





COMMONWEALTH CODE INSPECTION SERVICE, INC

PLAN REVIEW SUBMITTAL



Plans and specifications for the initial plan review should be as complete as possible at the time of submittal. To ensure prompt, accurate service, use this convenient guide as a checklist when submitting your plans for review.



PLANS REVIEWED FOR COMPLIANCE WITH:

Building • Plumbing • Mechanical • Fire Prevention Model Codes

INTERNATIONAL CODE COUNCIL CODES

INTERNATIONAL CODE SERIES

BUILDING PLAN REVIEW

In order to process your review in a timely manner, the following guide should be used as a checklist to ensure your submittal is as complete as possible for the first review. If additional information is required, it will be requested during the review process.

TITLE BLOCK:

ARCHITECT•DATE•TYPE OF CONSTRUCTION•USE GROUP•INSTALLED FIRE PROTECTION•DESIGN OPTIONS

Submit Complete Building Plans and Specifications Showing Use of All Areas, Equipment Layout, Aisles and Building Components.

1. ___ Indicate occupant load for all areas; include exiting system plan.
2. ___ Submit complete door schedule with catalog cuts for all doors, hardware sets and locksets.
3. ___ Submit all appropriate wall, floor, foundation sections and details.
4. ___ List all rated assemblies, diagram assemblies and design numbers.
5. ___ Submit window and glazing schedule, interior finish schedule and flame spread ratings.
6. ___ List all building design loads.
7. ___ Submit shop drawings for steel supported systems (submitted prior to start of work).
8. ___ Indicate shop drawings for all fire protection systems (submitted prior to start of work).
9. ___ Submit steel structural calculations.
10. ___ Submit details for all special occupancy requirements (atriums, floor openings, high rise, covered malls, hazardous materials, etc.).
11. ___ Submit details for all special structures (skylights, roof panels, awnings, etc.).
12. ___ Indicate sequence of operation for all special systems (smoke control, elevator recall, etc.).
13. ___ Submit details showing all state and local accessibility requirements and catalog cuts for fixtures.
14. ___ Submit signed, sealed and dated construction documents per the state requirements.

Soil Report

1. ___ Show requirements for footings and support loads.
2. ___ Submit footings and foundation requirements and recommendations.
3. ___ Submit engineer's requirements for appropriate footings and walls to support loads.

Site Plan

1. ___ Show setbacks, elevations, drainage, parking, outside lighting, lot grading and sanitary sewer.
 2. ___ Show locations of fire hydrants and bench mark information.
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PLUMBING PLAN REVIEW

Submit Complete Plumbing Plans & Specifications Including the Occupant Load and Number of Fixtures

1. ___ Provide a riser diagram for all water piping including sizes, type of pipe and type of fittings.
2. ___ Provide a riser diagram for the drain, waste and vent system including sizes, type of pipe, and type of fittings.
3. ___ Indicate the separation between the water service and sewer.
4. ___ For copper tubing, indicate type of pipe, fittings and lead-free solder.
5. ___ Indicate drinking fountains or bottled water.
6. ___ Indicate the type of backflow protection provided (RPZ requires floor drains).
7. ___ Provide catalog cuts for all fixtures, faucets and plumbing equipment.
8. ___ Indicate indirect drainage and storm water pipe locations.
9. ___ Indicate the type and location of all special valves, appliances and devices.
10. ___ Show thermal expansion tank, temperature relief and vacuum reliefs as necessary for water heaters.
11. ___ Show type of roof drainage, area of discharge, type and size of pipe, location of cleanouts and type, and location of overflow system. Roof drainage and emergency drainage shall be separate systems.
12. ___ Indicate the location(s) of all pipe cleanouts.
13. ___ Provide details for accessible access to the plumbing fixtures: size of water closet enclosure, height of water closet, grab bars, lavatory, tissue holder, mirror and length of the grab bars.

