



## **CONSTRUCTION PLANS SHALL CONSIST OF THE FOLLOWING**

SITE PLAN  
ARCHITECTURAL PLAN  
STRUCTURAL PLAN  
HVAC, ELECTRICAL AND PLUMBING PLANS  
ACCESSIBILITY PLAN  
SPRINKLER PLAN  
ENERGY PLAN

Unless otherwise instructed, please submit all plans for review in a digital format. Digitally reviewed and approved plans will be emailed to you upon completion. The permit applicant is required to print and provide hard copies of the approved plans if required by the municipality.

Drawings must be at least 18" x 24" (but no more than 36" x 42") in size, drawn to scale of no less than 1/8"=1', with sufficient detail and clarity to fully indicate the nature and scope of the work to be performed.

PLEASE NOTE: Drawing submissions which do not meet plan size requirements or are not sufficient in clarity will be automatically rejected and returned to the applicant.

## **PLAN REQUIREMENTS & SPECIFICATIONS**

### SITE PLAN

- Size and location of all new construction and all existing structures on the site
- Distances from lot lines
- Established street grades and proposed finish grades.

### ARCHITECTURAL PLANS

- Description of uses and the proposed use group(s) for all portions of the building; the design approach for mixed uses (as applicable)
- Proposed type of construction of the building
- Fully dimensioned drawings to determine areas and building height
- Adequate details and dimensions to evaluate means of egress, including occupant loads for each floor, exit arrangement and sizes, corridors, doors, stairs, etc.
- Exit signs/means of egress lighting, including power supply
- Accessibility provisions
- Description and details of proposed special occupancies such as a covered mall, high-rise, mezzanine, atrium, public garage, etc.
- Adequate details to evaluate fire-resistive construction requirements, including data substantiating required ratings
- Details of plastic, insulation and safety glazing installation
- Details of required fire protection systems

# ***Commercial Plan Submittal Guide***

### STRUCTURAL PLANS & ENGINEERING DETAILS

- Soils report indicating the soil type and recommended allowable bearing pressure and foundation type
- Signed and sealed structural design calculations which support the member sizes on the drawings
- Local design load criteria, including frost depth
- Earthquake seismic zone/effective peak acceleration coefficient
- Details of foundations and superstructure
- Provisions for required special inspections
- Applicable construction standards and material specifications (ie: masonry, concrete, wood, steel, etc.)
- Statement of Special Inspections

### HEATING & COOLING EQUIPMENT

- Calculations demonstrating code compliant sizing of equipment
- Equipment specifications
- Appliance layouts showing location, access and clearances
- Disconnect switches
- Indoor and outdoor design temperatures\_

### VENTILATION DATA, DUCTWORK AND EQUIPMENT

- Ventilation schedule indicating the amount of outside air (in c.f.m.) supplied to each room or space
- Layout showing outside air intakes
- Layout showing construction of ducts, including support and sheet metal thickness
- Duct lining and insulation materials with flame spread and smoke-developed ratings
- Exhaust fan ductwork layout and termination to the outside
- Size of louvers and grilles for attic ventilation
- Boiler and water heater equipment and piping details including safety controls and distribution piping layout
- Gas and fuel oil piping layout, material, sizes and valves
- Combustion air intake quantities and details
- Commercial kitchen exhaust equipment details including hood and fan drawings, details of automatic fire suppression and clearances
- Chimney and chimney connector or vent and vent connector details and connector gages and clearances
- Mechanical refrigeration equipment data and details
- Solid fuel burning appliance details, including incinerator and fireplace drawings and details
- Energy conservation equipment data and details

### PLUMBING PLANS

- The occupant load used to determine the number of required plumbing fixtures
- Number and distribution based on the use group
- Separate facilities for each sex
- Accessible plumbing facilities and details
- Anti-scald shower valves

- Plumbing piping plan showing layout, pitch of drainage lines, cleanouts, size of traps and riser diagram
- Water supply and distribution plan showing piping sizes, valves, water heater details and temperature-pressure relief valve with discharge pipe
- Sanitary drainage and vent system riser diagram showing drainage fixture units (dfu), sizes and vent termination details through the roof
- Potable water system riser diagram showing piping sizes and provisions for protection of potable water supply; piping support and installation schedule
- Storm drainage details, including rain gutter or roof drain sizes and downspout/leader sizes; health care plumbing and fixture details

### ELECTRICAL PLANS

- Labeling criteria of all electrical equipment
- Lighting floor plan, including electrical circuits indicating conduit and wiring sizes
- Power floor plans, including electrical circuits indicating conduit and wiring sizes, equipment and disconnect switches
- Exit sign/means of egress lighting location and power supply
- Panelboard schedule
- Lighting fixture schedule
- Symbol schedule and diagrams
- Specifications to include requirements for:
  - Raceway and conduit with fittings
  - Wire and cable
  - Electrical boxes, fittings and installation
  - Electrical connections
  - Electrical wiring devices
  - Circuit and motor disconnects
  - Hangers and supporting devices
  - Electrical identification
  - Service entrance and details
  - Overcurrent protection
  - Switchboards
  - Grounding
  - Transformers
  - Panelboards
  - Motor control centers
  - Lighting fixtures
  - Fire Protective signaling systems
  - Automatic fire detection systems
  - Emergency/standby systems

### ACCESSIBILITY PLANS

- Size and location of all new construction and all existing structures on the site
- Location of any recreational facilities (i.e.: pool, tennis courts, etc.)
- Established street grades and proposed finished grade
- Accessible parking, other locations of public access to the facility, accessible exterior routes and locations of accessible entrances
- Description of uses and the proposed use group(s) for all portions of the building; the design approach for mixed-uses (as applicable)

# ***Commercial Plan Submittal Guide***

- Fully dimensioned drawings to determine areas and building height
- Adequate details and dimensions to evaluate accessible means of egress, including occupant loads for each floor, exit arrangement and sizes, corridors, doors, stairs, areas of refuge, etc.
- Adequate details and dimensions to evaluate the accessible route to areas required to be accessible, including corridors, doors, protruding objects, maneuvering clearances, clear floor space at fixtures and controls, etc.
- Accessibility provisions, including but not limited to, access to services, seating, listening systems, accessible fixtures, elevators, work surfaces, etc.
- Accessible plumbing facilities and details
- Tactile signage provided
- Details of required fire protection systems\_

#### SPRINKLER PLAN REVIEW REQUIREMENTS

- Description and locations of uses within the building
- Design details in accordance with the appropriate reference standard (i.e.: NFPA 13, 13D, 13R) as referenced by the ICC International Building Code
- Design calculations indicating the discharge requirements of the system with evaluation of the arrangement and source of the water supply
- Results of a current flow test indicating the location and date of the test
- Working drawings indicating all pipe sizes and the spacing between branch lines and sprinklers on the branch line
- Material specifications and equipment specifications; all materials used should be verified that they are installed in accordance with their listing

#### ENERGY PLAN REVIEW REQUIREMENTS

- Three (3) sets of construction documents and other supporting data
- Three (3) sets of exterior envelope component materials
- U-factors of the envelope systems
- U-factors of fenestration products
- R-values of insulating materials
- Size and type of apparatus and equipment
- Equipment and systems controls
- Other pertinent data as required to indicate compliance with the requirements of the Code
- Com-Check information as provided from [www.energycodes.gov](http://www.energycodes.gov)

PLEASE NOTE A COMMERCIAL PLAN REVIEW COMPLETION TIME VARIES DEPENDING UPON THE COMPLEXITY OF PLANS AND THE CURRENT WORKLOAD.