

GOLDEN FIRE DEPARTMENT FIRE & LIFE SAFETY BUREAU



911 10th Street
Golden, Colorado 80401
303-215-8887

Contractor's Permit & Inspection Guide

*Note: This is not an all-inclusive list of requirements; this shall serve as a general guideline. All projects must be in accordance with the City of Golden's adopted fire code; the International Fire Code (2021 Edition) and all adopted amendments. Revision 5, March 2025. Information contained herein is current as of the revision date, but there is no assurance that the laws have not changed or been amended through subsequent legislation. This information does not constitute legal advice and is intended to serve only as a general guide. It should not be used as a substitute for seeking advice from qualified professionals.

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Adopted Fire Code & Amendments

The 2021 IFC, as amended, is the current adopted fire code for the City of Golden. In addition, the NFPA references, as well as other codes/standards listed in Chapter 80, are adopted as part of the City of Golden fire code. The use of more current codes/standards, such as NFPA, may be accepted, provided it is requested in writing as an alternate material and methods per 2021 IFC 104.10.

The link library.municode.com/co/golden/codes/municipal_code?nodeId=TIT16FI directs you to City of Golden fire code amendments and ordinances. For any questions, please contact the Fire & Life Safety Bureau.

Submittal Requirements

The following outlines the submittal requirements for all construction and operational permits, as well as re-inspection or after-hours requests.

1. Sign up for an [Accela Account](#) to create an application, upload documents and track your permit.
2. Click on **Register for an Account** on the right top of the form just under the blue login button. Once you register your account, go back to Login and proceed.
3. If you have problems, questions, or issues please contact the Fire Marshal, Brett Ballentine, email fireinspections@cityofgolden.net.

All permit submittals must include code references used for design (shall reflect current adopted cycle), professional stamps, data sheets for materials used, and a construction safety plan per IFC 3303. Submittals missing these items will be returned immediately for resubmission. All applicable CO State laws, City of Golden codes, standards and local ordinances/policies shall always be met by all contractors. An approved plan review does not relieve the designated contractors from their responsibilities. Therefore, if applicable laws, codes, standards or local ordinances/policies are violated during any process, the fire code official retains the right to require compliance. (IFC 2021 Sections 105.3.6, 105.3.8 and 106.2.4)

Plan Review Turnaround Time

Golden Fire Department's (GFD) goal is to provide a dependable, reasonable, and consistent plan review timeframe for all submittals. **Anticipate the plan review to require 3 – 4 weeks**; depending on the size and the scope of project, review times may vary. This targeted review time only applies to the initial review; subsequent reviews of re- submittals or of responses to the initial review comments require additional time.

This is only a goal and not a guarantee; complex projects may require longer plan review timeframes.

Please verify your project's address at <https://addresslookup.jeffco.us/addresslookup/dashboard>. Generally, with Accela, we have Geofencing built in. If your address is not in our jurisdiction, it will not let you move past the address validation, and you can stop attempting to submit for a permit in Golden. You can use the address wizard link above to try and find your jurisdiction under the Tax and Property information link.

Work without approved plans and a permit issued by GFD will result in a City of Golden Citation and a Stop Work Order. The general contractor shall be responsible for ensuring that all subcontractors have valid working permits issued by the City of Golden prior to any work beginning.

Inspection Requests

Inspections shall be requested via the online permitting portal and an email request shall be sent to fireinspections@cityofgolden.net at least **two business days** in advance. Requests must be confirmed and scheduled by a member of the Fire & Life Safety Bureau prior to inspection. See fee schedule on the Fire & Life Safety Bureau's website for more information regarding after-hours inspections.

All applicable acceptance testing documentation, including, but not limited to, Statements of Compliance (IFC 901.2.1), Contractor's Test Certificates, and as-built drawings are required at final inspection. All final inspection documentation shall be uploaded to the respective permit in Accela prior to the scheduled inspection for review and approval by the fire code official.

