# WHEA FSE inspections



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- Buildings are protected from fire by a series of detection, notification and suppression devices
- Each feature of fire safety must be fully operational
- Each device must be tested to ensure it is functional and dependable
- The Joint Commission requires a working inventory of devices, so if one is not tested or fails it may be located
- REMINDER: the Joint Commission uses the 2000 edition of the Life Safety Code

# EC.02.03.05 EP1 Supervisory Signal Devices



 A device that sends a signal back to the main fire alarm panel (e.g., fire pump running, loss of power to fire pump, fire pump room temperature problems, etc.)
 Must be tested quarterly

# EC.02.03.05 EP2 Water Flow Switches



- These devices alarm when the flow of water is detected in the sprinkler system – i.e., possibly a sprinkler head activated
- Must be tested quarterly
  - Semi-annually if not seeking deemed status

# EC.02.03.05 EP2 Valve Tamper Switches

- Monitors sprinkler zone valves; a signal is sent to main fire alarm panel if attempt to close
- Must be tested semiannually
- If a valve does not have a tamper switch, it must be locked in the open position



# EC.02.03.05 - EP3 Detectors and Door Releasing Devices

Includes duct/ heat/smoke detectors, manual pull stations, and magnetic door releasing devices.

Must be tested annually









## EC.02.03.05 – EP5 Fire Notification Devices



 Includes audible devices, speakers and visible devices.
 Must be tested annually





# EC.02.03.05 – EP4 Fire Alarm Testing Inventory

LOCATION	DEVICE TYPE	VISUAL CHECK	FUNCTIONAL TEST	PASS	FAIL
Nursing Unit 2 West	All strobes	X	Х	X	
Nursing Unit 2 West	All horns	X	, Х.,	X	
Nursing Unit 2 East	All strobes	Х	X	X	
Nursing Unit 2 East	All horns	X	X	X	
4th Floor West	All strobles	X	Χ.	X	
4th Floor West	All horns	X	X	X	
4th Floor East	All strok	X	X	X	
4th Floor East	All he is	X	X	х	
Surgery West	obes	Х	X	X	
Surgery West	A orns	X	X	X	
Surgery East	l a bes	Х	X	X	
Surgery East	All ho.	X	X	X	



#### **Device Specific**

For example, if there were 132 devices and one was broken, how would you know which one was broken without an active and device specific inventory

Ø	LOCATION & S/N	DEVICE TYPE	VISUAL CHECK	FUNCTIONAL TEST	FACTORY SETTING	MEASURED	PASS	FAIL
	1 BLDG 5 GND. FL. ROOM C	VISUAL ALARM	x	х			х	
	I BLOG 5 GMD. FL. BY STAFF LOCKERS	HORM/STROBE	x	x			х	
	1 BLDG 5 GND. FL. BY STAFF	HORN/STROBE	x	x		The short	x	
	1 BLDG 5 GND. FL. BY STAFF LOCKERS DOORS	HORN/STROBE	. ×	x			Х	
	1 BLDG 5 GMD. FL. IN CONFERENCE RM	HORN/STROBE	x	x			х	_
	1 BLDG 5 GND. FL. BY OPERATIONS OFFICE	HORN/STROBE	x	x			x	
	1 BLDG 5 GND. FL. BY EXAM 8	HORM/STROBE	x	x			x	
	1 BLDG 5 GMD. FL. BY EXAM 5	HORN/STROBE	x	x			x	
	1 BLDG 5 GND. FL. RESTRM BY EXAM 6	HORN/STROBE	x	x			х	
à	1 BLDG 5 GMD. FL. RESTRM BY EXAM 3	HORN/STROBE	х	x			х	

# EC.02.03.05 – EP5 Fire Alarm Offsite Notification



 If fire alarm panel is activated, the feature notifies off-site responders automatically
 Must be tested quarterly



TIP: Many times this test is completed and documented as part of quarterly fire drills

# EC.02.03.05 – EP6 Fire Pump Weekly Run Test (No Flow)



- Purpose of test is to verify pump is in operating condition
- Pump needs to run for a minimum of ten minutes(water flow is not required)



- Conducted to determine a change in the condition of water supply piping or control valves
- Must be conducted annually

