

[CompanyName]

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Construction

Quality Manual

Operating Policies of the [CompanyName] Quality System

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QUALITY MANUAL

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5. Project-Specific Quality Standards

APPLICABLE REGULATIONS, INDUSTRY, and COMPANY STANDARDS

5.1. OVERVIEW

[CompanyName] personnel and 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.

5.2. REGULATORY CODES

All [CompanyName] construction activities comply with the relevant regulations. The Quality Manager identifies regulatory requirements applicable to the jurisdictions served, including:

- Applicable Federal regulations
- Applicable State regulations
- Applicable building codes and local addenda to building codes
- Applicable Fire Code
- Applicable Fuel and Gas Code
- Applicable Mechanical Code
- Applicable Plumbing Code
- Additional regulations specified by the customer contract

The Quality Manager identifies regulatory requirements that apply to a specific project on the Project Quality Assurance/Quality Control Plan

The Superintendent had jobsite access to relevant codes and government regulations.

5.3. Industry Quality Standards

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

The Quality Manager identifies supplemental requirements for industry standards that apply to a specific project on the Project Quality Assurance/Quality Control Plan when it is not otherwise specified by the contract, contract technical specifications, or approved drawings.

Regulatory Codes and Industry Standards						
Division	Description	Reference Standard No.	Reference Standard Title			
9	Inspection of surfaces to receive ceramic tiles	TCA Hdbk	Handbook for Ceramic Tile Installation			
9	Ceramic tile installation	TCA Hdbk	Handbook for Ceramic Tile Installation			
9	Preparing concrete subfloor for terrazzo finish	NTMA Info Guide	Terrazzo Information Guide			
9	Finishing a terrazzo surface	NTMA Info Guide	Terrazzo Information Guide			
9	Carpet installation	CRI 104	Standard for Installation Specification of Commercial Carpet			
9	Steel structure surface preparation for painting	SSPC Painting Manual	Good Painting Practice, Steel Structures Painting Manual			
9	Containment of paint removal debris	SSPC Guide 6	Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations			

5.4. MATERIAL AND EQUIPMENT SPECIFICATIONS

The Quality Manager ensures that all types of materials and equipment that affect quality are identified and controlled.

The Quality Manager evaluates the expected use of materials and equipment and identifies types of materials and equipment that may affect project quality. For each item, the Quality Manager sets specifications for their intended use, including:

- · Compliance to contract requirements
- Compliance to code and industry standards and listing requirements
- Structural integrity
- Performance
- Durability
- Appearance
- Product identification for traceability.

The Quality Manager identifies controlled material and equipment that apply to the project.

The Quality Manager ensures that purchase orders for listed materials and equipment include the relevant specifications as specified in section 6.7 Purchase Order Requirements.

Only approved materials are used in the construction process.

5.5. 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.

5.6. CONTROLLED MATERIAL IDENTIFICATION AND TRACEABILITY

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.

5.7. Measuring Device Control and Calibration

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.

5.8. [COMPANYNAME] QUALITY STANDARDS

[CompanyName] quality standards supplement contract requirements when they are necessary to ensure quality.

The Quality Manager identifies supplemental requirements for [CompanyName] Quality standards that apply to a specific project on the Project Quality Assurance/Quality Control Plan.

When [CompanyName] quality standards differ from industry standards or product manufacturer instructions, the Quality Manager justifies that the standard reliably achieves quality results and then documents the justification.

All [CompanyName] construction activities conform to the company quality standards.

5.9. Application of Multiple Sources of Specifications

Should multiple sources of specifications apply to a work task, the higher level of specification applies. When there are equal levels of specifications that conflict, the specifications are applied in this order:

- Submittals approved by the customer
- Contract technical specifications
- Contract drawings
- Government regulations that exceed requirements of items below
- [CompanyName] quality specifications, including subcontract specifications
- [CompanyName] Quality Manual
- Product installation instructions
- Industry standards
- Generally accepted practices

Should multiple sources of conflicting specifications apply to a project, the Quality Manager defines the standards that apply to the specific project on the Project Quality Assurance/Quality Control Plan.



7. Process Controls

HOW WORK IS CARRIED OUT

7.1. OVERVIEW

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.

7.2. PROJECT STARTUP AND QUALITY CONTROL COORDINATION 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
- The Project Quality Assurance/Quality Control Plan
- 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

7.3. PREPARATORY PROJECT QUALITY ASSURANCE/QUALITY CONTROL PLAN PLANNING

7.3.1. 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

7.3.2. PREPARATORY SITE INSPECTION

The Superintendent also performs a quality inspection of the work area and:

- Assesses completion of required prior work
- Verifies field measurements
- Assures availability and receiving quality inspection status of required materials
- Identifies any nonconformances to the requirements for the work task to begin
- Identifies potential problems

7.3.3. WORK TASK PREPARATORY QUALITY PLANNING MEETINGS

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

7.4. WEEKLY QUALITY PLANNING AND COORDINATION 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.

7.5. PROCESS CONTROL STANDARDS

7.5.1. JOB-READY START WORK STANDARDS

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.

