Peaked Seams in Stretch-In Carpet Installation

Seam peaking can be a frustrating carpet installation problem for both the installer and the consumer. Although seams in carpet are necessary and common, many consumers expect them to be invisible, which in reality cannot be guaranteed.

To understand what must be done to reduce seam peaking, an understanding of its cause must first be explored.

The Mechanics of Seam Peaking

Seam peaking is an expected response to the natural line-up of force to stretching carpet. The condition is based on the principle that the backing absorbs the forces of stretching until it reaches the point where the carpet has been joined together with a seaming tape adhered to the carpet’s secondary backing. As the force is applied to the seamed area, the seaming tape is pulled upward to align itself with the approximate center of the carpet backing. This creates an elevation in the carpet along the seam which, causes the pile to gap open in a V-configuration (see figure below). When light strikes across the peaked seam, the edge facing toward the light source appears lighter than that facing away from it. Thus, a more visible seam is the result.

Tips to Minimize Seam Peaking

- **Seam Location** - Whenever possible, run seams into the source of light to minimize shadows highlighting the seam.

- **Tape Selection** - Wider tape (6 inch) allows the stretch to be distributed over a wider area. Although they cannot eliminate the mechanics of peaking, wide tape may make the condition less distinct.

- **Seaming Iron Temperature** - A setting on the iron that is too hot will cause the polymeric carpet backings to distort and shrink. Shrinkage of the carpet backing accentuates seam peaking.
• **Seam Edges** - All cut edges must be sealed prior to, or during, the seaming procedure. Latex-based seam sealer or thermoplastic sealers are acceptable. When using latex type seam sealer, it should be applied to edges and smoothed with the fingertip to allow quicker drying time and to avoid transfer to the seaming iron. Regardless of the adhesive, it must be applied in a manner that encapsulates the primary and secondary backings. Also, back rolling the carpet edges prior to applying seam tape will help reduce peaking.

• **Pre-stretching** - Pre-stretch the carpet parallel to the seam the recommended 1% to 1½% for about 18 inches on both sides of the seam. This relieves some of the stress the seaming tape must withstand.

• **Construct on a Flat, Rigid Surface** - Make all seams over a firm, flat surface. Soft, low density and thick carpet cushions inhibit proper seam fabrication. The use of a thin, smooth piece of plywood, hardboard, or other material between the carpet and the cushion is ideal for this purpose.

Installers can minimize visible seams by using quality products, and by referring to installation instructions as listed in the CRI Carpet Installation Standards (CRI 104 Installation Standard (Commercial) and/or CRI 105 Installation Standard (Residential) [https://carpet-rug.org/resources/installation-standards/](https://carpet-rug.org/resources/installation-standards/). Problems can also be minimized if retail sales representatives discuss with consumers the installation characteristics of the products being purchased so each understands that invisible seams may not be possible to achieve.