

SECTION 03 30 00 - CAST-IN-PLACE CONCRETE

Harbor View Library Annex (fictitious sample project) | Revision 2 (Addendum 2)

General: This section covers cast-in-place concrete for footings, slabs on grade, and elevated slabs, including formwork, reinforcement, placement, finishing, and curing.

Concrete mix: Provide normal-weight concrete with a minimum 28-day compressive strength of 5,000 psi and a maximum water-cementitious ratio of 0.45. Slump at the point of placement shall not exceed 4 inches.

Reinforcement: Provide deformed steel bars conforming to ASTM A615, Grade 60. Support reinforcement on chairs at the spacing shown, and maintain the specified concrete cover.

Placement: Place concrete continuously between construction joints. Consolidate with internal vibrators and do not use vibrators to move concrete laterally.

Cold-weather placement: When the ambient temperature is below 40 degrees F, heat the mixing water and aggregates, and protect fresh concrete from freezing for at least 72 hours.

Curing: Begin curing immediately after finishing. Keep exposed surfaces continuously moist for at least 10 days, or apply a curing compound at the manufacturer's rate.

Field quality control: The testing agency shall cast one set of four cylinders for each 50 cubic yards placed, and not less than one set for each day's placement.

Submittals: Submit mix designs, admixture product data, and reinforcement shop drawings for review at least 14 days before the first placement. Do not place concrete until the reviewed mix design is returned.