

DESCRIPTION

This guide covers proper application tips when spraying bituminous coatings. Airless spray equipment is an effective method of application particularly on large areas and irregular or vertical surfaces. (Consult with equipment manufacturer for pump recommendations). Air-atomized application is not allowed because it will affect the appearance of the coating.

Personnel using these products should familiarize themselves with procedures for personal safety, workplace precautions, and equipment operation. Refer to product data sheet and SDS for more information.

APPLICATION

Climatic Conditions

1. Rain, fog, dew, frost and relative humidity above 90% will adversely affect bituminous coatings, impacting adhesion and physical properties of the coating. Do not apply if any of these conditions exist or will exist within five hours of application. The substrate must be dry at the time of application.
2. To properly apply the material, the material temperature must be 65°F (18°C) or greater and the outside ambient temperature cannot drop below 50°F (10°C).
3. At temperatures above 90°F (32°C), reduce the application rate on vertical or irregular surfaces to prevent sags or runs. Do not apply at temperatures above 100°F (38°C).

Spray Equipment

Airless spray equipment generates very high fluid pressure. Spray equipment must be properly maintained and operated. Any misuse of spray equipment or accessories (such as over-pressurizing, modified parts, or worn or damaged parts) can result in serious bodily injury, fire, explosion, or property damage. Read and follow the equipment manufacturer's instructions and recommendations.

1. Airless spray pump must have minimum 7,250 psi output pressure rating and adequate delivery volume to support the spray tip orifice gallons per minute rating. The Graco GH933 or an equivalent pump is recommended. High-pressure airless sprayers with a higher maximum pressure capability are required for the following conditions:
 - using spray hose lengths greater than 200 feet
 - applying in cold weather

Spray Pump Recommendations

1. Max GPM Rating – 2.5
2. Hose – 3/4" ID Hose first 100' (30.48 m) with swivel connections and 1/2" ID Hose for second 100' (30.48 m)
3. Pump pressure – 5,000 psi
4. High pressure fittings
5. Tip – .045 - .055 for a 8" pattern at 12" distance (20.32 cm pattern 30.48 cm distance)
6. Recommended 12" extension with swivel tip
7. Tip and pump sizes will change depending on temperature and pattern concerns.

Spraying Technique

1. Hold the spray gun perpendicular to the surface at a distance of 18 to 24 inches (46 to 62 cm) from the roof. While triggering the spray gun, move it at a rate to produce the desired coating wet mil thickness without thin spots or "holidays." Spray technique should include a "half lap" technique where each spray pass is overlapped 50% for uniform coverage. Check applied film thickness using a wet mil gauge.
2. Using the 5,000 psi fluid pressure will provide a uniform spray pattern without fingering.
3. Spray across roof, back-roll as needed to ensure uniform coverage, then back spray across the same area to complete application.

Spraying Precautions

1. Rope off the area within 150 feet (46 m) of spray area.
2. Seal off ventilation intakes within the affected area.
3. Use windbreaks, where necessary, to confine spray mist and avoid damage to nearby surfaces due to overspray or drift.
4. Keep spectators and personnel away from spray area.

CLEAN UP

1. Clean airless spray equipment with aromatic solvent. Circulate aromatic through pump supply, airless spray pump and spray hose to remove residual coating. Then flush with clean aromatic solvent.
2. Do not leave in airless spray system for more than four hours. Under certain conditions, it is possible for these coatings to jell or harden inside the equipment.
3. For long-term storage, a final flush with mineral spirits is recommended.
4. For further details, consult with technical support or sales representative.

Protection Equipment

1. Use supplied air-breathing apparatus with full-face mask or hood during any spray application unless monitoring demonstrates TDI exposure below OSHA permissible limits.
2. Fabric coveralls are recommended
3. Impervious gloves are recommended

STORAGE AND HANDLING

Storage

1. Keep containers closed; store in a dry cool place away from heat, sparks, open flame and moisture.
2. For cold weather application, keep material stored above 65°F (18°C).
3. Open containers should be sealed tightly.

Mixing

1. Settling or separation may occur upon storage.
2. Mix material before using to assure uniform consistency. Use a Jiffy mixer for open head drums.
3. Ground container and equipment to prevent accumulation of static charge.