² ŜfŘiyƎ Essentials QA/QC Plan Sample (Canadian Standards)

Good for smaller projects and bid qualifications

Has All the Essential Elements of a well-founded Quality Control Plan

Contact:
FirstTimeQuality
410-451-8006

PROJECT-SPECIFIC WELDING QUALITY PLAN

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B. Key Elements of the Weld Quality Plan

Key elements of the [CompanyName] Quality Assurance/Quality Control Plan include:

Quality Management and Responsibilities. [CompanyName] fully integrates its quality management system into the organizational structure and performance management systems for each project. We:

- Maintain a documented quality system consisting of a quality manual with policies and procedures.
- Tightly control exceptions to the quality system so company standards are applied uniformly to every project
- Systematically maintains quality system documents and records.

Quality Control Personnel. [CompanyName] fully integrates its quality management system into the organizational structure and performance management systems for each project. We:

- Appoint a Quality Manager, Superintendent, and Project Manager to each project, each with well-defined quality responsibilities and the authority to carry them out.
- Have well-defined quality responsibilities for every employee with specific quality responsibilities for key job positions.
- Plan project quality records and documentation that will be maintained.
- Tightly control exceptions to the quality system so company standards are applied uniformly to every project
- Enforce policies that monitor work conditions before and during work so that quality results are assured.

Project Quality Coordination and Communication. [CompanyName] tightly controls the fabrication process to ensure quality results. We:

- Plan quality communications through meetings, reporting requirements, and points of contact.
- Have a project startup meeting to communicate project goals and expectations.
- Conduct preparatory meetings in advance of each scheduled work task to communicate requirement details and coordinate work activities.

Quality Assurance Surveillance. [CompanyName] audits the quality system to assure it is operating effectively. We:

- Audit the operation of the quality system on each project for conformance to the Project Quality Assurance/Quality Control Plan and the [CompanyName] Quality System requirements.
- Conduct annual company-wide audits to evaluate effectiveness of the [CompanyName] Quality

I. Weld Inspection and Test Plan

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

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

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

WELDING INSPECTION AND TESTING STANDARDS

Inspection and testing standards that may apply to this project include those listed below. Specifications that determine the rules for controlling the welding process and weld acceptance include, but are not limited to the following:

Inspection and Testing Standards

Division	Description	Reference Standard No.	Reference Standard Title
5	Identification markings to conform to ASTM standards specified in the approved construction documents	ISO 3269:2000 B97.3-1970 (R2002)	Material verification of high-strength bolts, nuts and washers
5	Identification markings to conform to AWS specification in the approved construction documents	W48-06 (R2011)	Material verification of weld filler materials
5	Inspection of high-strength bolting	ISO 7412:1984 ISO 4775:1984	Inspection of high-strength bolting
5	For structural steel, identification markings to conform to AISC 360	ISO 4019:2001	Material verification of structural steel and cold-formed steel deck
5	Ultrasonic weld inspecting techniques	ISO 16828:2012	Ultrasonic Testing Method

K. Quality Control of Corrections, Repairs, and Nonconformances

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

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

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

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

[CompanyName]
Nonconformance Report

Version 20141006

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	☐Replace ☐ Repair ☐ Rework ☐ Use As-is Approval of disposition required by customer representative? Yes ☐ No ☐ Customer approval signature /date: _____
Corrective Actions	☐Corrective actions completed Name/Date:_____ Customer acceptance of corrective actions required? Yes ☐ No ☐ Name/Date:_____
Preventive Actions	☐Preventive actions completed Name/Date:_____

Questions? Call First Time Quality 410-451-8006

LIST OF INCLUDED INSPECTION FORMS FOR WELDING

METALS

- Metal Decking
- Metal Railings
- Metal Stairs
- Structural Steel Framing

PLUMBING

- Electric Domestic Water Heaters
- Facility Potable-Water Storage Tanks
- Facility Sanitary Sewerage
- Facility Storm Drainage
- Facility Water Distribution
- Fuel-Fired Domestic Water Heaters
- Plumbing Fixtures
- Plumbing Insulation

HVAC

- Air Outlets and Inlets
- Air Terminal Units
- Breechings// Chimneys// and Stacks
- Central Cooling Equipment
- Commissioning of HVAC
- Cooling Towers
- Facility Fuel-Oil Piping
- Facility Fuel-Storage Tanks
- Facility Natural-Gas Piping
- Furnaces
- Heating Boilers
- HVAC Air Cleaning Devices
- HVAC Ducts and Casings
- HVAC Fans
- HVAC Insulation
- HVAC Piping and Pumps
- HVAC Water Treatment
- Indoor Central-Station Air-Handling Units
- Instrumentation and Control for HVAC
- Refrigerant Piping
- Testing// Adjusting// and Balancing for HVAC

Metals - Metal Railings 05.52.00

Project:	Phase:	Contract#:	Subcontractor:	Crew:

Compliance Verification

- ☐ Compliance with initial job-ready 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:

Heightened Awareness Checkpoints

FTQ	2TQ	
☐	☐	Shop applied primer and galvanizing intact and without blemishes
☐	☐	Connecting bolts, washers, and nuts tight and clean of dirt/rust
☐	☐	Welded connections continuous, even, clean, and free of blow holes or other irregularities
☐	☐	Connecting hardware and welds primed with paint of the same quality as the shop coat
☐	☐	Exposed welds ground smooth and flush with adjoining surfaces
☐	☐	Exposed fasteners countersunk to provide a smooth surface
☐	☐	Bases and stanchions level, plumb, and secure
☐	☐	Railing system securely mounted and free of movement
☐	☐	Railing parallels buildings and walking surface grade
☐	☐	Railing free of burrs, crimps, and other surface irregularities

FTQ Scores and Completion Sign-off

Field Mgmt.-91.45.01

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 #:: _____ Signed: _____ Date: _____

Task has been has been verified complete and in compliance with contract drawings and specifications except for non-conformances and incomplete items reported above.

Quality Score	*5 = 100% NO problems*	*4 = 1 minor problems*	*3 = Hotspot or 2-3 minor*	*2 = 6+ or major problems*	*1 = Excessive problems*
On-Time Score	*5 = On Time*	*4 = Late*	*3 = Late by 1 day*	*2 = Late by 2 days*	*1 = Late more than 2 days*
Safety Score	*5 = 100% NO problems*	*4 = 1 minor problem*	*3 = Hotspot or 2-3 minor*	*2= 4+ or major problem*	*1= Injury*

For More Information:
Contact: FirstTimeQuality

410-451-8006

www.FirstTimeQuality.com

EdC@FirstTimeQuality.com