

[CompanyName]

## Project Quality Plan

[ProjectName]

[ProjectNumber]

Management acceptance

This Project Quality Plan has been reviewed and accepted

Endorsed By: (Name / Title)	[QualityManagerName], Quality Manager		
Signature:	[QualityManagerName]	Date:	[Date]

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## D. CONTRACT REVIEW AND SUBMITTALS

(Ref. ISO10005 Quality Plan Requirement 5.11.2)

The contract for this project, [ProjectName] - [ProjectNumber], has been reviewed, approved, and signed by the President, Project Manager, and the Quality Manager.

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.

### CONTRACT REVIEW AND APPROVAL

The President conducts Customer contract reviews to ensure that:

- Customer requirements and specifications are complete
- Customer requirements and specifications are compatible with the relevant regulations, [CompanyName] quality standards, and Quality System requirements
- [CompanyName] has the capability to deliver the completed project in the time allotted

Before construction begins, the President makes sure that all contract requirements are clearly understood, all discrepancies are resolved, and all requirements are agreed upon. Once these requirements are met, the President signs the contract.

### SUBMITTALS

Lists of documents and records that will be submitted to the Customer appear on the Submittal Schedule and Log form. The Submittal Schedule and Log Form exhibit is included in this subsection.

### SUBMITTAL SCHEDULE AND LOG

The Project Manager identifies submittals that apply to a specific contract and when they should be submitted, including:

- Contract requirement reference (if applicable)
- Submittal type: Shop drawing, product data, quality inspection and test plan, request for information, or allowances and unit prices
- Description
- Due date for submission to Customer by [CompanyName]
- Due date for approval by the Customer. Due dates may be a number of days after a project plan milestone.
- Approval date

### SUBMITTAL REVIEW AND APPROVAL

The Quality Manager prepares submittals that provide additional details of how [CompanyName] plans to carry out quality-related aspects of the Customer contract, contract technical specifications, and contract drawings and reporting of quality records to the Customer.

The Quality Manager lists, schedules, and approves all quality-related submittals that are required by the project including submittals prepared by subcontractors and suppliers. The Quality Manager must review all submittals for compliance with the requirements of the [CompanyName] Quality System. The Quality Manager must sign approval of each contract submittal.

[CompanyName] extends compliance to contract specifications to all Customer approved submittals. All [CompanyName] activities comply with Customer approved submittals.

## SUBMISSION TO CUSTOMER

See Submittal Forms exhibits in this subsection for all the forms that will be used to submit submittals on this project.

## CUSTOMER APPROVED SUBMITTALS

The Project Manager obtains the signature of an authorized Customer representative on the submittal form.

[CompanyName] extends compliance to contract specifications to Customer approved submittals.

Work in the affected area of a pending submittal requirement does not start until the Customer approves the submittal.

## CONTRACT SUBMITTAL SCHEDULE

The Project Manager identifies submittals that apply to a specific contract and when they should be submitted, including:

- Contract requirement reference (if applicable)
- Submittal type: Shop drawing, product data, quality inspection and test plan, request for information, or allowances and unit prices
- Description
- Due date for submission to Customer by [CompanyName]
- Due date for approval by the Customer. Due dates may be a number of days after a project plan milestone.
- Approval date

## CONTRACT WARRANTY

The Project Manager ensures that Customer contracts clearly specify warranty coverage including:

- Scope
- Starting date
- Duration

The Project Manager ensures that Customer contracts also clearly specify owner responsibility for:

- Restrictions of use
- Maintenance requirements
- Exclusions for Customer supplied materials or equipment
- Timely notification of problems

[CompanyName] Project Submittal Form			
Submittal ID#	Project ID	Project Name	Date
	[ProjectNumber]	[ProjectName]	
To:		From: [CompanyName] Location:	
Type of Submittal: <input type="checkbox"/> Shop drawing <input type="checkbox"/> Product data <input type="checkbox"/> Request for information <input type="checkbox"/> Completed form or quality record <input type="checkbox"/> Quality system document  <input type="checkbox"/> Other:		Description of submittal:	
List of attachments:		Remarks:	
Submittal Prepared by: [CompanyName]  Name:  Title:  Signature / Date:		Submittal Approved by [CompanyName] Quality Manager:  Name:  Title:  Signature / Date:	
Customer Disposition: <input type="checkbox"/> Approved <input type="checkbox"/> Conditionally approved, resubmission not required (see comments) <input type="checkbox"/> Disapproved, resubmission required  <input type="checkbox"/> Other:		Customer Representative:  Name:  Title:  Signature / Date:	
Comments:			

[CompanyName] Project Submittals Schedule and Log							
Contract ID	Contract Name	Preparer	Date	Notes			
[ProjectNumber]	[ProjectName]	[ProjectManagerName]					

Contract Section Activity ID	Technical Specification Reference / Version Date	Type/Description of Submittal	Version /Date	Required Submittal Date	Date Submitted to Customer	Required Customer Approval Date	Customer Approval Date

## J. PROCESS CONTROLS

(Ref. ISO10005 Quality Plan Requirement 5.13, 5.16)

The construction process plan defines how project work is to be done and approved for the overall project. The construction process plan is communicated to all key personnel, subcontractors and suppliers in a startup meeting. As the project proceeds, work task plans provide additional details of how each individual work task is carried out. Work tasks planning meetings are used to communicate expectations of the work task plan to key personnel responsible for carrying out the work task.

Project phases of work and work tasks subject to process control procedures are listed on the Quality Controlled Work Tasks form. The form is included as an exhibit in this subsection.

Process controls include inspection controls which are described in the subsection of this Quality Assurance/Quality Control Plan.

Process controls include the control of nonconforming items is described in subsection of this Quality Assurance/Quality Control Plan.

