

# **Design-Build Comprehensive Quality Plan Sample**

Selected pages (not a complete plan or manual) Sample includes:

- ✓ Project Quality Plan Pages
- ✓ Submittal Forms
- ✓ Additional QA/QC Forms Examples

**Contact:** 

**First Time Quality** 410-451-8006

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# [CompanyName]

# Design-Build Construction Quality Assurance/Quality Control Plan

[ProjectName] [ProjectNumber]

Effective Date: [Date]

Version	Version notes
[Date]	Initial issue
Арр	roved
[QualityManagerNa	ame], Quality Manager

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# PROJECT-SPECIFIC CONSTRUCTION QUALITY PLAN TABLE OF CONTENTS

Background Information	7
Customer	
Project Name	7
Project Number	
Project Location	7
Overall Project Description	
[CompanyName] Scope of Work	
A. [CompanyName] Quality Policy	8
B. Key Elements of the Construction Quality Plan	
Project Quality Assurance/Quality Control Plan Overview	
C. Project Quality Coordination and Communication	
D. Project QC Personnel	17
Project QC Job Position Assignments	17
Project QC Organization Chart	
E. Duties, Responsibilities, and Authority of QC Personnel	
F. Personnel Qualifications and Technical Certifications	
G. Qualification of Third Party Inspection/Testing Companies and Subcont	ractors and Suppliers 27
Construction Inspection/Testing Laboratory Qualification Requirements	27
Qualification	27
Purchase Order Approval	28
H. Quality Training	30
I. Construction Project Quality Specifications	
Local construction Codes	
J. Design Controls	35
Design Reviews	35
Design Review Plan	
K. Material Inspection Traceability and Quality Controls	
Identification of Lot Controlled Materials	
Material Receiving and Inspection	39
L. Construction Inspection and Test Plan	43
Calibration of Inspection, Measuring, and Test Equipment	43
M. Work Task Quality Inspections	46
Identification of Quality Inspected Work Tasks	46
Required Inspections For Each Work Task	
, , , , , , , , , , , , , , , , , , , ,	

Daily Quality Control Report	47
N. Control of Corrections and Nonconformances	51
Marking of Nonconformances and Observations  Control the Continuation of Work	
Recording of Nonconformances	
Quality Manager Disposition of Nonconformance Reports	
Corrective Actions	
Nonconformance Preventive Actions	53
O. Project Completion Inspections	55
Punch-Out QC Inspection	55
Pre-Final Customer Inspection	55
Final Acceptance Customer Inspection	
P. Project Quality Records and Documents	59
Q. Quality Assurance Surveillance	62
Project Quality Performance Surveillance	62
Project Quality Audits	
Project Audit Plan	
Project Audit Requirements	
R. Additional Quality Control Requirements	65
Solecie	

#### J. DESIGN CONTROLS

Construction design controls are in place to assure the quality of construction designs for this project.

A design plan is used to document the design control process. The Design Plan is included as an exhibit in this subsection.

The first control point will be of the review of design inputs. The Design Manager will assure that all necessary information is available to perform the required design work. The Design Manager will also assure that expectations for design outputs are well defined.

Intermediate reviews will be carried out as indicated on the design control plan. The last review is the design output review.

A record of all reviews will be recorded on the Design Review form. A Design Review form exhibit is included in this subsection.

The President has appointed [DesignManagerName] as the Design Manager. [DesignManagerName] will control the design process with specific quality responsibilities, duties, and the authority to carry them out.

#### **DESIGN REVIEWS**

#### **DESIGN INPUT REQUIREMENTS REVIEW**

The Quality Manager ensures that the information in design inputs clearly defines customer expectations and that the necessary details are provided to set requirements for design.

The Quality Manager obtains design specifications from the customer and conducts a customer design input review to ensure that:

- Customer design input requirements and specifications are complete
- Design process review milestones are specified when necessary
- Customer design output requirements and specifications are complete for review milestones as well as the completed design
- Customer design requirements and specifications are compatible with the relevant regulations, [CompanyName] quality standards, and Quality System requirements
- [CompanyName] has the capability to deliver the completed design in the time allotted

The Quality Manager identifies supplemental design specifications that supplement customer specifications when they are needed to ensure a quality design.

Before design work begins, the Quality Manager makes sure that all design requirements are clearly understood, all discrepancies are resolved, and all requirements are agreed upon. Once these requirements are met, the Quality Manager approves the design input.

