

# [CompanyName]

[CompanyAddress] • [CompanyPhone]

## Fire Protection Quality Assurance/Quality Control Plan

[ProjectName]

[ProjectNumber]

Management acceptance

This Construction Quality Assurance/Quality Control Plan has been reviewed and accepted.

Endorsed By: (Name / Title)	[QualityManagerName], Quality Manager		
Signature:	<i>[QualityManagerName]</i>	Date:	[Date]
Version	0	Notes	Initial Issue

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# PROJECT-SPECIFIC CONSTRUCTION QUALITY PLAN

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## G. CONSTRUCTION PROJECT QUALITY SPECIFICATIONS

Fulfilling customer contract expectations is a primary objective of the [CompanyName] Quality System. To ensure that customer expectations will be fulfilled, [CompanyName] clearly defines the requirements for each contract before it is approved.

The Project Manager ensures that the information in customer contracts clearly defines customer expectations and that the necessary details are provided to set requirements for construction.

[CompanyName] personnel, subcontractors, and suppliers are accountable for compliance to standards-based written specifications.

To achieve expectations reliably and consistently, specifications are clearly spelled out, not only for results but also for processes. Specifications apply to materials, work steps, qualified personnel and subcontractors and suppliers, safe work rules, and environmental work conditions.

Standards ensure that results are specified rather than left to discretionary practices.

All [CompanyName] construction activities comply with generally accepted good workmanship practices and industry standards.

### COMPLIANCE WITH FIRE PROTECTION INDUSTRY STANDARDS

Codes that may apply to this project include those listed below.

Description	Reference Standard No.	Reference Standard Title
Sprinkler System Installation	NFPA 13	Standard for the Installation of Sprinkler Systems
Standpipe and Hose Systems Installation	NFPA 14	Standard for Installation of Standpipe and Hose Systems
Private Fire Service Mains	NFPA 24	Installation of Private Fire Service Mains and Their Appurtenances
Pipe Hanger and Support Installation	MSS SP-58	Pipe Hangers and Supports - Materials, Design and Manufacture, Selection, Application, and Installation
Corrosion Protection for Underground Pipes	NACE SP0169	Control of External Corrosion on Underground/Submerged Metallic Piping Systems
International Plumbing Compliance	ICC IPC	International Plumbing Code

## H. FIRE PROTECTION INSPECTION AND TEST PLAN

[CompanyName] identifies inspections and tests that will be performed during the project. A test report is completed for each test. The test reports are then used for monitoring compliance to the plan and tracking results.

If independent laboratories are required to perform tests or quality inspections, we ensure that the laboratories are certified by a nationally recognized testing accreditation organization as appropriate for the scope of the inspection or test.

The Quality Inspection and Test Plan form lists inspections and tests (other than work task inspections) that will be performed on this project.

Results of inspections and tests will be recorded on the Inspection and Test Form.

Form exhibits are included as an exhibit in this subsection.

### FIRE PROTECTION INSPECTION AND TESTING STANDARDS

Inspection and testing standards that may apply to this project include those listed below.

Description	Reference Standard No.	Reference Standard Title
Hydrostatic Testing	NFPA 13 / NFPA 14	Installation Standards for Sprinkler and Standpipe Systems
Plumbing Pipe Weldments	ASME B31.1	Power Piping
Ductile-Iron Pipe Testing	AWWA C600	Installation of Ductile-Iron Water Mains
PVC Pipe Pressure Testing	UBPPA UNI-B-3	Installation and Pressure Testing of PVC Pipes
Plastic Pipe Deflection Testing	ASTM D2412	External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading
Air Testing for Sewer Pipelines	ASTM C924M / UBPPA UNI-B-6	Low-Pressure Air Testing of Installed Sewer Pipe

### CONTROL OF INSPECTION, MEASURING, AND TEST EQUIPMENT

Inspection, measuring, and test equipment that will be controlled, calibrated, and maintained.

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traceable to national measurement standards.

