

Note: *This glossary is continuous work in progress - if you can't find what you're looking for please contact the author cited in the footer, thank you!*

Anchor Coat – A latex or adhesive coating applied to the back of tufted carpet to lock the tufts and prevent them from being pulled out under normal conditions. (See **Latex**)

Antimicrobial – A chemical treatment added during manufacture process to reduce the growth of common bacteria, fungi, yeast, mold and mildew.

Antistatic – The ability or propensity of carpet to generate static charge has been a problem that dates back to the use of oriental rugs. Static electricity remains a major concern that ranges from commercial environments with sensitive electronic equipment, general office areas with a network of personal computers, to the average residential end-use. Further advancements in heating and insulation have added to this problem by providing warmer and dryer indoor climates that are ideal for static generation.

The amount of static electricity generated by a material is based on the Triboelectric Scale and is expressed in kilovolts (kV). One kilovolt is the equivalent of 1,000 volts. It is generally accepted that the level of human sensitivity to static electricity is 3,500 volts, or 3.5 kV. Fortunately, shocks generated by carpet from higher kV's are generally only a nuisance, and are not damaging to individuals. One important factor that will determine static generation is room temperature and ambient relative humidity. Studies show that static electricity is generally not discernable until relative humidity drops below 40%.

Antistatic options can be added to increase or guarantee a carpet's antistatic performance, for example 'no shock' nylon filaments can be mixed with the body yarn or antistatic chemistry is added to carpet latex backing. An alternate method for static reduction is the use of topically applied antistatic sprays. Topical treatments are incapable of providing permanent static protection and can break down over time causing loss of antistatic performance and accelerated soiling.

The most applicable test for static electricity in carpet is the AATCC 134 Electrostatic Propensity of Carpets test method. Using this test, carpets are tested for static generation by step and scuff action using various shoe sole materials at ambient conditions of 70 degrees fahrenheit and 20% relative humidity. Ratings are then recorded and averaged. According to this test carpets that do not yield voltages in excess of 3 kV for commercial environments, and 5 kV for residential end-use, yield acceptable static performance.

Specifiers for special environments with sensitive equipment, such as aircraft, control rooms etc., will not accept a static level greater than 1.5 to 2 kV. The addition and permanency of built-in static inhibitors such as static dissipative filaments and conductive primary and secondary backings are often required in carpet to protect sensitive computer components. Typically, these carpets will generate 1.0 to 1.5 kV depending on construction and static component materials.

Appearance retention – the ability of a carpet to retain its original appearance. Since carpet is a vertically oriented textile that is walked on every day, carpet pile yarns are eventually going to bend and compress. By itself, this is a normal and expected condition, and the time required for this to occur, as well as the degree it happens is based on influences such as proper carpet specification, method of installation, and the quality and frequency of maintenance. Generally speaking, the denser the product the better it will perform. Carpets that are constructed with the required density for the intended use will deliver expected results and should maintain an acceptable appearance for as long as they are in service - providing, that is, they are properly installed and maintained.

Autoclave – Equipment that uses pressure and super-heated steam to heat set the twist into yarn.

Average Pile Density – The total weight of pile yarn in a cubic yard of carpet. A calculation used primarily in the commercial carpet industry. The Density (D) is determined by multiplying the pile yarn weight (W) in ounces per sq.yd. by 36 and dividing the total by the pile height (PH) in decimal inches, as expressed in the formula:

$$D = \frac{W \times 36}{PH}$$

The numerical result is in ounces per cubic yard. Pile density factors for machine woven commercial carpets range generally from 4200 to 8000oz/yd³. The Carpet and Rug Institute recommends a pile density of 5,000oz/yd³ or higher for heavy traffic conditions.

Average Pile Yarn Weight – Mass per unit area of the pile yarn including unexposed portions of the pile yarn. In the U.S., it is usually expressed as ounces per square yard.

Axminster – A type of carpet where the pile is inserted one row of tufts at a time, each row representing a section of the overall pattern. The tufts are U-shaped, and are anchored at the bottom into the primary backing that is simultaneously woven. The backing may have a synthetic-starch or latex finish applied to it. Axminster weaving has been traditionally used mostly for creating multicoloured patterned carpets.

Backing (Primary and secondary) – Backing is fabric (in tufted carpet) that makes up the back of the carpet, as opposed to the carpet pile or face. In tufted carpet, Primary backing is the material that the yarn is stitched through. Secondary backing is added in the finishing process (after dyeing) and serves to add strength (dimensional stability) to the carpet, and insures the individual tufts are locked in place. In woven carpet, the backing is the combination of the “construction yarns” which are interwoven with the face yarn.

Back Seams – Installation seams made with the carpet turned over or face down. Opposite of “face seams” made with the carpet face up. Both are on the back of the weaving or tufting operation.

