

IBC Commercial Submittal Checklist – New Construction

Documents Required:

	Building Application Signed by Property Owner
	Structural Calculations
	Truss Calculations
	Spec Sheets/Appliance Manuals (i.e., fireplace)
	Preliminary Soils Analysis / Geotechnical Report (New Construction or Addition)
	Storm Water Permit
	Sump Pump Form (for structures with a basement or crawlspace)
	Special Inspection and Testing Form
	Water Fixture Count Sheet
	Landscape & Irrigation Self-Certification Form
	Energy Forms
	Site/Subdivision Plan Approval / Infrastructure Approval (Planning / Engineering)

This commercial plan submittal checklist serves as a general review tool to support the building permit application process. Some code items not listed on this checklist might exist; it is the responsibility of the Registered Design Professional of record to ensure that all required documentation is included for compliance review.

The Code items included in this checklist may or may not be applicable to your project. It is the applicant's responsibility to verify that all necessary information is included and compliant with the City and State adopted Building Code to the best of their knowledge.

Construction Documentation:

	Plans drawn to scale on minimum _____ size sheets.
	Project Address SHALL be in the title block of EACH sheet.
	A registered design professional SHALL stamp all drawings.
	The 2" x 2" area in the top right corner of the title block SHALL be designated for the City approval Stamp.
	Drawings SHALL NOT be labeled "Not for Construction", "Preliminary Drawings", or "Bid Set"

Cover Page – Shall include:

	Owner Information. (Shall match Applications)
	Design team information. (Architect, Engineers, etc.) (Shall Match Applications)
	General Contractor Information.
	Project Address, Location, Vicinity Map.
	Drawing Index (See Pdox naming protocol for Upload.)

Code Analysis - Should include, if applicable:

	Currently Applicable Building Code References as adopted by COB.
	Occupancy Classification (IBC Chapters 3, 4, 5, 6)

General Building Limitations (IBC Chapters 5 & 6)

	Frontage Increase
	Case 1 - Single Occupancy or nonseparated mixed occupancies, or;
	Case 2 – Separated mixed occupancies.
	Mezzanines and equipment platforms.

Special detailed requirements based on use and occupancy. (IBC Chapter 4)

	Covered Mall and Open Mall Buildings
	High-rise Buildings
	Atriums
	Other Special Use and Occupancy

Fire Protection (IBC Chapters 6, 7, 8, 9)

	Combustibility
	Fire Resistance ratings and fire tests.
	Building Elements
	Interior Finishes (IBC Chapter 8)
	Fire Protection and Life Safety Systems (IBC Chapter 9)

Occupant Needs (Chapters 10, 11, 12)

	Means of Egress.		Exit Access.
	Occupant Load.		Other means of Egress.
	General Means of Egress.		Interior Environment (IBC Chapter 12)
	Capacity of Egress Components.		Number of Exits/Exit Access.
	Accessibility (IBC Chapter 11) (See A117.1-2017 section of this checklist)		

Building Envelope (IBC Chapters 13, 14, 15)

	Exterior Walls (IBC Chapter 14)
	Roof Assemblies and Rooftop Structures (IBC Chapter 15)

Nonstructural Materials (Chapters 24, 25, 26)

	Glass and glazing (IBC Chapter 24)
	Gypsum Board and Plaster (IBC Chapter 25)
	Plaster (IBC Chapter 26)

Building Services (IBC 27, 28, 30)

	Electrical (IBC Chapter 27, see electrical section of this checklist)
	Mechanical (IBC Chapter 28, See Mechanical section of this checklist)
	Plumbing (UPC 2020, See Plumbing Section of this checklist)
	Elevators and Conveying Systems (IBC Chapter 30)

Site Plan:

	New and existing building locations.		Parking Stalls. (required Accessible parking per A117.1-2017)
	Easements, setbacks.		Carports. (require a separate permit)
	City Utilities (Water, Fire Line, Sewer, etc.)		Trash Enclosures. (require separate permit)
	Services. (power, Gas, Etc.)		Site-lighting.

Architectural Plans:

	All Architectural construction documentation shall bear the seal of the Registered Design Professional of record. (Montana disciplined)
	All Floor Levels, stories, or floors. (Basements, Grade-plain, Above Grade plain, mezzanines, rooftop areas, etc.)
	Fire-Rated Assemblies: Vertical and Horizontal details and listings. (SHALL be coordinated with both Architect and Structural Design Professional's details.)
	All Building elevations.
	Building Sections. (SHALL be coordinated with both the Architect and Structural Design Professional's details.)
	Wall Sections and Wall Type schedule/details.
	Exterior finish schedules.
	Door, windows, openings, and hardware schedules.
	Reflective Ceilings plans.

