Mortar Spraying Tips

**WARNING**

Read instruction manual 332612 for complete instructions and warnings. Failure to do so can result in serious injury, amputation, or death.

Follow pressure relief procedures and wear protective equipment to avoid serious bodily injury.

Follow fire and explosion warnings as listed in your manual to avoid serious bodily injury.

This Quick Guide is not a substitute for reading and understanding all instruction manuals and warning labels supplied with the equipment, nor is it a substitute for reading and understanding the MSDS and the data sheet supplied by the material supplier. See instruction manual 332612 provided with your equipment for full instructions on proper use and all safety warnings.

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**WET OUT THE SYSTEM**

Always wet out the system by circulating clean fluid through the applicator back into the hopper before loading any mixed mortar. This is normally done with the flushing fluid, but sometimes resin or commercially available concrete pump priming fluids are used depending on what material is being sprayed.

- Use the material flushing agent recommended on the material application data sheet.
- When finished, pump out the excess fluid. Then drain out remaining fluid by loosening the bottom cam fitting.

**MIX THE MATERIAL**

Always wet out the pump, hose, and applicator before loading the mortar or epoxy material. Always follow the material manufacturer's instructions for the material being sprayed. Mortar must be thoroughly mixed to a smooth consistency before loading it in the hopper.

- Always add the powder slowly to the fluid while mixing. Do not add fluid to the powder.
- In non-explosive environments only: Use a powerful mixer drive such as a minimum 800 watt, 1/2 in. drive, electric drill. Gear reduced drills work best. Drill should have high torque at 300-1200 rpm.
- A heavy-duty drywall mud “H” blade or large “Jiffy” blade generally works well for mixing.

**MANAGING MORTAR AFTER MIXING**

- Pay close attention to the work life of the material being used.
- Only mix the mortar kits as needed. Do not let mixed mortar sit longer than necessary.
- Scrape mortar down the sides of the hopper as the hopper material level lowers. Do not let older mortar cure on the walls.
- Occasionally, do not refill the hopper until it is almost empty. This ensures all material in hopper is used while fresh.

**PRIME WITH MORTAR**

The applicator nozzle or tip must be removed during priming. Always push out any remaining “wet out” fluid into a waste container before circulating mortar. Always circulate clean mortar back into the hopper for a few minutes before beginning to spray.

**PREVENT PACKOUT**

To avoid “packing out” the pump or hose:

- Use the lowest pressure and largest nozzle size that provides an acceptable spray pattern. This will also result in seals and wear parts lasting much longer.
- Do not use any more fluid hose than is necessary.
- Use an applicator with a rubber tip retainer that will blow off if it plugs.

**BEFORE STARTING OR STOPPING MATERIAL FLOW**

- Never dead end the pump against the fluid shut-off ball valve.
- Start and stop the fluid flow with the red-handled brass air motor pilot valve at the applicator.
- Always have the atomizing air turned on before and after spraying fluid.
**FLUSH**

- Flush if the materials in the system are about to reach their cure time.
- Flush any time the flow rate starts to decrease as this is a sign that material is starting to thicken and cure.
- Always flush the system at least twice, draining all material flushing agent between flushes then replacing with clean material flushing agent.
- For some mortars, it is recommended to flush every 3 - 5 kits. Others can run continuously without flushing. See material manufacturer recommendation.

**DISASSEMBLE AND CLEAN PUMP (DAILY)**

Disassemble and clean lower pump assembly at the end of every day. The procedure takes about 10 minutes.

- Clean any residual mortar from seals and parts with a brush.
- Cleaning and lubricating balls and seats is recommended to ensure the balls do not stick the next time the pump is used.

**ALWAYS KEEP SPARE PARTS STOCKED**

Always keep spare parts stocked to ensure getting back up and running as quickly as possible. Parts to keep stocked include:

- Cam and groove fitting gaskets
- Spray tips
- Tip retainer
- Rod and cylinder seals
- Cylinder o-rings
- Other parts as needed