Barberpole – Yarn colouration made possible by plying two or more yarns together, either of different colours or of differing propensity to accept dye. (See **Stipple**)

Bas-Relief Carving – A process of multi-level carving, whereby the field area of the design is carved down and the design itself is made of the higher pile height.

BCF – (See **Bulked Continuous Filament**)

Berber – A carpet constructed with coarse yarns having randomly spaced flecks of colour against a background of base colour. Currently, this term has expanded to describe many level or multi-level loop carpet styles.

Berber Wool – Berber wool is sourced from sheep with white, brown, grey and black fleeces to create a natural multi-coloured yarn. Un-dyed the wool creates neutral earthy coloured carpet with a homespun appearance.

Binding – A band or strip sewn over a rug or carpet edge to protect, strengthen or decorate the edge.

Bleeding – Transfer of fibre dyes from carpet or other fabrics by a liquid, usually water, with subsequent redepositing on other fibres. (See **Crocking**)

Blend – A mixture of two or more fibres or yarns.

Bobbin – A spool-like device made of various materials, shapes and constructions with a head at one or both ends and a hole through its length, or barrel, for placement on a spindle or skewer. It is used to hold yarn for spinning, weaving or sewing.

Border Rug – A rug manufactured with one or more outside borders of one carpet style and a field (inside area) of another carpet type.

Bound Only Rug – A rug that is manufactured by simply cutting carpet to the size or shape desired to fit into a room (but not wall-to-wall) and bound.

Braided – Reversible oval or round rugs produced from braided strips of new or used material.

Breaking Strength – The ability or capacity of a material to withstand the ultimate tensile load or force required for rupture.

Broadloom – A term used to denote carpet produced with solid or a single repeating design. Broadloom is usually 12 feet wide or 4M wide.

Buckling – (See **Rippling**)

Bulked Continuous Filament (BCF) – Continuous strands of synthetic fibres extruded in yarn form without the need for spinning, which natural fibres and synthetic staple fibres require for yarn formation.

The filaments may undergo a process to add texture that makes the formerly straight filaments either kinked or curled. Continuous filament yarn does not fluff or lose face fibre however, since damaged fibre does not naturally detach from the surface, the effects of abrasion and wear can become more conspicuous on filament carpeting.

Bulking (or Crimping) – Processing yarns, to fluff them up and give more coverage with the same weight. This is usually accomplished by crimping the fibre.

Burling – A hand tailoring operation to remove any knots and loose ends, insert missing tufts of surface yarns. A repair operation on worn or damaged carpet is called reburling.

Burns – Burns occur when the carpet yarn is exposed to an errant heat source and the fibres are melted or scorched. Burns should be addressed immediately. First, snip off the damaged fibres, then use a soapless cleaner and sponge with water. If the damage is extensive, see a professional about repairs.

Cable – A yarn made by twisting two or more plied yarns together. Typically a large, regular yarn.

Cashmere – Super soft cashmere yarn is made from the fine hair of Cashmere goats, which is collected by combing the goats during moulting season, so production is small. Cashmere is relatively expensive, but can be blended with wool to be used in hand-tufted carpets.

Carding – In staple yarn manufacture, a process to remove impurities and short, unusable fibres. The fibre is cleaned and aligned to form a continuous untwisted string called a sliver.

Carpet – Any textile floor covering that is not designated as a Rug. (See **Rug**)

Carpet Cushion – (See **Underlay**)

Carpet Modules – Carpet packaged as squares, generally 18 inches by 18 inches (457 x 457 mm), with or without attached cushion backing. Also referred to as carpet tiles.

Carpet Odour – Some new carpets and padding may have a noticeable odour. Such odours usually disappear within a few days with ventilating and frequent vacuuming.

Carving – In handcrafted rug manufacture, whereby the component carpet(s) is (are) carefully cut down using a tool designed for that purpose to add a third dimension to the rug.

Category – (See **Design Category**)

Chain – In weaving: 1. The binder warp yarn that works over and under the filling yarns of the carpet; 2. Axminster loom refers to the endless chain that carries the tube frames; 3. Dobby loom – refers to the endless chain of pattern selector bars.

Chain Binders – Yarns running warp wise (lengthwise) in the back of a woven or woven interlock carpet, binding construction yarns.

Colourfastness – The measure of a carpet or yarn's resistance to colour fading.

Colour matching – The process of comparing colours, either by eye or by instrument, and making adjustments if necessary, with the intent of reducing differences between the item being coloured and the standard. Critical to colour matching are: The light under which the colours are compared. (The light source being used in the real conditions of the commercial environment should be used to match colours).

