

ATB-102 *Application Equipment: Guidelines & Recommendations*

General Information about Application Equipment

Acrymax coatings are applied by brush, roller, or spray. Brushing is suitable for small areas, edges or corners. Rollers are useful on larger and relatively flat surfaces. Spraying is best for large areas, but also works very well on irregular shapes.

Brush

Brushing is slower than other methods of paint or coating application. It is mainly used for small areas and for cutting in corners or edges. In general a good quality synthetic bristle brush should be used. However, there are some applications where a cheap throw-away brush can be used. Some applicators have reported good results using a tampico roof brush for application of elastomeric coatings on corrugated metal roofs.

Roller

Rollers are excellent for use on large and flat areas. They do not require the skill that spray application requires. Rollers are not as effective in applying paint evenly. They can also produce a "stipple" effect - the unintentional roller marks or texture patterns left in the paint. Using a quality roller with the appropriate cover type and nap length can minimize this problem. For latex paints such as Acrymax you should generally use synthetic fiber covers. The roller nap varies from 3/8" up to 1 1/2". For textured or irregular surfaces a roller cover with a longer nap should be used. Roller covers with longer naps also hold more paint, but do not give as smooth a finish as shorter nap rollers. It is not necessary to press hard on the roller during application. Pressing too hard can entrap air and cause foaming of the applied coating.

Pressure rollers that are attached to an airless spray machine are available. They are internally fed rollers that allow continuous painting without dipping the roller back into the paint. A power roller is generally more productive than a standard roller, but they are not as productive as an airless sprayer. A power roller is often used instead of an airless sprayer in situations where overspray might be a problem - such as when painting near a parking lot.

Airless Spray

Airless spray uses a hydraulic pump to move and then atomize the paint or coating.

The pump draws the paint in and pressurizes it for delivery to the spray gun through a high pressure hose. When the trigger on the spray gun is pulled the paint is forced through the spray tip causing the paint to be atomized and forming a spray fan. Airless spray typically uses pressures from 1,000 to 3,000 psi.

To achieve uniform coverage without sags the tip of the spray gun should be held from 10-12 inches from the work surface. Holding the gun too close can cause irregularities in the paint film. If the gun is held too far away it can cause "dusting".

Choosing the Right Spray Nozzle

There are a variety of tips that can be used with airless sprayers. The two variables on spray tips are the size of the orifice and the width of the fan.

- Given a constant fan width, as the orifice size is increased the more material the sprayer will apply. A larger orifice means greater paint flow.
- Given a constant orifice size, increasing the fan width will apply a thinner coating of material to the surface because the same amount of material is distributed over a larger area.

Choose the tip to regulate paint flow so as to minimize dripping, sagging and overspray while maximizing coverage. The size of the tip is primarily determined by three factors:

- Specific characteristics of the coating that is being sprayed – determines the orifice size.
- The surface area to cover - determines the fan size.
- The sprayer you are using - determines maximum tip size.

Tip life will vary by the type of coating. When a tip is worn it should be replaced. Tip life can be extended by spraying at the lowest pressure that will adequately atomize the coating. Reversible tips enable you to quickly clear tip clogs. If paint is sputtering from the gun, consider using a tip with a wider orifice. In most cases you should not thin Acrymax coatings.

Extensions attach directly to your spray gun. They are especially helpful when spraying roof coatings from a standing position and also are great for hard to reach areas. They are available in a variety of lengths.

Paint Spraying Techniques

You should typically hold the sprayer so the tip is 10 – 12 inches from the surface that is to be painted. Make horizontal sweeps across the surface you are spraying, overlapping each strip of paint by about 1 inch. Go slightly beyond the edges of the area before starting the return pass. The secret to good spray painting is to apply even coats.

Sprayer Safety

You should familiarize yourself with information in the user manual for the sprayer you are using. Follow all safety instructions. The high pressure developed by airless sprayers can force the paint through your skin. Keep the gun pointed away from you at all times, never point the gun at anyone else, and never put your hand in front of the nozzle. Protect your eyes and the rest of your body from over spray by wearing safety glasses, protective clothing and a hat.

Recommendations for Specific Acrymax Coatings

Acrylic Elastomeric Coatings (AF-130, AF-130BC, AF-130XT, AF-130FR, AF-135, PC-535)

Brush Application

Good quality synthetic bristle brush

Roller Application

Medium to Long Nap Roller (1/2" to 1 1/4" typical)

Spray Application

Output Rate:	1.5 to 2.5 gallons per minute (minimum)
Pressure:	2000-3000 psi
Tip Size:	0.027" - 0.045" (#4 Series 8" fan, #5 Series 10" fan)
Tip:	Reverse-a-clean
Suitable Spray Units:	Graco GMAX II 5900, GH 733, GMAX II 7900
Typical Spray Gun:	Graco Silver or Gold Gun
Hose:	1st 100 feet (1/2" Width) Graduate down to (3/8")
Accessories:	Heavy Duty Extension Swivel

Notes:

- Larger units will allow for longer hose runs and will enable the applicator to keep the pump on the ground and pump material to the roof.
- These units can also run multiple guns off the same unit to increase productivity.
- Pressure required will depend on length of hose, vertical distance that material must be pumped, and tip sizes being used. Pressure also needs to be adjusted to provide best spray pattern.
- AF-135 is available in a textured version. Special spray equipment is required for spraying textured coatings.

PVDF Fluoropolymer Coatings (AF-5500 Series)

Output Rate:	Set to 1/4 gallon per minute
Pressure:	2000 psi
Tip Size:	0.015 to .027 (#5 Series - 10 inch fan)

Primers & Sealers (AF-100, AF-127, PC-125)

Pressure:	2000 psi
Tip Size:	0.017"