



## DRAPERY TEST FORM

### The IDEA

The idea behind this document is to provide proof that an annual testing of the stage drapes has been completed on a particular stage as per National Building Code and National Fire Code. Special thanks to Wes Jenkins from the EPCOR Centre for the Performing Arts for elaborating this document.

Fire proofing applied to stage draperies has a life span determined by many factors: initial chemical and application process, cleanliness of the soft goods, humidity, storage, etc. Some flame proofing is still viable after 25+ years, most is not. To determine fireproofing viability, some jurisdictions (mostly US) require an annual inspection by an outside agent. In light of an incident in the fall of 2006 involving old recycled drapes, we have decided to initiate an annual testing procedure. Rather than utilizing an outside agent we will follow testing procedures and NFPA guidelines to create a set of reasonable / best practices for demonstration to local authorities and to our insurers of our compliance.

### The Procedure

Initially, to create a starting point for the log book, all of the drapes will be tested. In the log book will be date of purchase of the goods and the initial certificate for the fireproofing. This will be the start of the history for each piece. After initial testing, we will subsequently do annual testing of two items as outlined below.

During the pre-season annual maintenance period, testing will be conducted by the appropriate representative of each company. Two test pieces of fabric, (one from a border and one from a leg) will be tested as per the procedure outlined below. If either test fails then all of the soft goods in the theatre must be tested. Any drapes that have failed will be removed from service until re-flame proofed and retested. If all tests pass, the individual conducting the test will sign off on the testing form and forward a copy along with the samples tested, to the Production Manager/Director

## **The Test**

The purpose of this recommended practice is to provide authorities having jurisdiction with a field means of determining the tendency of textiles and films to sustain burning subsequent to the application of a relatively small open flame. The field test method can be useful to regulatory officials as an indicator of whether a material being used or installed burns very easily or can be flame resistant as indicated by the following:

- (1) Cessation of burning when the igniting flame is removed
- (2) Failure to burn at all
- (3) Continuing to burn non-aggressively after igniting flame is removed

The field test method has utility only when the authority having jurisdiction has no reliable data and, therefore, is forced to rely solely on the field test findings.

### **Please Note :**

These portions of information were taken from the NFPA 705 and NFPA 701 Recommended Practice for a Field Flame Test for Textile and Films 2003 Edition.

A complete version of the NFPA 705 Document may be purchased from the NFPA at [www.nfpa.org](http://www.nfpa.org) NFPA, 1 Batterymarch Park, Quincy, MA 02169-7471

### **Materials**

Specimens should be samples removed from the existing material. Specimens should be dry and should be a minimum of 12.7 mm x 101.6 mm (1/2 in x 4 in)

### **Open Flame**

The fire exposure should be from a common wood kitchen match or source with equivalent flame properties. The flame should be applied for 12 seconds.

### **Method**

The Test should be performed in a draft-free and safe location free of other combustibles.

The sample should be suspended (preferably by means of a spring clip, tongs, or similar device) with the long axis vertical, the flame supplied to the center of the bottom edge, and the bottom edge 12.7 mm (1/2 in.) above the bottom of the flame.

After 12 seconds of exposure, the match is to be removed gently away from the sample.

### **Requirements**

During the exposure, flaming should not spread over the complete length of the sample or, in the case of larger samples, in excess of 101.6 mm (4 in.) from the bottom of the sample.

There should be not more than 2 seconds of after-flame.

Materials that break or drip flaming particles should be rejected if the materials continue to burn after they reach the floor.

## **Limitations**

The deficiencies and limitations of the field test method can lead to misleading or erroneous results, and the error can be in both directions. It is quite possible to have a too-small sample show several seconds of after-flaming, causing the material to be rejected. It is equally possible for improper or inadequate field procedures to incorrectly indicate satisfactory flame resistance. This can result in dangerous errors.

## **Precautions**

Field procedures are useful, but they must be used with good judgment and their limitations should be recognized. Field tests should not be relied on as the sole means for ensuring adequate flame resistance of decorative materials. They are, however, useful in augmenting a comprehensive regulatory program.



**THE FORM**

On \_\_\_\_\_, 20\_\_ I tested the following samples :

Sample #1 taken from \_\_\_\_\_

Sample #2 taken from \_\_\_\_\_

Both of the pieces passed the outline procedures and are attached to this document.

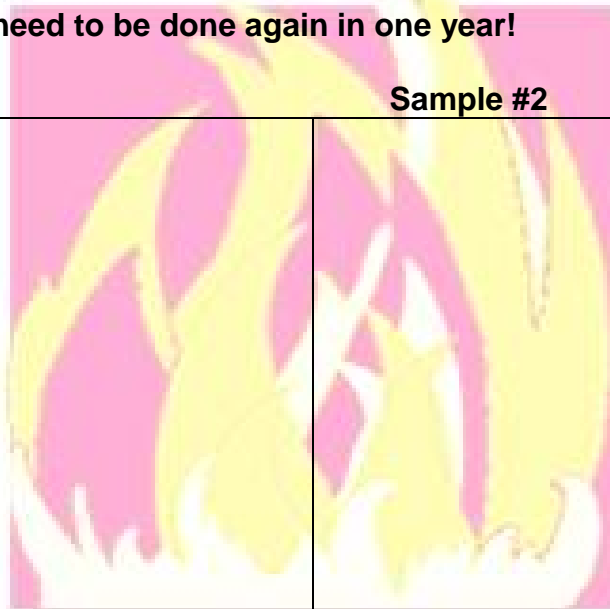
Signed \_\_\_\_\_

Dated \_\_\_\_\_

This inspection will need to be done again in one year!

Sample #1

Sample #2



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## **Further information and FAQ**

### **What needs to be treated?**

The NFPA regulations apply to decorative material in all public buildings including theaters, public halls, department stores, hotels, buildings used for public assembly or amusement, and schools.

### **How often does this need to be done?**

In NY and Seattle city law, affidavits of fireproofing are valid for one year, after which time the material needs to be tested. If the fabric is still flame resistant, the affidavit can be renewed for another year. In NYC after a total of three years, the fabric must be treated again. In addition, excess movement and handling (i.e tours), washing, dry-cleaning or painting will affect the flame retardancy of the material and may make additional treatments necessary. Municipal or Provincial standards may be different.

### **What are the guidelines for treatment?**

The National Fire Protection Agency (NFPA) has set guidelines for the fire protection of all fabrics. These guidelines are known as NFPA 701 and interpreted by each municipal fire department.

### **Can all materials be treated?**

No. Certain synthetics will not hold the chemical. Also, there is a possibility the flame proofing compound will affect the color or quality of some delicate fabrics.

### **What about Inherently Flame Retardant Materials?**

If your curtains are made of a fabric that is certified as inherently flame retardant there should not be a need to treat the curtains. However, you must have an original affidavit from the curtain manufacturer on file that states the material is IFR. If this is not the case your curtains may need to be surveyed tested in order to have a new affidavit issued.

### **Are the chemicals dangerous?**

NO. The chemicals can be non-toxic and odorless. The chemical may drip slightly when drying. It is recommend that drapes dry for at least 12 hours after treatment. Vendors need to supply Material Safety Data Sheets on all products used.

### **Can I treat applicable materials myself?**

Yes and No. You can treat many items yourself. Several vendors can supply the chemicals and sprayers for flame proofing, but by law, they cannot issue an affidavit or certificate of fireproofing. If your fire department requested a legal affidavit of flame proofing, you will need to hire a professional flame proofing contractor to conduct the treatment.