The surface texture of the object being matched (cut pile carpet can appear darker than loop made of the same yarn). The surface lustre of the object being matched (higher lustre yarn can look darker than lower lustre fibres).

Commercial Matching – Matching of colours within acceptable tolerances mutually agreed upon by the buyer and seller.

Construction – the carpet manufacturing method usually tufted, woven or bonded. The term also can refer to the specific details of a particular carpet's specification, including fibre type, yarn twist level, density, method of dyeing, etc.

Corner Sample – A sample rug, whereby a small (usually 2 feet square) portion of the rug is manufactured to show either the technique used, or the design to be manufactured.

Cotton Count – A numbering system, previously used for cotton, now used for most staple fibres, based on length and weight. It is the number of 840-yard skeins required weighing 1 pound, therefore, the higher the cotton count, the finer the yarn.

Cotton – Cotton is probably the most widely used natural fibre and most commonly used as a woven carpets 'warp' yarn because of its linear strength. It is rarely used as a carpet pile fibre, but can be used as a fine yarn outline or to create texture. Low recovery properties and flame resistance limit its use in hand-tufted carpets.

Cover – Degree to which the underlying structure is concealed by the face yarn.

Creel – The large frame used to hold yarn cones that directly feed yarn to the needles of a tufting machine.

Creeling – The process of mounting yarn packages on the yarn holder of the creel.

Crocking – A term used to describe excess colour rubbing off as the result of improper dye penetration, fixation or selection. (See **Bleeding**)

Cross Dyed – Multicoloured effects produced in a fabric with fibres of different dye affinities.

Cross Seams – Seams made by joining the ends of carpet together.

Cross Section – The shape of an individual filament or fibre when cut at right angles to its axis. Manufactured fibres used for carpet may have various shapes, including round, trilobal and pentalobal, as well as hollow varieties.

Cushion – (See **Underlay**)

Custom Tufted – Carpet or rugs in which pile yarns are manually tufted with hand machines or by narrow-width tufting machines.

Cut Pile – A carpet fabric in which the face is composed of cut ends of pile yarn.

Cut / Loop Pile – A carpet fabric in which the face is composed of a combination of cut ends of pile yarns and loops.

Deep Dye Fibres – Modified synthetic fibres with increased dye affinity relative to regular dye fibres. By combining deep dye fibres with regular dye fibres, a two-colour or two-toned effect can be achieved within one dye bath. (See **Space Dyed**)

Delamination – The separation of the secondary backing or attached cushion from the primary backing of the carpet.

Delamination Strength – Force required to remove secondary backing adhered to a finished carpet.

Delustered Fibres – Synthetic fibre in which brightness or reflectivity is reduced, usually by incorporation of a fraction of a percent of white pigment, such as titanium dioxide. Fibre producers' designations include dull, semi-dull and semi-bright, whereas bright fibres are nondelustered.

Denier (den) – A unit of measure for the linear mass density of fibers, is defined as the mass in grams per 9000 meters. The denier is based on a natural reference: a single strand of silk is approximately one denier; a 9000-meter strand of silk weighs about one gram. Applied to yarn, a denier was held to be equal in weight to $\frac{1}{24}$ of an ounce. The term microdenier is used to describe filaments that weigh less than one gram per 9000 meters. Typical nylon carpet fibre has 6 – 22 deniers.

Density – (see **Average Pile Density**) Refers to the amount of pile yarn in the carpet and the closeness of the tufts. In general, the denser the pile, the better the performance. Density is often numerically referenced as the "Average Pile Density".

Design Rug – A rug manufactured with design elements within the border, field or both.

Design brief – a detailed description of the design required, i.e. style, colours

Design Category – indicates the complexity of the design of the carpet or carving. The following categories are currently used to classify hand-tufted carpets at Nanhai: A (Plain carpet = least complex), AE, B, BE, C, D, E, M (Mural quality = most complex)

Differential Dyeing Fibres – Fibres of the same generic type, natural or man-made, treated or modified so that their affinity for certain dyes becomes changed, thus creating a multicoloured effect when dyed.

Dimensional Stability – The ability of the carpet to retain its original size and shape when subjected to outside forces (e.g. a secondary backing adds dimensional stability to carpet).

Direct Glue (Direct Glue Down) – An installation method whereby the carpet is adhered directly to the floor.

Double Back – Woven or nonwoven fabric laminated to the back of carpet with latex or other adhesive. Double backed carpet has enhanced dimensional stability and strength and protects floor finishes in the case an underlay or non-slip pad has not been applied. (See **Tertiary Backing**)

Double Glue Down – An installation method whereby the carpet cushion is adhered to the floor first, and the carpet is then glued to the cushion. Also referred to as Double Stick installation.

Drafting – Taking the carded staple fibre (known as sliver) and forming it into the proper length and width in preparation for the final yarn manufacture.