MECHANICAL PLAN REVIEW

Submit Complete Mechanical Plans Showing Location and Type of All Mechanical Equipment and Appliances

1. ___ Provide catalog cuts with installation instructions, listing BTU input and approved locations for all mechanical equipment.
 2. ___ Provide duct design criteria including size, type and gauge of the duct work, and type and location of all supports. Include additional details for all hazardous exhaust systems.
 3. ___ Indicate the location of the duct smoke detectors in any system over 2,000 cfm including supervision.
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4. ___ Submit a complete ventilation schedule showing the mechanical code occupant load, the supply, return and outside air for each room or area.
5. ___ Submit gas piping plan including location of meter, system pressure, type and size of pipe, and BTU demand for each section of pipe or appliance.
6. ___ Indicate size and location of the combustion air intakes (one high/one low required).
7. ___ Show a 110 V GFCI outlet within 25 feet of all rooftop equipment.
8. ___ Provide piping details including schematics for boilers, hydronic heat and refrigeration.
9. ___ Provide catalog cuts for factory-built fireplaces and details for masonry fireplaces.
10. ___ Provide details for any kitchen hood and exhaust systems including size and gauge of hood and duct, size and type of exhaust fans, shop drawings for suppression system, cleaning schedules, automatic power shutoff and portable extinguisher.
11. ___ Indicate the type, location and rating for the fire and/or smoke dampers and access panels.

Existing Building Plan Review

Submit Complete Plans and Specifications Showing Use of All Areas, Equipment Layout, Aisles and Building Components.

1. ___ Plans shall be signed and sealed in accordance with the requirements of your state.
2. ___ Provide the information required for a new building or for the building addition including complete plans and specifications.
3. ___ Provide a floor plan for existing building showing use, occupant load, and existing system including square footage of all areas.
4. ___ Indicate the construction type and use group for the existing building or adjacent tenants.
5. ___ Indicate the type of fire protection systems in the existing building.
6. ___ Indicate the type and location of the plumbing fixtures in the existing building.
7. ___ Indicate size, demand and distance to existing gas system, including size of pipe and system pressure.
8. ___ Indicate the loads of existing building and provide calculations showing existing loads and new loads.
9. ___ Provide a site plan showing the location of the existing and new building.
10. ___ Provide calculations/details showing changes or additions to existing fire protection systems.
11. ___ Indicate changes to the existing mechanical systems.
12. ___ Indicate changes made to the existing building for upgrading the access to conform to the new requirements.

FIRE ALARM REVIEW

Submit a Floor Plan Showing the Location of All Equipment and Devices

1. ___ Submit catalog cuts for all equipment.
2. ___ Submit a zone chart or device address list.
3. ___ Submit battery calculations that include all power-consuming devices.
4. ___ Indicate name of monitoring agency and listing of the agency.
5. ___ Submit voltage drop calculations for the initiating and alarm device circuits.
6. ___ Submit sequence of operations and special applications.
7. ___ Indicate type of wire and protection of wire when exposed to physical damage.
8. ___ Indicate a system test which indicates a test for each device.

SPECIAL EXTINGUISHING SYSTEM REVIEW

Submit a Floor Plan Show the Location of All Equipment and Devices

1. ___ Submit catalog cuts for all equipment.
 2. ___ Submit a zone chart or device address list.
 3. ___ Submit battery calculations that include all power-consuming devices.
 4. ___ Indicate name of monitoring agency and listing of the agency.
 5. ___ Submit voltage drop calculations for the initiating and alarm device circuits.
 6. ___ Submit sequence of operations and special applications.
 7. ___ Indicate type of wire with protection when exposed to physical damage.
 8. ___ Indicate a system that indicates a test for each device.
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ACCESSIBILITY REQUIREMENTS

