

Commercial Final Inspection Requirements and Information

Items to be Completed Prior to Final Inspection

The Construction Inspector will schedule and coordinate the final inspection. The following items must be complete prior to final inspection day.

- All building construction progress inspections complete and approved
- All items from the Construction Inspector's Life Safety inspection complete and approved
- Address on building
- Exterior accessibility inspection
- Interior accessibility inspection
- Commercial hood fire suppression and installation
- All equipment and systems installed, operational, inspected and approved
- Plumbing, electrical and HVAC installations final inspections complete and approved
- Stormwater management approved by Engineering department
- Other Engineering department required approvals
- Planning / Zoning requirements approved by Planning department
- Rental License application submitted

FIRE CODE INSPECTIONS BY FIRE MARSHAL

Contact the Fire Marshal at 730-4380 to schedule inspections

- Site access roads and fire lanes completed and signed
- Sprinkler locations, tamper and flow
- Standpipe tamper and flow
- Fire pump
- Rooms with fire panel marked per Fire Code
- Fire alarm
- Emergency lighting and exit signs
- Unit numbers on apartments
- Knox box with keys inside
- Stair towers and roof access labeled
- Elevator smoke evacuation
- Elevator recall

SYSTEMS PRE-TESTING

Submittal of Systems Pre-Testing Verification Form REQUIRED after contractors have tested these components with verification and prior to scheduling final inspection.

- Generator
- Emergency power
- Alarm decibel levels
- Exit signage lighting
- Emergency lighting
- Opening protectives in fire resistance rated assemblies operational per approved design with HVAC system running
- Egress door operations with and without fire alarms operational per approved design
- All mechanical equipment over 2000 including RTUs
- Enclosed parking ventilation CO and N2O
- Stair Pressurization
- All fire and smoke dampers operate on alarm or power shut down and register at alarm panel

Items to be Inspected at the Final Inspection

Submittal of Systems Pre-Testing Verification Form REQUIRED prior to scheduling final inspection. The following is a generalized list of items that will be inspected at the final.

HVAC System Requirements for Final Inspection Day

- Dampers activated by pull station or smoke detection
- Dampers will be inspected for closing and reopening on start up.
- Enclosed parking ventilation system activated on C/O detection

Building Systems Requirements for Final Inspection Day

- Test corridor, stair enclosure, elevator lobby, occupancy separation and other fire and smoke doors with HVAC system running
- Test fire alarm, horn strobes, door hold opens, accessible unit alarms, emergency power

Prior to certificate of occupancy

- Submit final paperwork to Construction Services
 - Special Inspection Final Report
 - Test and Balance report
 - Final HVAC Acceptance Form from Architect and Engineer
 - Fire Alarm Certification Report
 - Building Elevation Certificate (For projects in flood hazard or shoreland areas)
 - MN Dept. of Health approval (if applicable)
- Allow three working days after final inspection and submittal of all documents for preparation and issuance of C of O

Final Inspection Information

Life Safety Inspection

The Construction Inspector will coordinate a Life Safety Inspection with the general contractor **prior to the pre-final inspection meeting**. Buildings and grounds must be substantially complete, with required life safety items in place.

Elevators and Escalators

Every elevator, elevator equipment/machine room, penthouse, LULA lift, escalator, moving sidewalk, or chair lift must be inspected and approved by a CCLD State Elevator Inspector prior it being placed into operation and prior to the final building occupancy inspection. The installing contractor is responsible for scheduling all required elevator inspections with the CCLD Elevator Inspector.

Fire Code Inspections

Contact the Fire Marshal at 730-4380 to schedule inspections

Prior to final building inspection, the following inspections must be completed by the Fire Marshall: Fire alarm system operation and pre-testing, manual pull stations, fire extinguishers, fire lanes and fire department access, knox box installation, automatic fire suppression systems (sprinklers) and standpipes design, installation and testing for tamper and flow, the fire department connection with horn and strobe, sprinkler valve room, fire pump operation, fire panel labeling, stair tower and roof access labeling, elevator smoke evacuation and elevator recall.

Fire Alarm Systems

The final fire alarm system operations inspection must be scheduled by the installing contractor with Construction Inspector after it has been pre-tested with the Fire Marshal. The installing contractor is responsible for installing and subsequently testing the entire alarm system in accordance with NFPA 72

and the State Building Code. A final alarm system installation certification form must then be completed, signed and submitted to the Construction Inspector prior to issuance of the Certificate of Occupancy.

Automatic Fire Suppression Systems (Sprinklers)

In Duluth, sprinkler system code compliance is the responsibility of both the Fire Marshal and the Construction Inspector. The Fire Marshal takes the lead in inspections of sprinkler installations. The installing contractor must schedule the final fire sprinkler system and fire-pump start-up/operational testing and inspection with the Fire Marshal. The installing contractor is responsible for installing and subsequently testing the entire fire sprinkler system in accordance with NFPA 13 and the State Building and Fire Codes. At the final inspection, the fire sprinkler system flow alarm will be tested to verify that it is tied into an automatic phone-dialer system that will send a flow-alarm signal to an approved monitoring firm. The installing contractor must also complete and submit a final fire sprinkler system installation certification form to the Fire Marshal.

