

# Live Flame or Flame Effects on Stage

## **Summary**

(see Live Flame/Smoking Plot template).

Live flame is only allowed on stage during technical rehearsals and performances, it is not allowed in rehearsals, in offices or in classrooms. This includes scented candles and incense burners and sticks. Exceptions will be made for smudging ceremonies provided they have been discussed with the safety office first.

## Introduction and Definition

The historical record of theatre fires provides the backdrop for the limitations related to live flame or flame effects onstage. Each proposed instance of such must be carefully evaluated and determined to be artistically and aesthetically necessary. Fire codes do not allow the use of live flame or flame effects in places of public assembly without prior review and approval by the local Authority Having Jurisdiction (AHJ).

**Authority Having Jurisdiction (AHJ)**: An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, and installation or a procedure

**Fire-retardant (FR)**: A substance used to coat a material or to impregnate a fabric that reduces the flammability of combustibles, or delays their combustion

**Inherently Fire Retardant (IFR)**: A material, typically a fabric, that is made with treated fibers that meet NFPA 705 testing protocols. When tested, the fibers in an IFR fabric tend to retreat away from the flames, not allowing the flame to spread.

#### Who is covered?

All Departments

### What do I need to do?

When the use of live flame or flame effects is determined to be included in the production, and the related staging is established during rehearsals, the Stage Manager will fill out a DGSD/YRT Live Flame Documentation form. This form is given to the Associate Production Manager for distribution to the safety office.

Using the form, permission will be sought for the use of live flame by the safety office from the AHJ.

A copy of the most up to date Live Flame Documentation form must be included with the Life Safety Fire Inspection documentation given to the AHJ during the Inspection.



During the show's life safety fire inspection with the NHFM, each proposed instance of live flame or flame effects will be discussed and evaluated, along with the proposed precautions planned to be taken. Such precautions may include one or more of the following:

- candles in a base or a candle holder,
- self-extinguishing hand-held torches,
- a cast or crew member assigned to monitor the live flame,
- automatic or fail-safe shut-offs for flame effects,
- a crew member designated to be off-stage with a water fire extinguisher in hand (fire watch),
- all loose fabric in proximity to the live flame to be IRF or treated with fire retardant, etc.

Please note, the AHJ is allowed to ask for any control measures reasonably required to reduce the level of risk associated with naked flame, including denying the use of naked flame.

To provide for the integration of live flame or flame effects into a production during technical rehearsals, the DGSD/YRT Production Manager or the Director of Theatre Safety can review the stage conditions, the live flame or flame effects and the precautions to be implemented and can provisionally approve the live flame or flame effects to be used onstage during the technical rehearsals for a show.

Any planned unusual or extensive use of live flame or flame effects for a production are to be presented for preliminary review by the NHFM well in advance of the start of technical rehearsals for the show. The DGSD/YRT Production Manager or the Director of Theatre Safety can review proposals for such requests during the design, budgeting, or rehearsal periods, and can advise the production's artistic and design team as to how to proceed.

#### Contacts:

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# **Relevant Legislation**

NFPA 705: Recommended Practice for a Field Flame Test for Textiles and Films