A117.1-2017 Accessibilities:

	Occupancy / Scope
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Facility Access

	Exterior Accessible Routes		Accessible Entrances
	Curb Ramps		Accessible Means of Egress
	Parking Spaces		Interior Accessible Routes
	Passenger loading zones		Signage

Vertical Conveyance

	Ramps
	Platform Lifts
	Elevators

Plumbing Facilities and Kitchens/Kitchenettes (Other than within dwelling and sleeping units)

	Toilet and bathing rooms (Water closets, Urinals, Lavatories, Bathtubs, and Showers)
	Drinking Fountains
	Sinks
	Kitchens and kitchenettes

Special Occupancies

	Assembly (Services, Listening systems, Wheelchair spaces, companion seats, designated aisle seats, performance areas, dining areas.)
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Dwelling Units and Sleeping Units – Scoping

GROUP R-1 – TOTAL NUMBER OF UNITS

	Accessible units
	Units with visible alarms
	Type B units
	Exempted units

GROUP R-2 – TOTAL NUMBER OF UNITS

	Type A Units
	Units with support for a visible alarm notification appliance
	Type B units
	Exempted Units

Dwelling Unit and Sleeping Units – Technical Criteria

ACCESSIBLE UNIT

	Primary Entrance		Laundry equipment
	Accessible Route		Toilets and bathing facilities
	Doors and doorways		Kitchen
	Ramps		Windows
	Elevators and lifts		Storage facilities
	Operable parts		Beds

TYPE A UNIT

	Primary Entrance		Laundry equipment
	Accessible Route		Toilets and bathing facilities
	Doors and doorways		Kitchen
	Ramps		Windows
	Elevators and lifts		Storage facilities
	Operable parts		

TYPE B UNIT

	Primary Entrance		Operable parts
	Accessible Route		Laundry equipment
	Doors and doorways		Toilets and bathing facilities
	Ramps		Kitchen
	Elevators and lifts		

Structural Systems:

	All structure construction documentation shall bear the seal of the Registered Design Professional of record. (Montana disciplined)
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Structural Design (IBC Chapter 16)

	Structural Design Calculations for all structural members
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Design Loads on Construction Documents (IBC Chapter 16)

	Floor Live Loads.
	Roof Live Loads.
	Roof Snow Loads.
	Wind Loads, Design procedure, Wind speed, Risk Category.
	Earthquake design data, Risk category.

Soils and foundations (chapter 18)

	Soil investigations/Reports.
	Soil classification.
	Excavation, grading, and fill.
	Damp-proofing and waterproofing.
	Load-bearing values.
	Foundation walls, retaining walls, and embedded posts and poles.
	Foundations.
	Shallow foundations.
	Deep Foundations.

Structural materials (chapters 19, 21, 22, 23)

Concrete (chapter 19)

	Structural concrete design/construction standard specified.
	Construction documents.
	Footings for light-frame construction.
	Slab provisions.
	Shotcrete.

Masonry (chapter 21)

Design Method, construction standard specified.	Seismic design.
Masonry units.	Glass unit masonry.
Mortar type/grout.	Fireplaces/Heaters/Chimneys.
Metal reinforcement.	Dry-stack masonry.

Steel (chapter 22)

Structural steel design/construction standard specified.
Composite structural steel and concrete.
Open-web steel joist design/construction standard specified.
Steel cable structures.
Steel storage racks.
Cold-formed steel design/construction standard specified.
Cold-formed steel light-framed design/construction standard specified.

Wood (chapter 23)

Design Method option used	Hardwood and plywood
Lumber	Fire-retardant-treated wood
Wood I-joists	Trusses
Glue-laminated timbers	Joist hangers
Wood structural panels	Connectors and fasteners
Fiber-, hard-, & particleboards	Heavy timber construction
Engineered wood rim board	Shear walls and diaphragms

Conventional light-frame construction – wood (chapter 23)

Limitations satisfied	Wall bracing
Foundations and footings	Roof and ceiling framing
Floor framing	Design of elements
Wall construction	

Special Inspections and Tests (IBC Chapter 17)

Approval/Research report(s)	Sprayed fire-resistant materials and coatings
Statement of special inspections	EIFS
Report requirement/submittal to the building official.	Fire-resistant penetrations and joints
Prefabricated items	Smoke control
Steel construction	Mass Timber
Concrete construction	Wind requirements
Masonry construction	Seismic resistance
Wood construction	Contractor responsibility
Prepared fill and foundations	Structural observations

