



IDAHO STATE FIRE MARSHAL
Department of Insurance
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Boise, Idaho 83720-0043
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CLEAN AGENT PLAN REVIEW APPLICATION

NEW

RESUBMITTAL

DATE: _____

NAME OF PROJECT		STATE PROJECT	
		Yes	No
ADDRESS OF PROJECT			
CITY OF PROJECT		COUNTY OF PROJECT	
FIRE DEPARTMENT JURISDICTION			

OWNER'S INFORMATION

OWNER'S NAME		
OWNER'S ADDRESS		
CITY	STATE	ZIP

DESIGN CONTRACTOR

CONTRACTOR'S NAME		
CONTRACTOR'S ADDRESS		
CITY	STATE	ZIP
CONTACT NAME	PHONE NUMBER	EMAIL

INSTALLATION CONTRACTOR

CONTRACTOR'S NAME		
CONTRACTOR'S ADDRESS		
CITY	STATE	ZIP

Shop drawings for clean agent systems are intended to provide basic information consistent with the objective of installing a fully operational, code compliant clean agent system and to provide the basis for the required record (as-built) drawings.

APPROVAL OF SHOP DRAWINGS IS NOT INTENDED TO IMPLY WAIVER OR MODIFICATION OF ANY REQUIREMENTS OF THE STATE LAWS OR RULES, INTERNATIONAL FIRE CODE, THE NFPA 2001 STANDARD OR ANY OTHER APPLICABLE CRITERIA.

ANY CHANGES, MODIFICATIONS, ADDENDUMS, AND/OR SUPPLEMENTAL INSTRUCTIONS TO THE APPROVED SET OF PLANS AFTER DATE OF APPROVAL WILL REQUIRE RESUBMITTAL AND APPROVAL THROUGH THE STATE FIRE MARSHALS OFFICE.

NFPA 2001, 5.1.2.2.

Working plans shall be drawn to an indicated scale and shall show the following items that pertain to the design of the system:

1. Name of owner and occupant
2. Location, including street address
3. Point of compass and symbol legend
4. Location and construction of protected enclosure walls and partitions
5. Location of fire walls
6. Enclosure cross section, shown as a full-height or schematic diagram, including location and construction of building floor-ceiling assemblies above and below, raised access floor, and suspended ceiling
7. Agent being used
8. Agent concentration at the lowest temperature and the highest temperature for which the enclosure is protected
9. Description of occupancies and hazards being protected, designating whether the enclosure is normally occupied
10. For an enclosure protected by a clean agent fire extinguishing system, an estimate of the maximum positive pressure and the maximum negative pressure, relative to ambient pressure, expected to be developed upon the discharge of agent
11. Description of exposures surrounding the enclosure
12. Description of the agent storage containers used, including internal volume, storage pressure, and nominal capacity expressed in units of agent mass or volume at standard conditions of temperature and pressure
13. Description of nozzle(s) used, including size, orifice port configuration, and equivalent orifice area
14. Description of pipe and fittings used, including material specifications, grade, and pressure rating
15. Description of wire or cable used, including classification, gauge [American Wire Gauge (AWG)], shielding, number of strands in conductor, conductor material, and color coding schedule; segregation requirements of various system conductors; and required method of making wire terminations
16. Description of the method of detector mounting
17. Equipment schedule or bill of materials for each piece of equipment or device showing device name, manufacturer, model or part number, quantity, and description
18. Plan view of protected area showing enclosure partitions (full and partial height); agent distribution system, including agent storage containers, piping, and nozzles; type of pipe hangers and rigid pipe supports; detection, alarm, and control system, including all devices and schematic of wiring interconnection between them; end-of-line device locations; location of controlled devices such as dampers and shutters; and location of instructional signage
19. Isometric view of agent distribution system showing the length and diameter of each pipe segment; node reference numbers relating to the flow calculations; fittings, including reducers, strainers, and orientation of tees; and nozzles, including size, orifice port configuration, flow rate, and equivalent orifice area
20. Scale drawing showing the layout of the annunciator panel graphics
21. Details of each unique rigid pipe support configuration showing method of securement to the pipe and to the building structure
22. Details of the method of container securement showing method of securement to the container and to the building structure
23. Complete step-by-step description of the system sequence of operations, including functioning of abort and maintenance switches, delay timers, and emergency power shutdown
24. Point-to-point wiring schematic diagrams showing all circuit connections to the system control panel and graphic annunciator panel
25. Point-to-point wiring schematic diagrams showing all circuit connections to external or add-on relays
26. Complete calculations to determine enclosure volume, quantity of clean agent, and size of backup batteries; method used to determine number and location of audible and visual indicating devices; and number and location of detectors
27. Details of any special features
28. Pressure relief vent area, or equivalent leakage area, for the protected enclosure to prevent development, during system discharge, of a pressure difference across the enclosure boundaries that exceeds a specified enclosure pressure limit