Drop Match (See Set Match) – A pattern in carpet that repeats diagonally. Each corresponding pattern element drops down a certain distance (usually a half pattern repeat in length) instead of simply repeating horizontally across the width. In a quarter drop match, the design matches one quarter of the length of the repeat on the opposite side.

Dry Foam Cleaning (“Dry Extraction Cleaning”) – A cleaning process using a minimal amount of water, where dense foam is worked into the carpet with a reel type brushing machine. The soil-laden foam is then removed using a wet vacuum, which is often part of the same equipment as the brush.

Dry Powder Cleaning (“Dry Extraction Cleaning”) – A cleaning process using a minimal amount of water, where an absorbent solvent laced powder is worked into the carpet, allowed to set for a period of time, and then it and the absorbed soil and dirt are vacuumed up.

Dry Rot – A condition caused by attack of microorganisms on fibres, textiles, carpets or other materials, characterized by less strength and integrity. Attack on carpet backings permits carpet to break and tear easily. Natural materials, such as jute, are susceptible, whereas polypropylene and most other synthetics are resistant.

Dutchman – Installer’s term for a narrow strip seamed onto standard width carpet to fit oddly dimensioned areas. Proper planning will minimize the need for this practice.

Dye lot – a quantity of carpet dyed at one time or made from yarn dyed at one time which is consistent in colour throughout the fabric. Dye lot size varies with dye method and the capability of dyeing equipment.

Dye to match – when a customer approved sample is presented for colour matching

Dye Lot Variation – The amount that a colour can vary and still be considered a “match”, without physically being in the same dye lot.

Dye Penetration – The ability of a dyeing process to colour yarns completely from the tip to the base of the yarn.

Dye Stuffs – Highly coloured substances capable of permanent chemical or physical attachment to textile fibres. These are in dry powdered form or liquid form. They are the materials used to mix with water to create the dye “liquor” which is, in turn, mixed with water and other chemicals and used to dye carpet.

Dye Streaks – Relatively long, narrow variations of colour running lengthwise in direction. Dye streaks are associated with improper continuous dyeing, or as a result of mixing yarn lots. A moderate level of streaking is almost always present in Saxony carpets made from plied heatset yarns, and should be considered a characteristic of this type of carpet.

Embossed – A pattern formed when thick, twisted yarns are used on a base of lower, lighter yarns to create an engraved appearance.

End Matched – When yarns are matched from the cut ends of the yarn. (See **Side Matched**)

Extrusion – A yarn manufacturing term, this is the process whereby near liquid nylon (or other material) is forced through a spinneret (a sieve like apparatus) to “extrude” the very fine fibres that are either cut, mixed and bundled into yarn (“staple”), or bundled into yarn in long strands (“filament”).

Face Seams – Sewn or cemented seams made without turning the carpet over or face down. They are used during installations when back seaming is impossible.

Face Weight – Refers to the amount of fibre (per square yard) that is in the face of the carpet (total weight less the weight of the backing). However, this is different than density because tall, less dense tufts may have the same face weight as short, dense tufts. On average, short, dense tufts will be more resistant to wear and matting.

Fading – All carpet (like any textile product) is subject to colour changes over time. This change is very gradual and is caused by oxidation through exposure to the open air within the home. Due to damaging ultraviolet rays, areas exposed to sunlight are subject to more dramatic colour changes.

Felting – Similar to fibre bonding, except in the yarn form or non-woven fabric form, whereby the individual fibres are mechanically entangled (using a bank of needles) prior to the completion of the yarn manufacture.

Fibre – (See **Yarn**) Natural or man-made materials having very high aspect ratios. That is, having lengths hundreds to thousands of times greater than their widths. A single filament of natural material, such as cotton, linen, or wool, or artificial material such as nylon, polyester, metal, or mineral fiber, is measured in terms of linear mass density, the weight of a given length of fiber. Various units are in use, such as: the denier and tex (linear mass density of fibers), super S (fineness of wool fiber), worsted count, woolen count, cotton count (or Number English Ne), Number metric (Nm), and yield (the reciprocal of denier and tex).

Fibre Bonded (or Needle punch) – Carpet produced directly from individually coloured (usually synthetic) fibres. The fibres are laid as a thick web and fed through a bank of barbed needles. This entangles the fibres (forming a felted surface), which are then impregnated with a chemical which, after drying, bonds the fibres permanently together. ‘Second generation’ products use an additional needling process to convert plain surfaces to ribs, velour’s and patterned textures. Chemical backings (such as high-density foam and PVC) can be applied for use in suitable locations.

Fibre Bundle – A number of fibres positioned together.

Fibre Cushion – Term used to describe separate carpet cushion made of needle-felted animal hair, jute, other fibres or fibre blends. Some are rubberized and may have one or two rubber surfaces.