Electrical Requirements: 2020 NEC / MCA 24.301.401

	All work is required to be performed by a Montana-licensed Electrical Contractor.
	All electrical construction documentation shall bear the seal of the Registered Design Professional of record. (Montana disciplined)

All Structures

ELECTRICAL EQUIPMENT, APPLIANCES, MATERIALS, AND INSTALLATION

	Construction documents		Equipment, approval, listing, and installation instructions
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WIRING METHODS AND MATERIALS

	Required		Shown
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SERVICE

	Number of services		Feeder and services load calculations
	Conductor size/rating (overhead)		Overcurrent protection
	Conductor size/rating (underground)		Protection of conductors rated 800 amperes or less.
	Raceways seal		Protection of conductors rated over 800 Amperes
	Interrupting rating		Insulation of service
	Working space		Ground fault protection
	Disconnecting means		Maximum number of disconnects

EMERGENCY SYSTEMS

	Power source		Independent wiring
	Storage battery		Generator set
	Separate service		Unit equipment
	Signs		Loads of emergency branch circuits
	Capacity		Generator control wiring

WET LOCATIONS

	Receptacles		Electric metallic tubing
	Conductors		Lighting fixtures
	Markings/grounding		

GROUNDING

	Grounding conductor to service equipment		Electrode system
	Conductors		Grounding electrode system installation

MEANS OF EGRESS

	Means of egress illumination		Exit signs
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STANDBY SYSTEMS

	Capacity and rating		Power source
	Storage battery		Generator set
	Uninterruptible power supply		Separate service
	Connected ahead of service disconnect		Unite equipment

DISCONNECT MEANS

	Motors		Elevators
	Appliances		HVAC equipment

Mechanical Requirements: 2021 IMC

General Regulations

All mechanical construction documentation shall bear the seal of the Registered Design Professional of record. (Montana disciplined)

Construction documents	Hazardous location installation
Energy utilization	Outdoor installation
Appliances and equipment approval	Piping support
Pipe, tubing, and fittings identification, testing	Condensation disposal
Prohibited locations	Clearance reduction
Equipment installation	

GENERAL

Exits	Outside opening protection
Outside air exhaust and intake locations	

MECHANICAL VENTILATION

Ventilation air requirements	Energy recovery ventilation systems
Recirculation and transfer air	Public garages
System operation	Uninhabited spaces
System control	

NATURAL VENTILATION

Ventilation requirements	Contaminants exhausted
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Mechanical Ventilation

Ventilation calculations	Multiple-zone recirculating systems
Zone outdoor airflow, Equations 4-1 and 4-2	Exhaust ventilation
Single zone systems, equation 4-3	Group R-2, R-3, and R-4 occupancies three stories or less, Equation 4-9
100 percent outdoor air systems	

Exhaust Systems

REQUIRED SYSTEMS

Battery-charging areas	Clothes dryer exhaust
Application of flammable finishes	Domestic kitchen exhaust equipment
Hazardous materials	Smoke control systems
Motor vehicle operations	

COMMERCIAL KITCHEN DUCTS AND EXHAUST EQUIPMENT

	Exhaust fans		Duct construction
	Pollution-control unit		Clearance to combustibles
	Duct material		Exhaust outlets
	Duct design and velocity		Ventilation/exhaust hood venting

COMMERCIAL KITCHEN TYPE I HOODS

	Factory-built commercial kitchen hoods		Hood construction
	Fuel-burning appliances		Clearance to combustibles
	Grease filters		Makeup air
	Canopy-type hoods		Exhaust fan activation
	Non-canopy-type hoods		

COMMERCIAL TYPE II HOODS

	Duct construction and termination		Design
	Hood construction		

FIRE SUPPRESSION SYSTEMS

	Where required		Actuation and interconnection
	Type of system		

Duct Systems

	Plenums, general		Duct installation
	Air movement in corridors		Air filters
	Return air openings		Duct smoke detectors
	Duct construction and insulation		Fire, smoke, and ceiling radiation dampers, and common exhaust systems
	Flexible air ducts and air connectors		

Chimneys and Vents

	Masonry chimney		Metal chimney
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GAS-FIRED APPLIANCES

	Vents		Direct vent, integral vent, mechanical vent, and ventilation/exhaust hood venting
	Connections		Factory-built chimney

ALL APPLIANCES EXCEPT GAS-FIRED APPLIANCES

	Vents		Connections
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Specific Appliances, Fireplaces, and Solid Fuel-burning Equipment.