- These are connections through which the fire department can pump supplemental water into the building sprinkler system or standpipe system
- Visible and Accessible
- Caps in place
- Must be inspected quarterly





# EC.02.03.05 – EP11R Fire Pump Annual Test Under Flow



Evaluate against previous test

 Purpose of test is to verify that pump can provide the needed amount of water
 Length of pump test time is based upon pump's rating



# EC.02.03.05 - EP12 5 Year Standpipe Test

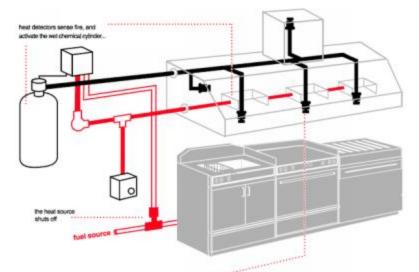


- Purpose of flow test is to verify the water supply provides design pressure at the required flow
- Hydrostatic test required on dry standpipes for two hours



# EC.02.03.05 – EP13 Kitchen Automatic Extinquishment

- Shuts off fuel source automatically.
   Connected to fire alarm panel
   Must be inspected every 6 months
   Actual discharge is not required
   K Type portable fire extinguisher
  - Class K Fire Extinguishers use a wet, potassium acetate-based, low pH agent to put out "cooking" fires in which there are animal or vegetable oils and fats.

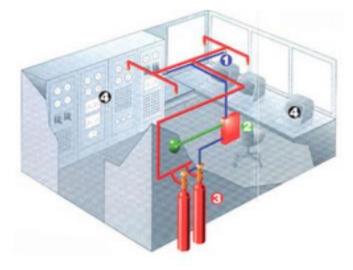




EC.02.03.05 – EP14 Carbon Dioxide &other Gaseous Automatic Systems

# Must be inspected annually Actual discharge is not required





# EC.02.03.05 – EP15 and 16 Portable Fire Extinguishers

# Monthly Visible Inspection

- Accessible
- Fully charged
- Any Parts broken
- Correct type
- DO NOT COUNT DAYS, BUT ENSURE MONTHLY INSPECTION
- Annual Maintenance by a licensed Fire Protection service company





# EC.02.03.05 – Portable Fire Extinguishers Types

A	Common Combustibles	Wood, paper, cloth etc.
B	Flammable liquids and gases	Gasoline, propane and solvents
C	Live electrical equipment	Computers, fax machines (see note!)
	Combustible metals	Magnesium, lithium, titanium
K	Cooking media	Cooking oils and fats

Note: The installation of a wrong type of extinguisher can be scored at LS.02.01.35 EP 14 (e.g., no K type in the kitchen) or EC.02.03.01 EP 1 (business occupancies)

- 4-3.4 Inspection Recordkeeping.
- 4-3.4.1 Personnel making inspections shall keep records of all fire extinguishers inspected, including those found to require corrective action.
- 4-3.4.2 At least monthly, the date the inspection was performed and the initials of the person performing the inspection shall be recorded.
- 4-3.4.3 Records shall be kept on a tag or label attached to the fire extinguisher, on an inspection checklist maintained on file, or in an electronic system (e.g., bar coding) that provides a permanent record.

#### DO NOT COUNT DAYS, BUT ENSURE MONTHLY INSPECTION

# EC.02.03.05 – Portable Fire Extinguishers Types

# Must be hydrostatically tested 5 years after installation and every 3 years thereafter



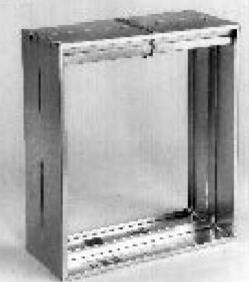
Note: Most fire departments do not rely on these hoses, because they bring their own hoses. They can only be removed if written approval is given by local fire department with an equivalency given by The Joint Commission.

