

A Carpet Primer

Quality: A peculiar and essential character; An inherent feature; Degree of excellence; Superiority in kind Webster's New Collegiate Dictionary

The most popular choice of all flooring alternatives available today is carpet. To put a dollar value on damaged carpet, the adjuster will have to identify its level of quality before it can be determined if an offered replacement is equivalent. A visitor to a carpet showroom will be dazzled by an array of carpets in dozens if not hundreds of colors. There are more than a thousand colors available on the market. Don't worry about color, it is not a factor in the quality of a carpet. Terms like broadloom are mentioned frequently when discussing carpets. Most carpets are broadloom carpets meaning only that they are at least 54" in width. That is all the term broadloom means. Certain low cost, low quality carpets are manufactured with the padding built in as an integral element of the carpet. These are called cushion-back carpets. All the rest of the carpets, installed over separate pads, are referred to as conventional carpet.

Conventional carpet which is manufactured by the tufting process has fibers or filaments made into a yarn which is stitched into a primary backing. Latex or its equivalent is applied, then a secondary backing is laminated or bonded on to become an integral part of the carpet.

Gauge, denier weight, and face weight are quality indicators, are expressed as numbers and are important to the manufacturers and suppliers of the carpet. What the adjuster should remember about these items is that the higher the number, the higher the carpet quality.

The thickness of the pile (the stands) is an indicator of quality. A thicker pile means a heavier and therefore better carpet. Through a process known as "crimping," an appearance of thickness and density can be provided in carpets made of nylon fibers. The individual fibers are bent, creased, or crimped giving bulk and fullness without increasing the amount of fiber used.

Ply is the number of fiber strands twisted together to form the carpet yarn. The more strands, the higher the ply. The higher the ply, the heavier the carpet, the better the quality.

Density of the carpet is one of the best indicators of quality. Dense carpets have the tufts or loops of yarn placed very close together, very compactly through the backing. Dense carpets have many more tufts per square inch than less dense carpets. Testing for density is done by bending the carpet backwards. If a lot of the backing material shows through, or "grins," the carpet is not dense and is of low quality. The backing material to which the carpet pile is affixed can be of natural material (usually jute) or a synthetic material. The choice of backing does not affect the quality.

More than 90% of carpeting is manufactured by a process known as tufting. The other 10% of the carpets are usually woven. A woven carpet is always a high-quality carpet. Woven carpets can be identified by examining the back of the carpet. If the yarn in the pattern can be seen, the carpet is woven.

Approximately 3% of carpets manufactured are made from the natural fiber wool. Wool carpets are durable and strong yet offer a very luxurious look and feel (hand). The wool carpet is deep, warm, and rich looking. Wool resists crushing, fuzzing, and abrasion and is very resilient. A 100% wool carpet will be of the highest quality. Synthetic fibers are now being blended with wool and chemical additives to create hybrid carpets which combine the best features of wool and synthetic materials while eliminating some of the drawbacks of each. These hybrids are extremely difficult to identify by their appearance and look. A label may be found on the back or a receipt might show the construction of the carpet, but more than likely a professional will have to make the identification. Adding wool to the carpet adds quality to that carpet.

If wool carpets are damaged in a fire, the heat will cause the pile to frizzle or fuzz the way hair might when exposed to heat. Synthetics will melt.

Except for wool, the type of carpet fiber used does not really affect quality. Wool is really the only natural fiber used in carpet manufacture. The other fibers found in carpets are all synthetics.

Ninety percent of all carpets are made with nylon. While a multitude of scientific-sounding fibers and materials are advertised and promoted and new, improved third and fourth generation materials are touted, the fact is that nine out of ten carpets are made with nylon fibers.

Nylon offers luxurious feel or hand and is durable. It is resistant to wear, moths, mildew, and a wide variety of stains. It "hides" dirt and is easy to clean.

"Shading" which provides luster or highlights and shadows from light reflections can be featured in nylon carpets or eliminated if this feature is not desired.

"Heat setting" sets the twist of nylon fibers so they stand up to use and cleaning. The "heat set" process is found in all quality levels.

Only six fibers account for 99% of the carpets manufactured. Besides wool and nylon, the other fibers are polyester, acrylic, modacrylic, and polypropylene/olefin.

Polypropylene/olefin is very popular for commercial use because the strong, durable fibers resist weather, mildew, and moisture as well as most acids and chemicals. It costs less compared to other fibers. The fiber is familiar to many because of its use in indoor/outdoor carpets. Polypropylene/olefin carpets are usually made in loop or cut and loop textures.

Styles or textures do not affect quality, but by identifying the particular texture involved in a loss, the number of choices available from which to select an equivalent replacement are greatly reduced. Instead of looking at 200 carpets, the particular texture involved might be offered in only twenty or thirty choices.

Three kinds of textures are currently popular: loop, cut pile or sheared, and cut and loop.

If the loops are all the same height, the texture is called level loop. If the heights vary, the texture has a sculptured pattern effect and may be referred to as carved loop. Loop texture resists crushing, matting, and unraveling and is often the choice in higher traffic areas, particularly in commercial operations.