Fire Suppression - Aboveground Requirements

All fire sprinkler system designs, installations and inspections shall comply with Colorado's Fire Suppression Program's requirements; it is solely the responsibility of the fire sprinkler contractor to provide GFD documentation that meets all CO laws and regulations and GFD codes, standards and local ordinances. Fire sprinkler systems shall be designed by a NICET III or higher designer and installed per all applicable codes, standards and equipment manufacturer's instructions. Due to the size or complexity of the project, the fire code official may require a higher certification or CO PE to stamp plans. All work shall be done by a CO registered fire suppression system contractor. Flow tests must be conducted within the last year from the date of the application submission; if needed, please schedule a flow test with the City of Golden Water Department. Scope of work letters are never accepted; however, small projects may comply with Colorado's Fire Suppression Program Section 6.2.7:

1. In lieu of full-sized drawings, an AHJ may allow the submittal of a scale drawing of the proposed project on 8½ x 11-inch paper, including product data sheets, calculations, and all information required by the applicable NFPA standard. The certified Fire Inspector has the right to require additional information as may be necessary to fully evaluate the project.
2. A signed letter on the registered contractor's letterhead must be submitted explaining the scope of work and a statement that tenant finish, remodel, or additions do not affect the hydraulic demand design or integrity of the existing fire protection system.

Standpipes

Standpipes shall be designed, installed and tested in accordance with all CO laws and regulations and GFD codes, standards and local ordinances. In addition to roughs/hydrostatics, flow testing shall be conducted by the suppression contractor and witnessed by the fire code official, in accordance with NFPA 14 requirements. A NFPA 14 "Materials & Test Certificate" shall be provided prior to final inspection and uploaded into Accela.

*GFD's Pumper Information: 1500gpm at 150psi

Fire Department Connections

All new FDC connections shall be a 5" Stortz with a 30-degree bend. The location of the FDC shall be proposed during the plan review process. GFD will determine whether the location indicated on submitted plans is adequate, in accordance with IFC 912.2. Under certain circumstances, we will locate the FDC in the field. All FDC's are required to have Knox locking caps, which can be found at www.knoxbox.com. These caps will be installed by GFD during an inspection. The contractor shall install FDC signage in accordance with IFC Chapter 9 requirements.

Fire Suppression - Underground Requirements

Fire suppression underground applications shall be submitted by a Colorado certified fire suppression - underground contractor. Certificates and material cut sheets shall be provided at initial submission. Plan set drawings are required to reflect piping from main to flange to riser assembly. Designs and installation shall follow the requirements listed in NFPA 24. Required inspections include bedding and/or thrust blocks, hydrostatic testing, and debris/super flush to be witnessed by GFD. A NFPA 24 "Materials & Test Certificate" for fire suppression underground piping shall be provided prior to final inspection and uploaded into Accela.

Inspection Requirements

The stamped reviewed plans and permit shall remain on-site at all times; inspections will not be conducted if these documents are not on-site. Requestor shall follow the inspection request requirements stated above. All projects shall have rough/hydrostatic inspections, and all sprinkler piping shall be visible for inspection. At the time of final inspection, completed back-flow certifications, underground, aboveground, standpipe test certificates, and statements of compliance (IFC 901.2.1) shall be provided to the inspector and uploaded into Accela.

Residential Fire Sprinklers

All standalone 13D systems are a deferred submittal through GFD, and multipurpose systems will be reviewed through the Building Department. Plans for an NFPA 13D shall be submitted by CO Fire Suppression - Aboveground Contractor. A bucket test is required for each NFPA 13D system. A "Materials & Test Certificate" and statements of compliance (IFC 901.2.1) shall be uploaded to Accela.

Fire Alarm Requirements

Fire alarm systems shall be designed, installed and tested in accordance with all applicable CO laws, applicable codes, standards and manufacturer's instructions. Plans shall be designed and stamped by a fire alarm contractor with a minimum NICET III designer or a qualified Colorado Professional Engineer (PE). Due to the size or complexity of the project, the fire code official may require a higher certification or CO PE to stamp plans.

Remote Annunciator

Remote annunciators shall be installed in fire alarm systems where the fire alarm control panel (FACP) is not in a readily accessible location (e.g. in the main entrance/lobby) for responding personnel.

