



BUILDING DEPARTMENT PLAN SUBMISSION CHECK LIST

CONSTRUCTION DOCUMENTS REQUIREMENTS

General Instructions

This checklist is intended to be a guide, and it is not meant to be all-inclusive; nor should it be assumed that every project requires all of the items included below. The list is provided to simplify the submittal and plan review process.

Footings and foundations

1. Enclose soil engineer's report for foundation investigation that provides recommendations for bearing capacity and includes certified test pit / boring location plans.
2. For pile foundations, enclose details for pile type, installed capacity, driving criteria, load test details for piles, as per the 2018 State Building Code.
3. Enclose foundation plan, foundation sections, and specifications of materials to be used.
4. Enclose a site diagram, showing to scale the location of new construction.
5. For basements or other retaining walls below grade, enclose structural calculations and details of wall thickness, reinforcement, etc.
6. For column foundations / wall foundations, enclose a chart showing load calculations per floor to top of column / wall footing or top of soil.

Underslab utilities

1. Provide details of plumbing and/or electrical installation within or beneath main foundation slab. Only those items directly involved with plumbing and/or electrical work beneath the slab need be shown.
2. For electrical installations, specify the following items:
 - a. Depth of cover from top surface of conductor, cable, conduit, or other raceway, to finished grade
 - b. Indicate grounding details as appropriate for slab installation
 - c. Specify underslab conductor sizes/types, and breaker sizes being supplied by them
3. For plumbing installations, provide the following:
 - a. Show all sanitary and storm drainage lines, indicating pipe size(s), slope, and materials used
 - b. Indicate point of discharge for storm drainage systems
 - c. Show details of underslab piping for domestic water and fire suppression systems, including pipe size(s) and materials

Structural framework

1. Enclose structural floor plans and roof plan showing sizes of members, and structural computations.
2. Enclose drawings showing connection details, and other technical data.

3. For trusses / floor joists, enclose drawings showing details of sizes, design criteria for live load / dead load, forces in member, specifications for lumber, sizes of lateral braces, sizes of purlins, their maximum spacing, and maximum deflection of members under working load.
4. For outer walls, provide calculations for horizontal wind load, justifying thickness of wall and size of reinforcement, if any.
5. Provide details for design criteria (live load / dead load, snow load, earthquake load, wind load) and specifications of material (steel, lumber, concrete, reinforcing steel bars, etc.), indicating allowable stress.

Exterior building

1. Provide setback distance of building from lot lines or other structures on same lot on all sides.
2. Provide the fire rating of exterior walls in hours; specify design/UL number (if rating is required).
3. Indicate accessible route of travel from parking lot to front door, and details of ramps with indicated slopes, for compliance with the accessibility requirements of the 2018 State Building Code.
4. Provide elevations, exterior wall/building sections, and details on all exterior doors and windows.

Interior building

1. If mixed use, indicate exact location, occupancy load, and square footage for these uses. Also show incidental and/or accessory uses, as appropriate.
2. If design is such that complete information cannot be shown on the project review application, indicate on plans all construction types, number of stories, and building heights.
3. Indicate door, window, and finish schedules on plans.
4. Provide thermal ratings of walls, ceilings, roofs etc.
5. Provide the fire rating of corridor walls, tenant partitions, floors, ceilings, exit stairways, shafts, columns, girders, beams, and roofs in hours; specify design and UL numbers (if rating is required).
6. Show STC ratings of partition walls and ceilings.
7. Show exit calculations; indicate the number of exits required per code and provided per floor, and specify the maximum travel distance in feet.
8. Indicate interior accessible routes of travel and details of ramps with indicated slopes, for compliance with the accessibility requirements of the 2018 State Building Code.
9. Provide details on location of telephones, water fountains, toilet rooms, laboratory and shop facilities, for compliance with accessibility requirements of the 2018 State Building Code.
10. If a fire suppression system is required by the 2018 State Building Code, verify that drawings comply with the fire protection requirements.

Plumbing

1. A site plan, showing plumbing lines into and out of the building to a distance five feet from the building line, must be submitted.
2. Include a sanitary drain and vent riser diagram, plan and elevation.
3. Include a fixture schedule listing each fixture, description, trap, vent sizes, DFU valve, SFU valves, hot and cold-water connection sizes.
4. Include materials specifications, or reference on the drawings for piping materials.
5. Show storm water piping system, noting square foot area served by each roof drain, piping size and pitch. Plumbing plans must show storm water lines and pitch from building to approved discharge outfall, public storm sewer, or site drainage system.
6. Include a hot and cold-water riser diagram, showing size and SFU counts.
7. Cleanouts must be indicated and labeled in all drainage lines.
8. Wall penetration sleeves should be indicated and details shown.
9. If a multi-story building, riser diagram for cold water must correspond in format and contain information shown in the 2015 International Plumbing Code portion of the 2018 State Building Code.
10. Plumbing fixtures and elevations / details shall conform to the accessibility requirements of the 2018 State Building Code – specifically fixture heights, spacing, etc.

