



Contractor Tips for Applying Asphalt Emulsion Roof Coating Systems



Getting Started

A roof is one of a building's biggest investments and also one of the most critical components in the building envelope. A roof replacement used to be your only option at the end of a roof's serviceable life; the roof coatings industry has changed all that.

There are now many new options for coatings and roof restoration systems. Asphalt emulsion based systems have been around the longest and have proven themselves successful. The secret to their success is in using reinforcing: The reinforcement increases strength, durability and resistance to ponding water.

While some contractors may recommend a full removal and replacement, [using a fluid applied reinforced system that includes asphalt emulsion](#) may be more than enough to get your roof system back into working order. It could extend the life of your roof indefinitely.

Asphalt emulsion roof coatings are made of asphalt emulsified with water and clay. They're lightweight, water-based, very low-odor and require no tear off of the existing roof. This makes them easy to apply, even for occupied buildings. They are [increasingly popular with roofing consultants and architects](#) for these reasons plus their excellent waterproofing capabilities.

Applying roof coatings, particularly asphalt emulsion coatings, is not complicated, but it does involve a number of steps. Here are some of our best tips for applying asphalt emulsion roof coatings.



First things first, figure out which specification fits your customer's budget and desired warranty. How much roof coating you will need, based on the manufacturer's specifications and the area of your roof? If you need help choosing the right specification for your roof, or if you will be requesting a manufacturer's warranty for your customer, [contact Western Colloid](#) for expert advice and approvals.

In general, Western Colloid recommends an application of a minimum of six gallons per square foot for their [asphalt emulsion coating](#). Many roofs need 12 gallons and gravel roofs may take 24 gallons. That might sound like a lot, but the good news is that it's actually economical. There is usually no reason to skimp on the emulsion.

Any architectural roof coating needs proper conditions to cure once it's applied, so when you're choosing a day for application, keep an eye on the weather. Asphalt emulsion coatings shouldn't be applied at temperatures less than 50 degrees. If the water in the coating freezes, it won't cure properly and risks cracking. Also, make sure there is no rain in the forecast, allowing the coating time to dry.

Clean your roof deck, removing any loose roofing material, dirt and debris. Use a stiff broom and blow or you can pressure wash for tough dirt. Remove oils and greases. If you use any kind of soap or detergent to clean, make sure to rinse it away completely, so the asphalt coating will adhere properly.

While a good quality asphalt emulsion roof coating will fill in many small voids, you'll want to make sure that larger ones are properly patched. Some of the patching can be completed with a three course with **Elastic Cement**. Be sure to allow time for these repairs to cure before applying your coating. You'll also need to repair and replace any damaged flashing and address all penetrations. Always consult your project specifications for details.

Apply Your Coating

Asphalt emulsion coatings shouldn't be mixed or thinned before application. For small areas, you can apply with a roller. If you're working over a larger area, use a specialty sprayer.



You should reinforce your asphalt emulsion coating with polyester fabric or fiberglass stands; this provides extra strength and flexibility to the roofing system. The polyester fabric should be lightly broomed to eliminate bridging and wrinkles while leaving the scrim of the polyester slightly exposed for better adhesion of the acrylic top coats.

Asphalt emulsion based roof systems can also be reinforced with chopped fiberglass strands. This requires specialized equipment but can be effective in providing strength and durability to the system.

Extra Application Tips From Experts

Asphalt emulsion can have a bad rep for being messy and difficult to use. But the truth is, with proper preparation, equipment and know-how, it can be easy and quick to use. Let's look at some of our best tips and advice for working with asphalt.

Staying Clean

One of the biggest issues faced with asphalt emulsion is the possibility of tracking it in the building, creating more cleanup and safety hazards. Here are some tips for keeping your job clean and safe:

- Wrap ladder rungs with non-slip tape. When the job is done, just peel off the tape for easy cleanup.
- Wear rubber boots and coveralls over your clothes. When you need to leave the roof, take them off and leave them on the roof so no tracks are left in building interior or parking lots.
- Use commercial-grade shrink wrap to cover HVAC units, skylights and other large equipment instead of paper held down with painters tape. Lightweight paper can easily blow off in the wind, leaving units exposed and wasting time and money on re-covering the units.
- Ensure everyone knows to NOT walk through the emulsion while rolling out polyester. Not only will your shoes get covered and track sticky asphalt over the rest of the roof (including that just smoothed out polyester), but you'll leave indentations in the asphalt emulsion that can result in poor adhesion.
- Keep your asphalt emulsion and acrylic equipment separate. They should not be interchangeable.
- If you need to do minor clean up, try an orange cleaner or mineral spirits. We do not recommend you use gasoline.

Protect Your Equipment—and the Building

Worried about equipment drying up overnight? Leave items that have touched the asphalt, such as brooms, hoses, wands and rubber gloves, in a vat of water overnight. It'll keep the asphalt from hardening and potentially ruining your equipment.

Another expert tip is to include a protective slip over the hose carrying the emulsion up the side of the building from the pump to the roof. That way, if the hose blows out, the building, parking lot and cars below won't be covered in hard-to-remove asphalt. Types of slips include any flexible tubing or even a fire hose.

Use the Right Equipment for the Job

If you think asphalt emulsion coating takes too long, you may not be using the correct equipment for the job. When using the right pump, hose, nozzle and material packaging, you can cover up to 200 feet per minute. This high production rate increases your bottom line since you'll finish faster. It also saves your customer money.

Make sure you choose a pump with the right pressure. A pump with low pressure and high volume works best. Always use the properly rated hose and wand for your pumps PSI.

And don't confuse asphalt emulsion spray nozzles with an acrylic coating spray nozzle—they're different. For more information on what equipment to use with roof coatings, [click here and choose recommended equipment](#).

Don't be intimidated by the equipment needed though. Asphalt emulsion roof coatings are easy to install. Just check out this video:



Choosing the Right Amount of Emulsion

There's nothing worse than getting into a rhythm of spraying emulsion and rolling out polyester than your drum running out of emulsion...again. If you aren't choosing a large enough container, you'll spend most of your time replacing the container when it constantly runs out.

If you are coating a large roof, order material in the largest size container possible. Our recommended pump sprays 12 gallons per minute, so you don't want to be running out and rehooking every 5 minutes. With the right staging area, pump and hose length, you can leave everything on the ground and pump the asphalt emulsion up to the roof.

Options and Next Steps



One option to consider is the desired warranty length. [Western Colloid's high-quality acrylic coatings](#) carry a standard 10-year material warranty. If a longer initial warranty period is desired consult with a Western Colloid representative.

The amount of coating can usually be increased to achieve 20 years with a worry-free roof. If the 10-year option is chosen, simple maintenance and renewal of the top coat in 10 years are all that is required to lengthen the warranty.

For more information on specialty equipment or how to use Western Colloid's complete line of architectural roof coatings, [visit our website](#).