

Hydrostatic Pressure Testing Safety Checklist

Site / Project	_____	Address	_____
Inspector name	_____	Company	_____
Date	_____	Time	_____

Documentation aid only. Adapt this resource to the site, manufacturer instructions, and applicable local requirements. It does not replace a competent person, professional judgment, legal advice, or a required statutory form.

Inspection checklist

Pre-Test Planning & Documentation

☐	Has a written hydrostatic test plan been reviewed and approved by a qualified engineer or the Authority Having Jurisdiction (AHJ)?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the specified test pressure clearly documented and does it NOT exceed the maximum allowable test pressure for the piping system and components (typically 1.5 times the design pressure)?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Has material compatibility with the test fluid (typically potable water) been verified for all piping components, including gaskets and seals?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all isolation valves that will be subjected to test pressure rated for that pressure and in good working order?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the pressure gauge calibrated and certified within the last year? Verify calibration sticker is present and legible.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is there a documented procedure for venting trapped air from the system during filling?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is there a documented procedure for safely draining the system after the test?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is there an emergency plan in place in case of a pipe rupture or other failure during the test?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Piping System Preparation

☐	Are all pipe supports and hangers properly installed and capable of supporting the weight of the water-filled piping system?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are adequate thrust blocks or other restraints installed at all dead ends, tees, and bends to prevent movement due to hydrostatic pressure? Verify design calculations.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all test caps and plugs rated for at least the specified test pressure? Verify markings are present and legible.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are test caps securely installed with appropriate thread sealant or gaskets to prevent leaks or blowouts?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all valves within the test section in the fully open or fully closed position as required by the test plan?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Has the piping system been flushed to remove debris and contaminants prior to testing?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are temporary supports installed as needed to prevent sagging or overstressing of the piping during testing?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are expansion joints properly restrained or isolated during the test to prevent damage?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Exclusion Zone & Personnel Safety

☐	Has a clearly marked exclusion zone been established around the piping system during the test? Minimum radius: 25 feet.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Have all non-essential personnel been evacuated from the exclusion zone?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are warning signs posted at the perimeter of the exclusion zone indicating the presence of a hydrostatic pressure test?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all personnel involved in the test wearing appropriate PPE, including safety glasses, hard hats, and steel-toed boots?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is there a reliable communication system in place to allow personnel to communicate during the test?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is there a readily accessible emergency shutdown valve or other means of quickly depressurizing the system in case of a failure?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Verify that PNEUMATIC (air) testing is ABSOLUTELY PROHIBITED on PVC or other plastic piping systems. Only hydrostatic testing is permitted.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	During pressurization, are personnel visually monitoring the piping system from a safe distance for any signs of leaks or distress?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Test Execution & Monitoring

☐	Is the system being pressurized slowly and in a controlled manner to prevent pressure surges?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the pressure being continuously monitored during the test using a calibrated pressure gauge?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the system being visually inspected for leaks at all joints, connections, and fittings?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the pressure drop being monitored over the duration of the test to ensure it remains within acceptable limits (typically less than 5% of the test pressure)?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the system being held at the specified test pressure for the required duration (typically 2-4 hours)?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	If leaks are detected, is there a procedure in place for safely depressurizing the system and repairing the leaks?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	After repairs, is the system being retested to verify the integrity of the repairs?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the water temperature being monitored during the test to account for thermal expansion or contraction?	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a properly sized pressure relief valve installed to prevent over-pressurization of the system?	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Findings

#	Item	Location	Severity	Action required
1				
2				
3				
4				
5				
6				
7				
8				

Signature

Inspector signature _____

Name _____

Date _____