### LISTING OF QUALITY CONTROLLED CONSTRUCTION WORK TASKS

(Ref. ISO10005 Quality Plan Requirement 5.10.c)

Each work task is subject to a series of job-ready, work in process, and completion inspections. A project work tasks Quality Control Work Task List is included as an exhibit in this subsection.

The Quality Manager identifies each phase of construction work task that requires separate quality controls. Each work task triggers a set of requirements for quality control inspections before, during and after work tasks.

### WORK TASK PROCESS CONTROLS

#### WORK PROCESS SPECIFICATIONS

The Quality Manager ensures that work processes are controlled to ensure that the specified requirements are met. When appropriate, the Quality Manager will specify project quality standards for work processes that may include:

- References to documented procedures such as manufacturer's installation instructions
- Procedures for carrying out process steps
- Methods to monitor and control processes and characteristics
- Acceptability criteria for workmanship
- Tools, techniques and methods to be used to achieve the specified requirements.

#### WORK TASK READY CONTROLS

Work on a work task starts only when conditions do not adversely impact quality, comply with government regulations, contract technical specifications, industry standards, or product installation instructions.

The Quality Manager identifies supplemental start-work requirements that apply to a specific project when they are necessary to assure quality results.

## **WORK TASK WORK IN PROCESS CONTROLS**

Work is conducted only when conditions do not adversely impact quality; comply with government regulations, contract technical specifications, industry standards, or product installation instructions.

The Quality Manager identifies supplemental work in process requirements that apply to a specific project when they are necessary to assure quality results.

## **CONTROLLED USE OF MATERIALS**

[CompanyName] construction activities conform to manufacturers' product use and installation instructions that apply to the construction process.

When installing a product, the Superintendent has access to all applicable product installation instructions.

## **STORAGE, SHIPPING AND HANDLING**

### **PRESERVATION, STORAGE AND PROTECTION OF MATERIALS AND COMPLETED WORK**

[CompanyName] will preserve and protect work in process, completed work, component parts, materials, and when applicable, delivery to the destination, to maintain compliance with project requirements and standards. This includes handling, storage, protection from natural elements, and reducing risks of damage.

Completed work is protected from dirt, oil, ferrous material, other foreign matter, and damage as specified by government regulations, contract technical specifications, industry standards, or product installation instructions.

Protections will be employed that prevent water from collecting and pooling.

Aluminum will be packaged and stored in a manner that prevents damage to the material properties of the metal.

The Quality Manager identifies supplemental protection requirements that apply to a specific project when they are necessary to assure quality results.

## **PROCESS CONTROL COORDINATION AND COMMUNICATION**

### **PROJECT STARTUP MEETING**

Prior to the commencement of work, the Project Manager holds a meeting to discuss and coordinate how project work will be performed and controlled. Key personnel from [CompanyName], subcontractors and suppliers meet to review expectations for project quality results as well as quality assurance and quality control policies and procedures including:

- Key requirements of the project
- Required quality inspections and tests
- The project submittal schedule
- Quality policies and heightened awareness of critical quality requirements
- Project organization chart and job responsibilities
- Methods of communication and contact information
- Location of project documents and records

### **WEEKLY MEETINGS**

The Superintendent conducts a meeting with key company, subcontractor and supplier personnel responsible for carrying out, supervising, or inspecting the work, and interested Customer representatives.

The meeting is held on a nominal weekly schedule. During the meeting, the Superintendent facilitates coordination among the participants, communication among the participants, and reinforces heightened awareness for critical requirements.

The Superintendent maintains a record of the meeting event on the Daily Quality Control Report.

### **WORK TASK REQUIREMENTS REVIEW**

In preparation for the start of an upcoming work task, the Superintendent reviews an integrated and coordinated set of documents that collectively define quality requirements for the work task including:

- Objectives and acceptance criteria of the work task
- Quality standards that apply to the work task
- Work instructions, process steps, and product installation instructions that apply to the work task
- Shop drawings
- Submittals
- Tools and equipment necessary to perform the work
- License, certification, or other qualification requirements of personnel assigned to work
- Required records of the process and resulting product
- The subcontractor contracted to perform the work, if applicable
- Customer contract requirements
- Required quality inspections and tests
- Method for clearly marking nonconformances to prevent inadvertent use
- Location of quality system records and documents
- Personnel training

### **WORK TASK PREPATORY MEETING**

Prior to the start of a work task, the Superintendent conducts a meeting with key company, subcontractor personnel responsible for carrying out, supervising, or inspecting the work, and interested Customer representatives.

During the meeting, the Superintendent communicates the work task quality requirements and reinforces heightened awareness for critical requirements. Topics for a work task quality plan meeting include:

- Conflicts that need resolution
- Required quality documents and a verification of availability to personnel carrying out, supervising, or inspecting the work task
- Record keeping requirements and the availability of necessary forms
- Review methods and sequences of installation
- Special details and conditions
- Standards of workmanship
- Heightened awareness of critical quality requirements
- Quality risks
- Work tasks quality inspection form

# [CompanyName] Project Startup Meeting Form

[illegible]



## L. REQUIRED TESTS

*(Ref. ISO10005 Quality Plan Requirement 5.18)*

The Quality Manager ensures that quality tests that apply to a specific project are clearly identified. Tests for a project include:

- Customer required quality tests as specified by the contract, contract technical specifications, contract drawings, and approved submittals.
- Additional quality tests necessary to assure quality results.

## INSPECTION AND TEST REGISTER

*(Ref. ISO10005 Quality Plan Requirement 5.10)*

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

The Quality Manager prepares quality inspection and test plans for a project that identifies:

- Each required quality inspection and/or test
- Inspection and test specifications for each required quality inspection or test
- Hold points for Customer quality inspection
- Specification requirements for each quality inspection and test

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

The completion of the inspection or test will be recorded on the Inspection and Test Register form.

