



Spraying LATICRETE® Hydro Ban™

TDS 410

LATICRETE® Hydro Ban™ can be effectively sprayed to increase productivity on large projects. In addition to the conventional means of applying LATICRETE Hydro Ban, (see Data Sheet 663.0 and How To Install Data Sheet 663.5) the airless spraying technique can be used as an alternate means of application. The following are the guidelines for this procedure. Most airless spray units can be used to apply the LATICRETE Hydro Ban. This procedure will refer to the use of Graco's Mark IV Electric Airless Sprayer® and the 5900 HD Gas Powered Airless Sprayer. These sprayers are designed for spraying the contents from a 5 gallon (19 l) pail. Many airless sprayers are similar in design and will accomplish the same purpose.

Mark IV Electric Airless Sprayer



5900 HD Gas Powered Airless Sprayer



Description	Graco Part Number	Max Tip Size	Max GPM (LPM)	Max PSI (MPa)
Mark IV	249636	.031 (0.79 mm)	0.95 (3.6)	3300 (22.8)
5900 HD	248699	.043 (1.09 mm)	1.6 (6.0)	3300 (22.8)

A good understanding of the equipment, set up, delivery and cleanup procedures are required in order to effectively spray LATICRETE Hydro Ban.

Airless Spray Tip Characteristics: It is important to remember that the orifice size, in conjunction with the fan width size, determines the spray characteristics of the tip.

Examples: As the orifice size increases, while maintaining the same fan width size, the greater the volume of coating will be applied to the same area. Conversely, the larger the fan width size, while maintaining the same orifice size, will result in the same amount of material being applied over a greater surface area.



Typical LTX Sprayer Nozzle

Tip Size: LTX521 – has an orifice of 0.021” (0.5mm) and a fan width of 10” (250 mm) holding the nozzle 12” (300 mm) away from the substrate.

Tip Size: LTX631 – has an orifice of 0.031” (0.8mm) and a fan width of 12” (300mm) holding the nozzle 12” (300mm) from the substrate.

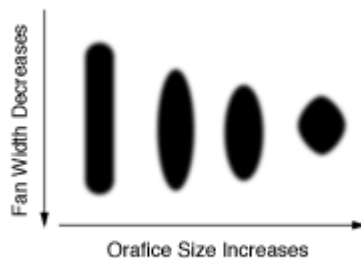
The use of spray tip with a smaller orifice will result in less product being delivered to the substrate requiring multiple passes to ensure a complete coating with optimum thickness.

Understanding Tip Wear

When beginning a project, choosing the right tip size and fan width will determine how effective the spraying process will be. The correct tip size will have a direct bearing on how much material is dispensed. However, spray tips will wear with normal use. Older, worn tips will increase delivery time and product consumption. Therefore, changing the spray tips often will result in greater productivity.

Choosing the right spray tip is essential for ensuring a quality finish. It’s important to replace a tip when it gets worn to ensure a precise spray pattern, maximum productivity and quality finish. When a tip wears, the orifice size increases and the fan width decreases. This causes more liquid to hit a smaller area, which wastes waterproofing membrane and slows productivity. Tip life varies by coating, so if a tip is worn, replace it. Extend tip life by spraying at the lowest pressure that breaks up the coating into a complete spray pattern (atomize). Do not increase the pump pressure; it only wastes waterproofing membrane and causes unnecessary pump component wear.

The example below demonstrates the spray pattern of new and worn spray tips. As wear occurs, the pattern size decreases and the orifice size increases. As a rule of thumb, it is best to replace the spray tips after spraying 30-45 gallons (114-171 liters) of LATICRETE Hydro Ban



Spray Guns

Follow the specific airless sprayer and spray gun manufacturer's written instructions when using their specific equipment. Graco's Silver Gun Plus[®] is depicted in the following photo. This spray gun can be used for both vertical and horizontal applications. Some Spray Guns will allow filtering in the gun handle. The filters will need to be periodically cleaned and changed to ensure proper liquid flow through the spray gun and tip.



Silver Gun Plus

Application of LATICRETE[®] Hydro Ban[™]

Follow all surface preparation requirements outlined in Data Sheets 663.0 and 663.5. The sprayer should produce a maximum of 3300 psi (22.8 MPa) with a flow rate of 0.95 to 1.6 GPM (3.6 to 6.0 LPM) using a 0.521 or a 0.631 reversible tip. Keep the unit filled with LATICRETE[®] Hydro Ban[™] to ensure continuous application of liquid. The hose length should not exceed 100' (3000 cm) in length and 3/8" (9mm) in diameter.

Apply a continuous LATICRETE Hydro Ban film with an overlapping spray. The wet film has a sage green appearance and dries to a darker olive green color. When the first coat has dried to a uniform olive green color, approximately 45 to 90 minutes at 70° degrees F (21° C), visually inspect the coating for any voids or pinholes. Fill any defects with additional material and apply the second coat at right angles to the first. The wet film thickness should be checked periodically using a wet film gauge. Each wet coat should be 0.015 to 0.022 inches (0.4 – 0.6 mm) thick. The combined dried coating should be 0.020 to 0.030 inches (0.5 - 0.8 mm) thick or 0.029 to 0.043 inches (0.7 – 0.11 mm) wet.

Check application thickness with a wet film gauge periodically as the LATICRETE Hydro Ban is being dispensed to ensure that the appropriate thickness and coverage is achieved. Bounce back and overspray will consume more product. To achieve the required film thickness, the coating must be free from pinholes and air bubbles. Do not back roll coating. Allow the LATICRETE Hydro Ban to cure in accord with the instructions in Data Sheets 663.0 and 663.5 prior to the installation of the tile or stone finish.

It is important to note that areas not scheduled to receive the LATICRETE Hydro Ban should be taped off and protected from any potential overspray. Expansion and movement joints should be honored and treated as outlined in product Data Sheets 663.0 and 663.5.

NOTES: The operator of the spray equipment must have a working knowledge of the equipment used and be able to adapt to the project conditions as the spraying takes place. As the spray tips wear, adjustments will need to be made.

Spray tip selection, pressure adjustments and hose length will have a direct bearing on the results achieved.



Spray Equipment Setup, Clean Up and Maintenance

Follow the airless sprayer manufacturer's instructions on set up, operation, clean up and maintenance of their equipment. The airless spraying unit should be flushed, clean and free from any contaminants prior to use with LATICRETE Hydro Ban.

Health and Safety

Follow all applicable health and safety requirement when applying LATICRETE® Hydro Ban™. The use of protective clothing, safety glasses and a dual cartridge respirator are recommended. See MSDS Sheet on LATICRETE Hydro Ban for complete information.

Airless spray equipment can be purchased by contacting:

Bob Zaffino
The Paint Project Inc.
Industrial Spray Equipment & Systems
71 West Street
Medfield, MA 02052
Tel 508.359.8003
Fax 508.359.8463
e-mail bob@paintproject.com

or

Graco Inc.
Sales/Distribution/Service
P.O. Box 1141
Minneapolis, MN 5540-1441
Tel. 800.690.2894
Fax 800.334.6955
www.graco.com

Technical Data Sheets are subject to change without notice. For latest revision, check our website at www.laticrete.com
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