Graphic Map

A permanently mounted graphic map must be located adjacent to either the FACP and/or the remote annunciator. All fire alarm initiating devices shall be shown on the map with name, address, and unit numbers of the building. Graphic maps shall be updated to reflect changes in new projects and shall be replaced if deemed illegible. The graphic map shall be noted on each fire alarm plan, including tenant modifications.

Fire Alarm Horn/Strobe Policy

1. Clear lens (horn/strobe): Activates on water flow, at the location of FDC.
2. Red lens (strobe only): Activates upon general alarm, at location of Knox box.

Fire Alarm Inspection Requirements

The stamped plans and permit shall remain on-site at all times; inspections will not be conducted if these documents are not on-site. Requestor shall follow the inspection request requirements stated above. All projects shall have a 100% pretest of the system prior to requesting a final inspection. An NFPA 72 Record of Completion and Statement of Compliance (IFC 901.2.1) shall be provided prior to final inspection and uploaded into Accela. The final acceptance testing shall be conducted in accordance with all applicable codes, standards and manufacturer's instructions. * FACP replacements shall initiate a full acceptance testing per NFPA 72. *

Kitchen Hood Suppression Requirements

Fire suppression systems are required on all Type I kitchen hoods. Kitchen hood suppression systems shall be designed, installed and tested in accordance with all applicable codes, standards and manufacturer's instructions by a qualified hood suppression contractor. These submittals shall include all applicable information for review (e.g. installing contractor's qualifications, manufacturer's technical design manual, nozzle location, nozzle distance from appliance, size and type of suppressant required, indication of appliances being protected, Class K fire extinguisher location and manual pull station location), and the plans shall be properly signed and sealed by a qualified CO Professional Engineer.

Kitchen Hood Inspection Requirements

The stamped plans and permit shall remain on-site at all times; inspections will not be conducted if these documents are not on-site. [Requestor shall](#) follow the inspection request requirements stated above. The Building Department and GFD shall be scheduled to simultaneously witness acceptance testing, conducted by the hood suppression contractor in accordance with all applicable codes, standards and manufacturer's instructions.

NOTE: IF A HOOD SYSTEM IS "RED TAGGED" AS OUT OF SERVICE, NOTIFICATION SHALL BE MADE TO GFD IMMEDIATELY.

Paint Booth Requirements

Flammable finish spray operations per IFC 2404.4 shall have suppression systems installed prior to use. Permits shall include information regarding hazardous material used, CO PE stamped or pre-engineered system plans, and material data sheets for all components. Design requirements shall meet the respective NFPA standards and IFC requirements.

Address Requirements

Per IFC 2021, all buildings shall have address identification. Markings shall be legible and placed in a position that is visible from the street or road fronting property. Characters shall contrast with the background, using Arabic numbers and alphabetical letters. Characters shall be not less than 4 inches high with minimum stroke width of ½ inch. Where fire access is by means of a private road or not visible from the public way, a monument pole or other sign shall identify the structure. Suites/tenant units shall have additional unit markings at entry points. This includes Additional Dwelling Units (#A and #B).

Knox Box Requirements

Knox Boxes are required to be installed per IFC 2021 Section 506. Boxes are required where immediate access to/within a structure/area is restricted because of secured openings. All buildings with a monitored life safety system must have a Knox Box. Knox Box locations shall be provided on plans and cannot be installed until approved by GFD; Knox Box installations shall be located, at a minimum, near the main entrance. Depending on the size and layout of the building, multiple boxes may be required. GFD requires that each Knox Box contain two (2) identical sets of keys, labeled (shown below) and put on a D-ring or carabiner. The keys that need to be provided are shown below in the Key Labeling section. Knox Boxes are required to be installed prior to final inspection.