Every tuft has a twist in it to hold the separate strands of yarn together. Cut pile texture gives a luxurious look and feel. The most popular variations now marketed are twists and plushes.

Plushes have very little twists in the individual strands of yarn, making them fluffy and bulky. Twists, as their name implies, have the yarns twisted more tightly for more wearability. Saxony and Frieze textures have more twist.

The third basic texture, cut and loop, is a combination of the first two. Also known as carved or sculptured, this is a versatile texture providing the look of a plush, cut pile texture, and the support and durability of a loop pile. The tufts and loops can be all one height or can vary considerably in height as can the proportion of loops to tufts.

While thousands of carpets are found on the market, remember that just a few details can help determine the quality of the carpet. Is the carpet dense?

Is it heavy? Is the pile thick?

Are there many strands of yarn in the ply?

Is the carpet woven?

Does the carpet contain wool?

In most cases, the carpet will be nylon fiber and will be selected from one of three textures: loop, cut pile or sheared, or cut and loop.

A GLOSSARY OF COMMONLY USED CARPET TERMS

The Glossary that follows provides definitions for terms you may hear or come across as you deal with carpet in your adjustments. You will not need to be familiar with most of these to be effective in your adjustment of carpet claims. They are presented here for reference purposes only.

Acrylic One of the synthetic fibers used in carpet manufacture, the closest to natural wool fiber in appearance and feel.

Axminster A machine woven quality carpet which gets its name from the particular kind of loom it is woven on.

Backing The materials holding the pile yarns together. Carpet pile yarns are usually attached to a backing fabric known as the primary backing, then a secondary backing is laminated to the first for additional strength and stability.

BCF Sulked Continuous Filament nylon, a fiber that is crimped or trilubular, not round.

Berber A nubby, loop pile texture, formerly found in wool fibers only but now also available in synthetics.

Broadloom Carpet manufactured in a width of 54 inches or wider.

Brussels Carpet A woven loop pile quality carpet manufactured like a Wilton carpet and sometimes known as a looped Wilton.

Bulk The volume of the fiber used for the yarn in the pile surface.

Carpet A three-dimensional, pile fabric, soft-floor covering installed with or over padding, usually, but not always, covering a wall-to-wall area.

Carved Carpet (Also called Sculptured Carpet) Carpets made with different lengths or thicknesses of pile, or mixtures of cut piles and loop piles, to achieve designs and varied textures.

Continuous Filament Yarn Synthetic fibers manufactured by a process that produces extremely long filaments resulting in a carpet yarn that does not require spinning, resists shedding, and is very strong.

Contract Carpet Heavy duty, level loop, commercial grade carpet which is manufactured in a large volume, usually to a specific order.

Conventional Carpet Carpet that has to be installed over padding.

Crimping Adding bends, crimps, and creases to individual nylon fibers during manufacture-thus providing bulk and fullness without increasing the amount of fiber used. Invisible to the naked eye, the crimps capture air when the fiber is spun into yarn giving it high bulk.

Cushion Back Carpet Carpet with a foam rubber padding bonded right to the backing, a process associated with lower quality carpets.

Cut Pile Carpet (Also called Sheared Carpet) A texture or style of carpet where each tuft of yarn is cut or sheared after it is looped through the primary backing.

Cut and Loop Carpet A texture where some of the looped yarns are left uncut to add contrast in the carpet with a combination of loop and cut pile textures.

Denier The fiber size and weight. A unit of fineness and quality where a higher denier number indicates a better quality of carpet where fibers are equivalent. Denier is a very technical term with which even carpet salespeople are not very conversant.

Density The quantity of yarn tufts or loops per square inch on the face or surface of the carpet. The compactness of the yarns, or how closely packed or woven the yarns are to each other. The denser the carpet, the higher the quality.

Dimensional Stability The ability of a fabric to maintain its original dimension after use and after wet cleaning.

Embossed Carpet A carpet made with two types of yarn, one of which shrinks in the heat-set process providing a high and low pile which gives a carved or sculptured effect.

Face Weight A measure of quality based on the ounces of surface or face yarn per square yard of carpet. The greater the face weight, the better the quality - if the carpets being compared are made with equivalent fibers. A face weight of 25 ozs. is usually minimal. Most carpets have a face weight of 36-44 ozs., and high quality face weights are in the 60-65 oz. range.

Fiber The synthetic or natural (usually wool) material, made in long filaments, of which the carpet yarn is comprised.

Filament The long, thin strand of fiber used to make carpet yarn.

Frieze (Also called Twist) A cut pile texture or style of carpet where the face or surface yarns are twisted very tightly creating a dense and low surface. (Pronounced "freezay.")

Fusion Bonding A manufacturing process where pile is embedded in a soft vinyl layer which hardens after it is cured.

Grinning A test of density made by bending a carpet section backwards to see if the backing material is visible through the pile yarns. The more backing material you see, the lower the density and therefore the lower the quality.