Form exhibits are included as an exhibit in this subsection.

**[CompanyName]  
Quality Inspection and Test Plan**

Project ID	Project Name	CONTRACTOR
[ProjectNumber]	[ProjectName]	[CompanyName]

SPECIFICATION SECTION AND PARAGRAPH NUMBER		SCHEDULE ACTIVITY ID	INSPECTION/TEST REQUIRED	ACCREDITED/ APPROVED LAB YES /NO	SAMPLED BY	INSPECTED/ TESTED BY	LOCATION OF TEST ON/OFF SITE/SITE		DATE COMPLETED	DATE FORWARDED TO CUSTOMER	REMARKS

<div style="text-align: center;"> <b>[CompanyName]</b>  <b>Testing Agency Test and Inspection Report</b> </div>		
Date of Issue/Report ID	Project Name	Project Number
	[ProjectName]	[ProjectNumber]
Name, address, telephone and email address of testing agency		
Dates and locations of samples and tests or inspections		
Description of the Work and test and inspection method		
Identification of product and Specification Section.		
Complete test or inspection data		
Test and inspection results and an interpretation of test results.		
Record of temperature and weather conditions at time of sample-taking and testing and inspection.		
Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements		
Name and signature of laboratory inspector.		
Recommendations on retesting and reinspecting.		

## [CompanyName] Testing & Inspection Results Log

[illegible]

## O. CONTROL OF NONCONFORMANCES

(Ref. ISO10005 Quality Plan Requirement 5.17)

Should a nonconformance be identified by an inspection, a systematic method will be used to control the item, correct it, and ensure that project quality is not adversely impacted by the event.

Nonconformances and their resolution are recorded on a Nonconformance Report form. A

### MARKING OF NONCONFORMANCES AND OBSERVATIONS

When the Quality Manager, Superintendent, inspector, or Customer identifies a nonconformance or an observation, the item is quickly and clearly marked by tape, tag, or other easily observable signal to prevent inadvertent cover-up.

### CONTROL THE CONTINUATION OF WORK

After the item is marked, the Superintendent determines if work can continue in the affected area:

**CONTINUE WORK:** When continuing work does not adversely affect quality or hide the defect, work may continue in the affected area while the disposition of the item is resolved. The Superintendent may place limitations on the continuation of work.

**STOP WORK ORDER:** When continuing work can adversely affect quality or hide the defect, work must stop in the affected area until the disposition of the item resolved. The Superintendent identifies the limits of the affected area. The Superintendent quickly and clearly identifies the boundaries of the stop work area.

### RECORDING OF NONCONFORMANCES

If nonconformances or observed items exist by the work task completion inspection, the Superintendent or inspector records the nonconformances on a nonconformance report.

The Superintendent sends the nonconformance report to the Quality Manager.

### QUALITY MANAGER DISPOSITION OF NONCONFORMANCE REPORTS

When the Quality Manager receives a Nonconformance Report, he or she assesses the affect the reported nonconformance has on form, fit, and function. The Quality Manager may assign a disposition of either:

**REPLACE:** The nonconformance can be brought into conformance with the original specification requirements by replacing the nonconforming item with a conforming item.

**REPAIR:** The nonconformance can be brought into conformance with the original requirements through completion of required repair operations.

**REWORK:** The nonconformance can be made acceptable for its intended use, even though it is not restored to a condition that meets all specification requirements. The Quality Manager may specify standards that apply to the completion of rework. Rework nonconformances must be approved by the Customer.

[CompanyName] Nonconformance Report		
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: _____	

## [CompanyName] Nonconformance Report Control Log

[illegible]

**[CompanyName]**

## **Corporate Quality Manual**

### **Operating Policies of the [CompanyName] Quality System**

Management acceptance

This Quality Manual has been reviewed and accepted

Endorsed By: (Name / Title)	[PresidentName], President		
Signature:	<i>[PresidentName]</i>	Date:	[Date]

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# QUALITY MANUAL

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## CROSS REFERENCES

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## 4. CONTRACT SPECIFICATIONS

### *DEFINE CUSTOMER QUALITY EXPECTATIONS*

#### 4.1. OVERVIEW

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.

#### 4.2. CONTRACT TECHNICAL SPECIFICATIONS

The Project Manager obtains contract technical specifications from the customer.

For each specific contract, The President identifies supplemental technical specifications on the Project Quality Plan when they are not otherwise specified by the contract or the approved drawings. Superintendents have jobsite access to contract technical specifications for the construction activities they supervise.

All [CompanyName] activities comply with the contract technical specifications.

#### 4.3. CONTRACT DRAWINGS

The Project Manager obtains customer supplied drawings that have been approved by local government regulators. Superintendents have jobsite access to approved architectural drawings for the construction they supervise.

All [CompanyName] activities comply with the drawing details and specifications cited in the drawings.

##### 4.3.1.1. AS-BUILT RED-LINE DRAWINGS

As the project progresses, the Superintendent will mark the original design drawings to indicate as-built conditions including changes to specified materials, dimensions, locations, or other features.

#### 4.4. NEEDS AND EXPECTATIONS OF INTERESTED PARTIES

The Quality Manager identifies interested parties, their expectations, quality requirements including governmental regulators, special interest organizations, and the public.

#### 4.5. CONTRACT RISK ASSESSMENT

The Quality Manager performs a general assessment and identifies project quality risks. Quality risks include ability to satisfy customer expectations for quality or on-time delivery as well as company risks related to time and cost related to possible quality issues.

#### 4.6. CONTRACT SUBMITTALS

The Quality Manager prepares submittals that provide additional details of how [CompanyName] plans to carry out quality-related aspects of the customer contract, contract technical specifications, and contract drawings and reporting of quality records to the customer.

