

## Industrial Painting & Coatings ITP, QC Procedures, & Checklists

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

Item	Specification Section	Applicable Standard	Inspection & Test Description	Test and Inspection Method	Frequency	Acceptance Criteria	Inspection/Test By	Unique QC Notes
1	Surface Preparation	AMPP SP 1	Surface cleanliness verification	Visual inspection	Prior to coating application	No visible contamination	QC Inspector	Record visual conditions
2	Surface Preparation	AMPP SP 10	Near-White Metal Blast Cleaning	Visual inspection with comparator (AMPP VIS 1)	Each prepared area	Per AMPP SP 10	QC Inspector	Reference visual standards
3	Surface Preparation	ASTM D4417	Surface profile measurement	Replica tape or profile gauge	Each prepared area	2-4 mils	QC Inspector	Record measurements
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8	Coating Application	AMPP PA 2	Dry film thickness measurement	Magnetic DFT gauge	Specified intervals	Meets specified DFT range	QC Inspector	Record DFT readings
9	Coating Application	ASTM D4541	Pull-off adhesion test	Portable adhesion tester	As specified in ITP	Minimum adhesion per project specifications	QC Inspector	Record adhesion values

Item	Specification Section	Applicable Standard	Inspection & Test Description	Test and Inspection Method	Frequency	Acceptance Criteria	Inspection/Test By	Unique QC Notes
10	Coating Application	ASTM D5162	Holiday testing (continuity testing)	Low voltage wet sponge/high voltage spark testing	As specified in ITP	No holidays detected	QC Inspector	Document findings and repairs
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14	Equipment Calibration	Project Spec.	Inspection equipment calibration verification	Calibration records check	Monthly	Calibration current and equipment functional	QC Supervisor	Document calibration status
15	Final Inspection	AMPP VIS 1	Final coating visual inspection	Visual inspection	Project completion	Free from defects (runs, sags, pinholes, holidays)	QC Supervisor	Final visual verification

Verification of Work Task Completion (sign and date)	
QC Supervisor Signature:	Date:
Quality Manager Signature:	Date:
Project Manager Signature:	Date:
* On behalf of the contractor, I certify that this enhanced Inspection and Test Plan is complete, aligned with the latest AMPP standards, and suitable for use in monitoring and verifying compliance with project specifications.	

## **SURFACE PREPARATION PROCEDURE**

Procedure Number: CP-QC-302

Revision Number: 1.0

Effective Date: [Insert Date]

**Approved by:** [QualityManagerName], Quality Manager

### **Purpose**

To define and standardize surface preparation procedures to ensure proper adhesion and performance of coating systems, aligning with customer specifications, AMPP standards, and industry best practices..

### **Scope**

This procedure covers surface preparation methods, inspections, and acceptance criteria for field- and shop-applied above-ground coatings and below-ground coatings. It applies to abrasive blasting, power tool cleaning, hand tool cleaning, waterjetting, and surface cleanliness evaluations.

### **Referenced Standards**

- AMPP SP 1 – Solvent Cleaning
- AMPP SP 2 – Hand Tool Cleaning
- AMPP SP 3 – Power Tool Cleaning
- AMPP SP 10 – Near-White Metal Blast Cleaning (formerly SSPC-SP 10/NACE No.2)
- AMPP SP 6 – Commercial Blast Cleaning (formerly SSPC-SP 6/NACE No.3)
- AMPP SP 7 – Brush-Off Blast Cleaning (formerly SSPC-SP 7/NACE No.4)
- ASTM D4417 – Field Measurement of Surface Profile of Blast Cleaned Steel
- ISO 8502-3 – Assessment of Dust on Steel Surfaces Prepared for Painting (Pressure-Sensitive Tape Method)
- ASTM D4285 – Test Method for Indicating Oil or Water in Compressed Air
- Manufacturer's Data Sheets (MDS).

