



SUBMITTAL GUIDELINES: COMMERCIAL PLANS

EFFECTIVE: June 1, 2017

CODES ENFORCED: 2016 CBC, CRC, CPC, CMC, CEC, CALGreen, CEEnC, and PAMC

The information provided in this document is general and intended as a guide only. Each project is unique and additional requirements may be enforced as deemed appropriate.

GENERAL

Building plans and permits are required for new construction, additions, and remodeling work. Separate permits are required for plumbing, mechanical and electrical work associated with new construction, additions, and remodeling work. In order to provide an expeditious review of your plans, only complete plans will be accepted for review. The following information is required for submittal with the plan check applications for new construction, additions, and remodeling work projects. A California licensed architect, civil, or structural engineer must prepare the plans.

Note: Specific plan requirements depend largely upon the extent, nature, and complexity of the proposed work. Each project is unique and may have additional requirements

1. PLAN REQUIREMENTS

Construction and remodeling projects require submittal of plans. Specific plan requirements depend largely upon the extent, nature and complexity of the proposed works. The following are guidelines for preparation and submittal of plans.

PLAN SIZE

- The minimum sheet size for non-residential plans is 18 x 24 inches.

DIMENSIONS AND SCALE

- Plot Plans, Floor Plans and other plan drawings shall be fully dimensioned according to the scale below. Show north arrow on plot plan.
- All drawings shall be drawn to an adequate scale with the scale indicated.
 - Plot Plans: 1/8"=1', 1"=10' or 1"=20'
 - Floor and Roof Framing: 1/4" = 1'-0" or 1/8" = 1'-0"
 - Floor Plans: 1/4" = 1'-0" or 1/8" = 1'-0"
 - Building Cross Sections: 1/4" = 1'-0" or 1/2" = 1'-0"
 - Foundation Plans: 1/4" = 1'-0" or 1/8" = 1'-0"
 - Exterior Elevations: 1/8" = 1'-0" or 1/4" = 1'-0"
 - Construction Details: 3/4" = 1'-0"

SET OF PLANS AND CALCULATIONS

- Complete plan set requirements for number of plan sets to submit.
- Submit 2 wet stamped and signed sets of structural calculations and soils report.

CLARITY

- All plans shall be prepared to be sufficiently readable and clear for a microfilm record. Pencil drawings are not acceptable but copies of pencil drawings can be submitted provided copies are readable and have good contrast. Minimum font size shall be 10.

COMPLETENESS

- Very important: Please remember, the more complete and accurate the drawings and submittal documents, the sooner a building permit can be issued.

2. PROJECT INFORMATION

On the first sheet of the plans, provide the following information:

NAME OF DESIGNER, ARCHITECT, OR ENGINEER

- The printed name, address, telephone number and signature of the person who prepared the plans. Plans prepared by architects and engineers must be stamped (with a state approved stamp) and wet-signed on at least 2 sets of plans.

ADDRESS AND OWNER

- The street address of the property and the name of the legal owner.

SCOPE OF WORK

- State the complete scope of work.

ABBREVIATION/SYMBOL/LEGEND

- Specify all abbreviation/symbol/legend used.

PROJECT INFORMATION

- Provide the following information:
 - o Applicable codes
 - o Number of stories
 - o State the floor area of the building (or areas of buildings for multiple buildings) and area per story
 - o Include an allowable building area or analysis which identifies floor area increases due to frontage, fire sprinklers, etc.
 - o If the building is fire-sprinklered
 - o The occupancy group or groups and type of construction
 - o The occupant load of each floor and whether or not the building is or will be sprinkled.

DRAWING INDEX

- List each sheet and sheet number in the plans with a Sheet Index or Index of the Drawings.

DEFERRED SUBMITTALS

- If any, provide a list of the proposed deferred items on the front sheet. All deferred items shall be submitted and approved by the Building Division prior to installation.