Field – The largest (typically the center) portion of a rug.

Filament – A single continuous strand of natural or synthetic fibre.

Filament Yarn – A type of yarn whereby the individual fibres are much longer and tend not to be mixed, but rather bundled together before being twisted and heatset into yarn.

Filler – A low cost material used for extending rubber, plastic or other polymers. Fillers are generally powders of very small particle size. Carpet latex laminating compounds and foams contain large amounts of fillers. The most common filler in carpet latex is finely powdered calcium carbonate, often called “whiting”, produced by grinding limestone. (See **Latex**)

Filling Yarn – In weaving, any yarn running across the width of the fabric perpendicular to the wrap yarns. In woven carpet, filling yarns are part of the group of construction yarns that also include chain and stuffer warp and form the backing. Woven carpet fill and chain warp yarns interface to secure the pile yarns. Filling and other construction yarns usually are cotton, polypropylene, jute, polyester, fibreglass or similar materials.

Finishing – A collective term denoting final processing of carpet and textiles subsequent to tufting, weaving and dyeing. Carpet finishing processes include steaming, application of tertiary backing, edge finishing, back beating, brushing, shearing, carving and others.

Flax – Flax and linen are occasionally used in loop pile hand-tufted carpets. The yarns are strong but not very resilient or resistant to abrasion. Adds interesting side lustre and texture effects when used as outlines. Often found in blends.

Flooring Radiant Panel – Laboratory testing device for measuring the critical radiant flux of horizontal mounted floor covering systems exposed to a flaming ignition source in a graded radiant heat energy environment.

Fluffing – (See **Shedding**)

Free Form / Shaped Form – A floor area bound by walls and of irregular shape. Sometimes called “form-fit area”.

Fringe – A decorative design element consisting of decorative edging and loose threads that is added to the edge (typically the ends) of a rug.

Fuzzing – (See **Shedding**)

Gauge – In tufting, the distance between two needle points expressed in fractions of an inch. (See **Gauge/Pitch**)

Gauge/Pitch – The number of ends of surface yarn counting across the width of carpet. In woven carpet, pitch is the number of ends of yarn in 27 inches of width; e.g., 216 divided by 27 = eight ends per inch. In tufted carpet, gauge also means the number of ends of surface yarn per inch counting across the carpet; e.g., 1/8 gauge = eight ends per inch. To convert gauge to pitch, multiply ends per inch by 27; e.g., 1/10 gauge is equivalent to 270 pitch, or 10 ends per inch x 27. One-eighth gauge is eight ends of yarn per inch x 27 = 216 pitch.

Generation – An informal reference indicating large improvements in the general development of the nylon fibre as used in carpet (i.e. first generation nylons were the earliest, progressing from there through the current fifth generation).

Greige – Undyed, unfinished carpet.

Grinning – In carpet where the primary backing can be seen between individual tufts of carpet, typically between adjoining rows.

Grippers/Gripper rods – (See **Tackless Strip**)

Ground Colour – In carpet, the background colour against which the top colours create the pattern or figure in the design.

Gully – The distance between the tackless strip and the wall. It should always be slightly less than the thickness of the carpet.

Hand – Used to describe the tactile quality, or how a carpet or textile feels to the touch. While many aspects of manufacture (twist, fibre, weight, denier, density, etc.) go into developing a carpet's "hand", obviously a carpet with a soft, appealing hand will feel soft and comfortable to the touch.

Heat setting (or Heatset) – A yarn manufacturing term, this is the process whereby heat or steam is applied to the twisted yarn to increase the yarn's ability to hold its twist over time. This promotes the fibre's ability to "bounce back" when it is temporarily crushed under foot.

Hexapod Testing – The Hexapod test subjects a carpet sample to sustained wear using a steel ball with six rubber faced feet in a rotating drum. The drum is rotated up to 12,000 cycles which simulates between 60 - 80,000 foot passes on a concentrated area of 8" x 18". After 2000 cycles the sample is removed, vacuumed according to the test procedure, and reinstalled in the drum for the consecutive 2000 cycles.

The Hexapod test determines the cumulative change in a carpet's appearance between trafficked and non-trafficked carpet providing an indication of the expected appearance retention of a new carpet in use over time. The Hexapod test eliminates influencing factors such as soiling, which are outside the control of the manufacturer. The tested samples are compared with an untested sample, using a grading chart, and results are given on a scale of 1 - 5 (1 = severe appearance change, 5 = no change).

Highlighting – (See **Shading**)

High Low – Multilevel carpet style combining high and low loop pile areas or high cut pile and low loop areas. The latter is also called a cut / loop style.

