

# A PRACTICAL SUPPRESSION DESIGN-SPEC CHECKLIST

An overview of design-specification basics that greatly help bidding for contractors. For more resources, including free summaries like this, visit [www.meyerfire.com/subscribe](http://www.meyerfire.com/subscribe).

Scope of Work	Description	Included
Area	Is the area of work clearly defined on drawings?	<input type="checkbox"/>
Extent of Demo	The extent of demolished components clearly defined on drawings?	<input type="checkbox"/>
Equipment	New & replaced equipment clearly identified on drawings?	<input type="checkbox"/>
Pipe	Will existing pipe be allowed for reuse?	<input type="checkbox"/>
Sprinklers	Quantity of new and relocated sprinklers?	<input type="checkbox"/>
Standpipe	Will a standpipe system be required? If so, is the type (ie: manual or automatic, wet or dry), class (ie: Class I, II, or III), and hose valve locations identified (ie: floor level or intermediate level)?	<input type="checkbox"/>
Requirements	Description	Included
Codes	Applicable building and fire codes, with editions, identified (ie: IBC, IFBC)?	<input type="checkbox"/>
Standards	Applicable design standards, with editions, identified (ie: NFPA 13, 13R, 13D)?	<input type="checkbox"/>
Insurer	Are applicable insurer requirements identified (ie: FM Global, XL GAPS)?	<input type="checkbox"/>
Hazards		
Construction Type	Is construction type identified? Note: this impacts protection & design criteria for combustibles concealed spaces.	<input type="checkbox"/>
Hazard Classification	Is the fire sprinkler design criteria clearly identified (ie: design density/flow and design area size, with hose allowances)? Are all storage areas classified?	<input type="checkbox"/>
Seismic Category	Is the seismic design category included, such that seismic requirements can be clearly identified?	<input type="checkbox"/>
Building-Specific	Description	Included
System Type	What type of system(s) will be provided? Will a dry or pre-action system be necessary? Deluge?	<input type="checkbox"/>
Building-Specific Requirements	Will any of the following be used on the project: closely-spaced sprinklers for atrium enclosure, attic protection, canopy/overhang protection, cloud ceilings, compactor protection, cooler/freezer protection, dock area protection, elevators, mobile partitions, non-heated spaces, protection below overhead doors, protection below raised floors, protection for skylights, chutes, or use of window sprinklers?	<input type="checkbox"/>
Preferences	Description	Included
Armovers	Are flexible armovers permitted for the project?	<input type="checkbox"/>
Pipe	Is the type (ie: black steel, CPVC, copper, galvanized) and thickness (ie: schedule 10, 40) identified?	<input type="checkbox"/>
Sprinklers	Is the type (ie: recessed, concealed), finish (ie: white, chrome), and tile location (ie: center of tile) identified?	<input type="checkbox"/>
Supply	Description	Included
Backflow	Is the type and location of the backflow preventer clearly identified?	<input type="checkbox"/>
Flow Test Information	Recent flow test information provided, or water storage tank with volume and elevation? Note: this is critical for design-spec projects where the contractor may need to perform calculations prior to bid.	<input type="checkbox"/>
Fire Pump Need	Is a fire pump required for the project? Have preliminary calculations been conducted to confirm? If provided, is a fire pump type, location, and size clearly identified?	<input type="checkbox"/>
Tank Need	Is a water storage tank necessary for the project?	<input type="checkbox"/>
Water Quality	Are there concerns with water quality that need to be addressed by the contractor?	<input type="checkbox"/>
Coordination	Description	Included
Architectural	Is there sufficient space to accommodate all fire protection equipment, with working clearances? Are there any code allowances used that affect the NFPA 13 version?	<input type="checkbox"/>
Civil	Is the service main large enough to accommodate the suppression system? Is a hydrant near enough to the FDC to meet local requirements?	<input type="checkbox"/>
Electrical	Has power been provided for any equipment (compressors, monitoring panels, 120V bells, fire pump, etc.)? Has sprinkler monitoring equipment (waterflow, pressure, tamper switches, nitrogen inertion) been accommodated by fire alarm or a sprinkler monitoring panel?	<input type="checkbox"/>
Fire Department	Is the type and location of the FDC indicated? Are hose valve locations coordinated (where provided)? Is the hydraulic safety factor identified?	<input type="checkbox"/>
Mechanical	Are all areas with wet pipe adequately heated? Are areas with equipment adequately cooled?	<input type="checkbox"/>
Plumbing	Have any drain locations needed for the suppression system been coordinated with plumbing design?	<input type="checkbox"/>
Structural	Is there sufficient structural support to account for suppression systems? Can the structural design accommodate likely main locations?	<input type="checkbox"/>