



Flame Resistance: All fabrics burn. There is not a treatment that makes a fabric flame proof; rather, it can be treated to be flame resistant. This treatment retards the burning process, providing a longer egress time (which is the amount of time required for an occupant to escape safely from a fire.) Below are some frequent questions asked about flame resistant finishes;

- **Can all fabrics be made flame retardant?**
Yes. Virtually all natural and synthetic fibers can be treated with flame retardant chemicals. Protein fibers such as wool and silk have inherent fire retardant qualities; consequently, they are easily treated to meet the most stringent fire codes. Cellulose fibers such as cotton and linen are easily treated because they readily absorb moisture. Synthetic fibers such as nylon and polyester do not absorb moisture but can be treated with special formulas. Non water durable fabrics such as velvet, moiré, chintz, sateen or polished cotton can be affected by a wet finish, but by applying a fire resistant back coating the damage to the surface can be limited and they can meet most fire code requirements for upholstery use. They may not meet the requirements for drapery use and in some cases for upholstery use, ergo; it is advised that a sample be submitted for testing prior to specification and purchase.
- **Under what circumstances should fabric be treated for fire resistance?**
In an area of public assembly where 10 or more people will be gathered together at one time. It is important to check with the site's local fire marshal for the code each fabric application must meet. These codes vary per location and application.
- **Does flame resistance treatment have any effect on decorative fabrics?**
It is important to remember that non water durable dyes may bleed or fade when subjected to this wet finishing process. Normally those fabrics intended for commercial applications will be treated against sublimation and are not affected. A test of the fabric may be provided ahead of treatment if there is any question.
- **Does the finishing process affect fiber reactive dyed fabrics?**
Yes. If a treated fiber reactive dyed fabric is exposed to the right amount of light, heat and humidity for a period of time the color will change, and in some cases, drastically. Non-saline and fire resistant back coatings can eliminate the problem. It is essential that the post processor be alerted when a fiber reactive dye has been used so that the fabric can be properly treated. Fiber reactive dyes will only be used in cotton.
- **Does the finishing process shrink the fabric?**
Yes, the process will shrink a fabric to the same degree water will shrink it. The degree depends on the fiber content and concentration. The average shrinkage is 3%. Casements shrink much more. Additional yardage should be calculated when treating fabric to compensate for shrinkage.