Kitchen Hoods

Class I kitchen hoods must be operationally tested by the installing contractor/building mechanical contractor and witnessed by the HVAC Inspector and Fire Marshal. Operational tests may include, but are not limited to: building power system shutdown to verify hood operation under fire suppression alarm conditions, smoke ventilation tests, grease duct pressure tests, power interconnection tests with required MAU, etc. The installing contractor is responsible for installing and subsequently testing the kitchen hood fire suppression system in accordance with MN Rule 1346, NFPA 96, and the State Building, Fire and Mechanical Codes. The fire suppression system installing contractor must also complete and submit a final system installation certification form to the Fire Marshal. The fire suppression system installing contractor is responsible for contacting the HVAC Inspector to schedule a final inspection. The HVAC Inspector will coordinate with the Fire Marshal to schedule the inspection. The kitchen hood inspection must be completed and approved by the HVAC Inspector and Fire Marshal prior to scheduling the building final inspection.

Health Department Approval

Final kitchen and/or food prep area sanitary health inspection. A copy of the final sanitarian/health inspection report must be submitted to the Construction Inspector.

HVAC and Mechanical Systems

A final HVAC/mechanical system inspection is required on all interior and/or exterior building mechanical systems. The installing contractor is responsible for scheduling this inspection with the HVAC Inspector. Final HVAC/mechanical system inspection(s) may include requirements for: smoke and fire damper actuation testing and inspection, smoke control system operational testing and inspection, fuel burning equipment start-up or air handling equipment operational testing and inspection, etc. Required equipment test results must be made available to the Construction Inspector before a final inspection of the building. The HVAC equipment installation inspection must be completed and approved by the HVAC Inspector prior to scheduling the building final inspection.

Plumbing

A final plumbing inspection is required on all interior and exterior plumbing system installations. The installing contractor is responsible for scheduling all required plumbing inspections with the Plumbing Inspector. Final plumbing inspection(s) may include requirements for hydrostatic testing of water services, air tests on exterior sanitary and storm sewer piping, chlorination and subsequent flushing and bacterial testing of all potable water distribution systems, interior manometer testing, backflow preventer device testing, and gas piping air tests. A copy of the domestic water line bacterial test results must be submitted to the Plumbing Inspector prior to final building inspection.

Electrical

A final electrical inspection is required on all interior and exterior electrical system installation for the project. The installing contractor is responsible for scheduling all required electrical inspections. The final electrical inspection must be completed and approved by the Electrical Inspector prior to scheduling the building final inspection.

Emergency Generators

The final emergency generator system start-up/operational test and final inspection must be scheduled with the installing contractor and the Electrical Inspector and Construction Inspector. The installing contractor is responsible for installing and subsequently testing the generator system in accordance with the State Electrical Code, NFPA 110, NFPA 111, and the State Building Code.

Special Piping

All miscellaneous gas piping, medical gas piping, process piping, hydronic piping, plumbing piping, and other mechanical equipment piping must be pressure tested prior to the final occupancy inspection of the building. Written verification of required piping pressure tests must be made available to the Plumbing Inspector before final occupancy inspection of the building. A copy of the third party medical gas test/inspection must also be made available to the Plumbing Inspector prior to final inspection of the building.

High Pressure Piping

All high-pressure-piping [HPP] piping over 15 PSIG, all ammonia piping systems, all HPP/high-temp piping systems over 250 Degrees/30PSI, and all high-pressure boiler system installations must be inspected by the Minnesota DOLI CCLD State High-Pressure-Piping Inspectors and/or a State Boiler Inspector- or their approved designee. The installing contractor is responsible for scheduling all required inspections for this equipment with CCLD staff. Written verification of required final inspection(s) approval must be made available to the Construction Inspector before final occupancy inspection of the building.

HVAC Equipment Balancing Report

A final HVAC equipment balancing report must be submitted for the buildings' HVAC air handling system and all hydronic equipment. Final balancing reports and/or test results must be submitted to the HVAC Inspector prior to final HVAC/Mechanical system inspection and issuance of the Certificate of Occupancy.

Special Inspection & Final Testing Summary Report

A final Special Inspection & Testing Summary report must be completed and submitted to the Construction Inspector once all required special inspections are done for the project. The final summary report must state that all required special inspections/testing have been completed, tested, and/or inspected as required by the code and by the structural engineer and/or architect of record. It must also contain language to verify that said inspections and test results meet the building code and the project specification requirements. This report must be submitted to the Construction Inspector as soon as possible, but at a minimum, before the final occupancy inspection of the building.

Occupancy of Buildings

Buildings or parts of buildings undergoing construction or change or use shall not be occupied until the Building Official has issued a certificate of occupancy. Certificates of occupancy will be issued only when work is complete and all required reports and documentation has been submitted and the Building Official has inspected the building and found no violations of the building code or other applicable regulations. Certificates of Occupancy will be prepared within three working days of approved final inspection and receipt of required documents.