SWRInfo Card

RESTORATION CLEANING WITH PRESSURE WASHING

NOTE: The following should be considered general information. Follow job-specific project/contract document requirements and manufacturer's written instructions.

SAFETY

- When using a pressure washer, always follow the safety instructions included in the owner's manual.
- Workers must have recommended PPE for equipment, this could include rubber-soled & steel-toed boots, gloves, long pants, safety glasses, and hearing protection.
- When using this method with other materials (such as chemical or abrasive cleaners), PPE must match the hazardous substances that the operator will be in contact with either through use (application) or removal (during washing).
- Equipment can produce loud sounds (continual or sudden) that can impact hearing.
- When using equipment for either pressurized water rinsing or steam cleaning, never direct wand or nozzle towards yourself or others. The equipment can produce temperatures so high they burn or so low they freeze parts of the body.
- Never use a gas-powered pressure washer in a partially or fully enclosed space. This can cause carbon monoxide poisoning.
- For electric-powered equipment, electric shock can occur if the pressure washer is not used properly and if safety instructions are not followed.
- Check around the area you'll be working to ensure your safety. Consider all possible hazards, including people, obstacles, electrical, and uneven or slippery surfaces.
- The strong spray from a pressure washer can cause serious wounds that might first appear minor. Wounds that appear minor can cause a person to delay treatment, increasing risk for infection, disability, or amputation.
- Use appropriate safety equipment and job site controls during application and handling.
- Environmental safety—Follow all local, State, and Federal regulations for effluent capture & containment. When using certain cleaners or abrasive media, some rinse water cannot be discharged into sewers or waterways regardless of regulations, refer to Technical Product Data Sheet.
- Consult the SWR Institute Safety & Health Manual for more information.

PREPARATION

- Verify approved equipment is on site. Ensure that equipment can generate an adjustable PSI within the applicable range, high-volume water flow rate, and temperatures as required for the job.
- Store your pressure washer in a clean, dry, well-ventilated place (if gas-powered) that is away from sparks.
- When storing your pressure washer in an unheated area, be sure to winterize it before the first frost. If storing in an enclosed space, remove all gasoline from the engine (if gas-powered).
- When using equipment with other materials (such as chemical), follow all applicable guidelines for preparation for those materials. Refer to applicable Restoration Cleaning SWRInfo Card(s) for more information.
- Pressures between 1,000 and 2,000 psi are typically used for surface preparation cleaning; refer to job specific requirements.
- For typical masonry cleaning with chemical or abrasive media, the pressure rating can range from 500 to 1,200 psi. For older, delicate, or compromised surfaces lower pressures are required.
  - Low pressure wash: between 100 psi and 400 psi.
  - Medium pressure wash: between 400 psi and 800 psi
  - High pressure wash: between 800 psi and 1200 psi
- Always test a small area of each surface to confirm suitability and desired results with pressure washing parameters before beginning overall application. Test with the same equipment, recommended surface preparation and application procedures planned for general application. Let test area dry 3–7 days before inspection and approval.
- Ensure that the jobsite has access to clean, fresh water that can adequately supply masonry-washing equipment.
- If using electric-powered equipment, ensure jobsite has sufficient power source to supply masonry-washing equipment.

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- Masonry-washing equipment generating a water flow rate of 6–8 gallons per minute is the best water/pressure combination for rinsing porous masonry.
- Use a 15–45° fan spray tip on masonry washing equipment. Spray nozzles narrower than 15° can damage masonry and should not be used.
- Nozzles should be held perpendicular to the surface at a distance between 18 and 30 inches from the surface.
- Best cleaning results are obtained when air and masonry surface temperatures are 40° F (4° C) or above. Cleaning when temperatures are below or will be below freezing within 48-hours may harm masonry.

APPLICATION

- Verify approved equipment is on site.
- Always apply mockup panels in an inconspicuous location.
- When using pressurized water washing in conjunction with other materials, follow all applicable guidelines for application of those materials. Refer to applicable Restoration Cleaning SWRInfo Card(s) for more information.
- Use a 15–45° fan spray tip on masonry washing equipment. Spray nozzles narrower than 15° can damage masonry and should not be used.
- Historic masonry should not be cleaned with less than 45-degree tip, held 6" from the surface.
- Nozzles should be held perpendicular to the surface at a distance between 18 and 30 inches from the surface.
- Do not use high pressure equipment to apply cleaning compounds to masonry as this can drive the cleaner deeper into the surface and cause unwanted staining. Low pressure spray equipment (50 psi max) should be used.
- Scrubbing with natural bristle or synthetic bristle brushes can improve cleaning results. Never use metal-bristle brushes on masonry as they can damage and/or stain the surface.
- When cleaning, always work from the bottom to the top of the work area to prevent re-deposition of contaminants.
- If desired cleaning results are not achieved from washing alone, evaluate whether chemical cleaners, abrasive media, or temperatures parameters should be considered.

QUALITY CONTROL

- Approved mockup panels should be protected throughout the project for quality comparisons.
- Heated water (150–180° F; 65–82° C) may improve cleaning efficiency.
- Rinsing pressures greater than 1000 psi and fan spray tips smaller than 15° may permanently damage sensitive masonry.
- Water flowrates less than 6 gallons per minute may reduce cleaning productivity and contribute to uneven cleaning results.
- In instances where substrates are exposed to freezing temperatures, make sure the material is thawed out and surface temperature is above 40°F (4°C).
- Keep wall areas below cleaning work wet and rinsed free of cleaner and residues to prevent streaking and/or uneven cleaning results.

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