



STM Studio Supplies can help to keep your curtains safe, legal and compliant by conducting an onsite assessment in most capital cities, and arrange any cleaning, repair or fire retardant treatments you require.

Any theatre, auditorium, public hall that utilises stage curtains must comply with current Building Code Australia (BCA) AS 1530 Part 3
 The AS 1530 Part 3 test is an index for "Spread of Flame" and "Smoke Developed"

It is also law to have a tag sewn to the rear of each curtain stating the manufacturer, fabric type, fire-retardant treatment, test report number and cleaning instructions.

In NSW, compliance with AS 1530 Part 2, an index for "Flammability" usually carried out by the Australian Wool Testing Authority (AWTA) or another approved testing authority is required.

This procedure is expensive, at least \$1200- \$1400 per test and does leave a big hole in your curtains where the sample was taken.



Almost all fire inspectors will approve your curtains based on a current application of approved fire retardant, either DIY or professionally applied. This would mean that although not strictly compliant, you would be recognized as addressing your OHS duty of care.

*Many people mistake the term "fire retardant" for "fireproof". These terms are **not** interchangeable. Fire retarded fabrics will still burn, they are just more resistant to heat and offer more protection than fabrics that have no fire retarding capabilities at all. Technically, no fabric is completely fireproof.*

The fire retarding substance can be judged non compliant if a non approved method of dry cleaning is used. (not to mention increasing the chance that it will catch on fire!)

No fabrics are indefinitely fire resistant, but certain chemical structures mean some are more flame retardant than others.

The weight and weave of the fabric will also affect the ignition and burn time as lightweight materials will burn faster than heavier fabrics. Textured fabrics such as velvet will ignite more easily than those with a smooth surface.

Some synthetic fibres are known to be more flame retardant than other materials. They are slow to ignite and once they have ignited they melt rather than burn.

Wool and silk are considered to be more resistant to flames than cotton and linen as they are both difficult to ignite and flames are often extinguished in the fibres. The untreated natural fibres in cotton and linen are quick to ignite, and the flames spread quicker than other fabrics.

Textiles that include both natural and synthetic fibres can be hazardous if they ignite as they combine the fast spread of flames of natural fibres with the melting characteristic of the synthetic fibres.

There are five different levels of fire rating for fabrics

NFR: Not Flame Retardant at all. These are not good solutions for any curtains that will be in close proximity to lights or other heat sources. Use of NFR rated fabrics should be limited to help ensure the safety of the cast, crew and audience.

FR: Flame Retardant, at least to some extent. The term refers to the process and not a family of chemicals used. The process involves applying a chemical to the fabric during the manufacturing process. This usually offers flame retarding properties for about a year although they can be effective for much longer. These will eventually need to have the flame retarding chemical reapplied to ensure on-going safety and fire code compliance.

NDFR: Non Durable Flame Retardant. The fabric has been treated with flame retardant chemicals which can be removed, or their efficacy reduced, by washing or wetting the fabric. NDFR fabrics can usually be dry cleaned but it is better not to wet them with water or steam.

DFR: Durably Flame Retardant. Unlike FR rated fabrics, those with DFR ratings offer flame retardancy for the life of the fabric, though they are not necessarily *as* flame retardant as IFR rated fabrics. There are conditions that can reduce the fabric's flame retarding properties so regular testing is advised for theatres or other locations that make use of stage curtains with this rating.

IFR: Inherently Flame Retardant which means that the fibres themselves resist the effects of fire rather than being fire retardant due to a chemical application. IFR fabrics are excellent solutions for situations where curtains will be in close proximity to light or heat sources that might pose a fire risk.

