

Example Functional Matrix of Systems Integration Showing Relationship with Water-Based Fire Protection

System Input	System Output	Activate Fire Alarm	Supervisory Signal to FACP	Activate Lights on FACP	FACP Notify Central Station	Release Door Hold-Open Devices	Speaker-Strobe Floor of Incident	Speaker-Strobe Floor Above	Speaker-Strobe Floor Below	Spkr-Strobe All Parking Levels	Check Communications	Primary Elevator Recall	Secondary Elevator Recall	Shunt Trip EI Equipment	Activate Smoke Control Panel **	Start EI Shaft PF	Start Stair 1 PF	Start Stair 2 PF	Start Smokeproof Enclosure EF	Start Corridor EF	Stop Corridor Fresh Air Fan	Start Garage EF(s)	Close Fire Dampers	Close Smoke Dampers	No Smoke Spread Fire Floor	No Smoke Spread Floor Above	No Smoke Spread Floor Below	Shut Down Music	Shut Down Paging System	Start Exit Lights Flashing	Fire Pump Running	Door Open Light on			
Elevator Lobby SD																																			
Floor Smoke Detector																																			
Special Detectors																																			
FM200 System						X									X	X	X	X	X	X	X	X	X	X	X										
SD Elev Equip RM																																			
HD Elev Equip RM																																			
Restaurant UL300																																			
Manual Pull Station																																			
Waterflow	Water-Based System Would Not Activate Unless FM200 System Failed to Extinguish the Fire																																		
Duct SD																																			
* Usually Only the SD in Front of the Elevator or One in the Elevator Equipment Room Activate Elevator Recall																																			
** Smoke Control Systems are Usually Activated in Response to Automatic Devices (SD, HD, Waterflow)																																			
*** See Student Manual Job Aids for Types of Detectors																																			
Note: Test all system functions on emergency power.																																			
Name of Project:																																			
Address of Project:																																			
Project Engineer:																																			
Permit Number																																			
Building Permit Number																																			
Fire Alarm Permit Number																																			
Any Sprinkler Permit Number																																			
Any Other Permits Related to the Project																																			