

CRESTRON SHADING SOLUTIONS

Fabric Characteristics and Design Guidelines

Many factors influence the aesthetics of a finished shade. Some clients may find certain characteristics unexpected or even unacceptable. This document outlines some of these aesthetic concerns, explains their causes, and provides recommended solutions to prevent or remedy these characteristics. As you read, keep in mind that these are general guidelines.

Aesthetics and performance of each shade is affected by several factors. Width and height of the shade is one factor. In addition, each fabric has its own characteristics that may make some of the occurrences below, such as edge fraying of PVC coated fiberglass roller shade fabric, more or less pronounced. Also, lighting near the shade, such as downlights, will accentuate the appearance of Vs and waves.

Terminology

Deflection:

As a shade increases in width, the metal tube begins to sag due to the diameter of the tube and the weight of the fabric.

“V” or “V-ing”, “A” or “A-ing”:

When deflection is present in the tube, the fabric sags and produces a “V” or “A” shape typically in the center of the shade.

Ripple/Wave:

Vertical ripples in the fabric.

Curling/Cupping:

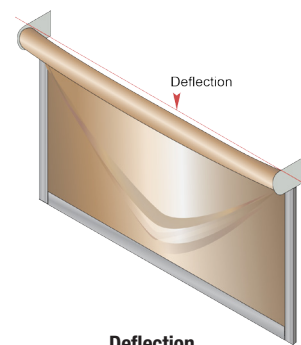
The edges of the fabric panel curl. It starts out normal at the top near the tube, becomes more pronounced toward the middle of the panel, and then lessens as its gets closer to the hembar.

Twisting:

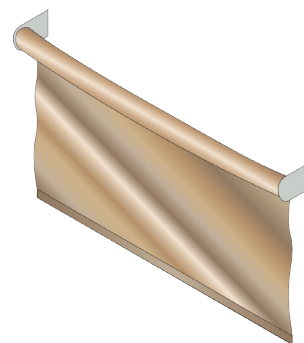
Typically visible on tall and narrow shades where the fabric twists vertically.

Telescoping:

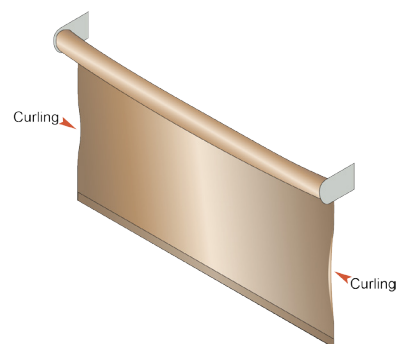
The tendency for a shade fabric to not roll up perfectly square with the shade tube. The fabric will telescope to the right or left and hang over the side of the tube. All shades are adjusted at the factory to ensure proper tracking. Actual installation conditions may prevent the shade from tracking properly. The levelness of the mounting surface is the most common cause of telescoping. Crestron’s architectural bracket allows the installer to adjust each end of the shade up and down to minimize or eliminate telescoping issues.



Deflection



Ripple/Wave



Curling/Cupping

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Terminology (continued)

Fabric Edge Fray

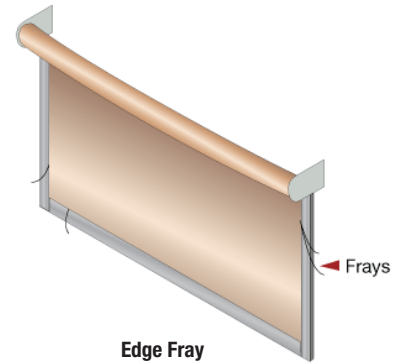
Some shading fabrics are manufactured using PVC coated fiberglass yarns. During the cutting process the PVC coating is melted together on the shade edges. Inevitably, some fiberglass strands may not be completely sealed. Over time, the fiberglass strands can fray slightly and become noticeable.

Simply trim away frayed fibers

While the bigger more noticeable frays are trimmed by the manufacturer at the factory, smaller frays can reappear during shipping, installation, or over time from daily operation. But don't worry, with a pair of scissors this is an easy problem to fix. With your fingers, fluff the fabric edge so that all frays are visible, then simply trim them away with your scissors.

Detailing the cut edges

Primarily noticeable on dark fabrics, white fiberglass yarns may be visible even after you've trimmed the frayed edges. With a permanent marker you can easily color the white fiber ends so they blend in with the fabric. For best results use a quick drying marker. Black, brown, or gray markers generally blend in best with most dark fabrics.



If you have a two-colored fabric, make sure to select a marker color that matches the lighter colored fabric. Test a hidden spot first to ensure that the colors match. To prevent markers from bleeding onto the fabric and staining the edge of the shade, go slowly and handle your markers with care.

Minimizing fraying

It's important to give your shades a clear path in which to operate. By keeping your shade fabric from rubbing on other objects, unwanted fraying can be minimized or prevented. Telescoping, as mentioned above, can also increase fraying - particularly when the fabric edge starts rubbing against the shade brackets.

Wide Shades

All tubes are prone to deflection. The wider the shade and the heavier the fabric, the more deflection tends to occur. The Crestron Architectural XL system, which consists of a 4" steel tube and special brackets, minimizes tube deflection. Although the maximum width of an XL shade is 192" (16'), for best performance Crestron recommends that shades not exceed 180" (15') wide. The tube deflection is increased by 30% when going from 180" to 192". The height of a 192" wide XL shade depends on the fabric type selected, ranging from 115" for a thick fabric to 240" or greater, with thin fabrics.

Another potential issue with wide shades is waves and curling. Adding battens to the shade can help. However, battens, which are plastic rods sewn into a pocket horizontally across the shade, can be visually unappealing to some customers.

If the shade spans multiple windows, consider individual shades or coupled shades. Crestron shades have a ¾" light gap, creating a 1.5" gap between coupled shades. If there are multiple windows with mullions that are at least 1.5" wide, this can be an excellent solution.

Tall Shades

As the height of a shade increases, the fabric edges want to curl. Some waves in the fabric will become more pronounced. Crestron recommends no more than a 3:1 height to width ratio for best performance. Anything that exceeds the 3:1 ratio will be more prone to curling and waves. Adding battens to tall shades can reduce the amount of curling that occurs at the edge of the fabric. Again though, battens may be unappealing to some customers.

**For assistance contact the Crestron Shade Support team at
855-53-SHADE or shades@crestron.com**