

WOVEN CARPET

By Tom Cartmell, CFI Chairman of Industry Relations Committee

This is part three of the series of carpets and backings. WOVEN CARPET is much more complex to explain, even though the woven products are similar in construction. They all have two basic components; face yarns and backing yarns. It is difficult to explain how to identify the different woven constructions.

WILTON

For many years, only cut-pile carpets woven on a Jacquard loom were known as "WILTON." A loop-pile made on the same loom was called a "BRUSSELS." Today, both loop-pile, cut-pile and cut-and loop pile are made on a Jacquard loom and known as "WILTON." The pitch, the wires per inch and the yarn weight gauge the quality of a WILTON. All high quality WILTONS were made with a 256 pitch and 10 or more wires per inch. Today, most high quality WILTONS are made with a 252 pitch and 7-10 wires per inch.

WILTON carpet is somewhat limited to the amount of colors that can be woven into carpet. The yarn spools are mounted on frames. A five-frame WILTON has five colors, but the most common WILTONS are made of two and three frames. Additional colors can be added by "Planting" yarns into the weave. This system allows additional color to be substituted for one of the original colors in a row of tufts. A five-frame WILTON would appear to have six or more frames due to the "Planting" of other colors.

The most unique characteristic of a WILTON is that the face yarns that are not selected by the Jacquard mechanism as part of the face pile, stay hidden in the back of the carpet interlaced with the weft, warp and stuffer yarns. This makes the pattern or face pile easy to see from the back of the carpet. Most WILTON carpet is two shot; two weft yarns per wire of face yarns. Many WILTONS are coated on the back with latex or a similar resin. There are many different WILTON carpets, such as; "face-to-face" and "flat weaves." However, a continuation of this article will describe this more in detail.

VELVET

VELVET is the simplest of all the woven carpets. Long ago, only cut pile was considered VELVET carpet. Loop-pile carpets on the same loom were known as "Tapestries." Today, both cut-pile as well as loop-pile constructed on a velvet loom are called "VELVET."

A VELVET loom is almost the same as the WILTON loom mechanism. Almost all of the face yarn is in the surface of the carpet, not hidden in the back. Unlike, the WILTON, normally there is only one row of face yarns between the warp backing yarns. The bulk of a VELVET carpet comes from the backing yarns and latex coating unlike the hidden yarns in a WILTON.

The leading quality factor in a VELVET is the pile density. This is achieved by specifying a number of wires per inch (pitch) or a heavy yarn weight. Today's VELVETS commonly have a 162 or 189 or a 216 pitch and will vary from 7-10 wires per inch. Almost all VELVETS will be a two weft shot per wire.

AXMINSTER

Axminster, NOT "Axminster," was the most common form of weaving carpet and rugs. Axminsters will always be cut pile and most often will be a single level cut pile. However, it can be made as a multi-level cut pile, which is usually done by using hard and soft twist yarns and heat to shrink the fibers. There are two ways of weaving Axminsters. The first being the "Gripper," and the second known as the "Spool." They both produce the same product, but smaller runs can be produced with the "Gripper" method.

You will notice a slight difference in the two, such as the face yarns being more noticeable on the back of the carpet as well as the carpet being more flexible with the "Spool" method. The Axminster will usually be a six-shot per row product. Wilton and Velvet call the number of rows per inch of length, a wire. They are referred to as a row in the Axminsters and will most always be double. What appears to be a three-weft yarn, shot across the width if examined closely, will actually be a six.

Each time a weft yarn is shot across the width, it is a double shot per row of face yarns. This is what allows Axminsters their great dimensional stability and explains why it is easily folded in the width, but not in the length.

KNITTED

I am aware of only one manufacturer in the United States that produces KNITTED carpet, Mohawk Commercial. It is marketed as "Woven Interloc." Because KNITTED carpets lack stability, they are usually specified to be installed as direct-glue or perhaps, double-glue installations.

The face yarns are actually interlocked with the backing yarns making it virtually impossible to get yarn pulls or raveling conditions. You can see a gauge or space between the rows of face yarns in the width, but not in the length. This is one product that you will not pull apart or dissect easily.

LENOMATIC

This is one of the newer woven carpets. Looking at the backing yarns easily identifies it. Normally, there are no stuffer yarns; only two or three chain yarns that are wrapped around each other in a braided fashion.

SUMMARY

This is one of those articles that you will want to read over and over again. The more you read it, the more you will get out of it. The bottom line is that unless you install **ALL** of the different types of woven carpet **ALL** of the time, you will have to dissect the carpet to see the different construction. If you do this, you will be able to identify the many woven backings with just a quick look. Let's install **WOVENS!**