

# Thermal and Moisture Protection Essentials QA/QC PlanSample

Good for smaller projects and bid qualifications

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

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# PROJECT-SPECIFIC THERMAL AND MOISTURE PROTECTION QUALITY PLAN

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# **B. KEY ELEMENTS OF THE THERMAL AND MOISTURE PROTECTION 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 construction 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:

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 System and improve its operation.

**Employee Qualifications.** [CompanyName] ensures that only knowledgeable, capable employees carry out the planning, execution, and control of our projects. We:

- Identify employee qualification requirements, including licensing requirements, training qualifications, responsibilities, and authority for each job position.
- Train field employees on quality standards and procedures for their job position.
- Validate employee capabilities before they are assigned to carry out quality job responsibilities.

• Review ongoing employee qualifications and evaluate quality practices and performance as part of the employee performance management process.

Qualification of Subcontractors and Suppliers. [CompanyName] purchases only from

subcontractors and suppliers that consistently meet [CompanyName] standards for quality. We:

- Clearly define outside organization qualification requirements including licensing requirements, compliance with specific quality standards, quality responsibilities, qualification of personnel and quality improvement processes.
- Validate capabilities to meet project quality requirements at planned production levels.
- Verify ongoing quality performance.

#### Project-Specific Quality Standards. [CompanyName] clearly defines standards and

specifications that apply to each project. We:

• Identify all relevant regulations, codes and industry standards.

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- Identify specifications for materials that meet contract as well as regulatory requirements.
- Specify quality and certification requirements for materials and equipment that affect quality.
- Identify special requirements for calibration of quality measuring devices.
- Supplement the contract and published standards with [CompanyName] quality standards as required to reduce quality risks and assure quality results.

**Inspections and Test Plan.** [CompanyName] quality inspection processes ensure that all work activities comply with the documented standards and specifications. We:

# I. THERMAL AND MOISTURE PROTECTION WORK TASK QUALITY INSPECTIONS

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

### WORK TASKS SERIES OF INSPECTIONS

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

- The initial task-ready inspection occurs when crews are ready to start work and ensures that work begins only when it does not adversely impact quality results.
- Incoming material inspections verify that materials are as specified and meet all requirements necessary to assure quality results.
- Work-in-process inspections continuously verify that work conforms to project specifications and workmanship expectations. Work continues only when it does not adversely impact quality results.
- At completion of the Task an inspection verifies that work, materials, and tests have been completed in accordance with project quality requirements. When appropriate, functional tests are performed.

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

#### **SPECIAL PROCESS INSPECTIONS**

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

#### MATERIAL QUALITY INSPECTION AND TESTS

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

### **DAILY QUALITY CONTROL REPORT**



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

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

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

Fixing 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]<br>Nonconformance Report<br>Version 20150706              |   |  |  |  |  |
|---|---|--|--|--|--|
| Nonconformance Report<br>Control ID                                     | Project ID  | Project Name                                 |  |  |  |
|   | [ProjectNumber]   | [ProjectName]                                |  |  |  |
| Preparer Signatu  | re/ 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 |  |  |  |  |
| Corrective Actions  | Customer approval signature /date:         Customer acceptance of corrective actions required? Yes         Name/Date:               |  |  |  |  |
| Preventive Actions  | Preventive actions completed Name/Date:   |  |  |  |  |

## LIST OF INCLUDED INSPECTION FORMS FOR THERMAL AND MOISTURE PROTECTION

### **FROM CSI DIVISIONS**

• Thermal and Moisture Protection - 07

### **FORMS:**

- Applied Fireproofing
- Blanket Insulation
- Board Insulation
- Dampproofing and Waterproofing
- Exterior Insulation and Finish Systems
- Firestopping
- Flashing and Sheet Metal
- Joint Protection
- Membrane Roofing
- Roofing Accessories
- Roof and Deck Insulation
- Roof Panels
- Roof Tiles
- Roofing and Siding Panels
- Sheet Metal Roofing
- Shingles and Shakes
- Siding
- Wall Panels
- Weather Barriers

| roject: Phase:  | Contract#:  | Subcontractor:  | Crew:  |  |
|---|---|---|--|--|
|   | Layo  | <ul> <li>Layout/ types/ sizes/ colors and dimensions: per plans</li> <li>Drywall and plasters: type/ layers and taping per plans and specifications</li> <li>Thicknesses: per plans and specifications</li> <li>Sprayed/troweled adheres to substrates/ continuous/ no voids</li> <li>Board fireproofing: damage free/ fasteners per specifications</li> <li>Flexible/ pipes and flues: mfr and fasteners correct per specifications</li> <li>Adhesives: correct types and ratings</li> <li>Shipping/ Storage/ Preparation/ Application: per specifications</li> <li>Aesthetics: neat workmanship when finished application is exposed</li> </ul> |  |  |
| FTQ Scores         ield Mgmt91.45.01         uality       5       4       3       2       1       Notes:         n-Time       5       4       3       2       1       Notes:         afety       5       4       3       2       1       Notes:         gn and date*: Cell # / ID #:: | and Completion  | Date:   |  |  |
| Quality Score         5 = 100% NO problems         4 = 1 minor problems           On-Time Score         5 = 0n Time         4 = Late           Safety Score         5 = 100% NO problems         4 = 1 minor problems   | 3 = Hotspot or 2-3<br>3 = Late by 1 day<br>3 = Hotspot or 2-3 | 2 = Late by 2 days  | I = Excessive problems<br>I = Late more than 2 days<br>I = Injury<br>Copyright 2012 First Time Quality |  |



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