



Burnsville Fire Department

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

2016 FIRE ALARM PERMIT APPLICATION

PERMIT SUBTYPE: Full Installation Remodel / Partial Installation

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 + _____
 (State 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 Value greater than \$5,000, replacing alarm panel, replacing devices with different manufacturer and/or model.)

65% x Permit Fee + _____

TOTAL DUE \$ _____

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

Existing Fire Alarm System: Yes No

UL Fire Alarm Certificate currently issued for system: Yes No --- If yes, cert #: FC _____

Permit work meets requirements of NFPA 72 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

Occupancy Load for Assembly occupancies (A-1, A-2, A-3, A-4, A-5): _____

Plans/specs submitted with permit application: Yes No

Permit Work / Description:

I hereby apply for a Fire Alarm 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:

Rough-in Field Testing Central Station Fire Alarm – Final Other _____

REQUIRED DOCUMENTATION: Field Acceptance Paperwork Central Station Signals UL Cert

PLANS AND SPECS SCANNED TO: E-TrakIt

Burnsville Fire Department (BFD)

Fire Alarm 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 alarm systems shall be designed and installed to the requirements of the 2007 Minnesota State Fire Code (MSFC), 2010 Edition of NFPA 72 (National Fire Alarm & Signaling Code) and 2008 Edition of NFPA 70 (National Electrical Code). Contractors shall be familiar with the MN amendments to the 2006 International Fire Code. Note: Exceptions exist in MSFC when fire sprinklers are installed throughout a building.

1) Permit Application, Plans and Cut Sheet

- A permit is required for installation and shall be secured by the BFD prior to starting the installation.
- 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 Fire Alarm permit and address on the subject line of the e-mail.*

2) 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:
 - o Job Values greater than \$5,000
 - o Replacing fire alarm panel
 - o Replacing devices with different Manufacturer and/or model

3) System Design, Drawings

- System designed by qualified personnel having the following qualifications (2010 NFPA 72, section 10.4.1.2):
 - o Factory trained and certified in fire alarm system design and emergency communications system design
 - o NICET fire alarm certified – minimum level III
 - o Licensed or certified by the state of MN.
- Drawings shall be legible, scaled, and **ONLY** contain fire alarm components.
- All symbols shall conform to NFPA 170 standard symbology where applicable. A symbol key shall be included in the submittal documentation for any nonstandard symbols

Note: Security system components may be included.

4) Floor plans

- A floor plan shall be provided indicating the location of devices, appliances, end of line devices, conduit and wire runs, conduit sizes, and number and size of conductors. Zone indications shall be placed adjacent to the appropriate EOL.

4) Elevations & Reflected Ceiling plans

- Provide elevations where necessary to show heights for reduction of spacing.
- Provide reflected ceiling plans where necessary to show non-smooth ceiling configurations.

5) Conductor Details & Point to Point

- Provide details for conductors on the plans, including type, manufacturer, and size.
- A full or typical point-to-point wiring configuration shall be provided for each type of device

6) Equipment Detail Drawings shall include the following:

- Exterior and underground fire alarm components
- Transition from exterior to interior
- Manual fire alarm boxes and horn/strobes (including installation heights)
- FACP, annunciator panels (FAAP) and external power supplies
- Heat and smoke detectors
- Fire sprinkler water flow and tamper switches, including PIV
- All other fire alarm system components

7) Addressability/Zoning

- All systems installed shall be addressable fire alarm systems unless a zoned system is approved by BFD.
- If applicable, a zone schedule shall be provided indicating zone designation, type of device(s) on the zone, and location information.
- A permanent zone identification map shall be located at the FAAP. The zoning of all fire alarm systems shall be approved by BFD.

8) Operational Matrix

- Provide an operational matrix or other descriptive account indicating all system inputs and outputs.

9) Calculations

- Voltage drop calculations, circuit amperage, and secondary power supply (battery) calculations shall be submitted. (Secondary power requirements: 24 hours of stand-by power and then five minutes of alarm annunciation).

Note: Where security system components are powered from the FACP, they shall be included in the battery calculations.

10) Central Station (UL-72 Certification):

- UL certification is required for monitored systems that include new installations, fire panel replacement/upgrade, and major remodels.
- Grandfathering of non-UL accounts will eventually be phased out. It is highly recommended to proactively obtain a UL -72 certification on all non-UL fire alarm systems.
- A copy of the UL fire alarm certificate will be required at the time of the final inspection.

11) Miscellaneous:

- A separate electrical permit is NOT required for fire alarm systems, however both the Fire Prevention Division and Electrical Inspector must approve the permit work. Please schedule the Electrical Inspector (952-895-4444) before the Fire Prevention (952-895-4579) final inspection.
- All smoke detection for HVAC shutdown and control of dampers shall be installed per the mechanical engineer's design and approved plans by the Burnsville Protective Inspections Department. Contact the Mechanical inspector for required inspections.
- Duct smoke detectors shall be programmed as a supervisory signal.
- Smoke detectors shall be tested using a suitable aerosol spray or method designated by the mfg. specs.
- 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 sprinkler control valves including the PIV.
- Elevator installations shall meet the requirements of the current MN Elevator Code. Permits are required for installation of smoke detection for elevator recall. Final testing shall be coordinated with BFD and State elevator inspector.
- Fire alarm electrical circuit breaker must be locked out to prevent tampering and marked in red.
- 24 hour battery test will be scheduled with the BFD prior to the full function test
- Prior to scheduling a full function test/inspection with the BFD, the installer shall test 100% of the devices, system components and functions. Fire alarm contractor will coordinate with sprinkler contractor for full function test/inspection.
- Final approval will be withheld and occupancy will not be granted until a final test has been witnessed and approved by the BFD (and final inspection by the Electrical Inspector, if required).

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