The Quality Manager lists, schedules, and approves all quality-related submittals that are required by the project including submittals prepared by subcontractors and suppliers. The Quality Manager must review all submittals for compliance with the requirements of the [CompanyName] Quality System. The Quality Manager must sign approval of each contract submittal.

[CompanyName] extends compliance to contract specifications to all customer approved submittals. All [CompanyName] activities comply with customer approved submittals.

#### **4.6.1. CONTRACT SUBMITTAL SCHEDULE**

The Project Manager identifies submittals that apply to a specific contract and when they should be submitted, including:

- Contract requirement reference (if applicable)
- Submittal type: Shop drawing, product data, quality inspection and test plan, request for information, or allowances and unit prices
- Description
- Due date for submission to customer by [CompanyName]
- Due date for approval by the customer. Due dates may be a number of days after a project plan milestone.
- Approval date

The Project Manager uses Standard Operating Procedure 4.6.1. Contract Submittal Schedule to plan project submittals that are required during a project and to record when the submittals are completed and approved by the customer. The submittal schedule also provides the means to control submittals that have deviated from the plan and document any unplanned submittals. At the end of the project, the submittal schedule is used to verify that all submittals have been completed.

#### **4.6.2. STRUCTURAL PLAN AND SHOP DRAWING SUBMITTALS**

The Project Manager or Purchasing and Estimating Manager prepare shop drawing submittals that supplement contract drawings. Shop drawings are required when additional details are necessary for fabrication or installation. The following information is included, as applicable:

- Dimensions established by field measurement
- Relationships to adjoining work
- Identification of products and materials
- Fabrication and installation drawings
- Diagrams showing locations of field-installations
- Shop fabricated manufacturing instructions
- Templates and patterns
- Design calculations
- Compliance with specified standards
- Seal and signature of professional engineer if required
- Additional requirements as specified in the contract, contract technical requirements, or contract drawings.

[CompanyName] extends contract specifications to include customer approved shop drawings.



#### **4.6.3. PRODUCT DATA SUBMITTALS**

The Project Manager prepares product data submittals that consist of the manufacturer's product information. The information included in this submittal is:

- Manufacturer, trade name, model or type number
- Description
- Intended use
- Size and physical characteristics including drawings when applicable
- Finish and color characteristics
- Product manufacturer's installation instructions, when applicable
- Additional requirements as specified in the contract, contract technical requirements, or contract drawings.

#### **4.6.4. ALLOWANCES AND UNIT PRICES SUBMITTALS**

When customer contracts specify allowances and unit prices that the customer will select after the contract is awarded, the Project Manager prepares an allowance and unit price submittal for customer approval.

When a customer selects or approves an allowances and unit prices, the customer indicates the allowance and unit price selection on the signed submission return.

[CompanyName] extends compliance to contract specifications to customer approved allowances and unit prices.

#### **4.6.5. REQUEST FOR INFORMATION (RFI) SUBMITTALS**

The Project Manager submits a request for additional information to the customer when errors are found or when required information is not contained in the contract, contract technical specifications, or contract drawings.

Should any number of contract technical specifications or contract drawings result in conflicting requirements, the Quality Manager submits a request for information to the customer to select the standard that applies.

[CompanyName] extends compliance to contract specifications to customer requests for information.

#### **4.6.6. CHANGE ORDER SUBMITTALS**

Contract requirements or contract technical specifications may require a change after the contract is awarded. The Project Manager submits the change order to the customer for approval, including any contract price adjustments.

When a customer approves a change order, the customer signs the submission return.

[CompanyName] extends contract specifications to include customer approved change orders.

The Project Manager uses Standard Operation Procedure 4.6.6. Change Order Submittal to clearly communicate proposed project change orders and record customer acceptance on a project.

#### **4.6.7. MOCK-UP SUBMITTALS**

The Superintendent prepares mock-up submittals as required by contract. Additionally, the Quality Manager specifies mock-up requirements when they are necessary to ensure customer expectations are clearly identified.

The Quality Manager ensures that each mock-up demonstrates specific elements of form and/or function, and that they are specified in the submittal documents.

[CompanyName] extends contract specifications to include customer approved mock-up submittals.

#### **4.7. CUSTOMER SUBMITTAL APPROVAL**

The Project Manager obtains the signature of an authorized customer representative on the submittal form.

[CompanyName] extends compliance to contract specifications to customer approved submittals.

Work in the affected area of a pending submittal requirement does not start until the customer approves the submittal.

The Project Manager follows Standard Operating Procedure 4.7. Customer Submittal Approval to provide a consistent method for presenting and recording key submittal information in a cover sheet for each submittal on a project.

#### **4.8. CONTRACT WARRANTY**

The Quality Manager determines warranty services that are required by regulatory requirements, customer requirements, and customer expectations.

The Project Manager ensures that customer contracts clearly specify warranty coverage including:

- Scope
- Starting date
- Duration

The Project Manager ensures that customer contracts also clearly specify owner responsibility for:

- Restrictions of use
- Maintenance requirements
- Exclusions for customer supplied materials or equipment
- Timely notification of problems

#### **4.9. CONTRACT REVIEW AND APPROVAL**

The President conducts customer contract reviews to ensure that:

- Customer requirements and specifications are complete
- Customer requirements and specifications are compatible with the relevant regulations, [CompanyName] quality standards, and Quality System requirements
- [CompanyName] has the capability to deliver the completed project in the time allotted

Before construction begins, the President makes sure that all contract requirements are clearly understood, all discrepancies are resolved, and all requirements are agreed upon. Once these requirements are met, the President signs the contract.

