

## **Silicone Coatings Spray Guide**

### **LS 2200 Series & HS 3200 Series**

This guide should be used to provide basic instructions for spray applying the silicone 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 silicone coatings should also familiarize themselves with all applicable Technical Product Data Sheets and Material Safety Data Sheets.

### **Health & Safety**

Certain silicone coatings contain flammable solvents which could create finely atomized particles while spraying. 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 or eliminate interior odors.
4. In order to eliminate overspray on nearby surfaces and objects, a fully enclosed windscreen should be used.

## Storage & Handling

### Storage

1. Containers should be left unopened until ready for use.
2. Store material between 40°F and 80°F for optimum shelf life. Storage outside of those conditions for an extended period of time could affect the performance of the material.
3. In order to spray in cold weather conditions, keep material heated to at least 65°F.
4. Store away from any sparks or open flames.

### Mixing

1. Separation will occur when the coating is stored for an extended period of time.
2. Thoroughly mix the coating with a power mixer for approximately 5 to 10 minutes until a uniform consistency is achieved.
3. To prevent static charge, ground container and equipment.
4. To prevent skinning of the coating in the container, place ¼" of Naptha or mineral spirits on top of the mixed coating.

### Thinning

1. Thinning of the coating is not required or recommended when applying during proper conditions and when using adequate equipment.
2. When thinning is absolutely necessary, only use Naptha or mineral spirits containing no alcohol or moisture and do not add more than 5 gallons per drum of coating.

## Spray Equipment

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

### Recommended Equipment Configuration

| <u>Sprayer</u>                     | <u>Hose</u>   | <u>Gun</u>   | <u>Tip Size</u> |
|------------------------------------|---|--------------|-----------------|
| Graco Xtreme X70<br>(Air operated) | 250'-450' ¼" hose (high pressure, moisture resistant) | Graco XTR704 | .029 to .043    |
| Graco GH 933<br>(Gas Powered)      | 250'-900' ¼" hose (high pressure, moisture resistant) | Graco XHF    | .029 to .043    |

**Graco X70**



**Graco GH 933**



### General Equipment Recommendations

- Filters should not be used
- Adjust tip size depending upon conditions. Hose length, air temperature, material temperature, etc can affect the spray pattern.
  - If the spray pattern is pulsating or is fingering, reduce the size of the tip orifice. This will decrease the material delivery volume and increase the pressure.
- To reduce applicator fatigue, install a wand extension at the gun with a 45° elbow at the tip.
- Be certain to **never** use hoses that were used previously to spray water based products. Residual moisture in the hose will react with the PM silicone coating and cause the material to cure which will clog the hose.

## Application

### Weather Conditions

Do not apply the PM silicone coatings if any of the following climatic conditions exist:

- Rain, fog, dew or frost.
- Relative humidity above 90%
- Ambient temperature below 40°F
- Ambient temperature is within 5°F of dew point

In order to properly spray the PM silicone coating, ensure the material temperature is at least 65°F in the container during cold weather applications. The warmer the material, the lower the viscosity will be which will be easier to spray.

### **Spray Technique**

While spraying, the tip should be 14" to 20" above the roof surface. While triggering the gun at the passlines, move at a rate to produce the desired coating thickness. Spray technique should include a half-lap technique where each spray pass is overlapped 50% for a uniform coverage ensuring no thin spots or "holidays" are present. Always verify coating thickness during the application with a wet mil gauge.



On vertical surfaces, ensure the material is not applied too thick as to cause runs or sags. At higher temperatures, the material will sag much easier than at lower temperatures.

### **Clean-up**

Clean tools and equipment with Naptha or mineral spirits. Depending on the hoses used, the silicone coating may be left in the hoses overnight. Ensure there is no air in the line at the end of the day.

If the spray equipment is not going to be used for more than 24 hours, flush the coating out of the lines with Naptha or mineral spirits. Flush the hoses with 10 to 15 gallons of solvent during the initial flush and then complete a second flush with 10 to 15 gallons of clean solvent.

*For more information on the spray the application of the PM silicone roof coatings, contact the technical service department at (812)944-7803.*

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