Hot Melt Seaming Tape – (See **Seaming Tape**)

Jacquard – An apparatus for a carpet weaving loom that produces patterns from coloured yarns. The pattern information is contained on perforated cards or computer files. The holes in the cards or binary data in the file activate the mechanism that selects the colour to be raised to the pile surface. For example, Axminster and Wilton use the Jacquard mechanism.

Jute – A natural bast fibre made from certain plants of the linden family, which grow in warm climates, such as those found in India and Bangladesh. Jute is used widely as the weft backing material in woven carpet. Also known as hessian, it is mainly used for sacking and matting. Jute does have interesting side lustre and although

its recovery properties are poor, it does find a use as outlines in designs providing an interesting texture and reflectance. Its natural colour means limited colour options and stains are difficult to remove.

Kibby / Hand trial / Strike off – sample produced by a machine for the purpose of colour and pattern scale only – NB. A Kibby sample is not representative of production (Axminster) quality

Knee Kicker – A carpet installation tool used to make minor adjustments by stretching carpet (for installation with a tackless strip).

Latex – A water based synthesis of synthetic rubber, natural rubber or other polymers. Latex is applied to the back of tufted carpet to lock the tufts and prevent them from being pulled out under normal conditions and to laminate secondary backing to primary backing to increase material strength and dimensional stability.

LEED – Leadership in Energy and Environmental Design (LEED) is a green building certification program used worldwide, developed by the non-profit U.S. Green Building Council (USGBC).

The LEED performance credit system aims to allocate points based on the potential environmental impacts and human benefits of each credit. Tai Ping provides products for consideration in two categories of the LEED rating system: Materials & Resources (MR) and Indoor Environmental Quality (IEQ).

A possible total of 3 LEED credit points can be obtained for Tai Ping's tufted wool or silk carpets under the subcategories of 'MR Credit 6' (Rapidly Renewable Materials), 'IEQ Credit 4.1' and 'IEQ Credit 4.3' (Low Emitting Materials). Tai Ping's 100% wool and 100% silk carpets, as well as the manufacturing adhesives, are classified under the Green Label Plus Program (GLP+) as 'low emitting', these points contribute to the total score for LEED certification of the building. The Green Label Plus (GLP+) test result certificates or emission chamber testing in an independent laboratory can be provided as evidence for LEED IEQ Credits. (See **VOCs**)

Legs – individual stands of yarn that combine to make a 2/3/4/6 etc. ply yarn

Length repeat – size of design from top to bottom

Level loop pile – a Hand woven or tufted carpet style having all tufts in a loop form and of the same height.

Leno Weave – A woven fabric construction in which paired warp yarns twist around one another between fill yarn picks. It is similar to woven gauze bandage construction. The secondary backings for tufted carpets are of leno weave construction.

Level Cut / Loop (also known as Pattern Cut Pile) – This type of carpet features a sophisticated look created by running cut pile and loop pile on a level pile height. The cuts and loops can appear random, or they can be arranged to create a distinct pattern.

Loom – Machine that produces woven fabrics. In weaving, lengthwise yarns (warp) are interlaced with weft yarns (fill) by the shuttle or other devices, such as gripper or rapier.

Loom Width – The loom size for which a design is to be produced

Loop Pile – Carpet style having a pile surface consisting of uncut loops. May be woven or tufted.

Luster/Lustre – Brightness, sheen, or reflectivity of fibres, yarns, or carpet. Synthetic fibres are produced in various luster classifications including bright, semi-bright, semi-dull and dull. Bright fibres usually are clear (have no white pigment), whereas the duller designations have small amounts of white pigments, such as titanium dioxide. Luster of finished carpet also depends upon yarn heat-setting methods, dyeing and finishing. In high traffic commercial areas, duller carpet is often preferred for soil-hiding ability.

Markers – Coloured yarns woven into the backs of woven carpets to aid installers in achieving correct pattern match and pile direction.

Match, Set or Drop – Pattern match designates the arrangement and dimensions of the repeating units making up the design of patterned carpet, including woven patterns, prints, tufted high/low and others. In set match, this rectangular pattern unit is arranged in parallel rows across the carpet width. In a half drop pattern, the start of each pattern repeat unit is transposed to the midpoint of the side of the adjacent unit. In quarter drop match, each unit would start of the measurement in inches past the neighboring pattern unit's starting point. Thus, pattern repeat units in drop match repeat diagonally across the width, and in set match, they repeat straight across the width perpendicularly to the length. Pattern repeat dimensions and match are significant to specifiers and purchasing agents because they influence the amount of excess carpet (over measured area) needed in multiple width installations.

Matting – Severe pile crush, most often combined with the unintended entanglement of fibres or tufts.

Mending – Hand repair of carpet after tufting and weaving to replace missing tufts, remove knots and loose ends, etc.

