

FIRE & LIFE SAFETY PLAN REVIEW SUBMITTAL GUIDELINE

TITLE SHEET - To include but not limited to:

- Name & address of project.
- Description of Work and Scope of Project.
- Applicable Building and Fire Code and all NFPA Standards applicable to the project.
- Note any Deferred Approval for Automatic Fire Sprinklers or other systems requested.

BUILDING CODE ANALYSIS - (for each separate building) To include:

- Type of Occupancy, Type of Construction and total allowable square footage.
- Allowable area increase calculations for sprinklers and/or frontage (if used).
- Identify whether Separated or Non-Separated use.
- Number of Stories/Basements, Total Height in feet.
- Note any alternate means of protection/construction with documentation on plan.
- Note if building is or is not to be provided with sprinklers and/or fire alarm system.
- Note if project is in a Fire Severity Zone for Wildland Urban Interface requirements (CBC 7A)

SITE PLAN SHEET(s) - To include:

- A plan of the entire site with all buildings at an appropriate scale.
- Indicate the area of work if for remodels or alterations/additions.
- Note the name and/or designations for all buildings.
- Show any and all property lines, assumed property lines, areas used for frontage.
- Show all access roads, fire department connections, fences, gates, and safe dispersal areas.
- Show the location of any existing and/or new fire hydrants with available fire flow.
- Identify Fire Department Access and obtain Local Fire Department review of site plan for state projects.

LIFE SAFETY & EXITING PLAN - (Required):

- Label all rooms as to their use within the building and identify occupancy classifications as appropriate.
- Complete floor plan of each floor indicating the exiting path from each room and floor with common path of travel distances and maximum travel distance identified, as required by code to the exits.
- Calculated occupant loads for spaces and egress loads at exit doors.
- Indicate location of all illuminated exit signs and tactile signs.
- Note all fire resistive walls (fire walls, fire barriers, shaft walls, etc.) and fire areas.
- Location of fire sprinkler riser, fire department connections, and fire alarm control panels
- For new construction, provide location of a room capacity sign if occupant load is over 50, place at or near the main exit door from the room. (Title 19, Section 3.30)
- Show location of all fire extinguishers by type and size.

FLOOR PLAN SHEET(s) - To include:

- Floor plan of every building within the scope of the work in 1/8" or 1/4" scale, show all dimensions
- Label all rooms with their name or use, show all door swings and all partition walls.
- Separately identify all rated corridor walls, fire walls and smoke barriers.
- Show section through rated corridor indicating how one-hour protection is maintained for each condition.
- Provide appropriate references to rated construction and/or conditions. Where rated conditions are allowed to be exempted, provide note with appropriate code section.
- Identify kitchen hoods as Type I or Type II (per mechanical code)

CEILING PLAN SHEET(s) - To include:

- Type of ceiling provided.
- Reference to appropriate detail for rated ceilings
- Location of all light fixtures in ceilings.

ROOF PLAN SHEET - To include:

- Note the roof classification in accordance with CBC Chapter 15, with listed assembly numbers.
- Note slope of roof(s).
- Note all draft stops (if required)

DOOR SCHEDULE(s) - Provided on plans and to include:

- Door identification
- Required rating of door and frame
- Required Panic Hardware noted
- Door Size
- Hardware Group
- Building identification in which it is located

DETAILS - To include:

- Details for all rated conditions, appropriately referenced with an assembly/ design number or identification for specific rated condition. Sample of conditions as follows:
- Fire Partition, Fire Wall, Fire Barriers, interior and exterior conditions.
- Floor/ceiling and/or roof/ceilings.
- Electrical panels and fire extinguishers within fire resistive construction.
- Rated access panels and hatches.
- Shaft wall construction for stairs, elevators. Type 1 hood duct chases.
- Show all fire blocking for wood construction.
- Show protection of Structural Frame if rated construction.

MECHANICAL DRAWING(s) - To include:

- Schedule of all HVAC equipment with noted CFM and an air balancing schedule.
- HVAC units with CFM's in excess of 2000 are noted to be provided with automatic shut-down per CMC 609, or appropriate exception is to be noted.
- For HVAC units with automatic shut-down, note whether by area detection or duct detector.
- Location of any required fire-resistive walls is highly desirable to be shown on mechanical plans with the location of required fire/smoke dampers.

PLUMBING DRAWING(s) - To include:

- Floor plan showing all gas piping and any hazardous (acid) waste piping.
- Shut off for gas piping noted. Each building to have separate shut off.
- Through-penetration detail(s), if rated construction is involved. (If rated details are provided on architectural drawings, provide reference to those details.)

ELECTRICAL DRAWING(s) - To include:

- Floor plan showing emergency lighting and exit signs.
- Location of any required fire-resistive walls is highly desirable, indicate highest KVA for transformers and highest voltage for each electrical room.

FIRE & LIFE SAFETY - SPECIFICATIONS

Specifications hold a different purpose for fire and life safety than other contractual issues. For fire and life safety code enforcement they play a limited role. The governing principle behind this philosophy is that if the issue is important for fire and life safety, it should be shown on the drawings itself. This is especially true for fire alarm drawings and sprinkler drawings. Once the project is constructed, the plans will normally be found within the records, however, specifications seem to disappear from the owner's possession. Because these are life safety systems, it is imperative that a complete and accurate record of the construction and the life safety systems be maintained and be available. Consideration should be given to providing a record set on computer disk, especially for large projects.

The following are some items that the designer are responsible for showing on the plans and/or within the specifications that are subject to Fire and Life Safety Regulations, but, may not necessarily be commented on during the fire code plan review process.

1. **Door Hardware:** Groups should be shown on the door schedule. Specific type latching mechanisms are not reviewed except for noting of panic hardware. Dead bolts are not allowed on doors from bathrooms or areas utilized by the public unless the dead bolt will release upon the activation of the door handle. (This is referred to as a single acting lock which meets the intent of the CBC).
2. **Interior Flame Spread Ratings:** must comply with CBC Chapter 8 and Table 803.9 which delineates the allowable flame spread for all wall & ceiling finishes.
3. **Roof Coverings:** should be noted in specifications. The roof covering classification should be noted on the drawings to show compliance with CBC Chapter 5 and then the specification should show how you obtain that classification.
4. **Performance Specs:** for Fire Alarm Systems, Sprinkler Systems and Standpipe Systems.

5. **Pipe Materials**: as to the specific type of piping that may be used.
6. **Insulation Materials**: to meet required flame spread and smoke density ratings of duct and pipe at given locations.
7. **Fire Proofing**: specifications and special inspection provisions.
8. **Portable Fire Extinguisher**: specifications. Type and size should be noted on drawings.

The above items are subject to field inspection for compliance.