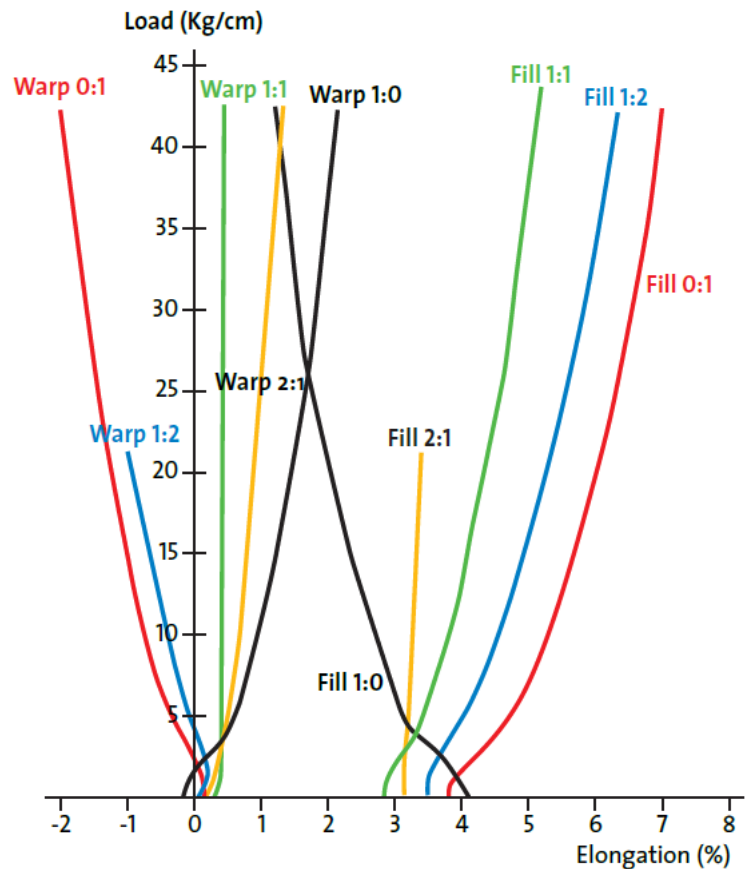


Two of the most important pieces of information needed in designing a tensile structures are the Tensile Modulus and Poisson's Ratio of the membrane material. There are various methods used to calculate these values. One of the most accepted was developed by the Membrane Structures Association of Japan (MSAJ). The membrane is subjected to biaxial stress at different loadings ratios (warp to fill). Results are then used to calculate the two values. In this bulletin, we have graphic information on the results of the biaxial tests and values for Tensile Modulus and Poisson's Ratio.

### SHEERFILL IIA Architectural Membrane

#### Actual Value for Material Constants

Fabric	Tensile Modulus (kgf/m)		Poisson's Ratio	
	Warp	Fill	Warp	Fill
SHEERFILL IIA	175,036	96,620	0.82	0.45



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