

FOUNDATION INSPECTION CHECKLIST

The following items are to be reviewed for completion by the contractor/owner prior to scheduling an inspection. Please keep in mind that this document is intended as a guide and is not an all-inclusive list and additional items may be required. Partial and phased inspections identified during the inspection process may require additional inspection fees per Building Department Fee Schedule.

OK N/A GENERAL FOUNDATION/CONCRETE SLAB

Address and jobsite yellow arrow sign to be posted and visible from road. (CRC R319)

Toilet facilities are on-site. (CPC 422.5)

Animals are restrained.

Construction site is safe for inspection and safe to transverse. Boards with nails and excessive debris removed with the site cleaned in a workmanlike manner.

Best Management Practices (BMP) are in place for storm water control (if applicable).

Approved plans and permit card are on the job-site. (CRC R106.3.1 & R105.7) It is helpful to place the plans on a table or plywood on a level area.

Any changes to the plans have been approved by the project design professional and the Building Department including but not limited to structural changes, foundation penetrations, hold-down types/locations, etc.

Engineer's structural observation report is on-site, if applicable. Refer to plans. (CBC 1710)

All Special Inspection field reports, such as shop and field welding, installation of epoxy and expansion anchors, etc. shall be onsite at time of inspection. (CBC 1704)

If project is located in a flood zone provide a wet stamped/signed flood elevation certificate from the licensed surveyor based on the top of the building forms. All flow-through venting shall be blocked out in the forms at time of inspection. Interior grade level for raised floors shall be equal to exterior the grade level.

Approved engineers mix design (wet stamped/signed) onsite at time of inspection (if required by project engineer).

Concrete being placed during freezing or near-freezing weather shall comply with cold weather concrete construction requirements per ACI 318-11.

- Tent area with approved blankets for a minimum 72hrs
- Engineer of record shall specify and provide an approved mix design to the inspector
- Ground shall be thawed and inspected
- Special inspection requirements/procedures may apply
- Temperature gauge shall be on site at all times while concrete is curing for 72hrs to verify maintained temperatures.

OK N/A

Concrete being placed during hot weather shall be aware of specific concrete ingredients, production methods, handling, placing, protection and curing to prevent excessive concrete temperatures or water evaporation that could impair the required strength or serviceability of the member or structure per ACI 318-11.

SETBACKS

Property lines are clearly marked or easily determined from existing survey markers. Property lines shall have strings delineating property line locations.

Lot line survey letter onsite at time of inspection if required by the Planning Department (usually required if within 30ft to a property line). Survey letter shall be wet stamped/signed by the licensed surveyor.

Setbacks from ascending and/or descending slopes are in compliance with the California Building Code and County Ordinance (i.e. Refer to figure R403.1.7.1 or CBC 1808.7.1).

GRADING & PAD CREATION

Compaction reports shall be onsite for any building pad grading/fill.

Review soils report for any special condition, requirements or special inspections required.

FOOTINGS

Footing depths & dimensions conform to plan and minimum code requirements (see Table R403.1 and approved plans). Footing depths shall extend 12" below the sites frost depth.

6" stem wall thickness is standard if stem wall height is less than 4'-6" (R404.1.4.2) or per project engineering. Certain shear walls and/or retaining walls may require 8" minimum stem wall; check plan details for complete requirements. 7/8" and larger hold-down anchors require a minimum 8" stem wall.

Steel grade, size, laps, ties & clearances:

- Rebar grade/strength per plans/engineering (Seismic Design Category D0 and greater shall be grade 60 minimum).
- Horizontal and vertical rebar laps, splices and hooks per plan and ACI 318-11.
- 3" minimum clearance to earth, 1-1/2" min. to forms, ³/₄" min. to air (depending on rebar size) (R404.1.2.3.7.4)
- All reinforcement is secured against displacement when walked on or disturbed during the placement of concrete.
- Reinforcement is clean of loose scale, rust, ice, mud, oil or other deleterious coatings.

Foundation elevation

- Top of exterior footing must be a min. of 12" plus 2% above the street gutter per R403.1.7.3
- 6" min. drainage fall for 10' away from building foundation to an approved drainage way (R401.3)

Trenches are clean, free of debris & soil is properly conditioned.

Hold-downs bolts/straps are in place per plan (i.e., diameter of bolts, embedment depth, edge distancesconform to plan & manufacture's recommendations). Refer to applicable manufacturers catalog for current installation info and sizing of required anchor bolts.

Min. $\frac{1}{2}$ " diameter foundation anchor bolts (or larger if required per plan) with a minimum embedment of 7"; spaced at no more than 6' oc for up to 2 stories and 4' oc for over 2 stories (R403.1.6 & R403.1.3.6.1). Spaced no more than 3 $\frac{1}{2}$ ", nor more than 12" from sill ends. These bolts may be "wet-set" at the time of concrete placement <u>unless</u> the shear schedule indicates a 36" or closer spacing.

OK N/A

Plumbing is wrapped to accommodate expansion and contraction at concrete intersections. Plumbing shall be adequately sleeved where penetrating footings, grade beams, etc. A minimum 1" thick of foam plumbing wrap is allowed to act as a sleeve at elbows and difficult plumbing intersections where sleeves cannot be constructed.

Top of footings must be level; bottom of footing may be stepped where slope of bottom exceeds 1 in 10 (R403.1.5). Stepped footings constructed per approved plan details.

Interior/exterior piers completed per approved plan for dimensions and embedment into undisturbed soil.

Reinforcement mats/cages are in supported against displacement at pier locations. Post bases are in place at time of inspection and prefabricated concrete piers are onsite if specified per plan.

Concrete forms are made up of approved materials and properly secured against displacement when concrete is placed per ACI 318-11.

CONCRETE SLABS

Slab base is installed and compacted per plan. Pre-saturation/compaction reports shall be onsite if required by project engineer and/or soils report.

Vapor barrier installed (minimum 6-mil or greater per plan) with joints lapped a minimum 6 inches. Vapor barrier installed in <u>direct contact</u> with concrete for the required capillary break. Vapor barriers may be omitted if not specified on the plans for unconditioned garages, utility building, carports, etc.

String lines are completed to measure slab depth in multiple locations per approved plans

All reinforcement is secured in place in the middle of the slab depth on proper supports (rocks may not be used). Reinforcement <u>is not</u> allowed to be pulled up off of the slab base at time of pouring concrete.

GROUNDING ELECTRODE

Grounding electrode conductor in place at time of inspection consisting of:

- 20' #4 rebar in bottom 3" of footing, or
- 20' #4 bare copper conductor in bottom 3" of footing, or
- Other approved grounding electrode per CEC 250.52