

PLAN SUBMITTAL REQUIREMENTS FOR COMMERCIAL BUILDINGS

THE FOLLOWING DOCUMENTS MUST BE PROVIDED FOR NEW COMMERCIAL BUILDINGS OR ADDITIONS THERETO. ALL PLANS MUST BE COMPLETE, LEGIBLE, AND TO SCALE. DUE TO THE WIDE ARRAY OF BUILDING TYPES AND PROJECT COMPLEXITIES, ADDITIONAL INFORMATION NOT INDICATED IN THIS GUIDE MAY BE REQUIRED AT THE TIME OF PLAN REVIEW.

All plans, specifications, calculations, etc. are to be stamped by their respective design professional(s) (Colorado Licensed Architect and Colorado Registered Engineers).

I. SUBMITTAL DOCUMENTS

1. Complete Permit Application Online - www.citizenserve.com/firestoneco
2. **All** General, Mechanical, Plumbing, Electrical, and Sub-Contractors shall be listed on the Permit Application and licensed with the Town of Firestone
3. The total building valuation must be provided in addition to the total electrical valuation. Note: detailed bids may be required if the Building Official deems the valuations to be inaccurate for the proposed scope of work.
4. Soils Report (Site Specific)
5. Complete project manual(s) from the design team
6. International Energy Conservation Code compliance path documentation prepared by the designing Architect.

If Applicable:

7. Stamped and signed receipt from St. Vrain Valley School District (New multi-family only)
8. Sewer tap receipt from St. Vrain Sanitation (New commercial and multi-family)
9. Receipt from Little Thompson Water District (New commercial and multi-family located in this district)
10. Receipt from Left Hand Water District (New commercial and multi-family located in this district)

II. CIVIL PACKAGE

1. Dimensioned site plans identifying the size and locations of all structures and their proximity to each other and the property lines.
2. Grading and drainage plans.
3. Utility plans.
4. Accessibility plans and details.

III. STRUCTURAL

A. Structural design criteria – ALL INFORMATION REQUIRED BY 2018 IBC 1603 MUST BE PROVIDED

1. Wind speed and exposure
2. Ground snow load
3. Roof snow load data
4. Live & dead loads
5. Risk category
6. Seismic design category, site class, etc.
7. Soil-bearing data (must be based on a site-specific soils report prepared by a geotechnical engineer)
8. Roof rain load data
9. Snow drifting plans
10. Etc.

B. Foundations

1. Plan view and wall sections
2. Cast-in-place components (hold downs, etc.)
3. Dimensions of footings, foundation walls, grade beams, piers, etc.
4. Overall foundation dimensions.
5. Depth of footings below grade.
6. Column footing size and locations.
7. Beam size and bearing locations, beam pockets, etc.
8. Reinforcing steel size and location
9. Anchor bolt size and locations.
10. Door and window opening sizes and locations.
11. Material specifications (concrete, steel, etc.),
12. Special requirements for slabs, drainage, void beneath grade beams, anchor bolts, bracing, etc.
13. Under Drain Variance Application with Engineer's design drawing. (if applicable)
14. Complete Under Drain Plan including under-drain connection details, type of sump pit, collection system design, sump pit location, type of termination, and exterior discharge location.

C. Framing:

1. Plan views and wall sections
 - Floor framing
 - Roof framing
2. Material specifications (concrete, steel, wood, etc.)
3. The size and spacing of studs, joists, rafters, beams, etc.; also show hips and valleys.
4. Size and location of all structural components (beams, columns, and headers).
5. Connection requirements for all structural components.
6. Bracing details.
7. Shop drawings and layout for trusses with Engineer's Seal.
8. Specific hold downs/strapping types and locations.
9. Uplift reactions.
10. Shear wall locations, schedules, etc.
11. Sections/details for all typical and special conditions.
12. Etc.

