



City of Marco Island

DEPARTMENT OF FIRE PREVENTION

1280 San Marco Rd.
Marco Island FL 34145
239-394-5405

FIRE SPRINKLER
OVERHEAD/
UNDERGROUND

PLAN CHECKLIST

(For Plan Design Review)

Original Document – 05-21-2013

City of Marco Island “Fire Sprinkler Overhead/ Underground Checklist for Plan and Submittal Review”

The following is intended to assist the engineer and/or installing contractor in designing and submitting for review - a “code compliant” – Fire Sprinkler System. This document in no way details all of the requirements that may be necessary for a complete code compliant system.

Note: Systems shall be designed in accordance with the codes and standards adopted in Rule Chapter 69A-60 The Florida Fire Prevention Code, NFPA 1 the Florida specific version, NFPA 101 the Florida specific version, NFPA 13 and the City of Marco Island Code of Ordinances.

Checklist

Submittal Type

Yes **N/A**

- Initial application (First Submittal)
- Resubmittal addressing correction items.
- Plan Modification/inspection upgrade of existing building (Plan changes after approved plans have been issued)

Design Description

Yes **N/A**

- NFPA 13
- NFPA 13R
- NFPA 130
- NFPA 130 Modified
- Live Work Unit

Documents Provided

Yes **N/A**

- Fire Sprinkler Permit Application – all pages
- Fire Sprinkler Hydraulic Calculations
- Fire sprinkler plans
- Signed Copy of Owner's Certificate
- Water Supply Information from local water purveyor (within last 12 months).
- Manufacture's Specification Sheet for each Sprinkler Type and all other Devices
- Hydraulic Calculations in the form specified in the latest edition of NFPA 13.
- Existing system design information including: type of system, design of system (tree, grid, loop, etc), sprinkler spacing, hydraulic information, pump information, water supply used.

- ○ High Piled/Rack & Combustible Storage
- ○ Preaction release/detection system drawings and details.

Plan sheets: *Shall be drawn to an indicated scale on sheets of uniform size, with a plan of each floor and show those items from the following list that pertains to the design of the system.*

Yes N/A

- ○ All plan sheets shall include title block, name and address of project, name and address of contractor
- ○ Point of compass
- ○ Full height cross section of building *with fire protection piping shown* (including structural information)
- ○ Site plan (Include streets, adjacent buildings, property lines with a clearly marked North)
- ○ Sprinkler head legend provided on *cover sheet* with total number of each type of sprinkler for the entire project
- ○ Sprinkler head legend provided on *each sheet* with total number of each type of sprinkler on that sheet. Sprinkler legend to include: Make, Type, Model, K-Factor, Sprinkler Identification Number, *Maximum spacing that has been used in the hydraulic calculations* for each sprinkler type.
- ○ A graphic representation of the scale.
- ○ Total area protected by each system on each floor.
- ○ Clearly differentiate full height walls (walls to the deck) from partial walls and fire walls
- ○ Lights (Indicate if they are surface mounted or flush) (Required on 130 and 13R)
Occupancy class of each room.
- ○ Any small enclosures in which no sprinklers are to be installed. (Clearly indicate why sprinklers are not being installed in these areas.)
- ○ Pipe type and wall thickness.
- ○ Nominal pipe size and cutting lengths.
- ○ Type and location of hangers, sleeves and braces (Zone of influence shown on plans)
- ○ Riser Detail including: valves, backflow preventer, exterior bell, monitor switches, flow switches, air maintenance device, quick opening device, etc.
- ○ Hanger details
- ○ Floor level control values

- ○ Where the permitted work is an addition to an existing system, enough of the existing system shall be indicated on the plans to make all related code conditions clear. This includes enough of the system surrounding the scope of work to make it clear if the existing fire protection has been compromised.
- ○ Hydraulic Reference points shown on the plans that correspond with the reference points on the hydraulic calculations sheets.
- ○ The minimum rate of water application (density or flow or discharge pressure), the design area of water application, in-rack sprinkler demand, and the water required for hose streams both inside and outside. Flow test information (static residual, GPM date)
- ○ Clearly indicate the hydraulic most remote area(s) calculated.
- ○ If room design method is used, indicate all self closing doors and wall ratings.
- ○ Capacity in gallons of dry pipe system.
- ○ Stand pipe location, pipe sizes, and interconnection of multiple stand pipes.
- ○ The zone of influence shown for each lateral and longitudinal sway brace that has been calculated.
- ○ Location of hydrants
- ○ Size, location and piping arrangement of fire department connections.
- ○ Ceiling/roof heights and slopes (roof pitch)
- ○ Key plan on each drawing showing location of work for that drawing.
- ○ Vicinity map (showing location of project)
- ○ Grid points and line numbers. (Column Lines)
- ○ Fire pump make, model, rating, details and detailed piping schematic.
- ○ Under Ground Piping Plan including: Pipe size, type, Tap location, Depth of burial of pipe, Thrust block locations
- ○ Total number of sprinklers on the project.

I hereby attest that, to the best of my knowledge, the aforementioned checklist information, the submitted calculation(s) are accurate and adequate for the system design being submitted.

Applicant Name (print)

Applicant Company

Applicant Signature

State Registration Number

Address

City

State

Zip Code

Telephone Number

E-mail address

Date

