



Set Up Tremie for Piles: Pre-Pour Setup QA Checklist

Set up tremie for piles with an interactive checklist that is commentable and can export as PDF/Excel; confirm diameter, seals, embedment, and initial charge before concrete placement.

Project:

Date:

Filled by:

Pre-setup Documentation

1	Verify approved method statement, ITP, and drawings match pile ID, design diameter, and tremie method; record revision numbers and approvals.
2	Confirm concrete mix maximum aggregate size is compatible with tremie internal diameter; attach calculation showing compliance per approved project specifications.

Tremie Pipe and Diameter

3	Measure internal diameter of each section with calibrated calipers at three orientations; record readings and confirm within approved tolerance per specifications.
4	Borescope the full internal bore; ensure smooth surfaces, no weld protrusions, rust scale, or loose debris; upload clear photos of representative sections.
5	Measure each section length and total assembled length with a steel tape; log cumulative length to the nearest millimetre and compare to plan.

Seals and Couplings

6	Inspect gaskets and O-rings for cuts, flattening, or hardening; replace any damaged parts; record part numbers and batch/lot evidence.
7	Dry-assemble one joint and torque bolts/collars using a calibrated torque wrench; record torque values and tool calibration certificate validity.
8	Hydrostatic test an assembled joint with water to the specified pressure and hold duration; acceptance: no leakage or pressure drop; store gauge photo with timestamps.
9	Confirm quick-release cap/plug or non-return device at the tremie tip is installed, secure, and compatible with the chosen initial charge method; capture close-up photos.

Assembly and Cleanliness

10	Pull a foam pig or sponge swab through the bore until it exits clean; bag debris; attach before/after photos to demonstrate cleanliness.
11	Mark section numbers and cumulative length increments in durable paint at joints; photograph markings legibly for later reference during assembly.
12	Fit certified lifting eyes, clamps, or guides; verify Working Load Limit (WLL) exceeds lifted mass; upload images of tags and certificates.

Embedment and Length Planning

13	Survey platform level, current slurry/water level, and pile cut-off; compute required overall tremie length to maintain minimum embedment throughout placement; attach calculation sheet.
14	Prepare a section change plan listing spare sections, order of addition/removal, and responsibilities; have the crew review and sign the plan.
15	Conduct a dummy lowering test with a weighted probe or spare section inside casing/hole to confirm free passage to base; record depths and video/photo evidence.
16	Verify bottom device (plug/valve) mass and operation per manufacturer; acceptance: opens reliably under initial head; attach datasheet and functional test notes.

Initial Charge Planning

17	Calculate initial charge volume to fully prime the tremie and displace slurry from the tip; include allowances per approved project specifications; attach signed calculation.
18	Check hopper or charging bucket capacity against required initial charge; measure internal dimensions or use manufacturer data; mark capacity and photograph.
19	Confirm the selected priming method (plug, valve, or pre-filled pipe) and sequence; brief the crew; upload toolbox talk attendance and method summary.
20	Define communication channels and stop criteria for blockage or leakage during initial charge; record emergency contacts and escalation flow in the checklist.
21	Coordinate concrete delivery timing to ensure initial charge availability within transport/workability limits; attach delivery schedule and mix ticket template.

Pre-setup Documentation

22	Verify calibration dates for calipers, tape measures, pressure gauges, and torque wrenches; upload current certificates and tag photos.
23	Create or confirm the Inspection and Test Plan hold points for diameter checks, leak tests, and length verification; capture reviewer approval and signatures.
24	Photograph the assembled tremie tip, seals, and section markings; enable geotagging; store in the project QA folder with pile ID references.
25	Complete final pre-start sign-off confirming scope excludes pour execution; obtain superintendent and inspector digital signatures in the app.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
<p>Set up tremie for piles is the critical pre-pour verification that ensures the tremie pipe, joints, embedment plan, and initial charge are ready before concrete placement. This tremie setup checklist focuses on tremie pipe diameter, gasketed couplings, section lengths, priming method, and initial charge planning. It aligns with a tremie concreting setup while deliberately excluding pour execution steps such as continuous placement and withdrawal control. By validating dimensions, smooth bores, leak-tight seals, calibrated tools, and embedment strategy, you avoid blockages, segregation, slurry contamination, and stoppages. The outcome is a leak-free, correctly sized, clean pipe with a documented plan for minimum embedment and initial charge volume per approved project specifications and authority requirements. Use this for bored piles, barrettes, or cased shafts where tremie methods are specified. Start the interactive mode to tick tasks, add comments, attach photos, and export PDF/Excel with a QR-secured record.</p>	<p>1. Preparation: Gather approved method statement, drawings, ITP, and manufacturer data. Bring calipers, borescope, torque wrench, pressure gauge, survey gear, foam pig, and PPE. Verify tool calibrations are in date. 2. Open the checklist: Select the pile ID, set project metadata, and enable location/time stamping. Invite relevant engineers, QA/QC, and superintendent for collaborative review. 3. Start interactive mode: Tick each task as you complete it, add comments for observations, and attach photos/videos of measurements, seals, and tests directly from the device camera. 4. Use acceptance cues: Reference the specification fields in each item to confirm compliance per approved project specifications and authority requirements; flag nonconformances with corrective actions. 5. Export and share: Generate an export as PDF/Excel, including photos, comments, and timestamps. Share via QR code for site access and version control. 6. Sign-Off: Collect digital signatures from the engineer, QA/QC, and superintendent. Archive the signed checklist in the project folder and link it to the pile record.</p>