#### **4.10. SUPPLEMENTAL PROCEDURES**

- SOP 4.6.1. Contract Submittal Schedule
- SOP 4.7. Customer Submittal Approval

Selected Pages  
Not the Complete Plan

## 9. INSPECTIONS AND TESTS

### *ASSURE COMPLIANCE*

#### 9.1. OVERVIEW

Inspections are necessary to verify that work processes and results conform to both contract requirements and [CompanyName] quality standards.

Qualified personnel inspect every project throughout the construction process. Additional reviews validate the accuracy of the field quality inspections and ensure that the quality standards apply uniformly.

An inspection and test plan defines the quality inspections and tests required for a specific project.

Personnel may only inspect work activities for which they have been qualified by the Quality Manager.

#### 9.2. REQUIRED WORK TASK QUALITY INSPECTIONS AND TESTS

The Quality Manager identifies each Task that is a phase of construction that requires separate quality controls to assure and control quality results. Each Task triggers a set of requirements for quality control inspections before, during and after work tasks.

Tasks are divided into two categories:

- Discrete Tasks are standard type of work where a completion inspection is performed one time at the completion of a phase of work.
- Process Tasks are tasks where completion inspections are performed continuously. Continuous inspections are required when there is a limited window of time to perform a completion inspection before the next task begins. Process tasks may also be characterized by independent monitoring of a work process, such as welding, where the observer verifies conformance to work procedures.

Process tasks undergo additional quality controls that continuously monitor compliance to specifications.

Independent quality audits are conducted to verify that the task quality controls are operating effectively.

Construction projects may execute a work task multiple times in a project, in which case a series of quality inspections are required for each work task.

#### 9.3. MATERIAL INSPECTIONS AND TESTS

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

##### 9.3.1.1. MATERIAL RECEIVING INSPECTION

The Superintendent inspects or ensures that a qualified inspector inspects materials prior to use for conformance to project quality requirements. The receiving inspection includes a verification that the

- Correct material has been received
- The material is identified and meets the traceability requirements for the material
- Material certifications and/or test reports meet the specified requirements
- Materials are tested and approved for the specific application

The Superintendent ensures that each work task that uses the source inspected materials proceed only after the material has been accepted by the material quality inspection or test.

#### **9.3.1.2. SOURCE INSPECTIONS**

Source quality inspections are required when quality characteristics cannot or will not be verified during subsequent processing. The Quality Manager determines if a source inspection is necessary to validate supplier quality before materials are delivered to the project jobsite.

The Superintendent ensures that each work task that uses the source inspected materials proceed only after the material has been accepted by the source inspection.

### **9.4. WORK IN PROCESS INSPECTIONS**

Work in process quality inspections continuously verify compliance project quality standards beginning at the start of a work task, as work is conducted, and continues until the work task is complete.

#### **9.4.1.1. INITIAL JOB-READY INSPECTIONS**

For each work task, the Superintendent or a qualified inspector performs job-ready quality inspections to ensure that work activities begin only when they should begin. Job-ready quality inspections verify that conditions conform to the project quality requirements.

#### **9.4.1.2. INITIAL WORK IN PROCESS INSPECTION**

For each work task, the Superintendent or a qualified inspector performs an initial work in process inspection when the first representative portion of a work activity is completed.

#### **9.4.1.3. FOLLOW-UP WORK IN PROCESS INSPECTIONS**

The Superintendent or a qualified inspector performs ongoing work in process quality inspections to ensure that work activities continue to conform to project quality requirements. Punch Items

If the Superintendent or inspector observes an item for correction prior to a work task completion inspection, the item is identified for correction. During the work task completion inspection each Punch item correction is verified.

Any outstanding Punch items remaining after the work task completion inspection is deemed a nonconformance.

#### **9.4.2. ADDITIONAL INSPECTION REQUIREMENTS FOR PROCESS TASKS**

For each process task, a qualified person inspects the ongoing completion work for conformance to project quality requirements. This is in addition to discrete task completion inspections that are performed one time at the end of a phase of work.

The continuous monitoring inspections are conducted before starting other work activities that may interfere with an inspection.

### **9.5. WORK TASK COMPLETION INSPECTIONS**

For each work task, the Quality Manager or a qualified inspector inspects the completion of each work task to verify that work conforms to project quality requirements.

Completion quality inspections are performed for each work task. Completion quality inspections are conducted before starting other work activities that may interfere with an inspection.

Any outstanding Punch items remaining after the work task completion inspection is deemed a nonconformance.

## **9.6. INSPECTION OF SPECIAL PROCESSES**

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 are required. For these special processes, a qualified inspector continuously inspects the work process.

## **9.7. INDEPENDENT MEASUREMENT AND TESTS**

The Quality Manager ensures that quality tests that apply to a specific project are clearly identified. Tests for a project include:

- Customer required quality tests as specified by the contract, contract technical specifications, contract drawings, and approved submittals.
- Additional quality tests necessary to assure quality results.

## **9.8. COMMISSIONING FUNCTIONAL ACCEPTANCE TESTS**

A functional test is performed on each functional system. A qualified inspector performs functional acceptance tests to verify that a system meets predetermined acceptance criteria including:

- The equipment and systems operate as intended
- The equipment and systems perform as intended
- Documentation for operation and maintenance is complete

Each functional test has a documented testing procedure that includes:

- Step-by-step work instructions for conducting the test
- Data recording requirements
- Acceptance criteria
- A determination of pass or fail

## **9.9. HOLD POINTS FOR CUSTOMER INSPECTION**

The Superintendent stops work when reaching a hold point specified on the inspection and test plan. The Superintendent ensures that work proceeds only with customer approval.

