

SAN ANSELMO BUILDING DEPARTMENT

COMMONLY MISSED ITEMS

COMMONLY MISSED NON-STRUCTURAL ITEMS

The following are the most common non-structural items overlooked by designers when submitting plans. In order to minimize the delay in plan review on your project, please take the time to check and see that all these items have been covered on your plans prior to submission.

- Address numbers at least 4" tall for residences and 6" tall for commercial buildings must be in place adjacent to the front door. If not clearly visible from the street, additional numbers are required. Residential numbers must be internally illuminated (backlit), placed adjacent to a light or be reflective numbers. If the project is a new house or a substantial remodel, they may only be internally illuminated (backlit) or illuminated by an adjacent light controlled by a photocell and switched only by a breaker so it will remain illuminated all night. If not currently as described, they must be installed as part of this project. Painted numbers on the curb do not comply. Show the location of existing numbers or require their installation.
- California Building Code requires that for every project that exceeds a value of \$1,000, smoke detectors in the house must be brought up to current code. Indicate location of smoke detectors on the drawings. If existing bedrooms are not shown on drawings, provide a general note indicating detectors will be added. If smoke detectors already comply, note that. They must be installed in every sleeping room and in the corridor or area that gives access to each separate sleeping area. There must be a minimum of one detector per building story. For new construction, smoke detectors must be powered by A/C power. Smoke detectors in existing rooms may be powered by a battery.
- All driveways and parking areas must be covered with either concrete or asphalt. If not currently paved, it may be required as part of the project to correct this. The portion of driveway past the property line and in the public right-of-way must be concrete 6" thick. On the site plan, describe the surface material of any existing and proposed driveways.
- Provide a detail on the drawings indicating the height of any guard (guardrail) and the maximum dimension of openings. All portions of all decks or walkways that are 30" or more above grade or floor level must have a guard 42" in height. Any opening must be less than 4". (CBC 1013)
- Indicate stairway dimensions on the drawings. Residential stairways must be a minimum of 36" in width with a clear headroom of 6'-8" measured along a line measured perpendicular to the plane formed by the nose of the risers. Width in all other projects is 44" unless occupancy is less than 50 where the stairs may be 36" wide.
- Indicate rise and run of stairs on the drawings. Residential stairways must have a maximum rise of 7.75" and minimum run of 10". Commercial is 7" maximum rise and 10" minimum run. If the tread is less than 11", a nosing projection of .75" minimum and 1.25" maximum must be provided. Risers must not have a variation in height greater than 3/8". (CBC 1009)

- Provide a handrail detail or a note on the drawings indicating design requirements. Handrails, 1¼" to 2" in diameter, or similar cross-section, must be provided 34"-38" above the nose of the treads for the entire length of stairways. Handrails that project from a wall must have a space of not less than 1½" between the handrail and the wall. Guards on stairs must have openings less than 4.375". (CBC 1012)
- Provide at least 3' clearance between kitchen counters and an island.
- Show all new electrical outlets. Electrical receptacles must be installed so that no point along the floor line at the face of the wall is more than 6', measured horizontally, from an outlet. This includes any wall space of 2' or more in length. The addition of a door or relocation of a wall may require the receptacles in the adjacent rooms to be modified to comply with this spacing.
- Show locations of GFCI outlets on the drawings. All electrical receptacles installed on kitchen counters, in bathrooms, storage rooms, garages, or outdoors must have ground fault circuit interrupter protection.
- Show locations of kitchen outlets on the drawings. GFCI electrical receptacle outlets must be installed in kitchens on all counter top areas greater than 12" in width such that no location is more than 24" from an outlet. This includes islands and peninsulas. Most commonly missed are the ones within 24" of the end of the counter at the sink and those in the island or peninsula.
- At least 50% of the wattage of luminaries in kitchens must be high efficacy (florescent). Provide Energy Code Form WS-5R on the drawings if any lights are not florescent.
- Lighting in bathrooms, garages, laundry rooms and utility rooms shall all be high efficacy or controlled by a manual-on/occupancy sensor-off type switch.
- All luminaries in rooms other than kitchen, bathrooms, garage, laundry room or utility room must be high efficacy or controlled by a manually-on/occupant sensor-off type switch or a dimmer. Closets less than 70 sf are exempt.
- Outdoor lighting shall be high efficacy (florescent) or controlled by a photocell/motion sensor combination.
- All branch circuits serving bedroom receptacles must have arc-fault circuit-interrupter protection.
- Toilets must be low-flow type and located in a space not less than 30" in width and have a clear space of not less than 24" in front. Indicate dimensions on the drawings.
- Waterproof sheetrock (greenboard) may not be used behind tile at a shower or tub.
- A gas-fired furnace or water heater may not be located in a bedroom or bathroom or any room with direct access to those rooms unless the closet is equipped with a listed, gasketed door assembly with a listed self-closing device. Clearly show the location of the furnace and water heater on the drawings. (CPC 505)

