Generated file by QChecklists
https://quollnet.com

Apply corrosion protection at pile heads QA checklist

Apply corrosion protection at pile heads with an interactive checklist; verify coatings and cathodic interfaces, document batch and DFT; fully commentable and export as PDF/Excel.

Project:
Date:
Filled by:

Pre-Work Verification	
1	Confirm scope, materials, drawings, and exclusions.
2	Confirm scope excludes jackets; do not plan or install pile jackets or encasements; record supervisor confirmation and photo of area.
3	Verify latest approved method statement and project specifications are available on site; record document numbers and revision dates.
4	Check coating materials and thinners match the approved data sheet; photograph batch/lot numbers and expiry dates for each container.

Environmental and Surface Conditions	
5	Measure air/substrate temperature and relative humidity with a calibrated thermo-hygrometer; ensure substrate is at least 3 °C above dew point; log readings with time.
6	Confirm wind, spray, and dust control (sheathing or windbreaks) are in place; attach photos of protection and note start/stop times.
7	Verify surface is dry and salt-free at pile head; conduct soluble salt test if required; record result within the specified limit per approved project specifications.
8	Mask adjacent concrete/cap interfaces to maintain clean boundaries; photograph masking lines and label measurement offsets from reference points.

Surface Preparation	
9	For steel pile heads, abrasive blast to the specified cleanliness; record compressor dew point, abrasive type, pressure, and visual comparators; attach pre/post photos.
10	Measure surface profile on steel using a replica tape or comparator; record average profile within specified range; attach readings and tape impressions.
11	For concrete pile heads, mechanically prepare surface to sound substrate; remove laitance; document pull-off soundness checks and dust removal method.
12	Clean prepared surfaces by oil-free blow-down and solvent wipe where required; use lint-free cloths; photograph cleanliness prior to first coat.

Coating Application and Curing	
13	Verify mixing ratios, induction time, and pot life per data sheet; record start time, ambient, and batch numbers; attach mixing photos.
14	Apply stripe coat to edges, welds, and sharp transitions at pile head; note coverage method/brush/roller and time applied; photograph targeted areas.
15	Spray or roll first full coat to achieve specified wet film thickness; record WFT checks with comb gauge at 5+ locations; log values.
16	Measure DFT after cure with a calibrated gauge; record min/avg/max DFT in µm across 5+ spots; acceptance within specified range.
17	Respect overcoat and cure times based on ambient conditions; record time stamps between coats; verify final cure per manufacturer guidance.

Cathodic Interface Installation	
18	Install CP connection pad or lug at pile head as detailed; clean contact area to bright metal; photograph before/after contact surface.
19	Terminate CP cable with approved lug, heat-shrink, and mechanical protection; torque fasteners to specified value; record torque and tool serial.
20	Verify electrical continuity from lug to pile steel; measure resistance with a calibrated meter; acceptance ≤ 0.1 Ω or per specification; log reading.
21	Apply dielectric/insulating coating where isolation is required from adjacent reinforcement; document boundaries and confirm no bridging to rebar.

Inspection, Testing, and Documentation	
22	Perform holiday test on final coating thickness with appropriate voltage; acceptance: zero holidays; mark and repair any pinholes; retest and record.
23	Affix durable label or stencil with system, number of coats, total DFT, date, and inspector initials; photograph for records.
24	Compile batch certificates, calibration records (DFT gauge, hygrometer, torque tool), photos, and signed ITP check sheets; export and attach QR-authenticated report.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
Apply corrosion protection at pile heads is a focused quality-control activity covering pile head coating application and cathodic protection interface works where specified. This checklist addresses surface preparation, environmental controls, DFT verification, holiday testing, electrical continuity/isolations, and documentation of coating batch numbers. It applies to steel and concrete pile head interfaces adjacent to caps, plinths, or slabs, and expressly excludes pile jackets or encasement systems. By following these steps, teams reduce early coating failures, underfilm corrosion, and CP malfunction caused by poor bonding, moisture entrapment, or inadequate thickness. Outcomes include traceable coating lots, reproducible DFT measurements in micrometres, defect-free film via holiday detection, and proven CP terminations with secure torque values and low resistance paths where required. Use this interactive checklist to assign tasks, tick items, add field comments, attach photos and readings, and export to PDF/Excel with a QR for authentication.	1. Preparation: Assemble approved specifications, drawings, ITP, SDS, and data sheets. Gather tools: DFT gauge, WFT comb, thermo-hygrometer, dew point calculator, replica tape, holiday detector, torque wrench, multimeter, blasting/abrasion tools, masking, PPE. 2. Open the checklist and select the work location and pile ID. Confirm that jackets are excluded and the correct coating/CP interface details apply to this pile head. 3. Using the Interactive Checklist: Start interactive mode, tick each item as performed, and add time-stamped comments with photos of readings, batch labels, and surface condition evidence. 4. Enter numerical measurements directly into fields (DFT in µm, dew point separation in °C, torque in N·m, resistance in Ω). Attach instrument calibration certificates. 5. If an item fails, flag it, add a corrective-action comment, and assign it to the responsible party. Retest and document closure with new readings and photos. 6. Export the completed record as PDF/Excel with embedded photos and measurement logs. Enable QR code to authenticate the exported file against the online record. 7. Sign-Off: Obtain digital signatures from contractor, QC inspector, and client representative. Include date/time stamps and role titles. 8. Archive: Store the signed checklist in the project document system and link it to the as-built record and maintenance plan for future reference.