NFPA code 160: 2021 Edition

Chapter 14 Fire Performers

- **14.1 Performers.** All Performers shall act in accordance with 8.1.2.
- 14.1.1 Capability.
- **14.1.1.1** Performers shall comply with Section 8.3
- **14.1.1.2** Each performer must be physically capable of executing their performance.
- **14.1.1.3** At least one cast member shall be designated the flame effects operator and comply with the requirements in Chapter 8.

14.1.2 Rehearsal.

- **14.1.2.1** Each routine shall be rehearsed in costume with fire prior to the initial performance before an audience or after any change to the performance has been made.
- **14.1.2.2** The flame effects operator shall confirm the cast members and the routine are ready for performance before an audience.
- **14.1.3** Clothing Fire performers shall comply with the requirements of Section 7.10.

14.2 Safety Personnel.

- **14.2.1** Each performance and rehearsal with fire shall have at least one spotter.
- **14.2.1.1** Spotters shall be in charge of both on stage and back stage fire safety, including emergent and intentional wick extinguishing.
- **14.2.1.2** Spotters shall be aware of the aspects of fire performance and be familiar with the routine to be performed.
- **14.2.1.3** Spotters shall be trained in flame extinguishing, reaction time, equipment control and audience control.
- **14.2.1.4** Spotters shall be attentive and have clear view and unobstructed access to the hazard they are responsible for.
- **14.2.1.5** Spotters shall comply with the requirements of Section 7.10.
- **14.2.1.6** Spotters shall carry a safety towel at all times.
- **14.2.1.7** Spotters shall have unobstructed access to the fire extinguisher required in 16.3.2.

14.3 Fire Props.

14.3.1 Testing.

- **14.3.1.1** Fire props shall be tested prior to each use to verify that they operate in accordance with their intended use.
- **14.3.1.2** Any defects found in the fire props shall be repaired or replaced.

14.3.2 Wicks.

- **14.3.2.1** Wicks shall be fire resistant, absorbent material intended to temporarily store and convey fuel to the flame effect during the performance.
- **14.3.3.2** Wicks should be attached to the fire prop such that they cannot be forcibly removed from the prop.
- **14.3.2.3** Wick material shall be made in such a way as to prevent loss of any part of the wick during use.

14.3.3 Handles.

14.3.3.1 Shafted fire props shall either be made of fire resistant materials or have a fire resistant covering that extends at least 4 inches (100 mm) beyond the anticipated flame contact zones.

- **14.3.3.2** Chain grips shall be made of non combustible materials.
- **14.3.4 Connectors.** Connectors shall be constructed to prevent inadvertent separation from wick and handles

14.3.5 Fueling.

- **14.3.5.1** Fueling shall take place in an approved area.
- **14.3.5.2** Excess fuel that has been removed shall be stored in accordance with NFPA 1 or NFPA 30
- **14.3.5.2.1** Fuel residue shall be removed immediately after performance
- **14.3.5.2.2** Fuel soaked waste shall be stored and disposed of in accordance with the manufacturer's instructions as well as in compliance with the venue and local regulations.
- **14.3.5.2.3** Fire props shall be cooled to ambient temperature before fueling.
- **14.3.6 Fire Prop Extinguishment.** In addition to the requirements in Section 16.3, flames shall be permitted to be extinguished using suitable materials or methods.
- 14.4. Fuels. Safety Data Sheets must be available for fuels and hazardous chemicals used.
- **14.4.1 Storage.** Fuels shall be stored in accordance with NFPA 1 or NFPA 30.

14.4.2 Fueling Area.

- **14.4.2.1** All fueling shall take place in an approved fueling area.
- **14.4.2.2** Designated fuel stations shall be attended by the flame effect operator or spotter until the hazard is removed.
- **14.4.2.3** Fuel containers and dip buckets shall be sealed when not in use.
- **14.4.2.4** Fueling area shall be located outside or in an approved area.
- **14.4.2.4.1** There should be an unobstructed path from the fueling area to the performance area.
- **14.4.2.4.2** Fuel soaked wicks shall not be permitted to move through an audience without at least one spotter.
- **14.4.2.4.3** The audience should be prohibited from being within at least 25 ft (7.6 meters) of the fueling area.
- **14.4.2.4.4** Smoking or other source of ignition shall be prohibited from being within at least 25ft (7.6 meters) of the fueling area.

14.5 Performance.

- **14.5.1 Separation.** Separation between the performer and the audience shall be maintained to prevent fuel or flame contact with the audience member as approved by the AHJ.
- **14.5.2 Performance Area.** The performance area must be free of flammable and combustible materials, or materials shall be treated with an approved fire retarding chemicals and tested for combustibility in an approved manner.

14.6. Post-Performance Procedures.

- **14.6.1** In addition to the post-performance procedures required in Section 14.1 thru 14.5, Section 14.6 shall be followed for post performance procedures.
- **14.6.2** Fire props shall be cooled to an ambient temperature before storage and transportation post performance.