT RECOMMENDATIONS

- Acrylic coating must be sprayed at a minimum of two passes Base and Top coat (1 1/2 gal. per pass). Projects requiring over 3 gal. per sq. must have an intermediate coat.
- **Base:** While spraying, the tip shoud be approx. 20" above the roof surface. While trigger-ing the gun at the passlines, move at a rate to produce the desired coating thickness. Spray techniques should include a half-lap technique where each spray pass is over-lapped 50% for a uniform coverage . . . Always verify coating thickness during the application with a wet mil gauge.
- **Top:** Application of top coat should be sprayed perpendicular (cross hatched) to the base coat. This ensures consistent coverage, no thin spots or "holidays" are present. Always verify coating thickness during the application with a wet mil guage. On veritcal surfaces, ensure the material will sag much easier than at lower temperatures.
- **Clean-up:** Clean equipment and overspray with water. Clean hands with waterless hand cleaner. Application tools and equipment can be cleaned with lukewarm water and soap, followed by a rinse of isopropanol, acetone, or SimpleGreen*. Recirculate the rinse through lines and gun until residual coating is removed. Flush the hoses with 10 gallons of water per 250 feet of hose during the initial flush.
- **DO NOT USE MINERAL SPIRITS, XYLENE, TOLUENE, OR VMP & NAPTHA SOLVENTS.**

For more information on the spray application of Progressive Materials roof coatings, contact the technical service department at 812.940.4369.