### EC.02.03.05 – EP18 Fire Dampers

- Stops the passage of fire through ventilation ductwork
- Activated by fusible link
- Inspected and tested within one year of installation and every six years thereafter



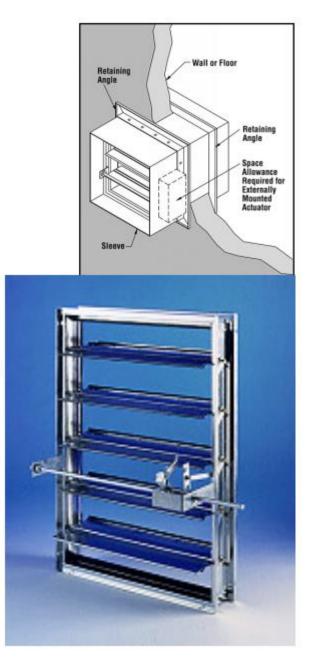






# EC.02.03.05 – EP18 Smoke Dampers

- Stops the passage of smoke through ventilation ductwork
- Activated by external smoke detector
- Must be installed within 24 inches of smoke partitions
- Inspected and tested after one year of installation and then every six years



# EC.02.03.05 – EP19R Ventilation Shut Down Devices



- Stops the passage of smoke through ventilation ductwork
- Activated by external smoke detector
- Must be installed within 24 inches of smoke partitions
- Inspected and tested after one year of installation and then every six years

# Duct Detector Testing Air Handler Shutdown

LOCATION & S/N	Device Type	VISUAL	FUNCTIONAL TEST	FACTORY SETTING	MEASURED	Pass	FAIL
CONV 6TH FLOOR NORTH HALLWAY	Photo Detector		X.	actions	DETERM	X	FAIL
CONV 6TH FLOOR	Photo Detector		×			х	
CONV 6TH FLOOR NORTH HALLWAY	Photo Detector		x			х	
CONV 6TH FLOOR NORTH HALLWAY	Photo Detector		Х			х	
CONV 6TH FLOOR NORTH HALLWAY	Photo Detector		х			х	
CONV 6TH FLOOR NORTH HALLWAY	Photo Detector		x			х	
CONV 6TH FLOOR NORTH HALLWAY	Photo Detector		х			х	
CONV 6TH FLOOR NORTH HALLWAY	Photo Detector		x			x	
CONV 6TH FLOOR NORTH HALLWAY	Photo Detector		x			×	
CONV 6TH FLOOR NORTH HALLWAY	Ionization Detector		х			x	
CONV 6TH FLOOR NORTH HALLWAY	Ionization Detector		x			х	
CONV 6TH FLOOR NORTH HALLWAY	Ionization Detector		×			х	
CONV 6TH FLOOR CENTER HALLWAY	Ionization Detector		x			х	
CONV 6TH FLOOR SOUTH HALLWAY	Ionization Detector		x			х	
CONV 6TH FLOOR SOUTH HALLWAY	Ionization Detector		х			x	
CONV 6TH FLOOR FAN	Duct Photo Detector		x			х	
CONV 6TH FLOOR FAN ROOM 54	Duct Photo Detector		х			х	
CONV 6TH FLOOR FAN ROOM 56	Duct Photo Detector		×			x	_
CONV 6TH FLOOR FAN ROOM 57/8	Duct Photo Detector		x			х	
CONV 6TH FLOOR FAN ROOM 57/8	Duct Photo Detector		x			х	
CONV 6TH FLOOR FAN LOOM 57/8	Duct Photo Detector		x			x	
ONV 6TH FLOOR FAN	Duct Photo Detector		х			х	
ONV 6TH FLOOR FAN	Duct Photo Detector		x			х	_
ONV 6TH FLOOR FAN	Duct Photo Detector		x			х	_

This form documents detector testing only – Not compliant





# **Best Practice**

Use Building Automation to Document

- Alarm activation
- •Fan status (supply and return)
- Return to normal

# EC.02.03.05 – EP20 Rolling Fire Doors

# Activated by fusible link Fusible link shall not be painted Must be tested annually





Documentation of maintenance, testing, and inspection activities for fire alarm and water-based fire protection systems includes the following:

NFPA 25
 NFPA72

# EC.02.03.05 – EP25 Joint Commission Accreditation

- Name of the activity
- Date of the activity
- Required frequency of the activity
- Name and contact information, including affiliation, of the person who performed the activity
- □ NFPA standard(s) referenced for the activity
- Results of the activity
- Report with Deficiency and follow up.