COMMERCIAL PLANS CHECKLIST

The purpose of this checklist is to assist you in the submittal and permit process for your project. This checklist is intended as a basic plan submittal guideline under the 2021 International Building Code. It is not intended to cover all circumstances. Depending on the scope and complexity of your project, additional and/or more detailed plans may be required.

SEPARATE SUBMITTAL AND PERMIT IS REQUIRED FROM SOUTH METRO FIRE RESCUE FOR COMMERCIAL ALTERATION (TI) PROJECTS

ONLINE BUILDING PERMIT APPLICATION MUST BE COMPLETED TO INCLUDE THE FOLLOWING:

- ☐ Contractor's name, phone number and address.
- ☐ Owner's name, address and phone number.
- ☐ Specify a contact person: name, phone number, e-mail and fax number.
- ☐ Project address.
- ☐ The estimated value of the project (include all materials and labor).

To begin the online submittal process, click HERE.

GENERAL SUBMITTAL INFORMATION

- ☐ **Complete** signed and sealed (by a Colorado registered design professional) architectural plans, structural plans and material specifications of all work must be submitted online to the project portal.

SITE PLAN INCLUDING THE FOLLOWING INFORMATION:

- ☐ Recommended scale: ⅛" = 1' – 0".
- ☐ Size and location of all new construction and all existing structures on the site.
- ☐ Lot dimensions.
- ☐ Building footprint with all projections & dimensions to all property lines and/or other buildings.
- ☐ North arrow.
- ☐ Easements.
- ☐ All parking.
- ☐ Show location of handicapped parking spaces with their access aisles and curb ramps, as well as any other ramps on the site.
- ☐ Handicapped access to the buildings from the public way.
- ☐ Location of any and all retaining walls (which require separate permits).

ARCHITECTURAL PLANS AND SPECIFICATIONS TO INCLUDE:

- ☐ Description of uses and the proposed occupancy classification(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 building areas and height.
- ☐ Adequate details and dimensions to evaluate means of egress, including occupants loads for each floor, exit arrangement and sizes, corridors, doors, stairs, etc.

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- ☐ Exit signs/means of egress lighting, including power supply.
- ☐ Accessibility scoping 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 rating.
- ☐ Details of plastic, insultation, and safety glazing installation.
- ☐ General details of required fire protection systems (will be a deferred submittal to South Metro Fire Rescue).

STRUCTURAL PLANS, SPECIFICATIONS, AND ENGINEERING DETAILS TO INCLUDE:

- ☐ Soils report indicating the soil type and recommended allowable bearing pressure and foundation type.
- ☐ Signed and sealed structural design calculations to substantiate structural performance/support the member sizes shown on the drawings.
- ☐ Local design load criteria including frost depth, live loads, snow loads, wind loads, earthquake design data, and other special loads as applicable (City of Centennial design criteria shown below).
- ☐ Details of foundations and superstructure.
- ☐ Provisions for required special inspections.
- ☐ Applicable construction standards and material specifications (i.e., masonry, concrete, wood, steel, etc.).

Ground Snow Load	Wind Design				Seismic Design Category	Subject to Damage From			Winter Design Temp	Ice Barrier Under-layment Required	Flood Hazard	Air Freezing Index	Mean Annual Temp
	Speed (mph)	Topographic affects	Special wind region	Wind-borne debris zone		Weathering	Frost Line Depth	Termite					
30 psf	115 mph	NO	NO	NO	B	Severe	36 in.	Slight to Moderate	1	YES	08/01/97	1000	45°F

FOUNDATION PLAN WITH WET SEAL AND SIGNATURE BY DESIGN PROFESSIONAL ON EACH PAGE

- ☐ Recommended scale: ¼” = 1’ – 0”
- ☐ Structural foundation details and calculations.
- ☐ Footings, foundations, piers, and grade beams.
- ☐ Post and girder intersections.
- ☐ Fireplaces – masonry or gas.

MECHANICAL PLANS, SPECIFICATIONS, AND ENGINEERING DETAILS TO INCLUDE:

- ☐ Complete signed and sealed (by a Colorado registered design professional) plans and specifications of all heating, ventilating and air conditioning work.
- ☐ Complete information on all the mechanical equipment and materials including listing, labeling, installation, and compliance with referenced material standards.

