READY TO INSPECT — FIELD CHECKLIST

Post-tensioned concrete final inspection checklist

Post-tensioned concrete final inspection is where the punch list is either short or expensive. This checklist walks the finished work the way an owner or AHJ will see it: devices on, systems running, everything labeled. Each item gets the photo that closes it instead of reopening it. Work is commonly verified against ACI, the applicable building code. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The GC's superintendent with the PT subcontractor's stressing crew and the engineer's field rep witnessing elongations. When: After the concrete reaches the specified stressing strength, tendon by tendon, and, on bonded systems, after cutoff when the tendons are grouted.

Before stressing

- [ ] Stressing strength confirmed by the testing agency's breaks
  Cylinder results for this pour reach the stressing strength on the drawings before any jack goes on, and the report is in the PT supplier's hands.
  No photo required
- [ ] Stressing crew is the PT supplier's certified crew
  Operators on the jacks named on the PT supplier's crew list with current certification on file, not a laborer borrowed from another crew.
  No photo required
- [ ] Exclusion zone barricaded behind and in line with each jack
  Barricade, tape and signs keep everyone, including whoever holds the phone, out from behind the jack and anchorage; the photo is taken from the side, outside the zone.
  1 photo required
- [ ] Bearing concrete at each live end sound before the jack is set
  Edge forms and pocket formers stripped, pockets clean, no honeycomb, cracks or voids behind the bearing face; any defect reported to the PT supplier and the engineer of record before stressing.
  1 photo required
- [ ] Tendon tails paint-marked for elongation measurement
  Each tail marked at a consistent reference from the slab or beam edge by the stressing crew before stressing, so the elongation can be measured from the same point after lock-off.
  1 photo required

Stressing

- [ ] Elongation measured against the calculated range and recorded
  Measured elongation and gauge pressure logged per tendon and compared against the calculated range on the stressing record before the tail is cut.
  2 photos required
- [ ] Jack calibration current and sequence followed
  Calibration certificate for the jack and gauge in date, stressing sequence matching the drawings so the slab isn't loaded unevenly.
  1 photo required
- [ ] Special inspector's stressing observation logged
  Where the statement of special inspections covers stressing, the inspector's observation of jacking, gauge pressures and elongations is logged for this pour.
  No photo required
- [ ] Wedges seated evenly at each anchor after lock-off
  Once stressing on that edge is finished and the stressing foreman has opened the zone, viewed from the side, never in line with the tendon: wedges even, none proud or cracked.
  1 photo required
- [ ] Stressing records for the pour sent for the engineer's review
  Completed records with tendon marks, gauge pressures and elongations for every tendon in the pour sent to the engineer or PT supplier for comparison with the calculated values.
  No photo required

Pockets and grouting

- [ ] Pockets patched after cutoff
  Tails cut, anchor and wedges coated per the detail, pockets packed and patched flush so the anchorage is protected, not left open.
  2 photos required

- [ ] Grouting completed on bonded systems
  Bonded tendons grouted per the procedure, grout returning at vents to confirm the duct is full, injection and vent records kept.
  No photo required

- [ ] Tails cut only after the stressing records are reviewed
  Tails left long until the engineer or PT supplier releases them, then cut by the method the supplier allows with no torch heat at the wedges, leaving the tail length on the detail.
  1 photo required

- [ ] Pocket patch bag labels match the specified grout
  Bag label on the patch material at the pocket matches the non-shrink grout or patch product named in the specifications or PT shop drawings, mixed per the bag.
  1 photo required

- [ ] Trades told not to drill or core stressed areas without a scan
  Written notice to trades that stressed slabs and beams need tendon locating before any core, sleeve or post-installed anchor, with signage posted where the project requires it.
  No photo required