Division 03 Concrete pre-submittal checklist

PROJECT	SPEC SECTION	SUBMITTAL NO.

CHECKED BY	DATE

1. Before you start

These apply to every submittal, whatever the trade.

- [ ] Pull the exact spec section this package answers to, including addenda that changed it.
- [ ] Read the submittal articles in Part 1 and list every item they ask for.
- [ ] Confirm the transmittal names the right section number, and that each product is tagged to the paragraph it answers.
- [ ] Mark any deviation from the spec yourself on the transmittal. A declared deviation gets reviewed; a hidden one gets the package rejected.
- [ ] Keep a copy of exactly what you sent, with the date, for your submittal log.

2. Named manufacturers and products match the spec **Blocker**

Compare every product in the package to the manufacturer and model the spec names. If anything differs, attach the approved substitution or or-equal letter, or swap back before you send. Tick each item once you have checked it and nothing below applies without written approval.

- [ ] Ready-mix producer substitutions (CalPortland, CEMEX, Lehigh Hanson, Martin Marietta, Vulcan Materials)
- [ ] Precast manufacturer substitutions (Clark Pacific, Coreslab Structures, Gate Precast, Metromont, Oldcastle)
- [ ] Reinforcing steel fabricator changes
- [ ] Admixture manufacturer substitutions (BASF/Master Builders, GCP Applied Technologies, Sika, Euclid Chemical)
- [ ] Fiber reinforcement brand changes (Fibermesh, Forta, Nycon)
- [ ] Formwork system substitutions (Doka, PERI, EFCO, Symons)
- [ ] Curing compound and sealer manufacturer changes

3. Performance values meet the spec numbers **Blocker**

Put the data sheet next to the spec and compare the actual values, not just the test method. A sheet that says "tested per ASTM" without the number is not proof. Tick each value once it meets or beats the spec.

- [ ] **Compressive strength (f'c)** in psi at 28 days (most common: 3000, 4000, 5000, 6000 psi)
- [ ] **Slump** range in inches (typical 4-6 inches for conventional, higher for SCC)
- [ ] **Air content** percentage (4-7% for freeze-thaw exposure per ACI 318)

- [ ] **Water-to-cementite ratio (w/cm)** maximum per exposure class
- [ ] **Chloride ion content** limit for reinforced concrete (ACI 318 Table 19.3.2.1)
- [ ] **Flexural strength** (modulus of rupture) for pavements and slabs
- [ ] **Modulus of elasticity** where specified
- [ ] **Rebar yield strength** grade (Grade 60 = 60 ksi, Grade 75, Grade 80)
- [ ] **Rebar size and spacing** vs structural drawings
- [ ] **Concrete cover** dimensions per ACI 318 Table 20.6.1
- [ ] **Fiber dosage rate** (lb/cy) for fiber-reinforced concrete
- [ ] **Shrinkage limit** (ASTM C157 microstrain at 28 days)
- [ ] **Unit weight** for lightweight concrete (typically 110-120 pcf)
- [ ] **Permeability** (coulombs per ASTM C1202 for low-permeability concrete)

4. Certifications and test reports are attached

Fix and Resubmit

Reviewers want the report itself, not a line on the data sheet saying one exists. Tick each document that the spec requires and the package actually contains. Skip lines that do not apply to your section.

- [ ] **ACI 318** compliance documentation (Building Code Requirements for Structural Concrete)
- [ ] **ASTM C39** compressive strength test reports (cylinders)
- [ ] **ASTM C94/C94M** compliance for ready-mixed concrete
- [ ] **ASTM C143** slump test documentation
- [ ] **ASTM C231** air content test documentation
- [ ] **ASTM C1602** mixing water compliance
- [ ] **PCI certification** for precast concrete fabricators (categories A1, C1-C4, G, S1)
- [ ] **AWS D1.4** compliance for reinforcing steel welding
- [ ] **CRSI certification** for reinforcing steel fabricators
- [ ] **Mill certificates (MTR)** for reinforcing steel per ASTM A615/A706
- [ ] **ASTM C157** shrinkage test reports where specified
- [ ] **ASTM C1202** rapid chloride permeability test reports
- [ ] **ICC-ES evaluation reports** for proprietary post-installed anchors
- [ ] **Seismic certification** for precast connections (IBC/ASCE 7)
- [ ] **LEED documentation** - recycled content (fly ash, slag), regional materials

5. Colors, finishes, and profiles match the selection

Fix and Resubmit

Match each visible attribute to the spec text and the architect's approved sample or color schedule. Tick each one you have confirmed.

- [ ] Form finish class (as-cast, rubbed, sack-rubbed, sandblasted, bushhammered)
- [ ] Exposed aggregate finish (size, color, exposure depth)
- [ ] Integral concrete color (pigment dosage and color match)
- [ ] Precast panel finish and texture (acid-etched, sandblasted, polished, form-liner pattern)
- [ ] Concrete stain or sealer appearance (gloss level, color)
- [ ] Form-liner pattern for architectural cast-in-place

6. Details and installation match the spec and drawings

Fix and Resubmit

These are the mismatches reviewers catch most in this division. Check your shop drawings and installation data against the spec and the contract drawings, and tick each line once you have confirmed it does not apply to your package.

- [ ] **Rebar spacing** differs from structural drawings
- [ ] **Lap splice length** below ACI 318 development length requirements
- [ ] **Concrete cover** below specified minimum
- [ ] **Joint layout** (control joints, expansion joints, construction joints) differs from drawings
- [ ] **Embed plate** location, size, or anchorage differs
- [ ] **Form tie** pattern or type differs (she-bolt vs snap-tie)
- [ ] **Anchor bolt** size, embed depth, or edge distance differs
- [ ] **Post-installed anchor** type or capacity differs from engineer's design
- [ ] **Rebar coating** type differs (epoxy-coated vs galvanized vs uncoated)
- [ ] **Dowel bar** size or spacing at construction joints differs
- [ ] **Waterstop** type or placement differs from detail
- [ ] **Vapor retarder** placement (above vs below granular base) differs

7. Every required item is in the package

Fix and Resubmit

Open the submittal articles in Part 1 of your spec section (often split into action and informational submittals) and confirm each required item is present. The list below is what this division's specs most often require.

- [ ] Concrete mix design submittals with proportions and material sources
- [ ] Trial batch test results (strength, slump, air content)
- [ ] Reinforcing steel shop drawings (bar bending schedules, placing drawings)
- [ ] Mill test reports (MTR) for reinforcing steel
- [ ] Admixture product data and compatibility letters
- [ ] Formwork drawings and shoring/reshoring calculations
- [ ] Curing compound product data
- [ ] Precast concrete shop drawings with connection details

- [ ] Precast erection drawings and sequence
- [ ] Post-installed anchor calculations and ICC-ES ESR
- [ ] Cold weather / hot weather concreting plan
- [ ] Quality control plan (testing frequency, sampling procedures)
- [ ] Concrete placement plan for mass pours

Free checklist from deviationcheck.com/checklists/03-concrete/. Want the package checked against your spec? Deviation Check reviews it for $35 at deviationcheck.com.