



Place Raft Concrete (Horizontal) – Inspection Checklist

Place raft concrete (horizontal) with our interactive checklist—commentable steps, controlled placement, vibration, joints, and curing—then export as PDF/Excel for sign-off and traceability.

Project:

Date:

Filled by:

Pour Plan & Logistics

1	Confirm approved pour plan: zones, sequence, and target pour rate 20–40 m ³ /h or per spec; evidence: signed plan and pre-pour meeting minutes.
2	Verify concrete supply continuity: plant capacity and transit times meet rate with 10% buffer; evidence: supplier confirmation and delivery schedule.
3	Define pump setup and access routes: boom reach covers farthest point with ≥2 m clearance; evidence: marked layout sketch and site photos.
4	Seal perimeter forms/kickers to prevent grout loss; acceptance: no visible gaps >5 mm; evidence: pre-pour photo walkthrough.

Equipment & Environmental Readiness

5	Check pump and hoses are clean and primed; acceptance: initial slurry disposed per environmental plan; evidence: disposal log and photos.
6	Calibrate laser level/total station within last 30 days; evidence: calibration certificate attached to checklist.
7	Inspect internal vibrators: head Ø 38–63 mm, frequency 150–200 Hz; minimum two operable plus one standby; evidence: tag numbers and test video.
8	Pre-dampen base/subgrade to saturated surface-dry; acceptance: no standing water; evidence: pre-pour photos across full footprint.
9	Record ambient and concrete temperatures on first truck: ambient 5–35 °C, concrete 10–30 °C unless specified; evidence: calibrated thermometer readings.

Placement Procedures

10	Check first load slump per mix design: target ±10 mm; evidence: slump test ID, reading, and photo.
11	Limit free-fall/discharge height to ≤1.5 m; use tremie/chute if higher; evidence: photo with measured height reference.
12	Place concrete in 300–400 mm layers; maintain uniform head pressure; evidence: supervisor log with timestamps per bay.
13	Maintain continuous placement; interruption not exceeding 20 minutes without joint treatment; evidence: delivery ticket times and pour log.
14	Provide protected walkways and boards; no stepping into fresh concrete; evidence: site photos of access controls.

Vibration & Compaction

15	Insert vibrators at 250–350 mm grid; dwell 5–15 s until paste sheen and air release; evidence: compaction checklist and short video.
16	Penetrate 50–100 mm into previous layer to knit lifts; evidence: foreman sign-off and photos.
17	Avoid dragging vibrators; do not contact forms or embedded items; re-vibrate edges and around penetrations; evidence: observation notes.
18	Monitor for segregation or excessive bleeding; adjust layer thickness or dwell time; evidence: corrective action record with timestamp.

Joints, Finishing & Levelness

19	Install planned construction joints/stop-ends at approved locations; acceptance: within ± 50 mm of plan; evidence: photos and coordinates.
20	Manage unplanned stoppage: roughen, clean, and grout-bond cold joint per approved project specifications and authority requirements; evidence: before/after photos and approval.
21	Strike-off with screed/laser screed to design elevation; acceptance: level variance ≤ 10 mm over 3 m; evidence: laser readings file.
22	Bull-float and finish per specification; avoid sealing surface during bleed; evidence: finish method noted with timestamps.

Curing & Closeout

23	Start curing within 30 minutes of final finishing; evidence: record finishing and curing start times.
24	Apply curing (water, wet covers, or compound) per approved project specifications and authority requirements; record compound lot number and application rate in L/m ² .
25	Maintain curing for ≥ 7 days or per specification; verify moisture/temperature daily; evidence: curing log and photos.
26	Complete as-built level survey; collate tickets, tests, and approvals; export checklist and documents; evidence: signed digital package with QR verification.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
<p>Place raft concrete (horizontal) work demands disciplined planning and execution. This field-ready checklist helps teams deliver a defect-free raft slab pour, also known as mat foundation concrete placement or a horizontal foundation pour, by focusing on pour plan validation, controlled placement, effective vibration, joint management, and curing. It intentionally excludes reinforcement inspections to maintain tight scope on concrete placement operations. By following these steps, you minimize risks like honeycombing, segregation, cold joints, excessive bleeding, surface cracking, and uneven levelness, while improving density, durability, and schedule certainty. You will verify plant logistics, equipment readiness, layer thickness, vibrator coverage, discharge height, joint preparation, finishing tolerances, and curing duration—capturing photos, readings, and sign-offs as evidence. Use this checklist to streamline pre-pour meetings, guide site supervision, and document compliance per approved project specifications and authority requirements. Start interactive mode to tick items, add comments, attach evidence, and export PDF/Excel with a QR-secured record.</p>	<p>1. Preparation: Assemble tools (laser level, thermometers, internal vibrators), confirm pour plan and logistics, invite stakeholders to the checklist, and pre-assign responsibilities. Enable photo, video, and document uploads, and generate a QR code for onsite access. 2. Using the Interactive Checklist: Start interactive mode before the first truck arrives, tick items as completed, and add time-stamped comments with photos/readings. Tag actions to roles (QC, supervisor, supplier) and attach certificates or delivery tickets. 3. During the Pour: Use a mobile device (offline-capable if needed) to capture evidence in real time. Flag any nonconformance, assign corrective actions with deadlines, and continue documenting changes without interrupting placement. 4. Sign-Off: Collect digital signatures from responsible parties, export the full record as PDF/Excel, distribute to stakeholders, and archive. Verify authenticity using the embedded QR code on all exported documents.</p>