



Burnsville Fire Department

100 Civic Center Pky, Burnsville, MN 55337
Fire Marshal: 952-895-4579 FAX: 952-895-4512

2016 FIRE SUPPRESSION PERMIT APPLICATION

**PERMIT
SUBTYPE:**

- | | | | |
|--------------------------------------|-------------------------------------|--|--|
| <input type="checkbox"/> Wet System | <input type="checkbox"/> Dry System | <input type="checkbox"/> Cooking Hood | <input type="checkbox"/> Clean Agent |
| <input type="checkbox"/> Spray Booth | <input type="checkbox"/> Fire Pump | <input type="checkbox"/> Pre-Action | <input type="checkbox"/> Deluge |
| <input type="checkbox"/> Anti-Freeze | <input type="checkbox"/> Other | <input type="checkbox"/> Residential – 13D | <input type="checkbox"/> Residential – 13R |

Date _____

Estimated Project Completion Date: _____

Site Address	_____ Burnsville, MN Suite # _____
Building Name	_____
Tenant Name	_____ MSFC Occupancy Class: _____

Applicant: Owner Contractor Other _____

Property Owner	Name/Company _____ Phone No. _____ Address _____ City _____ State _____ Zip _____
Contractor	Company _____ Phone No. _____ Contractor License No.: _____ Expiration Date _____ Address _____ City _____ State _____ Zip _____ Contact Person (Print) _____ Phone No. _____ Email _____

Fire Permit Fee & Plan Review Fee:

Job Value \$ _____

1.5% of Job Value less than or equal to \$10,000 and _____
 1% of Job Value greater than \$10,000 plus surcharge + _____
 (Surcharge = Job Value x .0005) + _____

Permit Fee _____ (Minimum \$80.00)

Example: \$12,000 Job Value
 10,000 x 1.5% = 150.00
 2,000 x 1% = 20.00
 12,000 x .0005 = 6.00
 Permit Fee 176.00
 +
 Plan Review Fee
 65% x 176.00 = 114.40
Total Due = \$290.40

Plus Plan Review Fee, if Applicable

(Plan Review Fee required on Job Values greater than \$5,000 and New systems over 20 heads)

65% x Permit Fee + _____

TOTAL DUE _____

Minimum Permit Fee of \$80.00 (includes State Surcharge)

Existing Sprinkler System installed: Yes No

Existing Fire Alarm System / Sprinkler Monitoring installed: Yes No

Permit work meets requirements of NFPA 13 Edition: (year) _____

Occupancy Classification: A-1 A-2 A-3 A-4 A-5 B E F-1 F-2 H-1 H-2 H-3 H-4
(see desc. under appl. requirements)
I-1 I-2 I-3 I-4 M R-1 R-2 R-3 R-4 S-1 S-2 U

Hazard Classification: Light Hazard Ordinary Hazard (Group 1) Ordinary Hazard (Group 2)
 Extra Hazard (Group 1) Extra Hazard (Group 2)

Special Occupancy Hazards: Reference additional NFPA standard: _____

Construction Type Type I Type II Type III Type IV (Heavy Timber) Type V (Wood Frame)

Commodity Classification: Class I Class II Class III Class IV
 Plastics (Group A) Plastics (Group B) Plastics (Group C)

Plans/specs are required with permit application

Permit Work / Description (please be specific to the area of the building the work is to be performed):

I hereby apply for a Fire Suppression permit and acknowledge that the information is complete and accurate; that the work will be in conformance with the ordinances and codes of the City of Burnsville, the MN State Building / Fire Codes and applicable NFPA Standards; that I understand this is not a permit, but only an application for a permit, and work is not to start without a permit; that the work will be in accordance with the approved plan in the case of work which requires a review and approval of plans.

Applicant Signature

Date

Permit Reviewed By

Title

Date

FOR OFFICE USE

REQUIRED INSPECTIONS:

Wet/Dry System: Rough-in Hydro-50/static Hydro-200 psi Central Station Final
Dry (Add'l): Pneumatic Trip

Other Systems: Central Station Cooking Hood Clean Agent 13-R Spray Booth
 Anti-Freeze Dry Chem Wet Chem 13-D Pre-Action
 Deluge Standpipe Fire Pump Foam Other

REQUIRED DOCUMENTATION: Field Acceptance Paperwork Central Station Signals

PLANS AND SPECS SCANNED TO: E-Trak It

Fire Suppression Permit Application Requirements

(Please keep in mind that this is a generic listing of requirements and not necessarily all will apply to your specific installation).

Fire Suppression systems shall be designed and installed to the requirements of the 2007 Minnesota State Fire Code (MSFC) and 2010 edition of NFPA 13. Contractors shall be familiar with the MN amendments to the 2006 International Fire Code (IFC).

