



**mighty mac**

it's beary clean

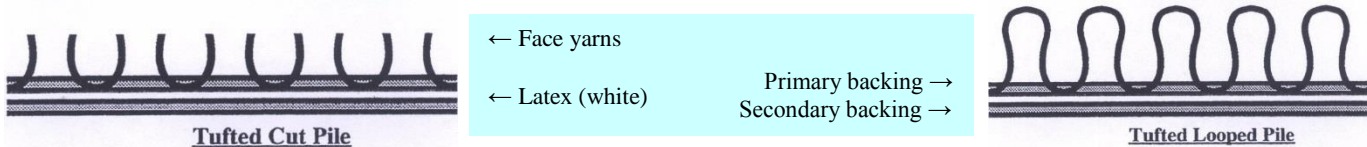
[www.mightymacclean.com](http://www.mightymacclean.com)

(843)842-3994

## CARPET STYLES & FIBERS - WALL-TO-WALL CARPETS

**Carpet Construction** - The vast majority of wall-to-wall carpet installations are 'tufted' products. A woven 'primary backing' of polypropylene or occasionally jute is stretched over the loom. Machines with hundreds of needles punch the face yarns through this backing. A thin layer of latex is applied to the back of the carpet and a much thicker 'secondary backing' of polypropylene is glued in place. It is this 'secondary backing' that gives the carpet its strength and rigidity.

Cut pile carpet has the loops cut immediately as the carpet is being tufted, loop piles do not. Some carpets have a combination of cut and loop pile.



### Carpet Fibers (Face Yarns)

**Nylon** – is a synthetic fiber. It represents around 60% of the residential carpet sales. Nylon is usually sold as a cut pile or a cut & loop pile style. It is a moderate priced item and the prices vary based on density and thickness of the tufts. All residential Nylon is white. Dyes are added after manufacture to the sides of the fibers on 'dye sites'. Nylon is crimped during its manufacture and has good memory or spring. Nylon has 'acid dye resisters' and a secondary stain resistor, such as DuPont Teflon or 3M Scotchgard applied during the manufacturing process. This secondary stain resistor wears off over time and it is a good idea to have Mighty Mac reapply it after a couple of years. Nylon is long wearing. It can have any sort of dye pattern and color, from a single color to intricate designs and unlimited colors. It is fairly stain resistant although it is susceptible to bleaching agents.

**Olefin or polypropylene** – is a synthetic fiber. It represents about 25% of the residential market. It is virtually always sold as a loop pile product, the "Berber" style being the most popular. Being a lightly refined oil based product, it is touted as a highly stain resistant fiber. Oil based spills can be problematic though. Olefin is inexpensive. It is 'vat dyed' meaning the color is added to the product while it is in a liquid state. This limits color variety but it makes it impervious to bleaching agents. As it does not absorb moisture, Olefin is used extensively in outdoor situations. The biggest drawback to Olefin is its lack of "spring". It can crush quickly which can leave a dark traffic lanes and that is a permanent condition. Many manufacturers have begun to add some Nylon (15-20%) to improve the spring. The problem is that now you lose some of its advantages, and bleaching agents can strip part of the color out.

**Polyester – PET** (polyethylene terephthalate) and the new **PTT** (polytrimethylene terephthalate – 'Triexta') polyesters have grown from 0% of the market to about 15% in the last decade. It is a 'vat dyed' product so it is not susceptible to many bleaching agents and products with high concentration of dyes. It is similar in look and feel to Nylon. The big question is how it will wear. Polyester has not been used in the carpet market for decades due to its propensity to ball up (pilling) and tendency to wear quickly. With the introduction PET (which is made from recycled plastic soda bottles) the pilling problem was greatly reduced, but not eliminated. PTT claims it will reduce it further. It does not wear as well as Nylon.

**Wool** - is the only natural fiber regularly used and it represents about 1% of the residential market. Wool accepts dyes easily and produces vivid colors and patterns. It wears like iron, has wonderful spring and is naturally fire resistant. It is susceptible to molds, insects and bleach will destroy the tufts. Since it accepts dyes so readily, spills with high dye concentrations (wine, coffee, Kool Aid, etc) can cause permanent damage. Wool is also the most expensive option by a wide margin.