IV. **ARCHITECTURAL**

A. Code analysis

1. Occupancy classifications (IBC Ch. 3)
2. Special conditions (IBC Ch. 4)
3. Construction type (IBC Ch. 6)
4. Sprinkler class and status (IBC sec. 903)
5. Fire alarm status (IBC sec. 907)
6. Maximum allowable quantities (IBC sec. 307, 414, etc.)
7. Allowable height, stories, and area (IBC Ch. 5)
8. Separate/nonseparated mixed occupancy requirements (IBC sec. 508)
9. Fire and smoke protection features (IBC Ch. 7)
10. Fire separation requirements based on Fire Separation Distances (IBC sec. 705, etc.)
11. Interior finish requirements (IBC Ch. 8)
12. Occupant loads (IBC Ch. 10)
13. Means of egress systems, components, protection requirements, distances, etc. (IBC Ch. 10)
14. Accessible means of egress (IBC Ch. 1009)
15. Accessibility requirements (IBC Ch. 11)
16. Energy code compliance path
17. Deferred submittals (IBC sec. 107.3.4.1)
18. Plumbing fixture counts (IBC Ch. 29)
19. Elevator & machine room requirements (IBC Ch. 30)

20. Special construction (Ch. 31)

21. Etc.

B. Life safety and egress plans – IBC sec. 107.2.3

1. Identify the occupant loads and egress requirements from all rooms and spaces.
2. Identify the locations, ratings, and types of all rated walls (fire walls, fire barriers, fire partitions, smoke barriers, smoke partitions, etc.)

C. Typical plan information

1. Floor plans for each floor level, including unfinished floor areas
2. Reflected ceiling plans
3. Interior finish plans
4. Exterior elevations – front, rear, and each side
 - Include alternate/enhanced elevations. (If applicable)
5. Wall sections and details
6. Stair/ramp section details
7. Rated component sections (exit enclosures, corridors, shafts, exit passageways, supporting construction, etc.)
8. Roof plans
 - Note: Include roof ventilation calculations
9. Door and window schedules
 - Include door sizes, ratings, hardware, etc. – All openings must be tagged on the floor plans
 - Identify all safety glazing locations.
 - Identify all rated glazing locations.
10. Energy code details
 - Defined thermal boundaries
 - Type, R-value, and location of insulation.
 - Air Sealing Details- windows, doors, cantilevers, behind fireplaces, behind tubs/ showers, etc.
 - Explanation of the moisture management system.
11. Crawlspace Ventilation/ Conditioning (If crawlspace)
12. Radon Control Method (If applicable)
13. Identify all interior and exterior wall assemblies. Details must be provided, and all walls must be tagged with their respective wall types.
14. Etc.

V. **MECHANICAL**

1. Equipment schedules
2. Ventilation calculations
3. Material requirements
4. Duct and piping insulation requirements
5. Exhaust termination and air intake locations
6. Floor plans
 - a. Identify all equipment locations
 - b. Provide ductwork layout, sizes, etc.
 - c. Location and size of exhaust fans, makeup air, ventilation, or combustion airducts.
 - d. Gas piping (provide adequate information to size the system per the IFGC)
 - e. Etc.
7. If Kitchen Hoods are a part of your project, provide the manufacturer's shop drawings for the hood(s), fan(s), MAU(s), etc.
8. Woodworking facilities - Engineered plans and calculations for the entire dust collection system are required.
9. Spray/Paint Booths – Occupancies using spray application of flammable finishes must have approved paint booths and mixing rooms. Engineered plans must be submitted to the Fire Dept. as well as the Building Dept. for review. All equipment must be listed. Provide the manufacturer(s) spec sheets as applicable.

10. Etc.

VI. **ELECTRICAL**

1. Electrical site plan
2. One-line diagram
 - a. Feeders
 - b. Grounding
 - c. Transformer types and sizes
 - d. Identify the utility provider
 - e. Full fault current calculations
 - f. Equipment sizes and ratings
 - g. Load calculations
 - h. Etc.
3. Floor plans for each floor level, including unfinished floor areas
 - a. Locations of all equipment (panels, transformers, etc.).
 - b. Electrical plan with outlets, switches, and fixture openings.
 - c. Lighting plans
 - d. Emergency lighting plans including photometric
 - e. Location of Ufer Ground.
 - f. Hazardous locations and applicable requirements
 - g. Etc.
4. Typical details
5. Electrical equipment schedules
6. Etc.

VII. **PLUMBING**

1. Equipment schedules
2. Material requirements
3. Pipe insulation requirements
4. Floor plans for each floor level, including unfinished floor areas
 - Sanitary drainage plans
 - Water piping plans
 - Gas piping (if designed by the plumbing engineer in lieu of the mechanical engineer)
 - Roof drainage plans
5. Riser diagrams
6. Typical details
7. Etc.

Additional Submittals – Please contact Districts for their submittal requirements:

Frederick Firestone Fire District and St. Vrain Sanitation District

Contact districts for submittal requirements

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