## **9.10. QUALITY INSPECTION AND TEST SPECIFICATIONS**

Specifications for each inspection or test are clearly understood before the inspection or test is performed including:

- Items to be inspected/tested
- Inspections/tests to be performed
- Testing schedule frequency
- Specification references including contract drawing identification number and version, if applicable, and/or contract technical specification number and version, if applicable
- Performing party
- Witness parties
- Certificates required
- Checklists/procedures
- Reference standards

### **9.11. INSPECTION AND TEST ACCEPTANCE CRITERIA**

Inspections assess conformance of materials or work for each work task to project quality requirements, including applicable:

- Contract technical specification
- Contract drawings
- Approved shop drawings
- Approved product submittals
- Approved allowances and unit prices
- Product identification requirements
- Approved submittals
- [CompanyName] quality standards

The material or completed work task is accepted only when it meets all project quality requirements.

### **9.12. INSPECTION AND TEST STATUS**

The status of each quality control inspection or test is clearly marked by tape, tag, or other easily observable signal to ensure that only items that pass quality inspections is accepted.

For each quality-controlled work task, the Quality Manager determines the appropriate method of identification to show inspection and test status.

For each quality-controlled material, the Quality Manager determines the appropriate method for identifying quality inspection and test status.

### **9.13. INDEPENDENT QUALITY ASSURANCE INSPECTIONS**

The Quality Manager and/or qualified inspectors perform independent quality assurance inspections that verify that task quality controls are operating effectively.

The Quality Manager selects a representative portion of task completion inspections performed by the Superintendent. Those tasks are independently inspected by the Quality Manager and/or qualified inspectors. The findings are compared to the findings of the inspections performed by the Superintendent. Any deviations are addressed by corrective actions and preventive actions as necessary.

### **9.14. INSPECTION AND TEST RECORDS**

The Superintendent follows Standard Operating Procedure 9.14. Inspection and Test Records to record and store the results of quality inspections and tests.

#### **9.14.1. INSPECTION RECORDS**

The Quality Manager prepares an inspection form for each work task. The Quality Manager lists on the form checkpoints for heightened awareness including:

- Initial job-ready inspection requirements
- Inspection and tests
- Work in process inspection requirements
- Completion quality inspections
- Other quality requirements as necessary to reduce quality risks

The person responsible for the inspection, records work task inspection results on the work task inspection form.

The Quality Manager follows Standard Operating Procedure 9.14.1. Inspection Records to prepare a work task quality inspection form for planned work tasks on a project when an adequate quality inspection form is not available and to provide a document for recording the results of work task quality inspections.

#### **9.14.2. TEST RECORDS**

Test result data include as appropriate:

- Reference to the inspection and test plan item
- Description or title of the inspection activity
- Drawing identification number and version, if applicable
- Technical specification number and version, if applicable
- Location of the inspection activity
- Acceptance criteria
- Nonconformances
- Validation that nonconformances are corrected, reinspected or retested, and confirmed to meet Quality System requirements.
- Any open items to be completed later.
- Inspector's name and signature indicating compliance with all requirements of the Quality System
- Quality rating scores as appropriate
- Date of inspection or test
- Certificate, if applicable
- Conspicuous statement of final result as either "CONFORMS" or "DOES NOT CONFORM"

#### **9.15. PROJECT COMPLETION AND CLOSEOUT INSPECTION**

The Superintendent and Quality Manager follow Standard Operating Procedure 9.15. Project Completion and Closeout Inspection to clearly document a nonconformance found by test or work task completion quality inspection, to monitor the disposition status, and to record its disposition.

##### **9.15.1. PRE-FINAL [COMPANYNAME] INSPECTION**

Near the end of the project, or a milestone established in the Project Quality Inspection and Test Plan, the Quality Manager will inspect the completed project and verify conformance to contract specifications.

The Quality Manager records nonconforming items.

The Superintendent assigns a planned date by which the deficiencies will be corrected. The date may be assigned for all items or individual items as necessary. After corrections have been made, the Superintendent verifies the completion of each item.

Then the Quality Manager conducts a follow-up inspection and verifies that all nonconforming items have been corrected to meet contract specifications. Any remaining deficiencies are recorded and managed as nonconformances.

When the pre-final [CompanyName] inspection process is complete, the Quality Manager then notifies the customer that the project is ready for the customer's final inspection. The customer is also notified of any remaining nonconformances and their planned resolution.



#### **9.15.2. PRE-FINAL CUSTOMER INSPECTION**

If the customer performs a pre-final inspection, the Quality Manager records nonconforming items and assigns a planned date by which the deficiencies will be corrected.

The Superintendent assigns a planned date by which the deficiencies will be corrected. The date may be assigned for all items or individual items as necessary. After corrections have been made, the Superintendent verifies the completion of each item.

After corrections have been made, the Quality Manager will conduct a follow-up inspection and verify that all nonconforming items have been corrected to meet contract specifications. Any remaining deficiencies are recorded and then managed as nonconformances.

When the pre-final customer inspection process is complete, the Quality Manager then notifies the customer that the project is ready for the customer's Final inspection. The customer is also notified of any remaining nonconformances and their planned resolution.

#### **9.15.3. FINAL ACCEPTANCE CUSTOMER INSPECTION**

If the customer performs a final inspection, the Quality Control Manager, Superintendent, and Project Manager will participate in the inspection. The Quality Manager records nonconforming items and assigns a planned date by which the deficiencies will be corrected. The date may be assigned for all items or individual items as necessary. After corrections have been made, the Superintendent verifies the completion of each item.

After corrections have been made, the Quality Manager will conduct a follow-up inspection and verify that all nonconforming items have been corrected to meet contract specifications. Any remaining deficiencies are recorded managed as nonconformances.

When the final customer inspection process is complete, the Quality Manager then notifies the customer that the project is ready for the customer's follow-up verification. The customer is also notified of any remaining nonconformances and their planned resolution.