The Quality Manager ensures that design input documents are verified by qualified personnel. The person responsible must verify:

- Design input specification are approved by a customer authority
- Design input specifications are complete
- Design input 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

The Quality Manager holds review meetings with interested parties at key design milestones. The Quality Manager identifies the key design milestones, the design output required for the review, and a list of reviewers.

Two design reviews are required: one is an input design review and the other is the final design review. The Quality Manager identifies other design reviews necessary to ensure a quality result. Design reviews may be specified at the completion of design work tasks, site assessments, preliminary engineering, preliminary design, percentage completion stages, and on a calendar schedule.

The Quality Manager identifies customer and company reviewers appropriate for each design milestone. Reviewers may include persons that have a stake in any of the following: quality, safety, constructability, scheduling, maintenance, purchasing, estimating, or cost control.

At each review, the Quality Manager reviews reviewer recommendations for amendments to the design specifications. The Quality Manager submits selected design amendments for customer approval. Customer approved design amendments are design requirements.

#### **DESIGN OUTPUT REVIEWS**

The Quality Manager ensures that design output documents are verified by qualified personnel independent of the person performing the work. The person responsible must verify:

- The completed design meets requirements specified by the design input
- The completed design meets approved design amendments
- Engineering calculations are correct
- Completeness of records per the Design Project Quality Assurance/Quality Control Plan including inputs, reviews, communications, and verification activities.

#### **DESIGN REVIEW PLAN**

The Quality Manager prepares a project-specific design review plan that includes:

- A listing of company and customer stakeholders, reviews they will participate in, and how their
  input will be used to amended design requirements. The project organization chart Includes
  interfaces between various groups and personnel for producing and reviewing the design.
- Design output deliverables, including required drawings, and engineering calculations
- Identification of who will perform design output verification activities and the criteria they will use.
- The Quality Manager reviews the design process project plan with the customer and other interested parties. The customer approves the plan after any discrepancies are resolved and the plan is agreed upon. Design work may begin only after the customer approves the plan.

[CompanyName] Design Review Form						
Pı	roject ID	Project Name	Design Review Ref#	Date		
[ProjectNum	ber]	[ProjectName]				
Review miles	stone:	Performing Department/Crew/Subco	ontractor and Supplier:			
Reference de	esign documents under	review				
Item#		Title or Descripti	on	Version / Issue Date		
		Review reco	ommendations			
Item#		commendation supporting documents)	[CompanyName] Acceptance/ Rejection Signature / Date:	Customer Acceptance/ Rejection Signature / Date:		
			☐ Approved ☐ Disapproved	☐ Approved ☐ Disapproved ☐ Approval not required		
		S.C.C.	☐ Approved ☐ Disapproved	☐ Approved ☐ Disapproved ☐ Approval not required		
			☐ Approved ☐ Disapproved	☐ Approved ☐ Disapproved ☐ Approval not required		
			☐ Approved ☐ Disapproved	☐ Approved ☐ Disapproved ☐ Approval not required		

# K. MATERIAL INSPECTION TRACEABILITY AND QUALITY CONTROLS

Products and materials are controlled to assure the use of only correct and acceptable items. Controls include identification of the inspection status. Materials that require lot control traceability and the method of traceability are listed on the Controlled Materials form included as an exhibit in this subsection.

#### **IDENTIFICATION OF LOT CONTROLLED MATERIALS**

The Quality Manager determines types of project materials that require quality controls.

For each type of quality-controlled material, the Quality Manager determines lot control traceability requirements, if any, and specifies the means of lot identification. Identification methods may include physical labels, tags, markings and/or attached certification documents.

When lot-controlled materials are received, the Superintendent verifies that materials have the specified lot identifications.

The Superintendent maintains lot identification at all production phases from receipt, through production, installation, or assembly, to final completion. Acceptable methods for preserving lot identification include physically preserving observable lot identifications, recording the lot identification on a work task quality inspection form or other work record, or collecting the physical lot identifier as a record along with supplemented with location.

If lot-controlled materials are without lot identification, the Superintendent deems the materials as nonconforming and segregates them and/or clearly marks them to prevent inadvertent use. The Superintendent treats the material according to the company policy for nonconformances. Only the Quality Manager can re-identify or re-certify the materials.

#### MATERIAL RECEIVING AND INSPECTION

When lot-controlled materials are received, the Operations Manager inspects the materials and verifies that materials have the specified lot identifications. Received materials are listed on the Material Receiving and Inspection Report form or Metals Materials Receiving and Inspection form included as an exhibit in this subsection.