3. ARCHITECTURAL PLANS

The following are minimum plan requirements for most projects. Additional plans, calculations or documentation may be required for complex projects or components.

SITE PLAN (OR PLOT PLAN)

- The Site Plan must include or show all of the following information:
 - A scale and north arrow.
 - Grading, utility, and site improvement.
 - Adjacent streets or alleys and dimensioned location of the existing building or buildings on the site.
 - Front, side and rear yard setback dimensions, dimensions to easements, and dimensions between buildings if there is more than one building on the site.
 - Fire services and devices (FDC/PIV, Hydrants)
 - All parking to include regular and van accessible parking spaces. Disabled accessible route or path of travel from the public way and accessible parking to building entrances and exits, routes of travel between buildings on the same property and all other site accessible features including signage.

FLOOR PLANS

Floor Plans must be complete and indicate or show the following information:

- Function of each room and space. For example: Office, Storage, Manufacturing, Toilet, etc.
- The Occupancy Group of each room or space when there are multiple occupancies or uses.
- Door and window sizes and hardware schedules for all doors.
- The exiting system (or an exiting diagram) including rated corridors and relationship of corridor walls to roof structure, ceilings and floor exit doors, exit stairways, etc. Indicate the occupant load and required exit from each space or room.
- Alterations to existing buildings:
 - Identify and label all new (N) and existing (E) construction.
 - Identify the specific area or areas within the building where proposed work occurs.
 - Define and label areas for demolition (if applicable) with dotted lines.

ROOF PLANS

- Roof Plan must be complete and indicate or show the following information:
 - Roof material.
 - Rooftop mechanical units, access ladder, parapet, skylights, etc.
 - Roof slope and direction. Show location and details of scupper, downspout, & flashing.

ELEVATIONS

- Exterior elevations of all 4 sides are required for new buildings. For existing buildings, provide elevations where exterior work is to be performed. Note that additional elevations may be required for clarity.

BUILDING CROSS SECTIONS**EXISTING BUILDINGS**

- Provide cross section views as required at walls, floors or ceilings to fully depict the new construction and how it relates to existing construction. Where new or replacement roof-mounted mechanical equipment is proposed, a cross section through the roof area showing parapet walls and/or equipment roof screening is required.

NEW BUILDINGS

- Provide at least one cross section view. Provide additional sections or partial sections as necessary to explain all construction and the relationship of foundations, floors and roof to walls, ceilings and other construction. Be sure to indicate cross section cut lines on the Floor Plans.

TITLE 24 CCR ACCESSIBILITY STANDARDS

- Indicate in detail how the new or altered building complies with all required disabled access features and standards. See also Site Plan requirements above (e.g., path or travel to area of work, accessible restrooms, drinking fountains, etc.).

REFLECTED CEILING PLANS

- A ceiling plan is required for new buildings and for alterations and renovations when the existing ceiling is being modified.

DETAILS AND NOTES

- Include all construction details such as changes in floor elevations and floor transitions from concrete to wood, if any, and details of how new additions are connected to existing buildings.

LANDSCAPE AND IRRIGATION PLANS

- If landscape and irrigation plans are required, all submittals must comply with City of Palo Alto Planning Division requirements.

4. STRUCTURAL PLANS/CALCULATIONS**STRUCTURAL SPECIFICATIONS**

- Indicate all structural materials, special inspection items and frequencies of inspection, design loading criteria, & soil report information.

ROOF FRAMING PLAN

- Indicate size and spacing of roof framing members and details of the roof diaphragm. For existing buildings, indicate any required modifications of the existing roof plan.

FLOOR FRAMING PLAN

- For framed floors, provide framing member sizes and spacing, type and length of shear walls, details of floor diaphragms, hold-downs (if any) and supports.

FOUNDATION PLAN

- Provide a complete plan and details of the new foundation system. For existing buildings, indicate existing and new foundations, type of foundation, size and depth of footings or piers, grade beams and slab details.

