

## Fire Protection Division of Responsibilities (DOR) for Construction Inspection

V= verify W = witness

V or V/W	Inspection	Const. Insp.	FP Division
<b>Fire protection water supply systems</b>			
V	1. Underground piping materials, size and routing meets design	X	
V	2. Restraint methods (thrust blocks, retaining fittings) meet design	X	
V	3. Appurtenances (hydrants, valves, etc.) and locations meet design		X
V/W	4. Hydrostatic (leak) testing of piping	X	
V/W	5. Flushing of underground piping	X	
V	6. Backfill and compaction methods meet design requirements	X	

<b>Sprinkler system piping</b>			
V	1. Pipe routing and size meets design documents	X	
V	2. Piping is properly supported per design documents	X	
V	3. Piping is properly braced (seismic restraints installed per design)	X	
V	4. Anchor bolt installations for supports per design documents	X	
V/W	5. Hydrostatic (leak) test of piping	X	
V/W	6. Flushing of underground piping connections	X	
V	7. Proper clearances between piping and adjacent commodities	X	
V	8. Sprinkler heads are properly installed (type, orifice size, orientation, coverage, temperature rating, etc.)  <div style="text-align: right; margin-right: 20px;">During installation At final</div>	X	X
V/W	9. Flow testing (alarm testing) of system piping		X
V	10. Proper installation of system components (valves, alarm valves, trim, alarm devices, supervisory air, backflow prevention, drains, gauges and other appurtenances) per design documents during install  <div style="text-align: right; margin-right: 20px;">During installation At final</div>	X	X
V	11. Proper signage, labels and flow arrows on piping and components  <div style="text-align: right; margin-right: 20px;">During installation At final</div>	X	X
V	12. Proper methods for freeze protection (anti-freeze loops, dry and preaction configurations, etc.)		X

<b>Special extinguishing systems</b>			
V	1. Pipe routing and size meets design documents	X	
V	2. Piping is properly supported per design documents	X	
V	3. Piping is properly braced (seismic restraints installed per design)	X	
V	4. Anchor bolt installations for supports per design documents	X	
V/W	5. Hydrostatic (leak) test of piping	X	

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V	6. Proper clearances between piping and adjacent commodities	X	
V	7. Discharge nozzles are properly installed (type, orifice size, orientation, coverage, obstructions, etc.)  <div style="text-align: right;">During installation At final</div>	X	X
V/W	8. System actuation and alarm testing		X
V	9. Proper installation of system components (valves, agent storage containers, alarm devices, supervisory devices, gauges and other appurtenances) per design documents  <div style="text-align: right;">During installation At final</div>	X	X
V	10. Proper functionality of control system logic and control functions, releasing panel, auxiliary functions (fan shutdown, power shunt-trip, door closure, damper closure, pre-discharge alarms, abort stations, etc.) Per design drawings		X
V	11. Proper signage, labels and flow arrows on piping and components  <div style="text-align: right;">During installation At final</div>	X	X

### Building construction features, walls/barriers

V	1. Fire-rated floor and roof systems are constructed per design	X	
V	2. Roof systems/covering assemblies are installed per design	X	
V	3. Fire-rated walls/barriers constructed per design documents	X	
V	4. Fire-rated walls/barriers labeled/stenciled with appropriate rating	X	
V	5. Through penetration firestop system installations in walls/barriers meet design documents	X	

### Fire doors / fire windows

V	1. Doors/windows, frames and hardware have proper rating, properly close and latch, are labeled and meet design documents	X	
V	2. Doors/windows properly operate (release, close, latch) when inter-looked with fire detection and alarm system		X

### Fire-proofing/coatings

V	1. Fire-proofing installed per vendor instructions	X	
V	2. Patches and repairs to fire-proofing are installed properly	X	

### Fire Detection and Alarm Systems

V	1. Proper routing of conduit, raceway, etc.	X	
V	2. Continuity and/or meggar testing of conductors/cable	X	

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V	3. System components are installed in proper locations and at proper heights per design documents	X	
V	4. Proper conductors/cabling used per design documents	X	
V	5. Wiring and termination to control panels and field devices are properly routed and landed per design documents	X	
V	6. Proper voltage on fire alarm conductors	X	
V	7. Proper functionality of fire alarm system devices		X
V	8. Proper functionality of fire alarm system logic and control functions per design drawings		X
V	9. Proper fire alarm system control logic, including auxiliary functions per design drawings		X
V	10. Proper remote reporting to CAS		X
V	11. Size and type of batteries per drawings and calculations		X

### Elevators

V	1. Elevators are programmed properly for fire safety (recall floors, shut-trip, interlock with fire alarm system)		X
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### HVAC

V	1. HVAC fan shutdown upon duct smoke detector activation and/or other control requirement via fire detection and alarm system		X
V	2. Fire and smoke dampers are installed per design documents	X	
V	3. Smoke damper controls function per design drawings, interlocked with fire alarm system		X
V	4. Proper setting (fusible link temp) and operation of fire dampers		X

### Emergency Lighting/EXIT signage

V	1. Installation in accordance with design (configuration with lighting, mounting, locations)	X	
V	2. Satisfactory testing/commissioning by LANL Start-Up		X

### Portable fire extinguishers

V	1. Installation/placement and appropriateness with hazards in accordance with design		X
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Approved by Jim Streit, FP-DO and Ed Lucero, CM-CE; signed file with CENG-STDS