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- ☐ Details on the HVAC equipment including the equipment capacity (BTU/h input), controls, equipment location, access, and clearances.
- ☐ A ventilation schedule indicating the outdoor air rates, the estimated occupant load/1,000 ft^2, the floor area of the space, and the amount of outdoor air supplied to each space. Complete calculations clearly denoting equations and factors must be provided.
- ☐ The location of all outdoor air intakes with respect to sources of contaminants.
- ☐ Duct construction and installation methods, flame spread/smoke development ratings of materials, flexible air duct and connector listing, sealing of duct joints, seams and connections, and duct support spacing.
- ☐ Condensate disposal, routing of piping and auxiliary and secondary drainage systems.
- ☐ Required exhaust systems, routing of ducts, and termination to the exterior.
- ☐ Complete details of all Type I and II kitchen hoods, grease duct construction and velocity, clearance to combustibles, and fire suppression system.
- ☐ Details of all duct penetrations through fire-resistance rated assemblies including locations for all fire dampers, smoke dampers, and ceiling radiation dampers along with applicable fire protection ratings and labeling requirements.
- ☐ Method of supplying combustion air to all fuel-fired appliances, the location and size of openings, and criteria used to size the openings.
- ☐ Details on the vents used to vent the products of combustion from all fuel burning appliances including the type of venting system, the sizing criteria required for the type of vent, and the routing of the vent.
- ☐ Boiler and water heater equipment and piping details including safety controls, gauges, valves, and distribution piping layout.

ELECTRICAL PLANS, SPECIFICATIONS, AND ENGINEERING DETAILS TO INCLUDE:

- ☐ Complete signed and sealed (by a Colorado registered design professional) plans and specifications of all electrical work.
- ☐ Labeling criteria of all electrical equipment.
- ☐ Lighting floor plans including fixture locations, electrical circuits, circuit numbers, and panel locations.
- ☐ Power floor plans including electrical circuits, writing sizes, panel locations, working clearances and electrical room egress, disconnect switches, receptacle locations including GFCI locations, and required arc fault protected circuits.
- ☐ Exit sign/means of egress lighting location and power supply.
- ☐ Single line diagram and panelboard schedule including AIC rating and available fault current, and the calculated service load with a load distribution schedule.
- ☐ Lighting fixture schedule.
- ☐ Symbol schedule and diagrams.
- ☐ Details showing the grounding electrodes, bonding of the grounding electrode system, and the size of all bonding and grounding electrode conductors for the service.
- ☐ Specifications to include requirements for:
    - Wire, cable, raceway, and conduit with fittings.
    - Electrical boxes, connections, fittings, and installation.
    - Electrical wiring devices.

- Circuit and motor disconnects, and motor control centers.
- Hangers and supporting devices.
- Electrical identification.
- Service entrance and details.
- Overcurrent protection and grounding.
- Switchboard and panelboards.
- Transformers.
- Lighting fixtures.

PLUMBING PLANS, SPECIFICATIONS, AND ENGINEERING DETAILS TO INCLUDE:

- ☐ Complete signed and sealed (by a Colorado registered design professional) plans and specifications of all plumbing work.
- ☐ Plumbing fixture specifications including identification of the applicable referenced material standards and the maximum flow rates for the plumbing fixtures.
- ☐ The basis for the number of plumbing fixtures provided including the occupant load used, the applicable occupancy classification(s), and fixture rate(s).
- ☐ Dimensions for bathrooms and plumbing fixture locations along with the wall and floor surface materials to be installed.
- ☐ Site plan which indicates the routing of the sanitary, storm, and water service with the burial depths for all sewers and water service.
- ☐ Water distribution system sizing criteria and calculations.
- ☐ Water supply and distribution piping plan showing the incoming water supply, distribution piping, pipe size, the location of water hammer arrestors, and the location of all valves.
- ☐ The location of all backflow preventers, the type of backflow preventers provided for each piece of equipment or outlet, and the specified material standards referenced in the code.
- ☐ Drainage system piping plan showing the layout of all piping, of plumbing fixtures, and the location of cleanouts.
- ☐ Riser diagram(s) of the drain, waste, and vent piping including the building drain, all horizontal branches, and the connections and layout of all fixtures. Pipe sizes, direction of flow, grade of horizontal piping, drainage fixture loads, and the method of venting all plumbing fixtures.
- ☐ The location of all indirect waste connections, standpipes, grease traps, and separators.
- ☐ Complete water heater details, temperature and pressure relief valve discharge, discharge piping, and pan details along with the method of supplying tempered water to required fixtures.
- ☐ Complete details of the method of draining storm water from the roof including calculations to verify pipe and/or gutter sizes, the location of all roof drains and the roof area that each group of roof drains is intended to serve, and an independent secondary roof drainage system.
- ☐ Piping material specifications to verify compliance with the referenced material standards for all sanitary, storm, and potable water piping (i.e., ASTM B88 for copper pipe), the type of joints and connections for all piping, the pipe hanger support spacing, and detail of anchorage and bracing.