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[CompanyName]

Industrial Coating and Painting 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:	[PresidentName]	Date:	[Date]	
Version	1.0	Notes	Initial Issue	

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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, 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] coating and painting activities comply with the relevant regulations. The Quality

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

5.3. INDUSTRY QUALITY STANDARDS

All [CompanyName] coating and painting 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.

Standards and Codes that may apply to [CompanyName] projects include those listed below.

5.3.1. SURFACE PREPARATION AND APPLICATION STANDARDS

- AMPP SP 1 Solvent Cleaning
- AMPP SP 2 Hand Tool Cleaning
- AMPP SP 3 Power Tool Cleaning
- AMPP SP 5/NACE No. 1 White Metal Blast Cleaning
- AMPP SP 6/NACE No. 3 Commercial Blast Cleaning
- AMPP SP 7/NACE No. 4 Brush-Off Blast Cleaning
- AMPP SP 10/NACE No. 2 Near-White Blast Cleaning
- AMPP SP 11 Power Tool Cleaning to Bare Metal

 AMPP SP 16 - Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-Ferrous Metals

5.3.2. COATING SYSTEM PERFORMANCE STANDARDS

- AMPP Paint 38 Single-Component Moisture-Cure Weatherable Aliphatic Polyurethane Topcoat, Performance-Based
- AMPP Paint 42 Epoxy Polyamide/Polyamidoamine Primer, Performance-Based
- AMPP PS 28.01 Two-Coat Zinc-Rich Polyurethane Primer/Aliphatic Polyurea Topcoat System, Performance-Based
- AMPP PS 28.02 Three-Coat Moisture-Cured Polyurethane Coating System, Performance-Based

5.3.3. ENVIRONMENTAL AND SAFETY STANDARDS

- AMPP Guide 6 Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations
- AMPP AB 4 Recyclable Encapsulated Abrasive Media

5.3.4. GENERAL BEST PRACTICES

AMPP Painting Manual - Good Painting Practice, Steel Structures Painting Manual

5.4. INDUSTRIAL COATING AND PAINTING 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

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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 coating and painting process.

5.4.1. CONTROLLED INDUSTRIAL COATING AND PAINTING MATERIALS

Controlled Industrial Coating and painting materials include:

- Industrial Coating Acrylic Paint systems
- Industrial Coating Epoxy Paint systems
- Industrial Coating Polymer Paint systems
- Cleaning solvents
- Abrasive media

Fillers, Caulks and Sealants

5.5. INDUSTRIAL COATING AND PAINTING EQUIPMENT SPECIFICATIONS

The selection and use of equipment are controlled to assure the use of only correct and acceptable equipment on the project.

The Quality Manager determines the specifications of required equipment that affect quality and the specifications of quality-controlled equipment.

When equipment is received, the Superintendent verifies that equipment is as specified.

5.5.1. CONTROLLED INDUSTRIAL COATING AND PAINTING EQUIPMENT

Controlled Industrial Coating and painting equipment includes:

- Spray guns and systems
- Compressors
- Application hand tools including brushes, rollers, and squeegees
- Wet Industrial Coating measuring devices
- Dry Industrial Coating measuring devices
- Surface profile measuring devices
- Concrete surface testing devices

5.6. WORK PROCESS SPECIFICATIONS

The Quality Manager ensures that work processes are controlled to ensure that the specified

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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.

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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.

5.7.1. INDUSTRIAL COATING AND PAINTING MATERIAL LOT TRACEABILITY

The use of Industrial Coating and paint system materials are recorded including:

- Product information (manufacturer, model, color)
- Quantity
- Application area

5.8. 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.

5.8.1. INDUSTRIAL COATING AND PAINTING CONTROLLED MEASURING DEVICES

Industrial Coating and paint measuring devices that are controlled include

- Wet Industrial Coating measuring devices
- Dry Industrial Coating measuring devices
- Surface profile measuring devices
- Concrete surface testing devices

5.9. [COMPANYNAME] QUALITY STANDARDS

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

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5.10. 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:

8. Inspections and Tests

ASSURE COMPLIANCE

8.1. 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 coating and painting 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 the Quality Manager has qualified them.

8.2. REQUIRED WORK TASK QUALITY INSPECTIONS AND TESTS

The Quality Manager identifies each Task that is a phase of coating and painting 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 the 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 with specifications.

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

Coating and Painting 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.

