



Foundation Embedded Items Installation Checklist Guide

Foundation Embedded Items Installation Checklist. Interactive checklist, commentable, export as PDF/Excel to capture positions, fixity, photos, and sign-offs.

Project:

Date:

Filled by:

Pre-Installation Controls

1	Review latest approved foundation GA, sleeve/anchor/earthing schedules, and IFC revisions; upload document numbers, approval stamps, and RFI status as control evidence.
2	Calibrate and verify total station, laser level, and torque wrench; attach current calibration certificates, serial numbers, and photos of labels.
3	Confirm materials meet specifications: sleeve sizes, anchor grades, templates, earthing tape/clamps; record batch numbers, delivery dockets, and supplier QA documents.
4	Conduct a pre-start briefing covering scope (no rebar checks), hazards, pour sequence, and hold-points; capture attendance signatures and briefing minutes.

Setting Out and Survey

5	Set out sleeve and anchor coordinates with a total station from verified control; export stake-out report showing point IDs and deviations $\leq \pm 5$ mm.
6	Mark centerlines and offsets on formwork with indelible paint; photograph markings with a folding rule for scale and point tags visible.
7	Verify top-of-concrete level benchmarks using laser and staff; record target FFL tolerance ± 5 mm and confirm pour lift plan with supervisor sign-off.
8	Run a clash check overlay for sleeves/anchors against openings and penetrations; attach annotated screenshot confirming ≥ 50 mm clearance all around each sleeve.

Sleeves Installation

9	Install sleeves at surveyed coordinates using rigid jigs or formwork supports; confirm plan within ± 10 mm and elevation within ± 5 mm, with photo evidence.
10	Maintain sleeve internal diameter free of debris; cap both ends and photograph a gauge plug matching nominal size fully passing through.
11	Set required falls for service sleeves with a digital inclinometer; record gradient per drawings (e.g., 1–2%) within $\pm 0.2\%$ tolerance and photo the reading.
12	Brace sleeves independently to formwork to prevent flotation and displacement; document fixity method and short video of a shake-test before pour.

Anchor Bolts and Base Plates

13	Assemble anchors on a rigid template/base plate; check bolt circle and diagonals with steel tape within ± 2 mm, and upload measurement photos.
14	Position template to surveyed coordinates; verify bolt projection above finished concrete within ± 3 mm and plumbness ≤ 2 mm per 300 mm with a level.
15	Lock bolts using double nuts or tack-welded template as specified; fit thread protection caps and confirm run-on length \geq full nut height.
16	Verify embedment depth and anti-rotation features per approved details; record measured depths and obtain inspector sign-off with timestamped photos.

Earthing and Bonding

17	Install earthing tape/rod to layout, maintaining ≥ 50 mm concrete cover and ≥ 100 mm from sleeves; photograph routes and label terminations.
18	Form joints by exothermic weld or approved clamps; record lot numbers, visual quality photos, and apply corrosion protection coating per specification.
19	Measure electrical continuity between designated points with a calibrated multimeter; record resistance $\leq 1.0 \Omega$ or per spec, including instrument ID.

Fixity, Protection, and Pour Readiness

20	Seal sleeves and protect threads with taped caps/foam to prevent ingress; photograph seals immediately before pour and after initial set.
21	Perform pre-pour survey recheck of all anchors and sleeves; upload as-built CSV, photos of witness marks, and obtain hold-point release.
22	Monitor during first concrete lift; verify no displacement with a quick total station check and log any adjustment within 5 minutes.

Comments:

Filled by:

Signature:

Introduction	How to use this checklist
<p>Foundation Embedded Items Installation Checklist enables precise placement of sleeves, anchor bolts, and earthing components in concrete foundations. This practical guide supports site engineers and inspectors managing cast-in items, embedded sleeves and inserts, base plates and anchors, and earthing/grounding conductors. The scope focuses on positions, levels, alignment, fixity, protection, and evidence capture before and during the pour. It explicitly excludes reinforcement bar checks, detailing, or inspection; coordinate those separately per approved project specifications and authority requirements. By following survey-led methods, rigid templates, and bracing strategies, you'll avoid costly rework, misaligned bolts, blocked services, and non-compliant earthing. Acceptance cues include dimensional tolerances, calibrated readings, continuity measurements, photos with scales, and signed hold-point releases. The outcome is predictable fit-up of steelwork and services, traceable continuity of earthing, and clean sleeves ready for services, all backed by authenticated records. Start in interactive mode to tick items, add comments, and export as PDF/Excel with a secure QR code.</p>	<p>1. Preparation: gather approved drawings/schedules, calibrated total station/laser, templates, sleeves, anchors, earthing tape/clamps, caps/foam, and PPE. Confirm access, lighting, and weather window. Align hold-points and pour sequence with supervision, and preload document numbers, batch data, and instrument IDs into the checklist.</p> <p>2. Using the Interactive Checklist: start interactive mode, tick items as completed, attach photos with scales, upload CSVs from instruments, and log readings. Use comments to resolve clashes or RFIs in real time. When complete, export to PDF/Excel and share the QR-authenticated record with stakeholders.</p> <p>3. Sign-Off: capture inspector and supervisor digital signatures, record dates and pour section IDs, and archive the package. Distribute the signed report to design, steelwork, and MEP teams. Store QR-verified records in your document control system for audits and handover.</p>