Recirculating direct-fired Industrial Heaters	Energy recovery ventilation systems
Infrared radiant heaters	Refrigerators
Clothes Dryers	Air conditioning equipment
Sauna Heaters	Radiant heating systems
Pool and spa heaters	Evaporative cooling equipment
Cooking Appliances	Outdoor decorative appliances
Forced-air warm-air furnaces	Dwelling unit exhaust equipment

Boilers, water heaters, and pressure vessels

Water Heaters	Low-water cutoff
Pressure vessels	Bottom blowoff valve
Working clearance	Hat water expansion tank
Boiler connections	Gauges
Safety and pressure relief valves and controls	

Refrigeration

Factory-built equipment	Quantity and application of refrigerant
Refrigerant system classification	Machinery room, gen. requirements
Refrigerant Classification	Machinery room, special requirements
Occupancy Classification	Refrigerant piping and installation

Fuel-gas piping

MATERIALS

Piping materials	Identification
Joints and connections	

SIZING

Gas pipe sizing	
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INSTALLATION

Piping location/protection	Appliance connection
Underground piping	Drips and sloped piping
Protection against corrosion	

GAS SHUTOFF VALVES

Appliance shutoff	Meter valve/regulators
Tenant shutoff	Tubing shutoff valve support
Prohibited locations	

OTHER GAS PIPING SYSTEMS

	Liquefied petroleum gas motor vehicle dispensing facilities		Overpressure protection devices
	Supplemental and standby gas supply		

Fuel oil piping storage

	Storage system		Fuel oil system installation
	Materials		Oil gauging
	Joints and connections		Fuel oil valves

Plumbing: 2021 UPC / MCA 24.301.301

Administration

	Construction documents		Riser diagram
	Size and location on the site plan		Water calculations

Engineered plumbing systems

	Sealed drawings, details, and data submitted		Engineered venting
	Design		

Plumbing fixtures

	Occupancy		Occupant load
	Minimum number of fixtures		Drinking fountain location
	Separate facilities		Fixture spacing, location, and installation
	Public and employee toilet facilities		Toilet room requirements
	Single-user and family or assisted toilet and bath facilities		Signage
	Accessible plumbing facilities required		

Water supply and distribution

DESIGN

	Burial depth		Maximum flow and water consumption
	Water service separation		Water pressure booster systems
	Water distribution system design		

VALVES

	Full open		Shutoff
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WATER HEATERS

	Approval and installation		Relief valve discharge
	Maximum temperature, tankless heaters		Required pan
	Relief valves		

HOT WATER SYSTEM

	Hot water requirements		Pipe insulation
	Maintaining hot water temperature		

PROTECTION OF POTABLE WATER

	Protection of portable water supply		Backflow protection
	Identification of nonportable water systems		Protection of outlets

Building drain and sewer system

GENERAL

	Fixture Traps		Slope
	Trap seals		Change of direction

STACKS

	Sizing		Horizontal offsets
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DRAIN AND HORIZONTAL BRANCHES

	Sizing		Connections to offsets and stacks
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CLEANOUTS

	Horizontal drains		Size, clearance, and access
	Change in direction		

SEWER

	Sewer location on site plans		Sewer size
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INDIRECT WASTE

	Where required		Hub drains
	Installation		Standpipes
	Waste receptors		

INTERCEPTORS

	Grease interceptors		Venting
	Food waste grinders		Manufacture Specifications

SEPARATORS

	Venting		Access
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Venting

VENTING

	Vent size		Wet venting
	Branch vents		Waste Stack vents
	Fixture Vent		Relief Vent
	Common vents		Island fixture venting

STACKS

	Vent stack required		Drainage stack offsets
	Vent stack connection		Sizing

VENT INSTALLATION

	Vent terminals		Vent Connection
	Vent grade		

Materials

GENERAL

	Material identification and label		
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DRAIN, WASTE, AND VENT PIPE

	Above ground		Chemical waste
	Underground		

STORM DRAINAGE PIPE

	Underground		Roof drains
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BUILDING SEWER PIPE

	Sanitary		Storm
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WATER SUPPLY PIPE

	Water service		Water distribution
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CLEANOUTS

	Plugs		
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JOINTS AND CONNECTIONS

	Approved types		
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Piping Support and Installation

	Hanger/support schedule submitted		Seismic support (IBC 1613.1)
	Protection against contact		Support intervals
	Stress and strain		Sway bracing
	Pipes through foundation walls		Anchorage
	Waterproofing of openings		Floodproofing
	Damage protection		Sealing annular space
	Penetration protection of fire-resistance rated assemblies		

