



## INSTALLATION INSTRUCTIONS SPRAYER EQUIPMENT GUIDELINES FOR W. R. MEADOWS FLUID-APPLIED MEMBRANES

Extensive field testing has shown that the Graco GH 833 Big Rig or Hydra Max 350 (now obsolete) sprayers work best for spraying of the water-based AIR-SHIELD™ LM, AIR-SHIELD LMP, AIR-SHIELD LSR, AIR-SHIELD TMP, and MEL-ROL® LM products. (These sprayers also work well for the spraying of the solvent-based, ALL SEASON versions of these products.) We are not aware of any other types of sprayers being used successfully with our products. Initially, we had used the Gmax 7900 Roof Rig, but we have found that the pressures (4000 psi) attained by the Graco GH 833 Big Rig and Hydra Max 350 units yield more consistent, trouble-free results. The Graco GH 833 Big Rig and Hydra Max 350 units are capable of a 3.5 – 4.0 gal./min. output, compared to a 2.1 gal./min. for the Gmax 7900 Roof Rig. The water-based emulsion products are extremely shear sensitive and should NOT be applied through gear-type pumps or pressurized follower plate systems. These systems will cause the emulsions to break, which will then clog the equipment. The ALL SEASON versions of the products are not shear sensitive and will remain stable when applied by most standard spray equipment.

The Graco GH 833 Big Rig unit comes equipped with 100' of hose, a texture spray gun, and several tips. NOTE: The standpipe on the sprayer MUST be opened and checked for the presence of a filter element and plastic sleeve. For AIR-SHIELD LM and MEL-ROL LM, these MUST BOTH be removed prior to use, as they will cause clogging.

Both the Graco GH 833 Big Rig and Hydra Max 350 can be used for five-gal. pails or 55-gal. drums. Extensions on the pumps are able to create enough suction to allow material to be pulled from the top of a standing drum (or tote) of product. (An option available for the Graco GH 833 Big Rig allows the pump to be placed directly over a drum for improved pumping of thicker materials in cooler weather.)

**GRACO HYDRA MAX 350**



**GRACO GH 833 BIG RIG**





## INSTALLATION INSTRUCTIONS

### SPRAYER EQUIPMENT GUIDELINES FOR W. R. MEADOWS FLUID-APPLIED MEMBRANES

#### EQUIPMENT

**HOSE:** We have used up to 100' of hose with these products. (Longer lengths may work; possibly up to 150'.) The hose must be rated for use up to 4000 psi for these units. W. R. MEADOWS recommends using separate hoses specific to each material.

**SPRAY GUN:** The Graco heavy duty texture gun is required (part #241705). It does not contain a paint filter and works well for these products. Other Graco guns have not worked, as they contain a diverter pin in the spray nozzle that will constantly clog the gun.

**SPRAY TIPS:** We have used the 0.051" (Graco 551,651) tip successfully for spraying and this is our preferred tip size for MEL-ROL LM/AIR-SHIELD LM products. For spraying of AIR-SHIELD LMP, AIR-SHIELD TMP, and AIR-SHIELD LSR, the 0.051" tip will work, but using the 0.035" or 0.037" tip will yield a smoother finish on the wall. For spraying of a solvent-based ALL SEASON products, we recommend using the 0.035" (Graco 535, 635) tip. NOTE: Tips should be the "reversible" type for easy clean out.

#### APPLICATION - PRIMER

**PRIMING:** Priming of poured concrete substrates may be required to minimize the potential for blistering of the membrane after it is applied and when exposed to direct sunlight. Once applied, the primer coat should be allowed to dry and be allowed to "warm up" while exposed to direct sunlight. Allowing the primer to be exposed to direct sunlight prior to the membrane application will allow the surface to "warm up" (due to the black color) and help "de-gas" the surface. This "de-gassing" releases the air/moisture vapors in the pores of the substrate, allowing them to expand and dissipate prior to the membrane application. If the primer is not exposed to direct sunlight for a sufficient time interval prior to membrane application, then blistering of the membrane may occur.