Material quality inspections and tests ensure that purchased materials meet purchase contract quantity and quality requirements. The Superintendent inspects or ensures that a qualified inspector inspects materials prior to use for conformance to project quality requirements.

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.

[CompanyName] Controlled Materials Form					
Contract ID	Contract Name	Preparer	Date		
[ProjectNumber]	[ProjectName]				

Contract Section/ Activity ID	Material	Intended Use (if description is necessary)	Lot Traceability Requirements	Method for identification of Approved Inspection Status
			70	
			(9)	
			7	
	0			
	60			

[CompanyName] Metals Material Receiving Inspection Report					
Project ID	Project Name	P.O.#	Supplier	Receipt Date	
[ProjectNumber]	[ProjectName]				
Type of Material (i.e., steel plate)	Material Description (nominal dimensions)	Heat Number/ Serial Number/Markings	Condition / Damage	Color Code Marking	
			40		
Receiving Inspector A	pproval Signature / Date		Representative proval Date		
				☐ Material Receiving Inspection Passed	

[CompanyName]  Material Inspection and Receiving Report									
Contract ID	Contract	t Name	Purchase Order No.		Supplier		Bill of L	ading No.	Date
[ProjectNumber]	[Project	Name]							
Item No.	Stock/Part No.		Description	Quantity Received	Condition	Marking	Accept	Conditional Use	Reject
Receiving Quality Control									
ACCEPTANCE  Listed items have been accepted by me or under my supervision  Conform to contract specifications EXCEPT as noted herein or on supporting documents.  Received in apparent good condition EXCEPT as noted  Signature of authorized person and date:  EXCEPTIONS:									

#### L. CONSTRUCTION INSPECTION AND TEST PLAN

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.

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

The Quality Manager determines inspection, measuring, and test equipment that will be controlled, calibrated, and maintained.

Records of calibrations will be maintained including calibration certificates documenting of traceability to national standards.

A list of controlled and calibrated test equipment is listed on the Test Equipment Calibration Plan and Log included as an exhibit in this subsection.

The Quality Manager evaluates the project requirements and determines if there are measuring devices that require controls to assure quality results.

For each type of device, the Quality Manager identifies:

- Restrictions for selection
- Limitations on use.
- Calibration requirements including the frequency of calibration. All calibrations must be traceable to national measurement standards.

When a measurement device is found not to conform to operating tolerances, the Quality Manager validates the accuracy of previous measurements.

[CompanyName] Quality Inspection and Test Plan									
Project ID			Project Name					CONTRACTOR	
[ProjectNumber]			[ProjectName]				5	[CompanyName]	
SPECIFICATION SECTION AND PARAGRAPH NUMBER	SCHEDULE ACTIVITY ID	TEST REQUIRED	ACCREDITED/ APPROVED LAB YES /NO	SAMPLED BY	TESTED BY	LOCATION OF TEST ON/OFF SITE/SITE	DATE COMPLETED	DATE FORWARDED TO CUSTOMER	REMARKS
				X					
			5						

# [CompanyName] Test Equipment Calibration Plan and Log Project ID Project Name Preparer Date [ProjectNumber]

Type of measuring device	Calibration Type and Frequency	Measuring Device ID	Calibrated By/ Calibration Date	Calibration certificate #	Next Calibration Due Date
					Project Start
			2)		
		(0)			
		0)			

# **Questions? Call First Time Quality 410-451-8006 Questions? Call First Time Quality 410-451-8006**

#### **List of Included Forms**

#### **Standard Forms:**

- Point Of Contact List
- Project Organization Chart
- Project Quality Communications Plan
- Quality Manager Appointment Letter
- Project Manager Appointment Letter
- Superintendent Appointment Letter
- Personnel Certifications and Licenses
- Project Personnel Resumes
- Project Subcontractor and Supplier List
- Training Plan
- Training Log
- Regulatory Codes and Industry Standards
- Project Regulatory Building Codes
- Controlled Materials Form
- Metals Material Receiving Inspection Report
- Material Inspection and Receiving Report
- Inspection and Testing Standards
- Quality Inspection and Test Plan
- Test Equipment Calibration Plan and Log
- Quality Controlled Work Task List
- Daily Production Report
- Work Task Inspection Form
- Nonconformance Report
- Punch List
- Project Completion Inspection Form
- System Document Control Form
- Project Records Control Form
- Project Quality System Audit Form