Permit Application, Plans and Cut Sheet

- A permit is required and shall be secured by the BFD prior to starting the installation of the following:
 - Installation of new sprinkler systems
 - Moving or Adding heads
 - Replacing 10 heads or more (or 10% of building system)
 - Replacing recalled heads (If this is the only work done, minimum permit fee applies).
- Note: If a permit is NOT required, a copy of the contractor's work order is REQUIRED as documentation of the work performed. Fax (952-895-4512) or email doug.nelson@ci.burnsville.mn.us
- Permit application and fee must accompany plans for review.
- Provide two (2) sets of plan drawings and one (1) set of original equipment technical/data sheets.
- Provide an electronic copy of plan drawings and original equipment technical/data sheets. They may be e-mailed to doug.nelson@ci.burnsville.mn.us. Please include the type of permit and address on the subject line of the e-mail.
- Plans are required for all changes to existing systems with a job value greater than \$5,000 and all new systems over 20 sprinkler heads. Rough drawings are appreciated for systems changes involving less than 20 heads.
- Plans may be reviewed by a private fire protection company. An additional fee will be charged for this review.
- Two sets of plan drawings are required for Fire Department. Additional sets will be stamped and returned as requested. Corrections will be noted on reviewed plans.
- One set hydraulic calculations, and one set of technical/data sheets are required on all devices.
- Hydraulic design information must include allowable storage height and aisle width. Indicate which section and figures of NFPA 13 were used to determine density requirements.
- Warehouse buildings, spec buildings with unknown use, and buildings with a design that can be readily changed in use must be provided with sprinkler protection that allows for increased capability. Sprinkler system capability must accommodate rack storage of commodity 4 materials to a storage height of three feet below the roof deck. This is the minimum protection allowed. Extended coverage sprinkler heads otherwise rated for ordinary protection cannot be used due to limitations of spacing for future upgrades.

Permit and Plan Review fee

- Permit fee based on Job Value with a minimum fee of \$80.00
- Plan review fee required if any of the following:
 - Job Values greater than \$5,000
 - New systems over 20 sprinkler heads

Coverage

- NFPA 13 standard followed unless 13-R or 13-D specifically apply and are approved.
- Where Apartment/hotel style residential buildings are required to be designed per NFPA 13 standards.
 - Coverage must be provided in bathrooms and closets.
 - Linen style closets with shelving and with a size of 4 square feet or less are exempt.
 - Attics are required to be sprinklered.
- NFPA13R systems: No reduction in construction requirements, access or water supply is allowed
- Required in any attached structures.
- Required beneath overhead doors and stairways.
- Required in concealed combustible spaces. Wood frame construction with combustible spaces between floors must be sprinklered or qualify for NFPA 13 exceptions. Open web truss construction must be sprinklered as exceptions do not apply.

Post Indicator Valve (PIV) - required

- Yard PIV must be located a minimum distance of 1 ½ times the height of the building away from the structure.
- Wall PIV (WPIV) allowed. Location shall be approved by AHJ.
- Tamper switch is required.
- Alarm supervision is required

Hydrants, Fire Department Connection (FDC)

- Hydrant required within 100 feet of FDC and within 400 feet of all points of building perimeter.
- Hydrant (s) must be accessible to fire equipment
- A double connection (2 - 2 ½") is required.

Wet Systems

- Inspectors test valve must be labeled and accessible.
- Specifications are required for sprinkler heads installed.
- Tests required: Hydrostatic (2 hour/200 psi or 50 psi over static), Main drain, Flow test

Dry Systems

- Air Compressor must be designed with a storage tank.
 - Air pressure must be regulated by an approved air maintenance device.
 - Alarm piping connected to a pressure switch must be equipped with a valve that is designed to accept a tamper switch or be secured by a lock.
 - High and Low air pressure alarm is required.
 - The electrical power supply for the air compressor must be wired directly to the electrical supply, with the circuit breaker secured.
- Specifications are required for sprinkler heads installed.
- Tests required: Hydrostatic, Pneumatic and Trip test.

Main Drain

- Valve must be labeled and must open to the building exterior

Detector Check Valve – required

- Control valves are required on both sides of the detector check valve (city side & system side).
- By-pass meter is not required.

Spray Booth Protection

- Interior Horn/strobe is required in immediate area of booths to alert occupants of system discharge.
- Sprinkler system isolation valve required for spray booths.
- Separate fire alarm, mechanical and electrical permits are required. Contact the Burnsville Protective Inspections Dept for more information.

Elevator

- For elevator installations, sprinklers shall not be installed in elevator pits, machine rooms or shafts.

Plastic Pipe

- Listed for particular use.
- Installation per listing
 - Cold temperature installation not allowed.
 - Exposed piping allowed on flat ceilings only.