#### **9.16. SUPPLEMENTAL PROCEDURES**

- SOP 9.14. Inspection and Test Records
- SOP 9.14.1. Inspection Records
- SOP 9.15. Project Completion and Closeout Inspection

## 13. RECORD AND DOCUMENT CONTROLS

### 13.1. OVERVIEW

[CompanyName] ensures that quality related documents and records are created, current versions are in use, complete, identifiable, and stored properly.

### 13.2. QUALITY SYSTEM DOCUMENTS

#### 13.2.1. CORPORATE QUALITY MANUAL

The Quality Manager maintains the [CompanyName] Corporate Quality Manual that documents [CompanyName] quality policies. Each policy identifies the titles of personnel responsible.

The Quality Manager ensures that the Corporate Quality Manual and documents related to a work task are accessible to personnel performing the work.

The Quality Manager maintains, improves, and updates the manual as necessary. At least annually, the Quality Manager determines if updated versions of standards and product installation instructions are available. If so, the Quality Manager updates the Quality System documentation accordingly.

The President approves revisions to the Corporate Quality Manual, then signs and dates the cover.

#### 13.2.2. QUALITY SYSTEM POLICY AND PROCEDURES

The Quality Manager prepares procedures when documented work steps are necessary for establishing, implementing, and maintain the [CompanyName] Quality System. Only procedures approved by the Quality Manager are a requirement of the [CompanyName] Quality System.

Written procedures are required for the use of forms to record quality data.

Each procedure must contain the following elements:

- Purpose
- Scope
- Definitions
- Responsible Person(s)
- References
- Procedure steps: that describe sequential processes to be followed to accomplish quality objectives

### 13.3. DOCUMENT CONTROLS

The Quality Manager assigns a new version number to each version of quality system documents, including the Corporate Quality Manual.

The Quality Manager and President control all company-wide quality system documents including:

- Approval of all quality system documents and for adequacy prior to issue or reissue.
- Ensures that applicable documents are available and usable at points of use
- Prevents unintended use of obsolete documents

The Quality Manager controls project-specific quality system documents including:

- Approval of all project quality documents and for adequacy prior to issue or reissue.

- Ensures that applicable documents are available and usable at points of use
- Prevents unintended use of obsolete documents

#### **13.3.1. CONTROL OF SYSTEM DOCUMENTS**

The Quality Manager controls documents related to the [CompanyName] Quality System including:

- Corporate Quality Manual
- Quality System Procedures
- Project Management Procedures (including interface and coordination with customers and regulatory agencies with jurisdiction over jobsites)
- Government regulations
- Industry standards
- Procurement specifications

The Quality Manager ensures that records of the distribution of Quality System documents are kept. When new versions are distributed, obsolete versions are destroyed or controlled to prevent inadvertent use.

The Quality Manager and Project Manager follow Standard Operating Procedure 13.3.1. Control of System Documents to ensure the proper control of documents related to the quality system.

#### **13.3.2. CONTROL OF PROJECT DOCUMENTS**

The Project Manager controls documents related to specific customer contracts including:

- Customer contracts
- Contract technical specifications
- Contract drawings
- Shop drawing submittals and approvals
- Product data submittals and approvals
- Allowances and unit price submittals and approvals
- Requests for information and customer responses
- Subcontracts
- Inspection and test plans

The Quality Manager ensures that records of the distribution of project documents are kept. When new versions are distributed, obsolete versions are destroyed or controlled to prevent inadvertent use.

### **13.4. RECORD CONTROLS**

The Quality Manager verifies records for conformance to the Quality System Requirements and approves all Quality System records.

Records demonstrating conformance with and operation of the Quality System are retrievable for at least five years. The Quality Manager verifies records for conformance to the Quality System Requirements.

#### **13.4.1. QUALITY SYSTEM RECORDS CONTROL**

The Quality Manager verifies the completeness, accuracy, and retention of project-specific Quality System records including:

- Annual reviews
- Quality improvement records

#### **13.4.2. PROJECT RECORDS CONTROL**

The Quality Manager verifies the completeness, accuracy, and retention of project-specific Quality System records including:

- Inspection and test records
- Quality submittals to the customer
- Project quality system audits
- Field reviews
- Calibration certificates
- Daily log reports
- Incident reports
- Redline drawings
- Qualified personnel approvals
- Qualified subcontractor approvals
- Quality improvement records
- Project Quality records specified by customer contract, or contract technical specifications

The Quality Manager assigns record control responsibilities and document location that apply to a specific project.

Project Quality Records will be maintained for a minimum of five years or more as specified by project specifications, or by the Quality Manager for a specific project. Project Quality Records will be filed in the project office during the project. After the project is complete, project records will be stored in file storage area of the main office.

The Quality Manager and Project Manager follow Standard Operating Procedure 13.4.2. Project Records Control to ensure the proper maintenance and storage of all quality records for a project.

#### **13.5. SUPPLEMENTAL PROCEDURES**

- SOP 13.3.1. Control of System Documents
- SOP 13.4.2. Project Records Control

**[CompanyName]**

**Quality System**

**Standard Operating Procedures**

Selected Pages Plan  
Not the Complete Plan

# STANDARD OPERATING PROCEDURES

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<b>QUALITY SYSTEM SOP</b> <b>8.7 MONTHLY QUALITY CONTROL REPORT</b>	
Version	Approved by:
	Quality Manager

**Purpose:**

To communicate the monthly project status to the customer

**Scope:**

All active projects

**Definitions:**

None:

**Responsible Person(s):**

Superintendent

**References:**

Quality Manual Section 8.7 Monthly Quality Control Report

Quality Manual Section 13.4.2 Project Records Control

**Procedure:**

1. Use the Monthly Quality Control Report Form contained in this procedure unless the customer contract or Project Quality Assurance/Quality Control Plan specifies the use of a modified or customer supplied form. In that case, the specified form replaces the standard form for that contract.
2. The Responsible Person reports on monthly project status as required by the Quality Manual.
3. The Responsible Person records the report on the Monthly Project Report Form or equivalent.
4. The Responsible Person stores the completed form in the field office as required by Quality Manual Section 13.4.2 Project Records Control.