Knox Box Model

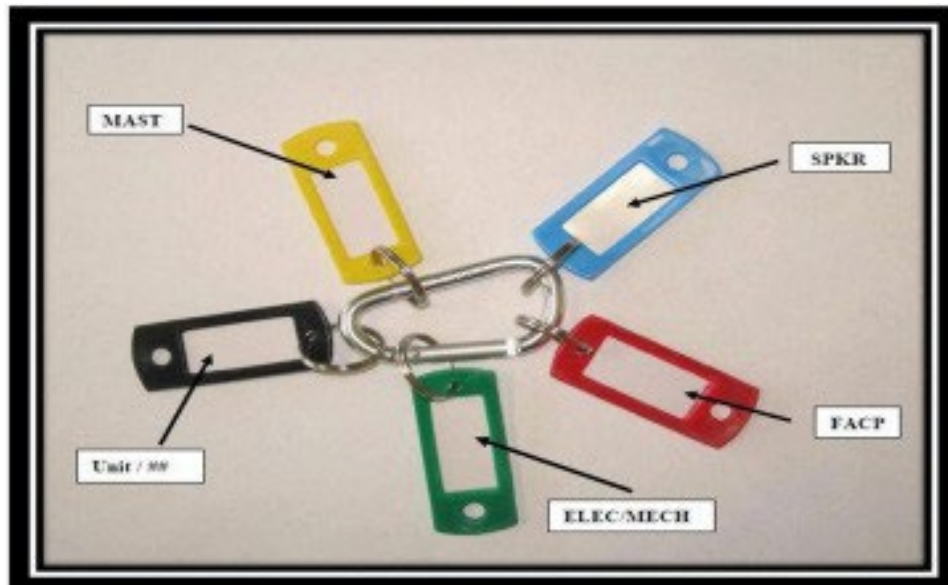
GFD approved Knox Box models can be found on the Knox Box website. To order go to: www.knoxbox.com/; select a box from the options available for GFD. Be aware that two (2) sets of keys must fit in the box when considering the size.

GFD does not specify color or whether boxes need to be surface mounted or recessed.

Knox Box Location

Knox box locations shall be indicated during the plan review process but are subject to field inspection to confirm. Existing buildings may email fireinspections@cityofgolden.net for a field consultation.

Key Labeling



Key Legend

Red: Fire Alarm, Elevator Fire Service Key
Blue: Fire Sprinkler or System Valve Padlocks
Yellow: Building Master--Interior and Exterior
Green: Miscellaneous, Electrical Rooms, Mechanical Rooms, and Storage Areas
Black: Tenant Units or Numbers

Recommended Terms

FACP: Fire Alarm Control Panel
SPKR: Fire Sprinkler Room
MECH: Mechanical Room
EFS: Elevator Fire Service
ELEC: Electrical Room
STG: Storage Area
#: Unit Letter or Number

(All labels shall be written with a permanent marker)
*2 sets of Knox Box keys are required

Emergency Responder Radio Coverage Systems (ERRCS)

Per the adopted and amended IFC (2021), all buildings **new and existing** will require a test of the facility for emergency responder radio coverage per Section 510 by **July 1, 2024**. If coverage is inadequate, an ERRCS will be required. Permits are required for ERRCS systems and shall include requirements listed in Section 510. These submittals shall include all applicable information for review (e.g. professionally stamped plans, a valid FCC operator licensing/approved certification for in-building systems, existing coverage mapping, listed equipment, standby power, etc.). ERRCS systems are not permitted to impact outside communication systems, and they shall be inspected and tested annually in accordance with IFC 510.6. New projects will require proof of coverage prior to final inspection. A "Pass" test report and a Statement of Compliance (IFC 901.2.1) shall be provided prior to final inspection and uploaded into Accela by the permit holder.

Building owners are responsible for providing documentation of coverage to GFD prior to the July deadline. GFD will not be performing coverage testing due to limited department resources.

Access Control Systems

All equipment installed for delayed or controlled egress that impacts fire department access requires a separate permit. Designs and materials shall meet the requirements listed in IFC 1010 and shall be inspected to verify applicable code requirements are met. Updated access cards/fobs shall be provided at final inspection for the Knox Box.

Fire Lane Requirements

Fire department access shall be indicated in the plan review process providing fire lane road widths, turning radii, turnarounds and required building access distances per IFC (2021) Section 503. An apparatus turning diagram shall be provided on all site plans. At the request of the fire code official, the Registered Design Professional may be required to provide a diagram detailing compliance with IFC 2021 Section 503.1.1. Fire lane sign location and types shall be provided during the plan review; a field inspection will be required.