### **Definitions**

- Surface Profile: Measurement of surface roughness after surface preparation.
- Near-White Metal Blast Cleaning (AMPP SP 10): A very thorough cleaning by abrasive blasting, removing all contaminants except for minimal, tightly adherent residues.
- Commercial Blast Cleaning (AMPP SP 6): Thorough abrasive cleaning removing all contaminants, visible rust, and mill scale, except minor staining.
- Flash Rust: Rapid corrosion occurring after blasting and prior to coating.

### **Responsibilities**

- Quality Manager: Ensures procedure compliance, reviews inspection reports, and manages nonconformances.
- Quality Control Supervisor (QCS): Oversees day-to-day inspections, verifies inspection accuracy, and manages corrective actions.
- Inspectors: Conduct detailed inspections, document findings, and report nonconformances.

- Superintendent: Manages site activities, coordinates inspections, and ensures adherence to procedures.

#### **Equipment and Materials**

- Abrasive blasting equipment
- Power tools (grinders, needle guns, pneumatic tools)
- Profile measurement instruments (replica tape, stylus gauges)
- Compressed air quality testing equipment (blotter test materials)

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- Inspect surfaces for cleanliness and compliance.

#### **7.4 Compressed Air Cleanliness**

- Conduct blotter test (ASTM D4285) prior to blasting or coating.
- Record results and immediately rectify any contaminants.

#### **7.5 Post-Surface Preparation Inspection**

- Inspect surfaces immediately after preparation to prevent flash rust.
- Document any deviations from specifications.
- If flash rust is observed, re-clean the area immediately.

#### **8. Acceptance Criteria**

- Surface cleanliness as per AMPP SP 10 or AMPP SP 6.
- Surface profile range as specified (typically 2-4 mils).
- No visible contaminants or moisture on surfaces prior to coating.
- Compressed air cleanliness compliant with ASTM D4285.
- Dust level rating Quantity Rating 2 or better (ISO 8502-3).

#### **9. Nonconformance Management**

- Document all nonconformances immediately.
- Tag and isolate nonconforming surfaces.
- Implement corrective actions, re-inspect, and document resolution.

## 10. Training and Qualifications

- Inspectors require AMPP PCI Level 1 or NACE CIP Level 1 certification.

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## 11. Documentation and Recordkeeping

- Daily Inspection Reports (DIRs)
- Surface profile measurement logs
- Blotter test results
- Nonconformance Reports (NCRs)
- Training records and certifications

## 12. Continuous Improvement

- Periodically review and update procedures based on lessons learned, audit findings, and regulatory changes.
- Regularly communicate procedure updates to all project personnel.

## Surface Preparation Inspection Checklist

Project: Id#	Project Name:	Surface Preparation Method:			
[ProjectNumber]	[ProjectName]	<input type="checkbox"/> Power Tool Cleaning (AMPP SP 3) <input type="checkbox"/> Hand Tool Cleaning (AMPP SP 2)		<input type="checkbox"/> Abrasive Blasting (AMPP SP 10 - Near-White Metal) <input type="checkbox"/> Abrasive Blasting (AMPP SP 6 - Commercial Blast)	
Checkpoints/Inspection Items	Acceptance Criteria	Standards	Measurements	Pass	Fail
Surface visually clean and free from visible contamination (oil, grease, dust)	No visible contamination	AMPP VIS 1			
Surface profile measured	Within specified range (typically 2-4 mils)	ASTM D4417 Method B/C			

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Surface temperature $\geq 5^{\circ}\text{F}$ above dew point	$\geq 5^{\circ}\text{F}$ above dew point	Project Specifications			
Relative humidity within limits	Within specified limits	Project Specifications			
No flash rust, moisture, or contaminants present post-preparation	Surface visually meets cleanliness standards	AMPP VIS 1			

Production Notes:

Reported Nonconformances:

### Verification of Work Task Completion (sign and date)

Inspector Name	Date of Inspection:
Signature	Time:

\* On behalf of the contractor, I certify that this report is complete and correct, and the 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.