

CUSHIONED



FR Systems provides access to the premier first quality spacer fabric in the United States and Canada. Customers can choose from styles and colors in our open line, which are always available. FR Systems recognizes that customers, brands, and projects may require their own specific needs in colors, thicknesses, and styles. We have the largest selection of Spacer fabrics on the market. We offer custom SpaceTex \* development which can help exceed your design and performance needs.



310 Watline Ave, Mississauga, ON L4Z 1P4 P 877-727-7965

www.frsystems.ca

## SpaceTex®

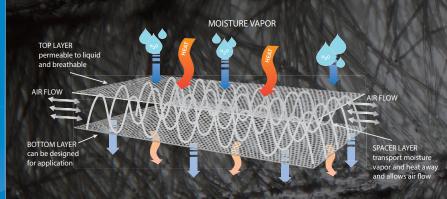
## SpaceTex®

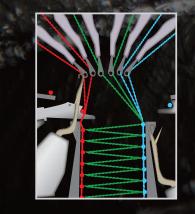
SpaceTex<sup>\*</sup> is a performance fabric that provides airflow, temperature regulation, and compression resistance. It is the perfect substrate for increasing comfort when heat and moisture are prevelant. FR Systems Proprietary pill resistent yarn and finish makes SpaceTex the most durable Spacer fabric on the market. Based on a three layer fabric technology, SpaceTex provides a unique air channel in its middle layer that draws heat and moisture away from the body unlike any other fabric. With up to 20 times the air permeability compared to normal fabric, this air channel serves as a temperature regulating medium, cushioned support, and also add aesthetic value. This is why SpaceTex<sup>®</sup> is popular in mattress support, fashion, pet accessories, athletic wear, automotive, and aerospace. For medical applications Chose SpaceTex<sup>®</sup> 5000, a hospital quality Spacer Fabric that is both antimicrobial and fluid proof

## Process

Understanding the creation and production process of SpaceTex (B) is paramount to understanding what Spacer fabric actually is. Unlike regular 2D fabrics, SpaceTex \* uses two separate fabrics that are joined by monofilament yarn that creates a breathable channel between the two fabrics. It is this channel that gives SpaceTex \* its 3D structure and creates a "microclimate" between layers. Heat and vapor move through the highly permeable fabric layer. Cool air provided by this natural ventilation process pushes out the heat and vapor, providing temperature control and maximum air circulation.

Additionally, the channel between layers can provide a cushioned feel. Many variables can be modified in the manufacturing of AirSkin<sup>®</sup> that affect its performance. Whether an application has performance driven needs or style and design based, AirSkin<sup>®</sup> can be customized to fit.





Using ASTM D737, the standard test method for air permeability of textile fabrics, air was drawn through both knit fabrics and SpaceTex<sup>®</sup> fabrics. While the knit fabrics received only a 10.7 cfm (cubic feet per minute), Spacer Fabrics received a 99.1 cfm, meaning it was almost 10 times more permeable than regular knit fabrics. SI MAR ARTICAL COM