
Pre-Installation Site Measurement Protocol

1.0 Objective & Scope

The objective of this procedure is to ensure that all pre-installation site measurements are captured accurately, consistently, and in compliance with project specifications and safety standards. This SOP applies to all field technicians, lead installers, and site surveyors conducting measurements for equipment, cabinetry, or structural installations on residential, commercial, and industrial sites across Canada.

Accurate measurements prevent costly rework, material waste, and schedule delays. This protocol standardizes the measurement process, documentation, and communication of site conditions to the installation team and project manager.

2.0 Required Equipment & Tools

- Digital laser distance measurer (minimum accuracy ± 1.5 mm) with backup battery
- 25-foot steel measuring tape (Class 1 accuracy)
- Spirit level (24-inch or longer)
- Digital angle finder or protractor
- Mobile tablet or smartphone with SiteQueue application installed
- Site measurement checklist (printed or digital in SiteQueue)
- Pencil, permanent marker, and waterproof notepad
- Camera or device with high-resolution camera for site photos
- Flashlight or headlamp for dim areas
- Personal protective equipment (PPE): hard hat, safety glasses, high-visibility vest, steel-toed boots, gloves

3.0 Site Safety & Hazard Assessment

- Conduct a site-specific hazard assessment upon arrival. Identify trip hazards, uneven flooring, exposed wiring, low overhead obstructions, and active construction zones.
- Wear required PPE at all times: hard hat, safety glasses, high-visibility vest, steel-toed boots, and gloves when handling debris or sharp edges.
- Ensure the measurement area is well-lit. Use a flashlight or headlamp in dim or unlit spaces.
- Verify that all ladders or step stools used are in good condition, rated for the user's weight, and placed on stable, level ground.
- Do not measure near live electrical panels, exposed wiring, or unguarded machinery. If hazards are present, stop work and notify the site supervisor immediately.
- Maintain clear communication with other trades on site. Use hand signals or radios if noise levels are high.
- Keep the measurement area clear of unnecessary tools and debris to prevent slips and falls.

4.0 Step-by-Step Execution Procedure

1. Upon arrival, check in with the site superintendent or client contact. Confirm the measurement area is accessible and safe to enter.
2. Review the project plans or work order in SiteQueue to understand the specific dimensions and features that need to be measured (e.g., wall lengths, ceiling height, door openings, window placements, electrical outlets).
3. Lay out floor protection (Ram Board or equivalent) from the entry point to the measurement zone to protect existing flooring.
4. Using the digital laser measurer, measure all wall lengths in the installation area. Record each measurement in both metric (mm) and imperial (inches) on the checklist. Measure at three heights: floor level, mid-height, and ceiling level to account for irregularities.
5. Measure ceiling height at multiple points (minimum three: center and both ends) using the laser measurer. Note any variations greater than 6 mm.
6. Measure door and window openings: width, height, and depth of the frame. Also measure the distance from the floor to the bottom of the window and from the ceiling to the top of the door frame.
7. Locate and measure all electrical outlets, light switches, plumbing rough-ins, HVAC vents, and any other obstructions. Record their position relative to the nearest wall and floor.
8. Use the spirit level to check floor and wall plumbness. Note any deviations greater than 3 mm over 1 meter. Use the angle finder to measure any non-standard corners or angles.
9. Take a minimum of five high-resolution photos of the measurement area: one overall shot from each corner, one close-up of each wall, and one of any unique features or obstructions. Ensure photos are well-lit and in focus.
10. Complete the digital measurement checklist in SiteQueue, entering all recorded data and uploading photos. Add any notes about site conditions, access issues, or special requirements.
11. Review all measurements for consistency and accuracy. Cross-check critical dimensions (e.g., total wall length vs. sum of segments) to catch errors.
12. Before leaving, walk the client or site supervisor through the key measurements and any notable findings. Obtain their verbal acknowledgment and note any questions or concerns.

5.0 Verification, Sign-off & Reporting

1. Submit the completed measurement checklist and all photos through SiteQueue immediately after the site visit. Do not leave the site until the submission is confirmed.
2. The project manager or lead installer will review the submitted data within 24 hours. If any measurements are missing or appear inconsistent, they will contact the field technician for clarification.
3. Obtain a digital signature from the client or site supervisor in SiteQueue acknowledging that the measurements were taken and reviewed. If a signature cannot be obtained on-site, note the reason and request a follow-up.
4. Log any site hazards or safety concerns observed during the measurement into the SiteQueue safety log. Include photos and a description of the hazard.
5. If re-measurement is required due to errors or changes in scope, schedule a return visit within 48 hours and update the work order accordingly.
6. Close the measurement task in SiteQueue once all data is verified and approved. The installation team will use this data to proceed with fabrication or installation.

Regulatory Disclaimer: This document is a generic site management template provided for educational purposes. The end-user assumes all liability for reviewing, adapting, and validating all field protocols against local site requirements.