Mechanical

1. Show calculation for ventilation air requirement based on occupant load (refer to 2015 IMC portion of the 2018 State Building Code).
2. Include EER value of HVAC units, boiler efficiency, etc. Supply the required energy calculations.
3. Include specifications on duct construction and installation, such as supports, loads, etc.
4. Include schematics and details of hazardous exhaust in units such as laboratory hoods.
5. Provide manufacturer's recommendation information for laundry / dryer exhaust.
6. Show locations of all fire dampers.
7. Include drawings for kitchen exhaust hood, duct and hood fire suppression system. Drawings must contain information required by the 2018 State Building Code.
8. Include all details, specifications, and calculations (building, volume, air change, riser diagram) for smoke exhaust / control, stair pressurizations, etc., as applicable per building and fire protection requirements of the 2018 State Building Code.
9. Show details of all hydronic, gas, and fuel oil piping.
10. Include calculations for combustion air requirement.
11. Show all details of chimneys and vents.
12. Show machinery layout plan, equipment schedule, and details of the processes involved.
13. Show height of all mechanical controls, for compliance with the accessibility requirements of the 2018 State Building Code.

Electrical

1. Show details of all grounding, including:
 - a. Grounding electrode system;
 - b. Distribution grounding;
 - c. Transformer grounding — if needed, show how neutral is established from transformer;
 - d. All wire sizes.
2. Show all overcurrent protection — indicate whether breakers are inverse, instantaneous, or non-

adjustable.

3. Indicate the specific wiring method to be used in all the various areas.
4. Show circuitry of all emergency systems and emergency lighting, including fire pumps, elevators, and exit discharge.
5. Show details of all wiring and bonding for pools, spas, hot tubs, etc.
6. Indicate the type of conductors to be used, copper or aluminum, and their type of insulation and temperature rating.
7. Indicate all wire and conduit sizes.
8. If neutral is reduced, provide calculations.
9. Show all panel locations; indicate working clearances about all electrical equipment, switch boards and panel boards.
10. Provide panel schedules and identify all circuits.
11. Provide riser diagrams.
12. Show circuitry, wire size, type of insulation and conduit size of fire signal systems.
13. Show height of all controls, for compliance with the accessibility requirements of the 2018 State Building Code.

Fire protection

1. For sprinkler and standpipe systems, specify system type, water supply information, and pipe sizes. Also indicate type of piping and fittings used throughout.
2. Provide hydraulic calculations for sprinklers; indicate hydraulic reference points.
3. Show measurements between branch lines and heads on lines, and indicate type of sprinkler heads used throughout the system.
4. Indicate height and location of all standpipe hose connections.
5. Provide a complete sprinkler system riser diagram with all parts identified.
6. For storage areas, provide hazardous material data sheets on commodities stored as appropriate, including quantity(s) stored.
7. Show installation details and location of fire department Siamese connection to sprinkler/standpipe systems.
8. For all suppression and alarm systems, show location of control panel, control valves, detectors, pull stations, strobe lights, abort switches, fusible links, alarm bells, warning lights, signs, etc.
9. If fire pump is to be used, specify capacity and type. Indicate whether electric or diesel powered, and provide all details on diesel fuel supply. Provide details of all piping, fittings, control and relief valves, as well as test header details. Indicate method of temperature maintenance for pump and associated equipment.
10. For other approved fire protection systems, show location and type of detectors and nozzles. Show location and size of agent container and piping, as well as types of piping and fittings. Provide system calculations.
11. Show details and schematics on all electrical connections for all fire protection systems, including information on emergency power supplies.
12. For wheelchair accessibility, show height of pull stations.
13. Indicate all fire alarm area zones.
14. For dry chemical systems, indicate type of chemical being used. Show size and location of agent containers. Provide a copy of the installation manual for the system. Provide details on discharge alarms, pipe sizes, and types of materials.
15. For range hood systems, refer to Mechanical check list, Item no. 7.

16. Provide details on smoke control system as required in Mechanical check list, Item no. 8.