#### PRIMER DILUTION / APPLICATION

**RATE:** Dilute the water-based LM products 4-5 parts product to one part water. Apply at 100-150 ft.<sup>2</sup>/gal. and allow to dry approximately one hour. The solvent-based ALL SEASON products do not need to be diluted and should also be applied at 100-150 ft.<sup>2</sup>/gal. AIR-SHIELD LMP, AIR-SHIELD LSR, and AIR-SHIELD TMP typically do not require a prime coat.

#### APPLICATION - MEMBRANE

**SPRAY:** Several coats may be required to obtain the recommended thickness without excessive running or slumping of the wet membrane in hot weather. Allow the first coat to dry approximately one hour before application of the second coat.

**NOTE:** MEL-ROL LM and AIR-SHIELD LM can be sprayed easily when the material temperature is 40° F or above.

The material temperature of AIR-SHIELD LMP, AIR-SHIELD LSR, and AIR-SHIELD TMP should be 40° F or above to be successfully sprayed; AIR-SHIELD LM (ALL SEASON) and MEL-ROL LM (ALL SEASON) can be applied below 40° F.

Filter is recommended for use in applications of AIR-SHIELD LMP, AIR-SHIELD LSR, and AIR-SHIELD TMP. The filter is not needed for applications of AIR-SHIELD LM, AIR-SHIELD LM (ALL SEASON), MEL-ROL LM, and MEL-ROL LM (ALL SEASON).

**ROLLER:** Material can be roller applied if a ¾" minimum nap roller is used. Several coats will typically be required to obtain the desired thickness. Allow the first coat to dry thoroughly before second coat is applied. Foam-type rollers or shorter naps should not be used, as they will simply slide on the substrate. Rinse and store all rollers used for water-based products in a container of water when not in use. This is necessary, as the material will cure very quickly on the rollers if allowed to "dry out." If this does occur, the rollers will need to be discarded or cleaned with solvent and allowed to dry thoroughly prior to reuse.

**W. R. MEADOWS, INC.** | P.O. Box 338 | HAMPSHIRE, IL 60140-0338

Phone: 847/214-2100 | Fax: 847/683-4544 | [www.wrmeadows.com](http://www.wrmeadows.com)



# INSTALLATION INSTRUCTIONS

## SPRAYER EQUIPMENT GUIDELINES FOR W. R. MEADOWS FLUID-APPLIED MEMBRANES

### EQUIPMENT SUMMARY CHART

WRM PRODUCT	Water-Based (W/B) Or Solvent-Based (S/B)	Sprayer Type	Hose	Gun	Spray Tip***
AIR-SHIELD LM	W/B	Graco GH 833 or Hydra Max 350	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 551 (0.051")
MEL-ROL LM	W/B	Graco GH 833 or Hydra Max 350	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 551 (0.051")
AIR-SHIELD LMP	W/B	Graco GH 833 or Hydra Max 350	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 551 or 637 (0.051" or 0.037")
AIR-SHIELD LSR	W/B	Graco GH 833 or Hydra Max 350	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 551 or 637 (0.051" or 0.037")
AIR-SHIELD LM (ALL SEASON)	S/B	Graco GH 833 or Hydra Max 350**	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 635 (0.035")
AIR-SHIELD TMP	W/B	Graco GH 833 or Hydra Max 350	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 551 or 637 (0.051" or 0.037")
MEL-ROL LM (ALL SEASON)	S/B	Graco GH 833 or Hydra Max 350**	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 635 (0.035")

\*\*OTHER TYPES OF STANDARD SPRAYERS ALSO ACCEPTABLE. \*\*\*TIPS SHOULD BE "REVERSIBLE" FOR EASY CLEANOUT.