<b>[CompanyName] Inspection and Test Plan and Log</b>		
Project Number	Project Name	
[ProjectNumber]	[ProjectName]	(All tests verified by Superintendent and/or QC Manager)

Spec Section	Item of Work	Phase	Inspection/Test Required	Inspected/ Tested By	Date Conducted	Date Sent to Customer	Accepted/ Rejected
21 1300	Fire Suppression Sprinkler Systems	Preparatory	Verify approved submittals, coordination with trades, material availability/storage, NFPA 13 compliance	Superintendent, Quality Manager			
21 1300	Fire Suppression Sprinkler Systems	Initial	Inspect initial installations for submittal conformity, materials, and design compliance per NFPA 13	Superintendent, Quality Manager			

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21 1300	Fire Suppression Sprinkler Systems	Final	Verify full operational readiness, alarm integration, labeling, signage, and final NFPA 13 checklist completion	Quality Manager, Superintendent			
21 1313	Wet-Pipe Sprinkler Systems	Preparatory	Confirm design documents, environmental conditions, and NFPA 13 compliance	Superintendent, Quality Manager			
21 1313	Wet-Pipe Sprinkler Systems	Initial	Verify wet pipe installation, sprinkler spacing/type compliance per NFPA 13	Superintendent, Quality Manager			

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21 1316	Dry-Pipe Sprinkler Systems	Preparatory	Confirm design conditions, material suitability, submittals, and NFPA 13 & 25 compliance	Superintendent, Quality Manager			
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Spec Section	Item of Work	Phase	Inspection/Test Required	Inspected/ Tested By	Date Conducted	Date Sent to Customer	Accepted/ Rejected
21 1316	Dry-Pipe Sprinkler Systems	Initial	Inspect dry-pipe valve assembly, pipe routing, and sprinkler head placement per NFPA 13	Superintendent, Quality Manager			
21 1316	Dry-Pipe Sprinkler Systems	Pneumatic Testing	Conduct air pressure and leak tests; verify dry-pipe valve functionality per NFPA 13 & NFPA 25	Qualified Testing Technician (Witnessed by Superintendent/QM)			

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21 1339	Fire Suppression Standpipes	Pressure Testing	Hydrostatic testing per NFPA 14; document required pressure maintenance	Qualified Testing Technician (Witnessed by Superintendent/QM)			
21 1339	Fire Suppression Standpipes	Follow-Up	Visual inspections for valve accessibility, supports, and leaks	Superintendent, Quality Manager			
21 1119	Fire Department Connections	Preparatory	Verify approved documents, submittals, material availability, and location compliance per NFPA 13 & NFPA 24	Superintendent, Quality Manager			

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21 1119	Fire Department Connections	Flow Testing	Conduct flow tests verifying capacity and pressure per NFPA 24	Qualified Testing Technician (Witnessed by Superintendent/QM)			
21 1119	Fire Department Connections	Follow-Up	Ensure clear access, labeling, and secure connections per NFPA 13 & NFPA 24	Superintendent, Quality Manager			

# I. FIRE PROTECTION WORK TASK QUALITY INSPECTIONS

[CompanyName] identifies a list of work tasks, phases of production, which will be quality controlled.

## WORK TASKS SERIES OF INSPECTIONS

Each work Task is subject to a series of inspections; before, during, and after the work is complete. Each inspection verifies compliance with full scope of the relevant specifications; not limited to checkpoints for heightened awareness.

- Preparatory Phase: Confirms readiness prior to installation
- Initial Phase: Validates that the first installations meet standards before full-scale work.
- Follow-Up Phase: Regular checks throughout installation to maintain compliance.
- Testing Phases (Pressure, Pneumatic, Flow): Ensure system operational integrity per applicable standards.
- Final Phase: Ensures comprehensive compliance and readiness for operational use and integration.

Inspection results are recoded and maintained as part of the project files.

## SPECIAL PROCESS INSPECTIONS

The Quality Manager identifies special processes where the results cannot be verified by subsequent inspection or testing and determines if continuous work in process inspections is required. For these special processes, a qualified inspector continuously inspects the work process.

## MATERIAL QUALITY INSPECTION AND TESTS

Material quality inspections and tests ensure that purchased materials meet purchase contract quantity and quality requirements.

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- Meetings held, participants, and decisions made
- Subcontractor and Supplier and Company Crews on site
- Visitors and purpose
- General Remarks
- Improvement Ideas
- Weather conditions

**[CompanyName]  
Quality Controlled Work Task List**

Project ID	Project Name	Preparer	Date
[ProjectNumber]	[ProjectName]		

Project Work Tasks / Contract Section	Quality Controlled work task	Method for identification of Approved Inspection Status
21 1300	Fire Suppression Sprinkler Systems	Fire-Suppression Sprinkler Systems Checklist
21 1313	Fire Suppression Wet Pipe Sprinkler Systems	Wet-Pipe Sprinkler Systems Checklist
21.1316	Fire Suppression Dry-Pipe Sprinkler Systems	Dry-Pipe Sprinkler Systems Checklist
21 1339	Fire Suppression Standpipes	Fire Suppression Standpipes Checklist
21.1119	Fire Department Connections	Fire Department Connections Checklist