Approved Signs



1. 18-inch-high x 12-inch-wide sign (Type 1-3).
2. 18-inch-high x 24-inch-wide sign (Type 4-5) AS APPROVED.
3. Reflective white background material.
4. "Fire Lane" to be a minimum of 1-inch x ¼ inch stroke.
5. Left, right or bi-directional arrows as required by site specifications.
6. Signs to be mounted per Manual for Uniform Traffic Control Devices.
7. Locations to be approved by GFD per specific site plan review and/or on-site inspection.
8. Or other approved signs by GFD.

Sign Location

1. Maximum distance between signs shall be 150 feet.
2. Signs shall be angled 30° - 45° with the line of traffic flow.
3. 7 feet to the bottom of the sign.

Apparatus Turning Dimensions

The following dimensions are based upon a 105' aerial platform. All required fire apparatus access road designs within a development shall be able to accommodate the dimensions detailed below.

Apparatus Dimensions

Overall length: 46'
Width: 8' 4"
Height: 10' 11.5"
Wheelbase: 271"
Number of axles: 3
Front overhang: 105"
Rear overhang: 137"
Axle to axle: 55"
Tire height: Large

Turning Radii Specifications

Inside turn: 25' 10"
Curb to Curb: 41' 9"
Outside Wall to Wall: 46' 11"

Definitions

Overall length: Overall length of apparatus measured from the rear bumper to the front of the aerial platform.

Width: Width of apparatus measured from side to side.

Height: Height measured from grade to highest point of the apparatus

Wheelbase: Distance between the centerlines front and rear axles of the apparatus. When the apparatus is equipped with a tandem rear axle, the centerline between the rear axles is used.

Chassis overhang: Distance from the centerline of the front axle to the front edge of the cab.

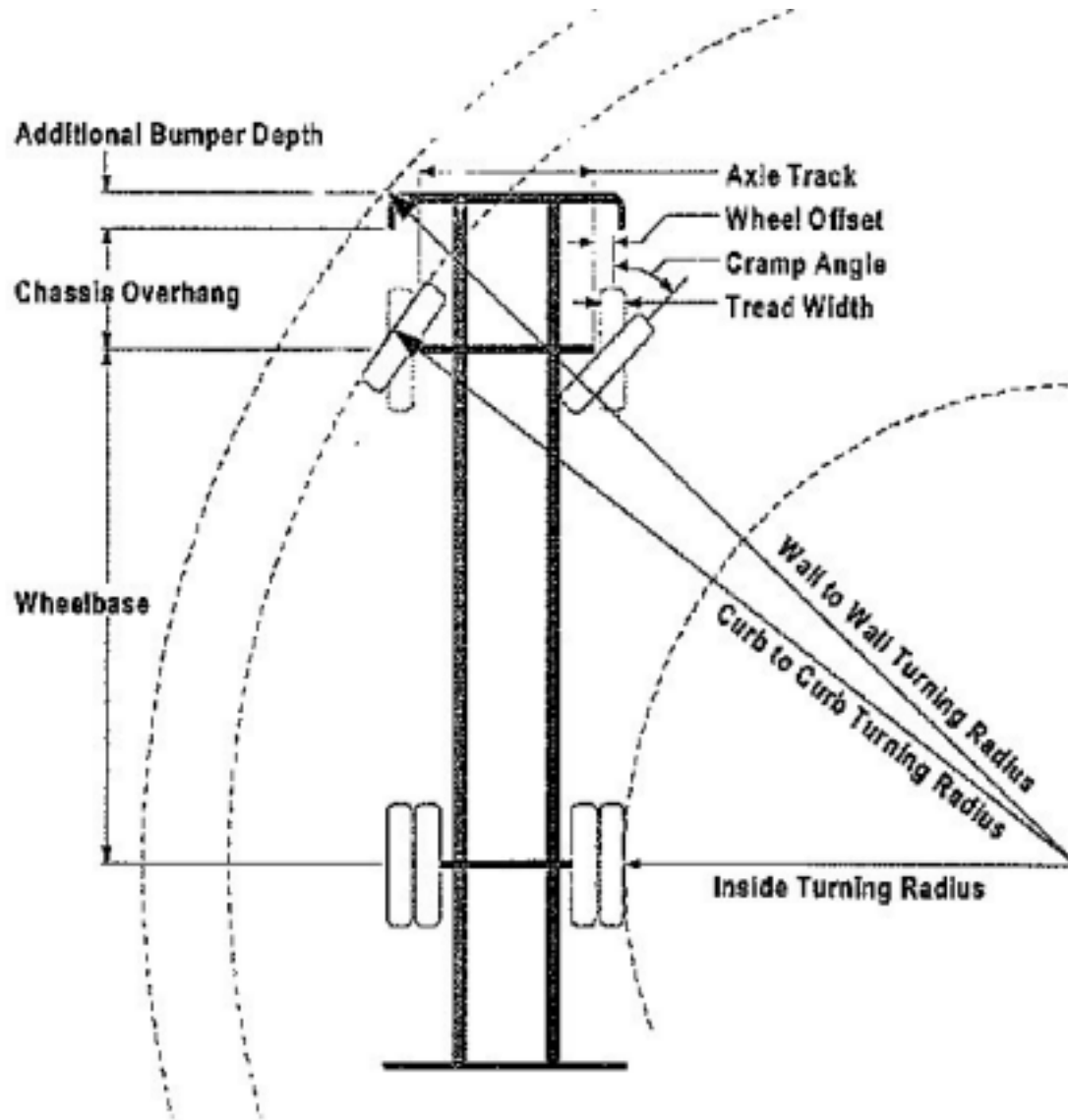
This does not include bumper depth or the platform overhang.

