



### **Use of Flame Effects Before an Audience Permit Application**

The Alpharetta Fire Marshal's Office provides these guidelines to ensure the safe installation and display of flame effects before an audience. Using GA 120-3-22 and the most current adopted edition of NFPA 160 and, if applicable, NFPA 58 Liquefied Petroleum Gas Code serves as the guide for the proper use of flame effects.

- Basic requirements of the Fire Marshal's Office shall include, but are not limited to, the following:

The Alpharetta Fire Marshal's form, Use of Flame Effects Before a Proximate Audience, shall be completed and returned. Indicate on the form if the flame effect is propane fueled or Lycopodium. A floor plan/site plan showing the various firing locations is required.

#### **Flame Effects fueled by LP-Gas systems shall adhere to the requirements of NFPA 58 section 6.17.10.**

1. The maximum water capacity of individual cylinders shall be 48 lbs. (22kg) [nominal 20 lbs. (9.1 kg) LP-Gas capacity.
2. If more than one cylinder is in the same room, the cylinders shall be separated by at least 20 ft. (6.1m).
3. Where separation of 20 ft (6.1m) is not practical or safe, reduction of distances shall be permitted with the approval of the Fire Marshal's Office.
4. Cylinders shall not be connected or disconnected during the flame effect or performance.
5. Certification that the set, scenery, and all rigging are inherently flame-retardant or have been treated to achieve flame retardancy.
6. At the time of the demonstration, readings of the skin's surface temperature will be measured with an infrared surface thermometer. The exposed skin of a member of the audience shall not exceed (44C 111F)

#### **Flame Effect Demonstration**

7. A required walk-through and a representative demonstration of the flame effects shall be provided to the Fire Marshal before flame effects are approved.

#### **Interruption of Fire Protection and Life Safety Systems**

8. Fire protection and life safety systems shall not be permitted to be interrupted during the operation of flame effects.
9. Portions of fire protection and life safety systems shall be permitted to be interrupted during the operation of temporary indoor flame effects when the following conditions are met:
  - i) Approval of the Fire Marshal is received.
  - ii) Approval of the owner or owner's agent is received.



iii.) An approved Fire Watch capable of directing the operation of all fire protection and life safety systems installed in the building is present.

10. Fire protection and life safety systems shall be permitted to be interrupted during the operation of permanently installed indoor flame effects only for initial acceptance of the system.

**Flame Effect Devices and Materials**

11. All flame effect devices and materials shall have drawings, manuals, or written descriptions to describe the type of item and performance specifications of the flame effect created.

12. This documentation shall be on-site and available to the Authority Having Jurisdiction.

**Operating Procedures**

13. All flame effects shall have written operating instructions, including start-up, show operations, normal shutdown procedures, and emergency shutdown procedures.

14. Operating instructions shall be available to the operator.

**Additional Fire Safety Provisions for Temporary Installations**

15. Where the Fire Marshal determines that a need for fixed or additional fire protection equipment or standby fire safety personnel exists, such equipment or personnel shall be provided.

16. Four or more fire extinguishers of the proper classification and size as approved by the Authority Having Jurisdiction shall be readily accessible while the flame effects performance is being conducted.

17. In all cases, at least two pressurized water, Class 2-A extinguishers, and two Class 10-BC extinguishers shall be provided, in addition to those required by NFPA 10, Standard for Portable Fire Extinguishers, for the building.

18. The extinguishers shall be placed so that at least one each is located on opposing sides of the performance where flame effects are used.

**Note:** The Fire Marshal may approve alternatives to the number of additional fire extinguishers for small productions.

**Standby Fire Safety Personnel Requirements.**

19. The Fire Marshal, upon reviewing the required NFPA 160 documentation, may require standby fire safety personnel to be present along with operational supplemental equipment.

20. Standby fire safety personnel shall have a working knowledge of the supplemental fixed or portable fire-fighting equipment used in the area of the flame effects.

21. Standby fire safety personnel shall have a means of communication or of transmitting an alarm during the operation of flame effects.