Required Elements for Accessibility

<input type="checkbox"/> Accessible Routes	<input type="checkbox"/> Platform Lifts	<input type="checkbox"/> Parking	<input type="checkbox"/> Means of Egress
<input type="checkbox"/> Windows	<input type="checkbox"/> Doors	<input type="checkbox"/> Entrances	<input type="checkbox"/> Drinking Fountains
<input type="checkbox"/> Seating	<input type="checkbox"/> Detectable Warnings	<input type="checkbox"/> Work Surfaces	<input type="checkbox"/> Telephones
<input type="checkbox"/> Area of Refuge	<input type="checkbox"/> Restrooms/Baths	<input type="checkbox"/> Ramps	<input type="checkbox"/> Curb Ramps
<input type="checkbox"/> Stairs	<input type="checkbox"/> Controls	<input type="checkbox"/> Alarms	<input type="checkbox"/> Elevators
<input type="checkbox"/> Storage	<input type="checkbox"/> Signage	<input type="checkbox"/> Lifts	

Specific Facility Type Requirements

1. Provide cuts of all plumbing fixtures.
2. Indicate dwelling use requirements.
3. Indicate auditorium and assembly area requirements.
4. Provide details for bathtubs and shower stalls in building other than dwelling units.

Exterior Requirements

1. Indicate accessibility routes.
2. Indicate total parking spaces for physically challenged, number, sizes and location of spaces.
3. Indicate sidewalk size from the parking to the building.
4. Indicate size and slope of ramps and curb cuts.
5. Submit drawing of above ground handicapped signs.
6. Provide detectable warnings in hazardous locations.

Interior Requirements

1. Indicate egress doors into occupiable spaces to have approved handles.
 2. Provide catalog cuts for accessible door hardware (handles, closers, thresholds).
 3. Show adequate maneuvering clearances at doors to gain access to rooms.
 4. Indicate required handrails on both sides of stairs and ramps.
 5. Indicate locations of hall call buttons, floor destinations, tactile characters (elevator lobbies).
 6. Provide detectable warnings in hazardous locations.
 7. Indicate size of floor access to public area telephones, heights of operable parts and hearing impaired equipment.
 8. Indicate protection for objects protruding into walks, halls, corridors, passageways or aisles above the finished floor of walking surface.
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9. ___ Indicate special occupancy requirements.
10. ___ Indicate clear floor and knee space for accessible drinking fountains and lavatories.
11. ___ Indicate location of water closets relative to walls and other fixtures.
12. ___ Indicate the height to the top of the water closet seat for the accessible fixtures.
13. ___ Indicate the height above the finished floor surface, bar sizes, length of bars and distances from walls for required grab bars at the water closet. Indicate height and location of required toilet paper dispensers.
14. ___ Indicate areas of refuge for physically challenged.

ELECTRICAL PLAN REVIEW

Submit Complete Electrical Plans Showing Location of All Devices

1. ___ Provide a floor plan showing the fixtures, outlets, equipment, transformers, panels, subpanels, receptacles and special systems.
2. ___ Indicate the type and size of the service (above ground or underground) with the location of meters and main disconnects.
3. ___ Indicate the size and type of all wire and number of all conductors in each conduit or raceway for each circuit.
4. ___ Indicate the size and type of all conduit and/or raceways.
5. ___ Indicate the use and amperage (load) for each circuit.
6. ___ Show the number of circuits, size of circuit breakers, location and size of main disconnect.
7. ___ Show the location of the convenience outlets at all appliance and rooftop equipment.
8. ___ Submit load calculation charts for all panelboards and main service with demand factors.
9. ___ Show emergency lighting to all rooms, spaces, corridors and access routes.
10. ___ Indicate method of connecting exit and emergency lights to the building electric system.
11. ___ Indicate type and location for ground, ground conduit and a bonding jumper at water meter.
12. ___ Indicate the size and type of the ground conductors.
13. ___ Show the location of all GFCI outlets.
14. ___ Indicate the location and classification of all hazardous areas and special systems.