

Spray Bar Guide

How to Set Up a Spray Bar Test for RainBloc® Water Repellent CMU

What is a Spray Bar Test?

Water repellent buildings need to resist water penetration through walls and mortar joints. A spray bar test is used to evaluate the resistance to water penetration of a concrete masonry unit (CMU) itself, rather than the performance of an entire wall assembly. During the test, a spray bar delivers a uniform, calibrated flow of water across the face of the unit to simulate wind driven rain. The results indicate how effectively the unit resists water penetration. ACM supplies Spray Bar test equipment free of charge to RainBloc customers as part of the RainBloc Certified Producer program.

While ensuring the unit itself is water repellent is important, it is only one component of a comprehensive approach to water repellent masonry buildings. For more information, check out <https://www.acmchem.com/rainbloc-certification>.



The Spray Bar test is a simple and inexpensive QC check to verify the water repellent performance of CMU.

How to Set Up a Spray Bar Test

Spray Bar Test Parts List

Included:

1. Spray Bar
2. Flow Meter
3. PVC Connector
4. Spray Nozzles
5. Hose
6. Two Hose Clamps
7. Submersible Pump
8. Two Velcro Strips
9. Two Angle Irons
10. Two Compressible Weather Strips

Not included

1. Plastic Container (at least 10 gallons)
2. Plumbing Tape
3. Vise Grips / Clamps

Spray Bar Instructions

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1. Container Preparation

- Drill multiple drainage holes in container lid.
- Drill a minimum 1-inch hole in the side of the container above the water line for the hose and electrical cord.
- Remove all plastic shavings from the container.



2. Pump Setup

- Place the submersible pump inside the container.
- Attach the hose to the pump.
- Route hose and electrical cord through the side hole.
- Fill container with clean tap water, ensuring the pump is fully submerged.



3. CMU Setup

- Place the lid on the container.
- Position the angle irons on top of the lid.
- Apply compressible weather stripping to the angle irons.
- Place the CMU on the angle irons with the front angle iron directly underneath the face shell to be sprayed

4. Spray Bar Positioning

- Attach the spray bar to the CMU using two Velcro strips. Vise Grips or clamps can also be used.
- Ensure the spray bar is level and approximately 1.5 inches from the CMU face.

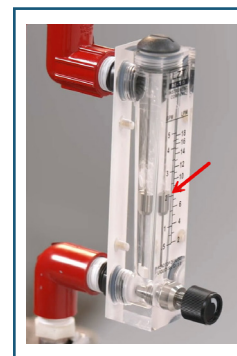


Spray Bar Set Up Notes

- Position the unit with the face shell directly over the front angle iron
- Secure the unit with velcro strips or clamps
- The spray bar is 1.5 inches from the face shell

5. Flow Adjustment

- Connect pump to power.
- Adjust the flow meter dial to 2 gallons per minute.
- Confirm the flow rate using the indicator on the back of the flow meter.



6. Test Procedure

- Spray the CMU continuously for 4 hours.
- After testing, inspect the inside of the front face shell for dampness or pinholes following NCMA CMU-WR2 guidelines.

7. Cleanup

- Dispose of used water after each test (do not reuse).
- Clean the container between tests. Do not use soap or surfactants as these can interfere with RainBloc performance.

We hope that information presented here is helpful. It is based on data considered to be true and accurate, and reflects our best understanding and knowledge, presented for the user's consideration. We do not warrant results of action based on any of the information contained.

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