[CompanyName] Monthly Quality Control Report			
Project ID	Project Name	Preparer	Reporting Period
[ProjectNumber]	[ProjectName]		
Summary of work completed and work in progress			
Outstanding issues			
Issues resolved during the reporting period			
Outstanding potential change orders			
Project status			
Cost analysis			
Project pictures			



## QUALITY SYSTEM SOP

### 10.2.3.1 RECORDING OF NONCONFORMANCES

Version	Approved by:
	Quality Manager

#### Purpose:

To clearly document a nonconformance found by test or work task completion quality inspection, monitor the disposition status, and to record its disposition.

#### Scope:

All projects tests and work task completion quality inspections

#### Definitions:

None:

#### Responsible Person(s):

Superintendent reports nonconformance on a Nonconformance Report Form

Quality Manager assigns disposition of the nonconformance

Superintendent stores the completed forms

#### References:

Quality Manual Section 10.2.3.1 Recording of Nonconformances

Quality Manual Section 13.4.2 Project Records Control

#### Procedure:

1. Use the Nonconformance Report Form and Nonconformance Report Control Log contained in this procedure unless the customer contract or Project Quality Assurance/Quality Control Plan specifies the use of a modified or customer supplied form. In that case, the specified form replaces the standard form for that contract.
2. The Responsible Person records nonconformances as required by the Quality Manual on the Nonconformance Report Form and records the nonconformance report on the Nonconformance Report Log.
3. The Responsible Person records disposition of nonconformances as required by the Quality Manual on the Nonconformance Report Form.
4. The Responsible Person records the disposition on the Nonconformance Report Log.
5. When the corrective actions and/or preventive actions have been completed, the Responsible Person records the action on the Nonconformance Report Form, updates the status on the Nonconformance Report Log.
6. The Responsible Person stores the completed form in the field office as required by Quality Manual Section 13.4.2 Project Records Control

[CompanyName] Nonconformance Report		
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: _____	

## [CompanyName] Nonconformance Report Control Log

[illegible]

[CompanyName] Corrective Action Report		
Report Control ID	Project ID	Project Name
	[ProjectNumber]	[ProjectName]
Preparer's Signature/ Submit Date		Submitted to:
Description of the requirement or specification		
Reason for the corrective action		
Location, affected material, affected area, etc. requiring corrective action		
Suggested Corrective Actions		
Corrective Action Plan	<input type="checkbox"/> Approval signature/date _____	
	Approval of corrective actions required by customer representative? Yes <input type="checkbox"/> No <input type="checkbox"/>	
	<input type="checkbox"/> Customer approval signature /date: _____	
	<input type="checkbox"/> Corrective actions completed Name/Date: _____	
Preventive Action Plan		
	<input type="checkbox"/> Preventive actions completed Name/Date: _____	

## QUALITY SYSTEM SOP

### 12.2 PROJECT QUALITY SYSTEM AUDIT

Version	Approved by:
	Quality Manager

#### Purpose:

To monitor the effective operation of the quality system on a project, and to record and store the results of Project Quality System Audits and corrective actions taken

#### Scope:

All active construction projects

#### Definitions:

None:

#### Responsible Person(s):

Project Manager has overall responsibility

Quality Manager

#### References:

Quality Manual Section 12.2 Project Quality System Audit

Quality Manual Section 13.4.2 Project Records Control

#### Procedure:

1. Use the Project Quality System Audit Form contained in this procedure unless the customer contract or Project Quality Assurance/Quality Control Plan specifies the use of a modified or customer supplied form. In that case, the specified form replaces the standard form for that contract.
2. The Responsible Person performs Project Quality System Audits as required by the Quality Manual.
3. The Responsible Person records results on the Project Quality System Audits Form.
4. The Responsible Person stores the completed form in the field office as required by Quality Manual Section 13.4.2 Project Records Control.

## [CompanyName] Project Quality System Audit Form

Project ID	Project Name	Auditor	Date
[ProjectNumber]	[ProjectName]		
<b>Review Topics:</b> <b>(Place check mark next to each item audited)</b>			
	<div style="display: flex; flex-direction: column; align-items: flex-start;"> <div style="margin-bottom: 10px;"> <input type="checkbox"/> Customer satisfaction  <input type="checkbox"/> On-time task completion  <input type="checkbox"/> Contract administration  <input type="checkbox"/> Safety compliance  <input type="checkbox"/> Quality risk planning and mitigation  <input type="checkbox"/> Performance improvement results  <input type="checkbox"/> Action plan for improvements </div> <div> <b>Quality Plan Conformance:</b>  <input type="checkbox"/> Project QC Personnel  <input type="checkbox"/> Project Quality Coordination and Communication  <input type="checkbox"/> Employee Qualifications  <input type="checkbox"/> Qualification of subcontractors and suppliers  <input type="checkbox"/> Project Quality Specifications  <input type="checkbox"/> Testing Plan  <input type="checkbox"/> Test Reports  <input type="checkbox"/> Work Task Quality Inspections  <input type="checkbox"/> Daily Quality Control Report  <input type="checkbox"/> Control of Punch Items and Nonconformances  <input type="checkbox"/> Project Records and Documents </div> </div>		
Nonconformance Notes and observations			
Action plan for improvement			
Follow-up results and date			