- Show the location of the attic access panel. Attic access must be provided, 20" x 30" minimum, in an area where there is at least 30" clearance overhead. If an appliance (water heater or furnace) is located in the attic, access is required to be at least 22" x 30". (CBC 1209.2)(CPC 509.4)
- Flood Zone. If the property is near one of the two major creeks in the valley and identified as being in Flood Zone "A" according to the U.S. Department of Housing Flood Insurance Rate Map (FIRM), comply with the requirements of CBC 1203.3(5), 1403.5, Appendix G, ASCE 24 and FEMA. An Elevation Certificate (FEMA Form 81-31 at www.fema.gov/pdf/nfip/elevcert.pdf) is required and to be included full size on the drawings. The Base Flood Elevation (BFE), floor elevation and ground elevation must be shown on the architectural and structural sections that are normally included with a set of plans. This applies to both remodels and new construction of commercial and residential buildings. Only flood resistant materials as defined by FEMA technical Bulletin 2-93 may be installed below the BFE. Complete Sections A, B and D of the Flood Elevation Certificate based upon design drawings in the initial submittal. Add a note on the front sheet that prior to a framing inspection, an updated Flood Elevation Certificate based upon finished construction with Sections A, B, C and D completed must be provided to the town. If a flood barrier is provided at entrances to a commercial building, it may be removable but it must have neoprene gaskets and a mechanical device to compress the gaskets and make it water-tight. Provide a detail of the barrier on the drawings.

COMMONLY MISSED STRUCTURAL ITEMS

A licensed design professional (engineer or architect) is required to prepare the design documents unless a designer can verify the construction will conform to CBC 2308, Conventional Light-frame Construction and especially Section 2308.12. This is limited to two-story single-family buildings with framing as described in Section 2308. CBC stipulates that a cripple wall greater than 14" is considered a story. It is the obligation of a designer to show the structure complies with the limits of CBC 2308 by identifying all the braced walls, showing there are no irregular or offset walls, and showing all construction details are limited to the requirements of Section 2308. (see CBC 2308.4)

- Provide on the first sheet the structural design information required by CBC 1603: floor & roof live loads; basic wind speed & exposure; earthquake design data including seismic design category.
- Provide verification the design conforms to Conventional Light-Frame Construction. Show location of all braced walls. Show the second story braced walls line up with the first story braced walls. Verify residence is a single story building or show the multi-story building has a cripple wall less than 14" high. Non-licensed individuals may design structures according to CBC 2308, Conventional Light-Frame Construction, utilizing braced walls. Only a licensed design professional (engineer or architect) may design shear walls.
- If a timber-framed structure does not conform to the requirements of CBC Section 2308, Conventional Light-frame Construction, calculations must be prepared and submitted with the drawings. If you are proposing the design that is in conformance with CBC Section 2308, Conventional Light-Frame Construction provisions, the

designer must verify that the building meets the requirements of CBC 2308 by identifying the braced wall lines and other requirements of Section 2308.

- If the framing does not conform to conventional construction, provide a list of all the Special Inspections required per CBC Chapter 17. Require that the inspection reports be provided to the town and the licensed design professional.
- If the framing does not conform to conventional construction, require that structural observation be performed by the licensed design professional and that a letter is to be provided to the town before a final inspection indicating the observations performed and that the structure conforms to both the code and intent of the design.
- Analysis for wind loads shall be based upon an 85MPH wind with Exposure C and earthquake loading based upon Seismic Design Category E unless a Licensed Design Professional can demonstrate otherwise.
- Show installation requirements for mudsills and anchor bolts. Mudsills must be attached with 5/8" diameter minimum bolts, embedded 7" in concrete, with 3"x3"x.229" plate washers on each bolt. This basically means all anchor bolts must be at least 12" long. Bolts must be placed at 4' OC maximum. (CBC 2305.3.11, 2308.12.8)
- Mudsills and studs at the panel edges must be 3" thick if the shear wall load value exceeds 350plf. (CBC 2305.3.11)
- Indicate the Special Inspections required by CBC Chapter 17.
- Provide a detail of the deck or stair ledger. Decks and stair landings must be attached to the house with a positive lateral anchor as required in CBC 2308.12.7. Face nails for ledgers or joist hangers alone are not allowed.
- Provide design width of shear panels on the drawings. Uplift to be restrained by holdowns due to overturning of shear walls should be based on the actual locations of the holddown devices, not the total width of the shear panel.
- If concrete is proposed, provide the minimum length of any reinforcing steel laps and placement clearances.
- If the party preparing the architectural plans elects to take the structural calculations from the structural consultant and show all the structural requirements on the architectural drawings, the person that prepared the structural design must review the final structural details and requirements to verify they are correct and wet-stamp those drawings.
- If trusses are proposed, this must be identified on the initial design drawings and truss calculations submitted to the Building Official before any framing starts. A note with this restriction needs to be on the drawings. The truss design and drawings should be submitted by the manufacturer to the licensed design professional. After the licensed design professional approves the calculations and drawings, the material is submitted to the Building Official.