Additional bumper depth: Depth added to the front overhang by the front bumper.

Front overhang: The aggregate overhang from the centerline of the front axle to the front edge of the aerial platform. This dimension is used to determine the wall to wall turning radius.

Rear overhang: Distance from the centerline of the rear axle to the rear tailboard. When the apparatus is equipped with a tandem rear axle, the centerline between the rear axles is used.

Axle to axle: Distance between the centerline of the rear tandem axles.



Operational Permits

Operational permits shall be submitted and reviewed for approval prior to special events, hazardous material use, or temporary installation/removal work. It is the applicant's responsibility to provide all required documents in accordance with all applicable codes, standards and manufacturer's instructions at initial submission to avoid plan review time delays. Inspections for compliance are required prior to event start time or hazmat/system usage. Operational permits may be subject to additional random inspections for their duration. All associated permit documentation shall always remain on-site.

Crowd managers shall be provided in accordance with applicable IFC requirements and GFD Ordinances.

Tent Permit Requirements

All required information per IFC (2021) Chapter 31 and Manufacturer's Instructions

- **Section 3103.6 Construction Documents:**

- A detailed site and floor plan for tents or membrane structures with an occupant load of 50 or more shall be provided with each application for approval.
- The tent or membrane structure floor plan shall indicate details of the means of egress facilities, seating capacity, arrangement of seating, and location and type of heating and electrical equipment.
- The construction documents shall include an analysis of structural stability.

- **Section 3103 and 3104 Required Documents**

- Tent schematics from the manufacturer.
- Installation instructions from the manufacturer; including stake/anchor/ballasting information.
- Any accessory documents from the manufacturer.
- Area drawing of location of tent.
- Dimension drawing of location of tent (with measurements in feet) distances from buildings, lot lines, fire lanes, parking lot & the number of spaces that will be taken up by the tent (per Section 3103.8).
- Tent details: exit signs (shall adhere to means of egress per Section 3103.12), fire extinguishers, no smoking signs & emergency lighting (depending on time of operation).
- Provide a diagram of tables, chairs, stages, or anything that will be set up within the tent and show occupancy load.
- Provide proper information regarding heating or cooking appliances that will be used and indicate distances from tent(s) on site plan.
- Fire Propagation Certificate.

Stage Permit Requirements

Temporary special event structures in excess of 400 square feet (37 m²) shall not be erected, operated or maintained for any purpose without first obtaining approval and a permit from the fire code official and the building official. Required documentation for plan review shall be in accordance with IFC (2021) 3105.5. A qualified, independent inspector shall be employed by the owner of the temporary special event structure, in accordance with IFC (2021) 3105.6.1. The independent inspector shall provide an inspection report to the fire code official, and any deficiencies noted shall be immediately and properly corrected prior to the request for final inspection, in accordance with IFC (2021) 3105.6.2.