7.5.2. WORK IN PROCESS STANDARDS

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.

7.5.3. PROTECTION OF COMPLETED WORK STANDARDS

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

Completed work is protected from damage as specified by government regulations, contract technical specifications, industry standards, or product installation instructions.

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

7.5.4. MATERIAL STORAGE

The Superintendent ensures all materials will be delivered, stored and handled in a manner that protects them from damage, moisture, dirt and intrusion of foreign materials.

Delivery of materials will be planned according to the work progress to minimize storage on site, where there are higher possibilities of damages and deterioration of materials.

Stored materials will be segregated to prevent cross contamination and limit losses should a delivery be rejected.

The Superintendent surveys stored materials during daily jobsite reviews and identifies any material that have incurred damage or otherwise become defective and therefore unfit for use.

7.5.5. CONTROLLED USE OF MATERIALS

The Project Manager ensures that contracts and purchase orders are awarded only to outside organizations qualified to perform the work task and/or supply materials as required for the specific project.

Only approved materials are used in the construction process. Only approved materials are specified in purchase and/or subcontracts.

Materials that are defective, deteriorated, damaged, or not approved are not used. The Superintendent clearly marks such materials for non-use or otherwise holds them aside.

When customer-supplied materials are lost, damaged, or otherwise found unsuitable for use, the Superintendent reports such findings to the customer.

When subcontractor–supplied materials are damaged or otherwise found unsuitable for use, the Superintendent reports such findings to the subcontractor.

The Superintendent ensures that construction uses only materials specified in the contract technical specifications, contract drawings, and approved submittals. Substitutions are made only by agreement of the customer and documented by a change order (see section 2.1.3.6).

7.5.6. CONTROLLED PRODUCT USE AND INSTALLATION

[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.

7.6. Daily Quality Control Report

The Superintendent records a summary of daily work activities. The report will include:

- Schedule Activities Completed
- General description of work activities in progress.
- Problems encountered, actions taken, problems, and delays
- Meetings held, participants, and decisions made
- Subcontractor and Supplier and Company Crews on site
- Visitors and purpose
- General Remarks
- Improvement Ideas
- Weather conditions

7.7. MONTHLY QUALITY CONTROL REPORT

When a monthly quality control report is required by the Project Quality Plan, the Superintendent records a monthly status report. The report includes:

- A summary of work completed and work in progress
- Outstanding issues
- Issues resolved during the reporting period
- Outstanding potential change orders
- Project status with current project costs and estimated completion date
- A cost analysis summarizing actual costs to date and estimated future costs
- Project pictures as appropriate

14. FORMS

[CompanyName] Controlled Materials Form	. 53
[CompanyName] Material Inspection and Receiving Report	. 54
[CompanyName] Daily Production Report	. 55
[CompanyName] Work Task Inspection Form	. 56
[CompanyName] Nonconformance Report	. 57



[CompanyName] Material Inspection and Receiving Report Version 20150201									
Contract ID	Contrac	t Name	Purchase Order No.	Version 20130201	Supplier		Bill of L	ading No.	Date
[ProjectNumber]	[Project	:Name]			•				
	Stock/Part			Quantity				Conditional	
Item No.	No.	D	escription	Received	Condition	Marking	Accept	Use	Reject
					7				
				X					
				U					
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:									

LIST OF INCLUDED INSPECTION FORMS

FINISHES

- Acoustic Treatment
- Acoustical Ceilings
- Backing Boards and Underlayments
- Plaster and Gypsum Board
- Textured Ceilings
- Wall Coverings

OPENINGS

- Door Hardware
- Doors and Frames
- Louvers and Vents

WOOD//PLASTICS// AND COMPOSITES

- Architectural Wood Casework
- Exterior Finish Carpentry
- Interior Finish Carpentry
- Sheathing
- Wood Decking
- Wood Framing

THERMAL AND MOISTURE PROTECTION

- · Applied Fireproofing
- Blanket Insulation
- Board Insulation
- Dampproofing and Waterproofing
- Exterior Insulation and Finish
 Systems
- Fi estopping
- Flashing and Sheet Metal
- Siding
- Wall Panels
- Weather Barriers