Central Station (UL-72 Certification):

- Not all systems are required to be monitored by an approved monitoring company. Monitoring is required in new buildings with 20 or more sprinkler heads and existing buildings with 100 or more sprinkler heads.
- UL certification is required for monitored systems that include new installations, fire panel replacement/upgrade, major remodels. A fax back from UL will be required at the time of the final inspection.

Permit work approval

- Final permit approval will be withheld and occupancy will not be granted until a final test has been witnessed, all inspections conducted and approved by the BFD.

Miscellaneous

- Outside horn/light device must be strobe style (not bulb style).
- Interior alarm horn, if required must be installed in a typically occupied area.
- Tamper switches are required on all control valves including the PIV.
- Piping that is disconnected or abandoned during renovation must be removed.
- Prior to scheduling a full function test/inspection with the BFD, the installer shall test all devices, system components and functions to 100%.
- Sprinkler contractor will coordinate with fire alarm contractor for full function test/inspection.
- Per NFPA 13, sprinkler contractor is required to provide the building owner with a copy of NFPA 25.
- A permanent map is to be located at the FAAP and sprinkler control room. This map should show all control valves and drains. The map shall show the sprinkler zones and where the control valve is located for that zone.
- For cooking hood systems, see COOKING HOOD REQUIREMENTS (separate document)

Note: BFD requires copies of contractor's annual inspection reports within 45 days of the inspection date. Permit or work orders (as applicable) are required for documentation that the deficiencies have been corrected.

OCCUPANCY CLASSIFICATIONS MN State Fire Code – 2007

- Group A – Assembly (50 or more persons):
 - A-1 - Theaters (performing arts, fixed seats)
 - A-2 - Dining and drinking (food/drink)
 - A-3 - Auditoriums, gymnasiums, museums (worship, recreation, amusement, other)
 - A-4 - Arenas, swimming pools, tennis courts (indoor spectator seating)
 - A-5 - Stadiums, grandstands (outdoor seating)
- Group B – Business:
 - Professional services
 - College/university classrooms
 - Offices
 - Clinics (including outpatient)
 - Motor vehicle showrooms
 - Electronic data processing
 - Assembly – less than 50 persons
- Group E – Educational (through 12th grade):
 - Pre-school
 - K-12
 - Adult Day Care (occupants capable of escape)
 - Day Care – older children (see I-4 for younger)
- Group F – Factory/Industrial:
 - F-1 - Moderate Hazard (combustible materials):
 - Aircraft
 - Automobiles
 - Boats
 - Metal
 - Rugs
 - Woodworking
 - F-2 - Low Hazard – Not a significant fire risk (mostly non-combustible materials):
 - Non-alcoholic beverages
 - Brick & Masonry
 - Ceramic products
 - Glass
 - Gypsum
 - Ice
 - Metal Products (fabrication & assembly)
- Group H – Hazardous Occupancies:
 - Group H-1: detonation hazard (explosive materials)
 - Group H-2: deflagration / accelerated burning (flammable/combustible liquids in use, dusts)
 - Group H-3: readily support combustion or pose physical hazard (flammable/combustible liquids in storage, flammable solids, Class 2 or 3 oxidizers)
 - Group H-4: health hazards (corrosives, toxic materials)
 - Group H-5: semiconductor fabrication
- Group I – Institutional:
 - Group I-1 (more than 16 persons):
 - Supervised residential (group homes, congregate care, half-way houses, treatment centers, board & care, Supervised living facilities – Class A-2*)
 - Group I-2:
 - Hospitals
 - Nursing homes
 - Detox centers
 - Supervised living facilities – Class B-3*
 - Group I-3: jails, prisons
 - Group I-4: day-care facilities (adult or child) for 6 or more persons not capable of self preservation*
- Group M – Mercantile:
 - Stores
 - Retail/wholesale stores
 - Sales rooms
 - Motor vehicle fuel dispensing (no repairs)
- Group R – Residential:
 - Group R-1 (transient in nature < 30 days):
 - Hotels / Motels
 - Boarding houses
 - Bed & breakfast with 6 or more guest rooms*
 - Group R-2:
 - Apartments (includes assisted living facilities without personal care)
 - Dormitories
 - Boarding houses or hotels (not transient)
 - Fraternities and sororities
 - Convents / Monasteries
 - Group R-3:
 - One & two family homes
 - Bed & breakfast with 5 or fewer rooms*
 - Day care (family & group family) for 5 or fewer*
 - Supervised living facilities (A-1 & B-1)*
 - Group R-4: residential care and assisted living (for 6-16 people):
 - Supervised living facilities (A-2 and B-2)*
- Group S – Storage:
 - Group S-1: moderate hazard (combustible):
 - Combustible materials
 - Vehicle repair garages
 - Group S-2: low hazard (non-combustible):
 - Metal items
 - Glass, ceramic
 - Parking garages
- Group U – Miscellaneous:
 - Private garages
 - Fences
 - Towers
 - Sheds
 - Agricultural buildings