



CLARK COUNTY FIRE DEPARTMENT
Fire Prevention Bureau
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Permit Type: 105.7.1
Control Number: G.0
Effective Date: 11/15/11

TITLE: FOAM-WATER SPRINKLER AND FOAM-WATER SPRAY SYSTEMS

SCOPE: Clark County Fire Department requirements for the submittal and design foam-water sprinkler and foam-water spray systems.

For new work in existing buildings, see the "New Work in Existing Buildings" guideline.

PURPOSE: Clark County Fire Department requirements for the permitting of foam-water sprinkler and foam-water spray systems in accordance with (NFPA) 16, NFPA 409 and current manufacturer specifications for permits for foam-water sprinkler and foam-water spray systems. Permits are valid through the duration of construction. Work must commence within 180 days, and remain active with no period of inactivity exceeding 180 days, or the permit becomes invalid.

DEFINITIONS:

Assessor's Parcel Number (APN): A unique number assigned to each property by the Clark County Assessor's office.

Listed: Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction.

PERMIT FEES:

Permit fees shall be assessed in accordance with the Permit Fee Schedule as adopted in the Clark County Fire Code. For applications that are expedited, additional fees shall apply.

SPECIFICATIONS AND SUBMITTAL REQUIREMENTS:

An application must be completed for each submittal. A minimum of three sets of plans shall be submitted with the permit application. Plans shall show compliance in accordance with Section 904 of the Clark County Fire Code, as adopted and amended by the Clark County Fire Code. All submittals must be legible and readable or the plan shall be issued a correction letter for cause.

Plans shall address the following:

General Suppression System requirements

1. Name of owner and occupant.
2. Location, including street address and APN.
3. Name, address, phone number, and contractor's license number of installing contractor.
4. Signature and NICET number, or engineer's seal, of the designer.
5. General notes as required by the AHJ.
6. Point of compass.
7. A graphic representation of the scale used on all plans.
8. Nevada State Fire Marshal license number.
9. Designate the Authority Having Jurisdiction.
10. State that installation conforms to NFPA 16, Clark County Fire Code, and the Nevada State Fire Marshal Regulations.
11. System design and installation shall be in accordance with the manufacturer's installation and design manuals.
12. Provide statement that only equipment referenced in the manufacturer's listed installation and maintenance manual shall be used.
13. Plans shall be drawn to an indicated scale or be suitable dimensioned
14. Include the pipe size, sprinklers to be used, maximum square footage of the coverage area and locations of strainers.
15. Indicate water supply designed to supply system at discharge rate and pressure for at least 60 minutes and foam for 10 minutes.
16. Provide design density.
17. Indicate percentage of foam to water.
18. Indicate method of drainage.
19. Indicate hazard to be protected and location of foam storage tanks in relation to the hazard.
20. Provide rated capacity of tank(s).
21. Provide method of automatic and manual activation means.
22. Indicate connections to means for tripping water deluge valves and other system-control equipment.
23. Provide detail on the atmosphere. If corrosive, provide method of corrosion protection.
24. Indicate type and quantity of foam and provide MSDS.
25. Indicate method of tank protection (from damage, freezing, corrosion, etc.).
26. Provide hydraulic calculations – most hydraulically demanding and least hydraulically demanding. Also provide the quantity of foam concentrate to be stored, including reserve, the concentration designation and the minimum anticipated temperature of the concentrate at the point of proportioning.
27. Describe the pumps, drivers, controllers, power supply, fittings, suction and discharge connections and suction conditions.
28. Provide pump curve.

29. Indicate draft curtains, detection zones, and drainage area separations.
30. Indicate tests that are to be performed and witnessed. Include the PSI to which the system will be hydrostatically tested (minimum 200 psi).
31. Indicate method of supervision. Provide location of audible or visual indicator that shows the system has operated.

PERMIT REVISIONS AND RESUBMITTALS:

Revisions to approved plans are required to be submitted and approved. Revisions will be assessed additional plan review fees. A copy of the previously approved plan shall accompany the revised submittal to facilitate the review. Clearly indicate all changes to the revised plans by clouding the change with a delta number signify the date of plan change. When several changes have been made, the Plans Checker may also require a detailed list of changes.

Re-submittals to address a Letter of Correction will require a full submittal. These plans require a copy of the red lined plan from the previous submittal to facilitate the review. Clearly indicate all changes by clouding the change with the delta number to signify the date of plan change.

PLANS CHECK STATUS INSTRUCTIONS:

The status of the review can be checked by logging on to:

www.clarkcountynv.gov/depts/fire

INSPECTIONS THAT MAY BE REQUIRED AND SCHEDULING INSTRUCTIONS:

If approved, an inspection will need to be scheduled. To schedule an inspection, go to www.clarkcountynv.gov/depts/fire . A fire inspector will review your site in accordance with the approved plans and this guideline.

The Clark County Fire Department's Fire Prevention Bureau (FPB) may witness and accept inspection, testing and maintenance of fire and life safety systems conducted by approved individuals as required by and within the scope and authority of the Clark County Fire Code.

This Guideline does not take the place of the Fire Code and does not take precedence over any Fire Code requirement or position taken by the Fire Chief. When a conflict exists between the requirements of this Guideline and the Fire Code or the opinion of the Fire Chief, the Fire Code or opinion of the Fire Chief prevails.

Technical Assistance, when required by the Fire Chief, will require a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.

Acceptance of Alternative Materials and Methods requires a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.