



# ROSE BRAND

## IFR vs. DFR vs. FR FABRICS & NOTES ON ENCORE

First some definitions

### **IFR = Inherently Flame Retardant**

This type of fabric is woven with threads (fiber or filament) that yield a product that meets fire code without any further treatment or finishing. Additionally, the safe expectation is that the fabric will remain sufficiently flame retardant for its lifetime (assuming the fabric is kept clean), even after repeated washings.

### **FR = Flame Retardant**

This type of fabric is woven with threads such that, initially, the fabric did not meet fire code. In order to meet fire code, the fabric was treated with a flame retarding chemical so that the end product does meet code.

Universally, these chemicals are dissolved in water and then introduced to the fabric by spraying or dipping. When the water dries, the chemical remains stuck (adhering) to the fibers or filament. Any future wetting of the fabric will re-dissolve the chemical, most likely removing the chemical entirely, or at least changing the even distribution of the adhering chemical on the threads. When this happens, the fabric should be thoroughly washed (with water) and re-treated to restore the flame resistance.

### **DFR = Durably Flame Retardant**

This type of fabric is woven with threads that are flame resistant but not enough. Instead of adding a FR chemical to stick to the surface of the thread, however, the manufacturer adds an FR compound that chemically binds with the fiber composition. The FR chemical not only is bound to the fabric chemically but is not water soluble and, therefore, cannot be removed from the fabric by washing (except in a special chemical bath).

Encore Fabrics, for example, are DFR woven products that have proven to retain their flame resistance properties after all water washings or dry cleanings.