Metallic yarn – Metallic yarns and threads add texture and glitter. Fibres are difficult to secure and often feel rough to touch. Metallic and yarns like Lurex are only used for small accents.

Mohair – Angora goats are sheered twice a year to obtain fine mohair. Similar to sheep's wool in structure and properties, mohair is generally finer and more lustrous. It has a smooth handle (feel), with good resilience but is expensive. Most commonly used in blends with wool.

Monofilament – A single, continuous strand of synthetic polymer in the form of a filament large and strong enough to be used as a textile yarn.

Moresque – A distinctive textural appearance given to carpet by the use of yarns that have been twisted with other yarns of different colours or shades. Moresque yarns thus have a “barberpole” appearance. Moresque carpet in suitable colours is a good soil hider in high traffic areas.

Multi-filament – Synthetic yarns composed of a multiplicity of continuous fibre strands extruded together, usually, from the multiple holes of a single spinneret. Multi-filament carpet yarns are textures to increase bulk and cover, and are called “bulked continuous filament” yarns or BCF yarns.

Multi-Level Cut/Loop Pile – This type of carpet features a sophisticated look created by running cut pile and loop pile, but the loops can be varying heights. The cuts and loops can appear random, or they can be arranged to create a distinct pattern.

Multi-Level Loop Pile – Similar to a level loop, varying heights of carpet features yarn on the face of the carpet that forms loops, of varying heights. The various heights can be random, or they can be arranged to create a distinct pattern.

Nap – Another term for pile, usually used when discussing the pile direction, or the direction that the carpet came off the tufting machine.

Narrow Carpet – Woven carpet less than six feet wide, as distinguished from broadloom.

Nonwoven – A fabric manufactured directly from fibres or filaments or from a web of fibres without the yarn preparation needed for weaving, knitting or tufting.

Nosing – The front dividing line of a step, where the top of a riser joins the front of a tread.

Nylon – A synthetic fibre first discovered by DuPont (now Invista) chemists in 1938, but not used in carpet until much later. Today it is the most widely used fibre for carpet and comes in either filament or staple form. Nylon can be dyed topically or dyed in a molten state (solution dyeing).

Olefin (or Polypropylene) – A synthetic fibre used for some conventional, as well as indoor-outdoor, carpets. This fibre is produced in continuous filament, fibrillated and staple form; solution dyed. Polypropylene is known for stain resistance, easy cleanability, wearability, and a low absorption factor. Other features include abrasion resistance, mildew proof, moth proof, non-allergenic, resiliency, colour retention and recoverability. Recommended for light traffic because it is less durable and less resilient than nylon. It also exhibits poor appearance retention and pattern walk-out as compared with nylon.

Open Time – The time interval between the spreading of adhesive on a substrate and the appropriate placement of a floor covering material into the adhesive for bonding.

Oriental Rugs – Hand-woven rugs made in the Middle East and the Orient.

Overtufting – A manufacturing process whereby a previously tufted rug is re-tufted, usually adding a differing design element.

Package Dyed – Yarn is dyed while wound on perforated tubes or wire forms. The package dye machine forces dye liquor through the yarn on the dye package.

Pad – (See **Underlay**)

Pattern Elongation – The deformation of a patterned carpet caused by unintended tensile force, yielding a pattern that appears “stretched” because it is longer than it was designed to be.

Pattern Match – Repeat – the distance from a point in a design in a patterned carpet to a point where the identical pattern appears again, measured lengthwise and width wise in the carpet. In matching the pattern, there will inevitably be some waste of carpet in order to obtain the best possible side match—whether it is a drop or self match pattern.

Pattern streaks – visually apparent streaking in patterned carpet resulting from linear juxtaposition of pattern elements in one direction. It is usually most visible in the length direction. It is not a carpet defect, but is inherent in certain designs. Contract specifiers should view rolls of carpet laid out on a floor to evaluate geometric or other busy patterns for this characteristic which may be objectionable in long corridors and other large areas, but not visible in small rooms. (See **Stipple Streaks**)

Peaking – A seam that is peaking is one that is generally higher than the other areas of the carpet. Most often this is due to improper carpet installation. It is also caused by a carpet installer running the padding seams in the same direction as the carpet seams (normally, this should not be done).

Pick – In woven carpet or in backing, this is the number of yarns running widthwise across the yarns running lengthwise in the carpet or backing.

Pigmented Yarns – Solution dyed yarns.

Pile – The visible surface of carpet, consisting of yarn tufts in loop and/or cut configuration. Sometimes called “face” or “nap”.

Pile Crushing (carpet in use) – Pile crush will occur to some degree. It is, in fact, unavoidable. It will be most noticeable in high traffic lanes and under the legs of heavy pieces of furniture. More frequent vacuuming will help minimize this condition in heavy traffic areas.