# [CompanyName]

**QA/QC Forms** 



# **QUALITY SYSTEM FORMS**

## **TABLE OF CONTENTS**

[CompanyName] Qualified QC Inspector List	3
[CompanyName] Project Personnel Qualification Form	4
[CompanyName] Personnel Certifications and Licenses	5
[CompanyName] Subcontractor and Supplier Quality Communications PlanPlan	6
[CompanyName] Project Quality Training Plan	7
[CompanyName] Project Quality Records Plan	8
[CompanyName] Project Submittals Schedule and Log	9
[CompanyName] Project Submittal Form	
[CompanyName] Change Order Form	11
[CompanyName] Project Design Review Plan	12
[CompanyName] Design Review Meeting Participant Form	13
[CompanyName] Design Review Form	14
[CompanyName] Subcontractor and Supplier Qualification Form	15
[CompanyName] Subcontractor and Supplier Certifications and Licenses	16
[CompanyName] Project Startup Meeting Form	17
[CompanyName] Work Task Quality Assurance/Quality Control PlanPlan	18
PREPARATORY PHASE CHECKLIST	19
[CompanyName] Work Task Quality Control Planning Meeting Form	21
CONTRACTOR QUALITY CONTROL REPORT	22
[CompanyName] Monthly Quality Control Report	24
[CompanyName] Inspection and Test Report	25
INITIAL PHASE CHECKLIST	26
[CompanyName] Nonconformance Report Control Log	27
[CompanyName] Corrective Action Report	28
[CompanyName] Training Record	29
[CompanyName] Jobsite Quality Review Planning and Log Sheet	30
Jobsite Quality Review Planning and Log Sheet continued	31
Notes:	32
[CompanyName] Project Records Control Form	33

[CompanyName] Project Submittal Form						
Submittal ID#	Project ID	Project Name	Date			
	[ProjectNumber]	[ProjectName]				
То:		From: Precision Plant Services Location:				
Type of Submittal:  Shop drawing  Product data  Request for information  Completed form or quality red  Quality system document	cord	Description of submittal:				
List of attachments:		Remarks:				
Submittal Prepared by: Precision Plant Services	C	Submittal Approved by Precision P	lant Services Quality Manager:			
Name:		Title:				
Title: Signature / Date:		Signature / Date:				
Customer Disposition:  Approved		Customer Representative:				
Conditionally approved, result comments)	omission not required (see	Name:				
Disapproved, resubmission re	quired	Title:				
Other:		Signature / Date:				
Comments:						

[CompanyName] Change Order Form							
Change Order ID#	Project ID	Project Name Preparer and Date					
	[ProjectNumber]	[ProjectName]					
Requestor Name :  Date:  Request Reference Document:		Contract change requested by:  Precision Plant Services  Client  Architect/Engineer  Project Manager  Code Enforcement Official  Other:					
Change order description:		Reason(s)s for change order: Supporting documentation provided:					
Time Extension Required: ② Yes ② No  Number of Days*:  Reason:		Cost Change Required?  Yes  No  Amount* \$ Reason:					
Supporting documentation attached:	50/0	Supporting documentation attached:					
Customer Approval:		Precision Plant Services Approval:					
Name/Date		Name/Date					

[CompanyName] Subcontractor and Supplier Qualification Form						
Company Name:		Scope of Work (specification sections):				
Project ID	Project Name	Арр	roval	Approved By		
[ProjectNumber]	[ProjectName]		itional			
Subcontractor and Supplier Quality System:		Subcontractor and Supplier site quality inspection				
Works under Precision Plant Services Quality System		Site quality inspection required before approval				
Approved to Work under subcontractor's quality system		Site quality inspection of product/material required before delivery				
Review Topics	Project-Related Job Credentials					
	Licenses required:		License and expiration dates:			
	Certification required:	ication required:		Certifications and expiration dates:		
Training required:		Training completed and expiration date:				
	Type and length of experience required:	and length of experience required:		Certifications and expiration dates:		
	Personnel license, certification, and training required:		List each person's credentials on the Subcontractor and Supplier Certifications and Licenses form.			
	Qualifications					
Senior person designated as Quality Manager			r Demonstrated results			
	☐Knowledge of Company quality standards		☐ Effective self-inspection process			
	Demonstrated capability to complete work to			Access to codes, standards and product instructions		
Company quality standards			Equipment availability			
☐ Demonstrated skills and knowledge ☐ Demonstrated experience			☐ Production capacity			
	QUALIFICATION NOTES:		Staffing availability			
	QUALIFICATION NOTES;					
Provisional Approval: Action plan for improvement						
Follow-up results	and date					



# For More Information:

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**Contact: First Time Quality** 

410-451-8006

edc@firsttimequality.com