

Fire Retardant Fabric and Scenery

ACTSAFE SAFETY BULLETIN #5

USING THIS DOCUMENT

This publication is intended for employers, supervisors, and workers who work in the live entertainment industry in the province of British Columbia.

Its purpose is to summarize legal requirements you should know about using flammable materials in your venue and productions and to provide best practice advice to reduce your risk of using flammable fabrics and scenery.



WARNING!

Treatment with a fire retardant product will provide resistance to open flame but will not render the material fireproof.

Always:

- consult your local authorities
- refer to applicable safety regulations (see Summary of the BC Fire Code requirements)
- apply whatever practice we can to reduce risk



Conduct a field flame test only if a good's fire retardant documentation not available. It is a last resort to test for fire retardation.

HIERARCHY OF CONTROLS

Consider the following when preparing your safety plan:

Control Level	Control Description	Safety Plan
Elimination	Physically remove the hazard	Don't use flammable materials.
Substitution	Replace the hazard	Substitute flammable materials with Inherently Fire Retardant (IFR) materials.
Engineering Controls	Isolate people from the hazard	Build in fire suppression systems: <ul style="list-style-type: none"> • Install barriers that prevent the materials from being exposed to sources of ignition. • Treat materials with fire retardant (ROSCO FLAMEX, for example).
Administrative Controls	Change the way people work	Train your team members to: <ul style="list-style-type: none"> • identify flammable materials • ask questions about fabric and scenery • use a fire extinguisher
Personal Protective Equipment (PPE)	Protect the worker from the hazard	Supply extra extinguishers that are appropriate for the conditions.



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POLICIES AND PROCEDURES

Develop policies and procedures about flammable materials in your workplace. They should address the following:

- How to choose, treat, and maintain **construction materials**.
- Do you use **only IFR** for drapes and scenic drops? If not, do you treat them in-house or send them to a professional?
- How do you manage scenery provided by a **client**, such as a rental company that uses your venue?
- When do you schedule **inspections** and **testing** of your venue's flammable materials? Who **conducts** those tasks?

TREATING THE MATERIALS

Recommended practice

Where possible, always have materials treated **professionally** to ensure they meet established standards. This is particularly important for fabrics. You can treat your own materials but doing that is less safe.

Doing it yourself

There are multiple treatment methods, but one of the most common is to apply a **commercial fire retardant** to the material. Before you begin, check the **Safety Data Sheet (SDS)** for any hazards or instructions. Then, carefully follow the manufacturer's instructions.

MAINTAINING THE TREATMENT AND KEEPING RECORDS

Handling, washing, or painting it will reduce a material's fire resistance, so test permanently-installed goods **annually**, as discussed below, and document the results.

Exposure to moisture also reduces or removes flame treatments. Floods, high humidity, and even mopping can reduce the effectiveness of flame treatments.

IFR materials

Schedule all IFR materials, fabric, and scenery for annual cleaning.

Dust, dirt, and other materials can collect on the scenery/drape, making the material flammable.



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SUMMARY OF THE BC FIRE CODE REQUIREMENTS

Section 2.3.2

This section of the BC Fire Code (2018) is about flame resistance.

Section 2.3.2.1 is about drapes, curtains, and decorative materials (goods).

Section 2.3.2.2 is about renewing flame retardant treatments.

Section 2.3.2.1

Section 2.3.2.1 of the Fire Code references ULC standard CAN/ULC-S109.

It says that goods used in buildings must conform to CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films,"

Section 2.3.2.2

Section 2.3.2.2 tells you to re-treat the goods as often as necessary so that they pass the match flame test NFPA 705, "Field Flame Test for Textiles and Films."

Actsafes Safety Association

Actsafes (www.actsafe.ca) is a not-for-profit health and safety association supporting British Columbia's arts and entertainment industries. Actsafes provides resources and training to employers, workers, and supervisors. We are always here to provide information relevant to best practices around health and safety in the arts and entertainment industries in B.C.

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