Appendices

	Appendices adopted		Compliance verified
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Energy Conservation Code: 2021 IECC / MCA 24.301.161

BUILDING SYSTEM REQUIREMENTS (Chapter 4 CE)

	ANSI/ASHRAE/IESNA 90.1		Thermal envelope certificate
	Total building performance		Existing buildings
	Prescriptive practice		

BUILDING ENVELOPE (C402)

	R-value-based method		Component performance alternative
	u-factor, C-factor, F-factor based method		Low-energy buildings

R-value and specific insulation requirements (C402.1.3, C402.2)

	Roof assembly (Type, Required R-value, Compliance)
	Above-grade walls (Type, Required R-value, Compliance)
	Floors (Type, Required R-value, Compliance)
	Slab-on-grade floors (Type, Required R-value, Compliance)
	Below-grade walls (Required R-value, Compliance)
	Radiant heating system (Required R-value, Compliance)
	Airspace

U-factor, F-factor, C-factor requirements (C402.1.4)

	Roof assembly (Type, Required U-value, Compliance)
	Above-grade walls (Type, Required U-value, Compliance)
	Floors (Type, Required U-value, Compliance)
	Slab-on-grade floors (Type, Required F-value, Compliance)
	Below-grade walls (Type, Required C-value, Compliance)
	Opaque doors (Type, Required U-value, Compliance)
	Roof solar reflectance and thermal emittance
	Skylight curbs

Fenestration

	Vertical fenestration area (Amount, Compliance)
	Skylight area (Amount, Compliance)
	Minimum skylight fenestration area (Amount, Compliance)
	Window projection factor

Air leakage

	Thermal envelope		Air leakage of fenestration
	Air barriers		Rooms containing fuel-burning appliances
	Residential and institutional testing		Doors and access openings
	Other than residential and institutional testing		Air intakes, exhaust openings, stairways, and shafts
	Exempt buildings with materials testing		Vestibules
	Exempt buildings with assembly testing		Recessed lighting

Loading docks	Operable openings
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Mechanical Systems (C403)

Design conditions	Mechanical systems serving multiple zones
Load calculations	Ventilation and exhaust systems
Applicable to all HVAC equipment and systems	Heat rejection equipment
Heating and cooling equipment efficiencies	Refrigeration equipment performance
Heating and cooling system controls	Construction of HVAC system elements
Economizers	Mechanical systems outside of buildings

Service Water Heating Systems (C404)

SWH Equipment efficiency	Heated water supply piping
Heat traps	Heated water circulating and temperature
Piping Insulation	Drain water heat recovery
Pools/permanent spas	Portable spas

Electrical Power and Lighting Systems (C405)

General – Sleeping Units	Parking garage lighting control
Lighting controls	Exterior lighting power
Luminaire Level Lighting controls	Lighting zones
Time-switch controls	Gas lighting
Light reduction controls	Dwelling electrical meter
Specific Application Controls	Elevators/escalators/moving walks
Manual controls	Voltage drop
Exterior lighting controls	Interior lighting power

Total Building Performance (C407)

Documentation	calculations
Compliance report	Thermal blocks

Maintenance Information and System Commissioning (C408)

Building operation and maintenance	Functional performance
Commissioning plan	Documentation
Adjusting and balancing	Lighting controls
Air systems	Functional testing
Hydronic systems	Documentation
Preliminary report	

Existing Buildings (Chapter 5 CE)

ADDITIONS

Change in space conditioning	SWH systems
Vertical fenestration	Pools/inground permanent spas
Skylight	Lighting power
Mechanical systems	Interior lighting

	Exterior lighting		
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ALTERATIONS

	General		Heating and cooling systems
	Building envelope		Lighting systems
	Roof replacement		Repairs
	Vertical fenestration		Change of Occupancy
	Replacement fenestration		

Adopted Codes: Note that Montana has amendments, MCA, and ARM. Links are available on our Adopted Codes page.

- 2021 International Building Code (IBC)
- 2021 International Mechanical Code (IMC)
- 2021 International Fuel Gas Code (IFGC)
- 2021 International Energy Conservation Code (IECC)
- 2020 National Electrical Code (NEC)
- 2021 Uniform Plumbing Code (UPC) (IAPMO)

* Projects that require three or more review cycles will be charged $\frac{1}{4}$ of the original permit fees

- [Bozeman Fee Schedule](#)

** The only deferred submittal allowed by the City of Bozeman is Fire Suppression. **

- [Bozeman Fire Department](#)