Gas Detection Systems (Beverage Dispensing Applications Included)

Permit applications shall include required information per IFC Section 5307.

- Plans shall be sealed and signed by a qualified CO Professional Engineer, or the designer shall provide a letter demonstrating sufficient design experience, a minimum of three (3) years.
- Total aggregate quantity of liquid carbon dioxide in pounds or cubic feet at normal temperature and pressure.
- Location and total volume of the room where the carbon dioxide operation will be conducted. Identify whether the room is at grade or below grade.
- Location of containers relative to equipment, building openings and means of egress.
- Manufacturer's specifications and pressure rating, including cut sheets, of all piping and tubing to be used.
- A piping and instrumentation diagram that shows piping support and remote fill connections.
- Details of container venting, including but not limited to vent line size, material and termination location.
- Alarm and detection system and equipment, if applicable.
- Seismic support for containers.

Liquified Petroleum Gas (LPG) and Propane Installations

Permits shall be required for any flammable liquid or gas installations, including temporary installations. LPG and propane installations shall comply with all applicable CO laws and GFD codes, standards and ordinances. Generally, any one installation shall not exceed one thousand (1,000) gallons water capacity, in accordance with Golden Fire Code Section 6104.2. However, the fire code official may authorize larger installations upon consideration of the plan submitted by the applicant. Colorado state law requires installations utilizing LPG storage containers exceeding an aggregate two thousand gallons (2,000) water capacity to be submitted to the Director of the Division of Oil and Public Safety (DOPS) for approval; CO DOPS approved plans shall be submitted in the GFD permit application or the application will be immediately rejected. It is the sole responsibility of the permit holder and LPG/propane vendor to ensure that all applicable laws, codes, standards, ordinances and best practices are always met.

Special Events

Special event permits shall be in accordance with City of Golden special event requirements. For additional information regarding GFD permits, please follow the City of Golden special event permitting process through Eproval and refer to the GFD Special Event Guide throughout the planning, application and event process.

Fees

Fees shall apply to construction and operational permit plan reviews which will also include initial inspections/witness-testing services performed by GFD; re-reviews and re-inspections/after-hour inspections may incur an additional fee. See fee schedule document on the Fire & Life Safety Bureau's webpage for more information.

GFD Policy for Existing Building & Fire Protection System Modifications

Prior to closing any fire and life safety permits for commercial alterations or fire protection system modifications, the building owner or their representative shall ensure annual inspection, testing and maintenance (ITM) reports are provided for the following existing fire and life safety systems, at a minimum: 1) fire alarm, 2) fire sprinkler system, 3) commercial kitchen hood suppression and 4) emergency generator. Overdue ITM reports or outstanding deficiencies may delay the approval of any alteration or modification permits.

Annual Testing and Maintenance

Inspection, testing and maintenance (ITM) on all fire and life safety systems are required as outlined in the 2021 IFC and each applicable NFPA standard. Please be advised, GFD has adopted The Compliance Engine reporting system as of October 1, 2019. All ITM reports, including deficiency corrections, must be submitted to The Compliance Engine. **GFD no longer accepts reports submitted via email.** As a contractor, please register your company to submit documentation.

All suppression contractors shall be aware and follow set rules by dfpc.colorado.gov Division of Fire Prevention and Control (8 CCR 1507-11 Section 6.4.6 Tagging of Suppression Systems).

*The GFD Fire Code Official reserves the right to require a Colorado Professional Engineer/Registered Design Professional seal and stamp on any fire and life safety plans submitted for permitting, at the expense of the applicant. *

General Email: fireinspections@cityofgolden.net

Fire Marshal Signature

The following entities attest that the intent of this document is to provide strict guidance regarding various Golden Fire Department requirements for fire and life safety systems – including their design, installation, testing and maintenance.



Recoverable Signature

X

BRETT BALLENTINE

Brett Ballentine

City of Golden Fire Department, Fire Marshal

Signed by: a7aff626-8f0b-4301-99d4-827cec14d758