

CGI Field Water Testing Guidelines

Proper notice and coordination with CGI is required in the event that the job is considering water testing. Note that our contracts specifically exclude water testing unless we are provided advance notice in writing. The reason we exclude this is water testing is a complex effort that must follow industry accepted protocols and standards. Further, it adds additional costs into the job that are not reflected in our standard pricing.

If water testing is required, we recommend the following:

- Coordinate the architect or owner's water testing specification (if any) with CGI.
 - Water testing should either follow AAMA's 501.2 (hose nozzle test) Field Test or 502-02 (field test with chamber) protocols. AAMA specifies that test pressures may not exceed 2/3 of the product's approved design pressures. Further, testing the openings to the design pressures on the plans or for the specific property is advised.
 - Determine if the customer plans to hire a third party testing agency. This may be unnecessary if CGI performs testing on its own.
 - Identify the quantity of openings to be tested. Some specs created recently set unreasonable standards requiring 25% of the openings to be tested. Obviously the glazing contractor and manufacturer need to understand these requirements before products are ordered.
 - Identify the locations of the units to be tested if possible. Some units may be difficult to access.
- When testing is required, use your best qualified and trained install team and ensure close supervision.
- Establish installation criteria for each opening as follows:
 - Select openings for each CGI product type as mock-ups. CGI will consult with you on the install of the mock-ups.
 - CGI will water test the mock-up openings with CGI equipment. Once the tests are complete, we will work with you to make any necessary modifications.
 - Install the remainder of the openings following the mock-up installation criteria.

Why so much focus on water testing?

While water testing is becoming more prevalent, not enough emphasis is placed on setting customer expectations and planning the testing program. Field water tests are much more difficult to pass than lab tests. Under lab conditions, all aspects of the installation and products are strictly controlled. In order to pass the same tests in the field, the construction around the opening, installation techniques and product quality at time of testing all must be closely scrutinized. Something as minor as a pinhole leak or minor debris on weatherstripping could result in failure. It is even common for exterior walls around windows to leak when exposed to the lab type test in the field. Construction and building designs must minimize water intrusion with proper sloping and drain-off. Products need to be installed plumb, level and square and with 100% watertight sealing. The products need to be clean, all the weatherstripping needs to be in factory-like condition, and the construction of the opening needs to be within acceptable tolerances. Testing needs to occur within 30 days of installation in order to ensure that the products are still in factory-like condition. All of this needs to be considered when water testing is required. **Consequently, if CGI is not notified of the: (1) field test specification set by the architect or responsible party prior to placing the order; (2) the specific openings that will be tested and have the opportunity to review the installation and product readiness and adjust prior to the field test (and pre-test the units if CGI desires); and (3) be given reasonable notice and be present for such testing, than CGI cannot be responsible for the outcome of the tests. Additionally, CGI cannot be responsible for improper construction techniques, installation not in accordance with our installation instructions, or products in the field that are no longer at factory level conditions.**

Contact the CGI Sales Department with questions or comments at 305-718-8890