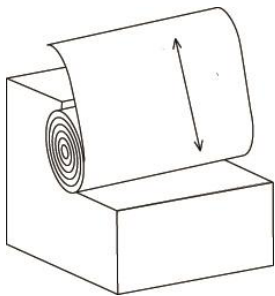




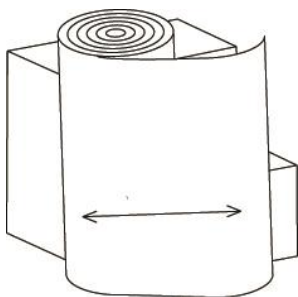
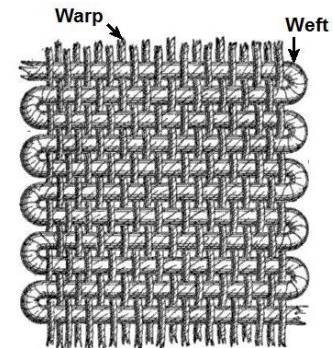
HPFi has historically offered each NOW and graded-in upholstery option across all product lines. However, there is now a minor adjustment to that long-standing practice on Flex Tiered seating products.

We have established a guideline for upholsteries used on the “steps” of Flex Tiered seating. The Seam Slippage or Seam Strength rating for upholsteries on the step surfaces is now a critical rating. Due to the pressure applied from stepping or standing on the steps (vs. a seated surface), there is a minimum threshold of 40 lbs. on the steps’ surfaces on Flex Tiered seating. The 40 lb. minimum does NOT apply to the side upholstery. It should be noted that this 40 lb. minimum rating is above the ACT (Association of Contract Textiles) minimum of 25 lbs.



Upholsteries have a Warp and Weft (fill) rating. On Flex tiered seating the upholstery is applied in a “topped” (up the roll) orientation shown at left, so the critical direction is Warp.

Warp is the thread that runs the length of the roll from end to end. Weft, sometimes called fill, are the threads that run side-to-side or across the roll.



*Non-directional* upholsteries with a warp less than 40 lbs. may be acceptable provided that the weft has the minimum 40 lbs. rating. The upholstery may then be applied in a “railroad” orientation. Since the pattern is non-directional, this will not affect the aesthetics of the upholstery.

This new guideline is meant to ensure that the performance expectations of Flex tiered seating are met. To assist our business partners with this policy we are updating our upholsteries’ brochures to include test data. Textile upholsteries are listed by “Seam Slippage” ratings while coated fabrics (vinyl and polyurethane) are listed as “Seam Strength” ratings. The data is based on standard tests ASTM D4034 (ACT preferred test method) or ASTM D1683 for textiles and CFFA 14 (or ASTM D751-6, Sections 66-71) for coated fabrics.