

## Fire Alarm Acceptance Testing Procedures

<p>1. Verify that the AC circuit is dedicated, equipped with a breaker lock, and labeled properly.</p>	
<p>2. Ask the technician to turn off the dedicated AC circuit. Then activate the nearest manual fire alarm box to put the system into alarm.</p>	<p>Verify that a trouble annunciates on the FACP within 200 seconds.</p>
<p>3. This is a good time to do a walk-thru of the building to check each audiovisual and test the batteries on full load (5 minutes for horn/strobes and 15 minutes for voice evacuation.)</p>	<p>Verify that the strobes and audible devices synchronize.  This is also a good time to verify that devices are installed in accordance with the approved plans.</p>
<p>4. Silence the audiovisuals on the FACP at the conclusion of the full load battery test.</p>	<p>Verify that audible and visual devices cease operation upon being silenced.</p>
<p><b>Control Panel:</b></p>	
<p>5. With AC power restored, unplug one battery lead.</p>	<p>Verify that a trouble annunciates on the FACP within 200 seconds.</p>
<p>6. Compare the calculated size of the batteries in the submittal to the actual batteries installed.</p>	<p>Verify that the manufacture date of the batteries is written on the batteries.</p>
<p>7. If a DACT is utilized for the transmission means, remove one phone line. Consideration will be given to performance based transmission means.</p>	<p>Verify that a trouble annunciates on the FACP.</p>
<p><b>Field Devices:</b></p>	
<p>8. Blow canned smoke on at least one detector. Test heat detectors as detailed by the manufacturer.</p>	<p>Verify an alarm signal is received at the FACP and verify that the location/description/ID are correct. Also, ensure it is installed properly.</p>
<p>9. Activate a manual fire alarm box.</p>	<p>Verify that an alarm is received at the FACP and verify that the location/description/ID are correct. Also, ensure it is mounted between 42-48" AFF and within 5' horizontal distance from the egress door.</p>
<p>10. Use a magnet, test switch, or canned smoke and activate a duct smoke detector.</p>	<p>Verify that the fan shuts down immediately. Next, verify that the proper signal is received at the FACP. Whether these are programmed as a supervisory signal or alarm signal is up to the AHJ. Also, ensure the duct detector remote test switch is labeled for the unit served.</p>
<p>11. Remove a smoke/heat detector head from its base.</p>	<p>Verify trouble annunciation at the FACP within 200 seconds.</p>
<p>12. Ask the installer to remove a wire from one randomly selected audiovisual device.</p>	<p>Verify that a trouble annunciates at the FACP within 200 seconds. Also, verify proper mounting height.</p>
<p>13. Create a ground fault on the system.</p>	<p>Verify that this condition annunciates on the FACP</p>

<b>Communications:</b>	
14. Ensure that the supervising station has a valid address and valid business name.	
15. Ensure that the supervising station has the correct phone number for the dispatch agency.	
16. Verify that signals are being received (from the protected premises) at the supervising station.	
<b>Sprinkler Devices (if applicable):</b>	
17. All sprinkler devices shall be tested with both the sprinkler and fire alarm contractors present.	
18. Turn off each control valve and turn back on.	Verify that a supervisory signal is received at the FACP and watch for restore.
19. Flow water through the inspector's test for wet alarm.	Verify the alarm activates in the allowable timeframe and verify that an alarm is received at the FACP.
20. Dry Sprinkler: Increase air pressure to activate high air pressure and partially bleed air pressure.	Verify that a high pressure supervisory signal and low pressure supervisory signal are received at the FACP.
21. Dry Sprinkler: Flow through the inspector's test.	Verify the alarm activates in the allowable timeframe and verify that an alarm is received at the FACP.
<b>Ancillary Functions (If applicable)</b>	
22. Phase I Elevator Recall	Verify this function.
23. Door hold-open devices	Verify their operation.
24. Smoke Management Systems	Verify their integration.
25. Type I Hood Suppression microswitch	Verify operation and alarm receipt.
26. Emergency Responder Radio Coverage Systems	Verify their integration.
27. Unlocking of Security Doors	Verify fire alarm integration
<b>Fire Pump (If applicable)</b>	
28. Fire Pump Running	Verify supervisory signal at FACP.
29. Fire Pump Power from Alternate Source	Verify supervisory signal at FACP.
30. Fire Pump Phase Loss/Reversal	Verify supervisory signal at FACP.
<b>Final Acceptance:</b>	
31. Ensure the FACP is tagged by the installing contractor.	
32. Ensure that the required document box is installed near the FACP.	Verify that the manuals, program (on a thumb drive), copy of the record of completion, and associated fire alarm keys are inside.
33. Ensure that the required annunciator panel is located at the main fire department entry point.	

**34. Make sure that you receive the necessary fire alarm keys and the record of completion for your files.**

**\*\*Conclude Testing\*\***

*\*\*Note: This may not be an inclusive list, but can serve as a great guide when completing a fire alarm acceptance test. This was produced utilizing NFPA 72 (2016 edition).\*\**