### APPLICATION/CLEANUP

WRM PRODUCT	Primer Coat Dilution Ratio (Product : H2O)	Primer Coat Application Rate	Minimum Product Temperature (When Sprayed)	Membrane Application Method	Sprayer Cleanup
AIR-SHIELD LM	4-5 : 1	100-150 ft. <sup>2</sup> /gal.	40° F	Sprayer or 3/4" (min.) Nap Roller**	Water Flush First
MEL-ROL LM	4-5 : 1	100-150 ft. <sup>2</sup> /gal.	40° F	Sprayer or 3/4" (min.) Nap Roller**	Water Flush First
AIR-SHIELD LMP	N/A	N/A	60° F	Sprayer or 3/4" (min.) Nap Roller**	Water Flush First
AIR-SHIELD LSR	N/A	N/A	60° F	Sprayer or 3/4" (min.) Nap Roller**	Water Flush First
AIR-SHIELD LM (ALL SEASON)	No Dilution Needed	100-150 ft. <sup>2</sup> /gal.	60° F	Sprayer or 3/4" (min.) Nap Roller**	Solvent Flush First
AIR-SHIELD TMP	N/A	N/A	60° F	Sprayer or 3/4" (min.) Nap Roller**	Water Flush First
MEL-ROL LM (ALL SEASON)	No Dilution Needed	100-150 ft. <sup>2</sup> /gal.	60° F	Sprayer or 3/4" (min.) Nap Roller**	Solvent Flush First

\*\*DO NOT USE FOAM OR SHORTER NAP ROLLERS.



**W. R. MEADOWS, INC.** | P.O. Box 338 | HAMPSHIRE, IL 60140-0338  
 Phone: 847/214-2100 | Fax: 847/683-4544 | [www.wrmeadows.com](http://www.wrmeadows.com)



## INSTALLATION INSTRUCTIONS

### SPRAYER EQUIPMENT GUIDELINES FOR W. R. MEADOWS FLUID-APPLIED MEMBRANES

## EQUIPMENT CLEANUP

### WATER-BASED PRODUCTS:

- Solvents must NOT come in contact with the liquid emulsion AIR-SHIELD LM and MEL-ROL LM products while in the sprayer, as they will immediately break the emulsion and plug up the entire sprayer system.
- Before starting to spray, the sprayer MUST be flushed with clean water.
- When spraying is complete, material must NOT be left in the pump, lines or gun as the MEL-ROL/AIR-SHIELD emulsions will quickly begin to break and cure in the equipment. When finished spraying, WATER ONLY should be PROMPTLY flushed through the system until pump and hose run clear. Do NOT add soap to the flush water, as it too will break the emulsion. “Simple Green” cleaner is the only cleaner found that can be used successfully.
- When spraying is complete, solvents, including xylene, toluene, mineral spirits, paint thinner, gasoline, etc., must NOT be used for the INITIAL flushing of the system. These solvents will break the emulsion and clog the system
- Aromatic solvents (xylene or toluene) are recommended for the FINAL flushing AFTER water has been flushed through the pump and lines. If solvent is pumped through the system after being flushed with water, all equipment MUST be flushed with water before spraying emulsion. All traces of solvent MUST be completely removed. Note: Aromatic solvent may be used to soak and clean the pump housing, gun, and tips. Solvents can be left in the sprayer for short durations (days) to aid in cleaning of the system. Solvents left in the sprayer for extended periods may begin to degrade the seals and hose. Again, all traces of solvent MUST be removed prior to using the equipment with the water-based emulsion products.

### SOLVENT-BASED, ALL SEASON PRODUCTS:

- While the ALL SEASON products are stable in the sprayer, once spraying is complete, solvents should be flushed through the system until pump and hose run clear. Aromatic solvents (xylene or toluene) work best, but mineral spirits, paint thinner, etc., can also be used. Solvents can be left in the sprayer for short periods of time, but should NOT be allowed to remain in the sprayer for extended periods of time, as they may begin to degrade the seals and hose.
- When switching from a solvent-based to a water-based product: After flushing with solvent, water MUST be flushed through the ENTIRE system until all traces of solvent have been removed. When beginning to spray a water-based emulsion product, if ANY solvent remains in the sprayer, the pump, hose, gun, and spray tips WILL CLOG and will need to be cleaned out.



**W. R. MEADOWS, INC.** | P.O. Box 338 | HAMPSHIRE, IL 60140-0338  
Phone: 847/214-2100 | Fax: 847/683-4544 | [www.wrmeadows.com](http://www.wrmeadows.com)