**[CompanyName]  
Fire-Suppression Sprinkler Systems (21.13.00)  
Inspection Checklist**

Project: Id# [ProjectNumber]	Project Name: [ProjectName]	Subcontractor and Supplier Company ID/Name:
Location/Area:	Reference drawing version #:	Crew ID/Name

Verification Item	Pass	Fail	N/A	Comments/Corrective Actions
Compliance with approved submittals and project specifications				
Materials verified and inspected prior to installation				
Compliance with initial installation and job-ready conditions				
First installations verified for NFPA 13 compliance				
System piping properly pitched for complete drainage				
Firestops correctly installed at all required penetrations				
Penetrations properly sealed and watertight				
Piping securely supported and free from movement/chafing				
Piping installed straight and true				
System pressure tested per NFPA 13 and free from leaks				
Valves installed with tamper-proof seals				
Wet piping protected against freezing conditions				
Sprinkler spacing and orientation verified per NFPA 13				
System clearly labeled/signage provided per NFPA 13				
Alarm systems integrated and tested for functionality				
Piping system flushed with potable water				

Production Notes:

Reported Nonconformances:

**Verification of Work Task Completion (sign and date)**

<b>*Inspector Signature:</b>		Date: _____
<b>*Superintendent Verification:</b>		Date: _____
<b>*Quality Manager Verification:</b>		Date: _____

\* On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used, and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

## [CompanyName] Daily Production Report

Project ID	Project Name	Preparer*/Date
[ProjectNumber]	[ProjectName]	
* On behalf of the contractor, I certify that this report is complete and correct and equipment and material used, and work performed during this reporting period complies with the contract drawings and specifications to the best of my knowledge except as noted in this report.		
	<b>Description</b>	
Job-ready and WIP Inspections (Active work tasks)		
Work Tasks Completion Inspections		
Sampling/Tests Performed		
Nonconformance Reports		
Problems encountered, actions taken, problems, and delays		
On Site Subcontractors and Suppliers, Company Crews, and Visitors		
Meetings held and decisions made		
General Remarks and improvement ideas		
Weather conditions	Temperature: Low: _____ F High: _____ F Precipitation: <input type="checkbox"/> No <input type="checkbox"/> Yes, type and amount: _____	

## **J. QUALITY CONTROL OF CORRECTIONS, REPAIRS, AND NONCONFORMANCES**

Should a problem occur in the quality of work, we systematically contain the issue and quickly make corrections. Our first action is to clearly mark the item by tape, tag, or other easily observable signal to prevent inadvertent cover-up.

Then we expedite a corrective action that brings the workmanship or material issue into conformance by repair, replacement, or rework. Previously completed work is reinspected for similar nonconformances. In the event that we cannot correct the item to meet contract specifications, the customer will be notified, and customer approval of corrective actions is required before proceeding.

Fixing the problems found is not sufficient. [CompanyName] systematically prevents recurrences to improve quality. First enhanced controls and management monitoring are put into place to assure work proceeds without incident. Then using a structured problem-solving process, [CompanyName] identifies root causes and initiates solutions. Solutions may involve a combination of enhanced process controls, training, upgrading of personnel qualifications, improved processes, and/or the use of higher-grade materials. Follow-up ensures that a problem is completely resolved. If problems remain, the process is repeated.

Nonconformances and their resolution are recorded on a Nonconformance Report form. A Nonconformance Report form exhibit is included in this subsection.

<b>[CompanyName] Nonconformance Report</b>		
Nonconformance Report Control ID	Project ID	Project Name
	[ProjectNumber]	[ProjectName]
Preparer Signature/ Submit Date		Quality Manager Signature / Disposition Date
Description of the requirement or specification		
Description of the nonconformance, location, affected area, and marking		
Disposition	<input type="checkbox"/> Replace <input type="checkbox"/> Repair <input type="checkbox"/> Rework <input type="checkbox"/> Use As-is	
	Approval of disposition required by customer representative? Yes <input type="checkbox"/> No <input type="checkbox"/> Customer approval signature /date: _____	
Corrective Actions	<input type="checkbox"/> Corrective actions completed Name/Date: _____	
	Customer acceptance of corrective actions required? Yes <input type="checkbox"/> No <input type="checkbox"/> Name/Date: _____	
Preventive Actions		
	<input type="checkbox"/> Preventive actions completed Name/Date: _____	