

Office of the Illinois State Fire Marshal

PROXIMATE PYROTECHNICS CHECKLIST (AHJ/Inspector)

1. Pyrotechnic walkthrough and demonstration:

- Confirm venue management consent to pyrotechnics.
- Verify pyrotechnic plot with actual site dimensions/adjustments.
- Type of devices - verify indoor/proximate use & performance specifications (NFPA 1126: 7.1, 7.2, 7.3, 7.4).
- Verify quantities, locations, and cueing of devices to be used.
- Verify secure areas and methods for restricting unauthorized persons from entering.

2. Verify that all devices are securely fixed with proper audience separation:

- Minimum 15 ft or 2X fallout radius (NFPA 1126: 8.4.1)
- Concussion mortars a minimum 25 ft in secured area (NFPA 1126: 8.4.2)
- Warning signal lights must be used to indicate the impending firing of a concussion special effect. The warning signal lights shall be located at least 25' from the concussion effect but within a distance to warn working personnel and other individuals of the impending concussion effect firing. (41 IL Admin code 230.260 E)
- Trajectory of comets/mines not over audience (NFPA 1126: 8.2.10)
- Waterfall effect area free of flammable materials (NFPA 1126: 8.2.11)
- Grid rocket effects properly secured and terminated (NFPA 1126: 8.2.8.1)
- At no time shall the path of a rocket or grid rocket pass directly over an audience in its travel. (41 ILL Admin code 230.260 D 1)
- Airbursts over audience to be minimum height of 3 times the diameter of effect, and no sparks within 15 ft of floor (NFPA 1126: 8.2.13(1) & (2) & (3))

3. Check firefighting equipment:

- At least 4 pressurized water or pump extinguishers shall be readily available for use (with the manufacturer's instructions). (41 ILL.Admin code 230.260 C)
- Other firefighting equipment as needed/required (NFPA 1126: 8.1.1.2)
- Existing on-site firefighting equipment/systems

4. Pyrotechnic firing systems:

- Verify operational/safety features and functions of systems (NFPA 1126: 8.3.2 & 8.3.3)
- Verify operator & spotters have clear view of effects and communication with operator (NFPA 1126: 8.3.5.1)

5. Determine need for demonstration of representative effects:

- Live demonstration can be required by authority having jurisdiction prior to approval (NFPA 1126: 6.4.1.2)
- 6. Determine plan for HVAC /detectors adjustments & notification of demonstration:**
- Smoke control (NFPA 1126: 8.6.6)
- 7. Check plans for approved and secure on-site storage and preparation areas:**
- Storage of pyrotechnic material and devices (NFPA 1126: 5.1)
 - Any time pyrotechnic material is stored within the facility, it must be stored in a Type 3 storage day box (41 IL Admin Code 230.260 b.1)
 - The mixing room shall be placarded (41 IL Admin Code 230.260 b.3)
 - A 2-1/2 gallon pressurized water fire extinguisher shall be located within 10 feet of the mixing room and the door shall be locked when unattended (41 IL Admin Code 230.260 b.4)
 - The mixing room shall not have carpeting on the floor (41 IL Admin Code 230.260 b.5)
- 8. Safety Precautions:**
- Separation from heat/flame sparks (NFPA 1126: 5.3)
 - No smoking within 25 ft (signage) (NFPA 1126: 8.5.5.1)
 - Materials stored/handled neatly and orderly (NFPA 1126: 8.5.1)
 - Prior to commencement of the live entertainment, an announcement to the patrons of the licensed premises must be made to inform the patrons of the locations of exits and fire escapes at the licensed premises. (41 IL Admin Code 230.260 F)
- 9. Check plan for personal protective equipment for preparation and loading of pyrotechnics:**
- The lead operator and assistant shall wear safety glasses and clothing made of cotton during the preparation and loading of pyrotechnic devices (41 IL Admin Code 230.260 G)
 - Verify proper State of Illinois Pyrotechnic Operator and Distributor License per (425 ILCS 35/2.1)