

Wet Testing – Lab Considerations

Are you performing your wet tests outdoors?

Where are you performing your product wet tests? UL outdoor product tests, IEC & EN Ingress Protection IP ratings, as well as NEMA enclosure ratings all involve a conducting tests on your product with water. Dripping water, sprayed water, splashed water, jetted water, even submersion under water may be involved. It's only natural to want to do the tests outdoors, where you have easy access to water and little concern with splatter and run off.

However, if you are testing outdoors, you are unlikely to be complying with the test requirements in the standard. Even if your outdoor climate is ideal, there are still problems with outdoor testing. Here are several problems inherent with outdoor testing:

- a) Repeatable test conditions cannot be provided outdoors,
- b) Test temperature within the range specified in the standards cannot be maintained,
- c) Test humidity within the range specified in the standards cannot be maintained,
- d) Wind can negatively influence testing outdoors – standards require testing in a draft free environment,
- e) Adequate water pressure for higher wet test ratings cannot be obtained from your water line and,
- f) VERY IMPORTANT: Test water temperature, required by many wet test standards to be at room temperature for 24 hours before testing, cannot be controlled.

The ideal wet test conditions are an indoor lab with controllable room temperature and humidity, without drafts, having a large quantity of room temperature tanked water, and a low/high pressure pumping system with calibrated flow gauges. Is this how you are doing your testing?

Indoor Wet Testing Services available from CertifiGroup
All UL, NEMA, & IP Ratings