

## Suggested Upholstery Procedures for Xorel

Furniture upholsterers use a variety of techniques to sew fabrics for use in upholstery. The construction details will vary depending on the individual chair design. Below are general suggestions, and should not be considered absolute methods for upholstery fabrication. These are recommended options based on years of experience in working with key fabricators. It is the responsibility of the workroom / fabricator to evaluate this material for its suitability on a specific chair design:

### Slower Upholstery Shop Environments

1. We recommend a minimum 1/2 inch seam allowance with a Plain Lock stitch confirming to Type 301 of ASTM D 6193 (formerly Federal Standard No. 751a.)
2. The recommended needles are # 16, #18 or 22 ball point<sup>1</sup> maximum or equivalent and 100% nylon or Polyester bonded monocord thread.
3. A minimum of 8 stitches per inch is recommended to insure adequate seam strength

### High Speed Factory Environments

4. Take appropriate measures to minimize needle heat during sewing.<sup>2</sup>
5. The fabric should be overlapped twice using a sewing machine with two or three needles of type union 35800 DQ + 35800 DN or 51900 H+J. Lap Seam (LSa) using Chainstitch confirming to type 401 of ASTM D 6193 (formerly Federal Standard No. 751a.)
6. Spun Polyester thread is recommended in this type of operation.
7. To help shape the fabric to the contour of the furniture, you may apply heat from an upholstery steamer or hair dryer on the curved seams – not more than 1100 watts at a distance no closer than 6 inches from the fabric.
8. Xorel is recommended for tight seating. We do not recommend Xorel for use on foams larger than 3". When foam is used the foam should be a firm foam with a minimum Indentation Load Deflection (I.L.D) of at least 55 lbs with a density of 2.5 lb/ft<sup>3</sup> or greater.
9. For ease of cutting Xorel, "Hot Knife" can be used. This device is commonly used to cut heavier synthetic fabrics. Additionally, it fuses the ends of the fabric which minimizes raveling.

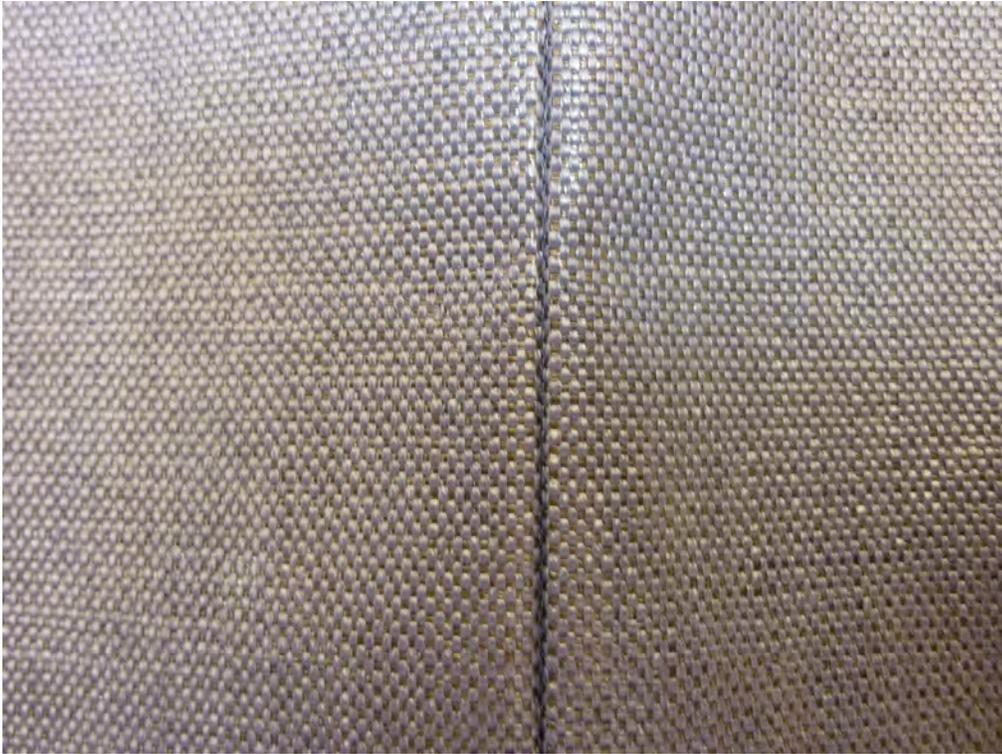
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<sup>1</sup> Singer 135 x 17, size 22 light ball point or Schmetz NM 140 light ball point or equivalent.

<sup>2</sup> For more information see Technical Bulletin: Minimizing Needle Heat;  
[http://www.amefird.com/minimizing\\_needle\\_heat.htm](http://www.amefird.com/minimizing_needle_heat.htm)

## Examples of Seams Sewn on Xorel

Single Needle Plain Stitch



Single Needle Top Stitch