**The AHJ has the authority to stop the discharge of pyrotechnics/flame effects; the ultimate responsibility for firing shall be that of the pyrotechnic operator.**



**Display Sponsor**

SPONSORING ORGANIZATION

NAME AND POSITION

ADDRESS

PHONE NUMBER

EMAIL

USE OF FLAME EFFECTS DATE

DATE OF DISPLAY\*

Start Time

End Time

LOCATION

**PYROTECHNIC DISPLAY COMPANY INFO**

NAME

ADDRESS

**PYROTECHNICIAN / OPERATOR INFO**

NAME(S)

ADDRESS

ADDITIONAL INFO

**INSURANCE COMPANY INFO**

NAME

ADDRESS

\* IF MULTIPLE DATES ARE REQUIRED, A NEW PERMIT WILL BE NEEDED FOR EACH DATE



**Proximate Audience Display**

**Proximate Audience Display (Select one)**                      **Yes**                      **No**

DISTANCE TO NEAREST SPECTATORS OR HAZARD

PARTY RESPONSIBLE FOR SECURING DISPLAY SITES

CLASSIFICATION OF THE FLAME EFFECTS SYSTEM IS (Check all that may apply)

**3.3.19.1 Group I Flame Effect.**

An attended manually controlled flame effect.

**3.3.19.3 Group III Flame Effect.**

An attended, temporarily installed flame effect for a specific production with limited operation and fixed time for removal.

**3.3.19.4 Group IV Flame Effect.**

A large individual or group flame effect that is permanently installed inside or outside any structure designed for unattended operation without a main show supervisory control system.

**3.3.19.5 Group V Flame Effect.**

A large individual or group flame effect that is temporarily or permanently installed inside or outside any structure and is designed for intermittent or continuous operation under the supervision of a main show control system but without full-time supervision by a technician.

**3.3.19.6 Group VI Flame Effect.**

A large individual or group flame effect that is temporarily or permanently installed inside or outside any structure and is designed for intermittent operation under the supervision of a main show control system and a technical director, with cast members in close proximity to the effect at the time of operation.

**3.3.19.7 Group VII Flame Effect.**

An individual flame effect that can be temporarily or permanently installed inside or outside any structure that, due to its unique operating requirements, does not fit into any other classification.



**SUPPLEMENTAL DOCUMENTATION CHECKLIST**

ATTACH A COPY OF THE OPERATOR’S PHOTO IDENTIFICATION.

ATTACH A COPY OF THE \$1 MILLION CERTIFICATE OF INSURANCE.

ATTACH A COPY OF THE PYROTECHNICIAN’S LICENSE (CLOSE PROXIMATE) AND PYROTECHNIC TRAINING CERTIFICATE.

ATTACH LIST AND DATES OF PREVIOUS DISPLAYS COVERING THE LAST YEAR.  
(PYROTECHNICIAN’S RESUME)

ATTACH SITE PLAN OR FLOOR PLAN WITH CORD LOCATIONS, FLAME LOCATIONS, EXTINGUISHER LOCATIONS, ETC.

I HEREBY AGREE TO HOLD THE CITY OF ALPHARETTA HARMLESS FOR ANY AND ALL DAMAGE TO PERSONS AND PROPERTY RESULTING FROM THE USE OF FIREWORKS BY THE PARTY IN CHARGE OF THIS EXHIBITION OR HIS ASSISTANTS. THE EXHIBITION SHALL BE EXECUTED IN STRICT COMPLIANCE WITH NFPA 160 AND CHAPTER 120-3-22 RULES AND REGULATIONS OF THE SAFETY FIRE COMMISSIONER AS ADOPTED BY THE CITY OF ALPHARETTA, AS WELL AS ALL STATE AND FEDERAL REQUIREMENTS. I FURTHER CERTIFY THAT ALL INFORMATION CONTAINED IN THE APPLICATION IS TRUE.

**NAME**

**SIGNATURE**

**DATE**