Guage (Also called Gage) A measure of quality in a tufted carpet indicating the number of needles used in the manufacture of the carpet per crosswise inch.

Hand The way the surface pile feels to the touch. A high quality carpet might be described as having a soft, sumptuous, or luxurious hand.

Hand Knotted A laborious process of hand wrapping individual pile yarns around a woven core, more often seen in rug making than in carpet manufacturing.

Heat-Set A process where the separate strands of fibers twisted together to form a two, three, or four-ply yarn are set to hold their twist by using heat or steam thus allowing the texture to remain crisp and defined. A very common process for synthetic cut pile textures.

Jute Back A natural fiber from the Sisal plant used for primary backing to secure surface yarns.

Level Loop A loop texture carpet where each loop is the same height.

Loop A carpet texture where the yarn is sewn through the primary backing in loops.

Luster (Also called Lustre) The reflective property of a carpet fiber.

Modacrylic One of the primary synthetic fibers derived from long chain polymers used in carpet manufacture, adding flame, moth, and mildew resistance and nonallergic qualities to the acrylic fibers with which it is normally blended.

Modular Carpet Carpet tiles.

Monochromatic Carpet Carpet which is one solid color.

Nap The carpet surface.

Needle Punched Carpet manufactured by an economical process where hundreds of barbed needles interlock a prewoven fabric core with a mat of fibers. Indoor/outdoor carpets are often manufactured with this process.

New Generation (Also known as Advanced) Basic synthetic fibers with additives which resist static, soil, and stains; allow for easy cleaning; and offer other technological improvements.

Nylon The major fiber in carpet manufacture, used in about 90% of all carpets made. Nylon comes in a variety of textures, offers a luxurious hand, and is very durable.

Olefin (Also called Polypropylene) One of the basic synthetic carpet fibers, familiar in indoor/outdoor carpets and gaining in popularity for indoor use in loop textures due to its wearability and low cost.

Pile The thickness of the strands of yarn on the surface of the carpet.

Pilling The formation of little bead-like balls on the surface of the pile.

Plush A cut pile texture where each tuft of yarn is clearly defined in the surface.

Ply The number of strands of fiber which are twisted together to form the yarn. The higher the ply figure, that is 4-ply versus 2-ply, the greater the quality of the carpet.

Polyester One of the basic synthetic carpet fibers, most resembling wool in looks and touch, but cool to the touch lacking the warmth of other fibers.

Polypropylene See Olefin

Primary Backing The natural or synthetic backing material to which the carpet yarns are stitched, hooked, or tufted.

Random Sheared A cut and loop texture where the yarn combinations are all one level with more loop pile texture than cut pile texture.

Rows (Also called Stitches) The number of tufts of carpet in a lengthwise inch. The more rows, the more quality.

Saxony A cut pile texture with the yarn fibers slightly twisted prior to assembly.

Sculptured See carved.

Secondary Backing The woven or nonwoven material applied to the back of a tufted carpet to provide dimensional stability and additional weight and bind.

Shading The shifts in the surface color of a carpet caused by footprints and cleaning. A characteristic of monochromatic (single color) velvet textures.

Shag A tufted carpet with very long pile and relatively few tufts per inch allowing the pile to fall randomly in all directions to form the carpet surface.

Shots The weft yarns that hold the pile of a woven carpet in place crosswise.

Stainproof The newest "generation" of nylon fibers which add a molecular barrier to the surface of the fibers that will not allow absorption or wetting of the fiber from a spilled substance preventing the diffusion of the spill and fiber materials and the staining which would otherwise result.

Stitches See Rows.

Texture The appearance of the surface yarn derived from the three-dimensional pile used. Three favorite textures are cut pile, cut and loop, and loop pile.

Tip Definition Cut pile carpet which has thicker, larger yarns which allow the tips of each tuft to be visible or "defined."

Tip Sheared See Random Sheared.

Tuft A cut loop or uncut loop of surface yarn in woven and tufted carpets.

Tufted Carpet Needle stitched carpet with the pile produced by a multi-needle sewing machine.

Twist Every tuft of yarn has a twist in it which holds the piles or separate strands of yarn together.

Twist See Frieze.

Velour A cut pile texture with almost no twist giving it a smooth, satin-like, velvet surface.

Velvet See Velour.

Warp The lengthwise yarns forming the structure and pattern in a woven carpet.

Weft See Shots.

Weight See Face Weight.

Wilton Carpet A term now used to define any carpet woven on a Jacquard loom

including the woven loop pile carpet formerly called Brussels. Wiltons are a quality carpet.

Wool A natural carpet fiber selected from specially bred sheep which offers the highest quality, a rich, natural lustre, a luxurious hand or feel, and a deep, warm look.

Worsted Wool Premium wools made from special long staple fibers which make exceptionally strong and fuzz-resistant yarns.

Woven Woven carpets, such as Wiltons, get their names from the particular looms that they are produced on. The looms weave pile, the horizontal securing weft, and the vertical warp to which the pile is wrapped, into a solid fabric.

Yarn The continuous plied strand of fibers which is made into the pile surface of the carpet.