8.2.1. INDUSTRIAL COATING AND PAINTING INSPECTIONS AND TESTS

Coating and painting inspection requirements are determined by the type of Industrial Coating and painting including:

- Inspect each step of Industrial Concrete Industrial Coating including:
 - Industrial Concreate Industrial Coating Initial Field Assessment
 - Industrial Concrete Industrial Coating Work Plan
 - Industrial Concrete Pre-Coat Readiness Inspection
 - Industrial Coating Concrete Surface Removal
 - Industrial Concrete Industrial Coating Surface Cleaning and Preparation
 - Industrial Concrete Industrial Coating Final Completion Inspections and Tests

- Inspect each step of Industrial Metal Industrial Coating including:
 - Industrial Metal Industrial Coating Initial Field Assessment
 - Industrial metal Industrial Coating Work Plan
 - Industrial Metal Pre-Coat Readiness Inspection
 - Industrial Metal Industrial Coating Metal Surface Removal
 - Industrial Metal Industrial Coating Surface Cleaning and Preparation
 - Industrial Metal Industrial Coating Final Completion Inspections and Tests
- Inspect all materials before use.

8.3. Inspection and Testing Standards

[CompanyName] complies with industry standards for inspections and tests including those listed below.

- ASTM D3276 Standard Guide for Painting Inspectors (Metal Substrates)
- AMPP PA 2 Measurement of Dry Coating Thickness with Magnetic Gages
- AMPP TU 11 Inspection of Fluorescent Coating Systems

* Solok

8.4. MATERIAL INSPECTIONS AND TESTS

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

8.4.1.1. 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

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8.5. 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.

8.5.1.1. 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.

8.5.1.2. 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.

8.5.1.3. 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.

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8.6. 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.

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

8.8. 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.

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8.10. 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.

8.11. 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

8.12. Inspection and Test Acceptance Criteria

Inspections assess the 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.

8.13. 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 are accepted.

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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.

8.15. Inspection and Test Records

8.15.1. 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 the work task inspection results on the work task inspection form.

8.15.2. 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

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- Certificate, if applicable
- Conspicuous statement of final result as either "CONFORMS" or "DOES NOT CONFORM"

8.16. Project Completion and Closeout Inspection

8.16.1. 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.

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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.

8.16.3. 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.

14. FORMS

[CompanyName] Inspection and Test Plan and Log	52
[CompanyName] Controlled Materials Form	53
[CompanyName] Material Inspection and Receiving Report	54
[CompanyName] Daily Production Report	55
[CompanyName] Punch List	56
[CompanyName] Work Task Inspection Form Metal Industrial Coating Work Plan	57
[CompanyName] Work Task Inspection Form Metal Industrial Coating Cleaning and Preparation	58
[CompanyName] Work Task Inspection Form Metal Industrial Coating Pre-Coat Readiness Inspection	n 59
[CompanyName] Work Task Inspection Form Metal Industrial Coating Application Inspection	60
[CompanyName] Work Task Inspection Form Concrete Industrial Coating Work Plan	61
[CompanyName] Work Task Inspection Form Concrete Industrial Coating Cleaning and Preparation	
[CompanyName] Work Task Inspection Form Concrete Industrial Coating Pre-Coat Readiness Inspec	tion
	63
[CompanyName] Work Task Inspection Form Concrete Industrial Coating Application Inspection	64
[CompanyName] Nonconformance Report	65

[CompanyName] Work Task Inspection Form Metal Industrial Coating Application Inspection

	<u> </u>	•
Project: ld# [ProjectNumber]	Project Name: [ProjectName]	Subcontractor and Supplier Company ID/Name:
Location/Area:	Reference drawing version #:	Crew ID/Name
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 work task completion inspection requirements Compliance with inspection and test plan	eation and coating application is within company manufacturer's recommendations on thickness erials remaining at time of inspection. Complete per drawings and specifications on the second sec	
Production Notes:	69 69	
Reported Nonconformances:	COCIO	
Verification	of Work Task Completion (sign	and date)
Subcontractor and Supplier Sign and date*: Work task verified complete to specifications (sign and date)		
Project Superintendent Sign and date*: Work task verified complete to specifications (sign and date)	2	
Quality Manager Sign and date*: Work task verified complete to specifications (sign and date)		
* On behalf of the contractor, I certify that this report is cor	mplete and correct, and equipment and mat	erial used, and work performed during this reporting

* On behalf of the contractor, I certify that this report is complete and correct, and equipment and material used, and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Questions? Call First Time Quality 410-451-8006

[CompanyName] Inspection and Test Plan and Log				
Project Number Project Name				
[ProjectNumber]	[ProjectName]			

Item	Spec Section Number	Spec Section Title	Applicable Standard	Inspections & Tests Description	# of Tests /Inspections Reqd.	Time Schedule/ Frequency	Inspection/Test By (All tests verified by Superintendent and/or QC Manager)	Sample Reqd. Yes/No	Unique characteristics of QC Service
1.									
2.					10				
3.					LAK				
4.									
5.									
6.				100,00					
7.				(Y) (Y)					
8.									
9.				XXX					
10.									
11.				OU					
12.									
13.									
14.									



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