Finishes - Acoustic Treatment 09.80.00							
Project:	Phase:		Contrac	ct#:		Subcontractor:	Crew:
□ Compliance Verification □ Compliance with in ready requirement □ Compliance with in article inspection	initial job- nts material inspect work in process		FTQ.	2TQ	Treatment s Applied Treatment s Applied trea bubbles// ar	nd staining	ved by ARCHITECT and even
 □ Compliance with vinspection require □ Compliance with requirements □ Compliance with view com	ements Task completion inspection and the safety policies a	est plan nd procedures	□ □ Suspended treatments (drapes// panels// etc.) do not impede HVAC circulation □ Sprayed on treatments do not cover sensor (thermostats fire detectors// etc.) □ Suspension and mounting clips securely fastened □ Utility penetrations insulated □ Blanket insulation secured from movement				er sensor (thermostats//
Field Mgmt91.45. Quality 5 4 3 On-Time 5 4 3 Safety 5 4 3	2 1 Notes: 2 1 Notes: 3 2 1 Notes:	FTQ Scores a	Signed				
On-Time Score $5 =$	100% NO problems On Time 100% NO problems	4 = 1 minor problems 4 = Late 4 = 1 minor problem	3	= Late l	ot or 2-3 minor by 1 day ot or 2-3 minor	2 = 6+ or major problems 2 = Late by 2 days 2= 4+ or major problem	I = Excessive problems I = Late more than 2 days I = Injury Copyright 2012 First Time Quality

	Openings - E	Door Hardware	e 08.71.00		
Project:	Phase:	Contract#:	Subcontractor:	Crew:	
Compliance Verification		FTQ 2TQ Heightene	d Awareness Checkpoints		
Compliance Verification □ Compliance with initial jobready requirements □ Compliance with material inspection and tests □ Compliance with work in process first article inspection requirements □ Compliance with work in process inspection requirements □ Compliance with Task completion inspection requirements □ Compliance with inspection and test plan □ Compliance with safety policies and procedures Reported Nonconformances and incomplete items:		Maker/ finish and type (passage/ privacy/ lock) per specifications			
Field Mgmt91.45.01	FIQ Scores at	nd Completion Sign	1-011		
Quality 5 4 3 2 1	Notes:				
On-Time 5 4 3 2 1	Notes:				
Safety 5 4 3 2 1	Notes:				
Sign and date*: Cell # / ID #:: Task has been has been verified complete and in	compliance with contract drawings and specification	_Signed:ons except for non-conformances a n	Date:d incomplete items reported above.		
Quality Score 5 = 100% NO On-Time Score 5 = On Time Safety Score 5 = 100% NO	4 = Late	3 = Hotspot or 2-3 minor 3 = Late by 1 day 3 = Hotspot or 2-3 minor	$2 = Late \ by \ 2 \ days$ $1 = L$ $2 = 4 + or \ major \ problem$ $1 = In$	excessive problems ate more than 2 days jury 2012 First Time Quality	

Project: Phase:	Contra	act#:	Subcontractor:	Crew:
Compliance Verification Compliance with initial jobready requirements Compliance with material inspection and tests Compliance with work in process first article inspection requirements Compliance with work in process inspection requirements	FTQ	2TQ	Heightened Awareness Checkpoints Layout/ types/ sizes/ colors and dir Drywall and plasters: type/ layers a specifications Thicknesses: per plans and specifi Sprayed/troweled adheres to sub voids Board fireproofing: damage free/ fa specifications Flexible/ pipes and flues: mfr and	mensions: per plans and taping per plans and ications estrates/ continuous/ no
 □ Compliance with Task completion inspection requirements □ Compliance with inspection and test plan □ Compliance with safety policies and procedures Reported Nonconformances and incomplete items: 			specifications Adhesives: correct types and rating Shipping/ Storage/ Preparation/ Ap specifications Aesthetics: neat workmanship whe exposed Tests and Certifications: per specifications	oplication: per
Field Mgmt91.45.01 Quality 5 4 3 2 1 Notes: On-Time 5 4 3 2 1 Notes: Safety 5 4 3 2 1 Notes:			Letion Sign-off	
Task has been has been verified complete and in compliance with contract drawings and specifics Ouality Score	3	B = Hotsp B = Late i	ot or 2-3 minor $2 = 6+ \text{ or major problems}$	I = Excessive problems I = Late more than 2 days I= Injury

Project: Phase:		Contract#:	Subcontractor:	Crew:	
Compliance Verification Compliance with initial jobready requirements Compliance with material inspection requirements Compliance with work in process article inspection requirements Compliance with work in process inspection requirements	s first	Operat Manua Operat Relief v No shu	ion and Maintenance Manu- valves discharge to approve- toff valves inline with safety, trictions to air flow into comb installed with clearance for	als supplied to Owner d areas /relief valves oustion chamber	
 □ Compliance with Task completion requirements □ Compliance with inspection and □ Compliance with safety policies Reported Nonconformances and incompliances 	test plan and procedures	□ □ Pumps balanced and free of excessive vibration/noi □ □ Pipe fittings tight and free of leaks □ □ Readouts and indicators clearly visible □ □ Boilers registered in accordance with local requirem			
Field Mgmt91.45.01 Quality 5 4 3 2 1 Notes: On-Time 5 4 3 2 1 Notes: Safety 5 4 3 2 1 Notes:	FTQ Scores a	and Completion S	Sign-off		
Sign and date*: Cell # / ID #:: Task has been has been verified complete and in compliance v Quality Score 5 = 100% NO problems		Signed:tions except for non-conformance:		I = Excessive problems	



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