SECTIONS AND DETAILS

- For engineered designs, provide shear transfer details and construction connections from roof diaphragm to vertical lateral system and to foundation.

STRUCTURAL DESIGN CALCULATIONS

- Provide complete structural calculations for vertical load carrying members and for the lateral force resisting system. Calculation sheets must be numbered. Calculations must be stamped and “wet” signed by the architect or engineer who prepared them.

5. MECHANICAL, PLUMBING, AND ELECTRICAL PLANS**MECHANICAL PLANS AND CALCULATIONS**

- Provide the following:
 - Duct layout plan with size, material and insulation of all ductwork and methods of support and bracing.
 - An equipment schedule. Include a description and the weight of each piece of equipment, and the required fresh outside makeup air for each system based on Occupant load determined from the CBC.
 - For roof-mounted equipment, a roof plan, location and size of openings for ductwork or equipment, details of required roof access, details of equipment anchorage, and a profile section through the roof and parapets or screen enclosure showing how equipment is screened.
 - Specify and note how condensate is routed to the sanitary drainage system or other acceptable methods.
 - California Energy Calculations with required heat loss/gain, shell building and glazing calculations reproduced on the plans at full size.
 - Indicate supply and return air for enclosed rooms and spaces.

PLUMBING PLANS

- Provide the following.
 - Water, sewer and gas line plan or isometric layout with sizes and materials noted. Include gas demands in CFH, developed lengths of gas piping and gas pipe sizing calculations for large projects and/or where medium pressure piping is to be used.
 - Calculations of sanitary sewer lines and water lines for large buildings.
 - Site sanitary waste and water line plans at new buildings and at existing buildings where needed. Indicate existing size and required size of sanitary lines at existing buildings.
 - Plumbing fixture count calculation.

ELECTRICAL PLANS AND CALCULATIONS

- Provide the following:
 - A single-line power distribution plan. Label all distribution panels and/or other equipment such as transformers. Show the operating weight of the new transformers.
 - Panel schedules and load calculations.
 - Electrical power and lighting plans. Show location of electrical rooms and panels.
 - California Energy Calculations with required lighting forms reproduced on the plans at full size.

6. OTHER CALCULATIONS, FORMS, AND COUNTY AGENCY REQUIREMENTS

- CCR Title 24 Energy Calculations. A minimum of 2 sets of signed reports
 - Energy calculations apply to new buildings and alterations or changes to existing buildings.
 - Energy compliance requirements include applicable reports, Mandatory Measures, required Compliance Statements, specifications, and reproduction of state forms on the plans at full size. Incorporate all energy conservation measures into the plans.
- Hazardous Materials: Provide a general layout of all areas and an inventory statement or list of types and quantities of all hazardous materials to be used or stored on the site with a key location map. On the statement or list, be sure to use classifications found in the CBC, Tables 307.1(1) and 307.1(2). This requirement also applies to existing buildings.
- Other City Department requirements
 - If property is located in the special flood hazard area, contact Public Works Department at (650) 329-xxxx prior to beginning any plan preparation.
- Santa Clara County Approval Requirements
 - Prior approval of the Santa Clara County Health Department is required for all food facilities and for public swimming pools and spas.

NOTES

1. Plan sheets prepared by a licensed architect or registered engineer must be stamped and “wet” signed in at least two copies of each sheet he or she has prepared in accordance with the California Business and Professions Code prior to or at the time of permit issuance.
2. If one or more of the required items mentioned above are omitted from the submittal plans, the application may be considered as incomplete and may not be accepted for City review.
3. A Building Permit may be issued only to a State of California Licensed Contractor or a property owner meeting the requirements of Section 7044 of the State Business and Professions Code. An Owner may authorize an agent to take out a permit in his or her name by providing a specific letter for a specific property authorizing that individual to take out the permit or permits. Such a letter should be typewritten and dated, contain the Owners name, property address, the person who will be taking out the permit and a general description of the work to be done.