Pile Crush (carpet in transit) – This is a term used for the specific type of crush that can normally occur during the shipment and storage of rolled carpet. This condition is not permanent, and usually corrects itself as the carpet “conditions” to the environment. In some cases it will be necessary to steam the carpet to remove the marks.

Pile Direction – This is the direction in which the pile naturally flows. This corresponds to the direction that the carpet came off the tufting machine.

Pile Height – A measurement of the pile of a carpet, from the base of the primary backing to the tip of the yarn.

Pile Reversal – (See **Shading**)

Pile Setting – Carpet cleaning term for the process of erecting the damp and dishevelled pile after shampooing by means of a pile brush or pile lifting machine.

Pile thickness – the resulting thickness when the thickness of the backing is subtracted from the total thickness of the finished carpet.

Pile weight – the weight in ounces of the fibre in a square yard of carpet.

Pile yarn – the yarn making up the tufts of the carpet.

Pilling – This is a term used to describe the condition when small “pills” of fibre appear on the top of the carpet. Some pilling can occur as a result of the type of fibre used to manufacture the carpet and the level of foot traffic. Small amounts of pilling should simply be cut off the top of the carpet.

Pill Test – A Federal standard for the measurement of the flammability of carpet or backing. Passing or failing this test is measured as a function of the size of the burn resulting from a timed Methenamine burning tablet.

Plied Yarn – A yarn composed of two or more single yarns twisted together. Many two-ply yarns are used in carpet. In cut pile carpet, e.g., Saxony, plied yarns must be heatset to prevent untwisting under traffic.

Ply – This is a term used in describing how many single ends have been ply-twisted together to form a plied yarn, e.g., two-ply or three-ply.

Polyester – A synthetic fibre introduced in some products in the 1950’s, and carpet in the 1960’s. It is made either as staple or continuous filament. Its characteristics include good abrasion resistance, good colour retention, and ability to accept bright, vivid colours, stain resistance, and wearability. It is moth proof, stain and soil resistant, mildew resistant and non-allergenic. Recommended for light traffic because it is less durable and less resilient than nylon. It also exhibits poor appearance retention and pattern walk-out as compared with nylon.

Polymers – High molecular weight, chemical compounds formed by repeated linking of smaller chemical units called monomers. Polymers from which fibres are made are long chain molecules in which the monomers are linked end-to-end linearly. Synthetic polymers used for carpet fibre include nylon 6, 6 and nylon 6 (polyamides), polyester, polypropylene and polyacrylonitrile (acrylics). In popular terminology, polymers are also called plastics or resins.

Polypropylene – (See **Olefin**)

Pooling – (See **Shading**)

Power Stretcher – A carpet installation tool used to stretch carpet (for installation with a tackless strip). According to industry standards, residential carpet, installed over cushion with a tackless strip, must be power stretched to prevent wrinkles and ripples.

Printed Carpet – A carpet that is dyed (usually in patterns) by using either flatbed screen printing, rotary screen printing, sponge printing or what is basically a very large inkjet printer.

Primary Backing – (See **Backing**)

Puckering – An installation problem when one side of the carpet is longer than the other side of the adjoining edge. The oversized carpet gathers in the form of wrinkles or pleats at the seam.

Random Shearing – A carpet texture created by running loop pile carpet through the carpet shearer whereby high loops are actually cut to become cut pile. Since cut pile is less reflective than loop pile, the resulting texture can actually appear to be different colour. Also referred to as Tip Shearing.

Rendering – A detailed, computer generated drawing of a proposed rug. It is used to show both colour placement (the colours used in the proposed rug) and to show a proposed design.

Repeat – (See **Pattern Match**)

Request form – Form to be filled out by sales reps/agents/mangers for the purpose of giving a detailed design request.

Resilience – The ability of carpet pile to ‘spring back’ or recover its original appearance and thickness after being subjected to compressive forces or crushing under traffic.

Re-stretch – Repeating the stretching-in procedure, subsequent to the initial installation. This can be required if improperly installed, if the carpet is too easily stretched, or if there has been too much moisture introduced into the carpet.

Riser – The vertical or front surface of a step, rising from the back of a tread.

Robotuft – Robotuft is an advanced robotic machine for producing tufted area rugs.

Rotary Brushing – A carpet cleaning technique in which a detergent solution is worked into the pile by a motor driven rotating brush. Loosened soil and spent solution is often subsequently removed by vacuum.

Rows or Wires – In woven carpet this is the number of pile yarn tufts per running inch lengthwise. Called “rows” in Axminster and “wires” in Wilton and velvet carpet. Analogous to “stitches per inch” in tufted carpet.

Rug – A textile based product that is typically placed on the floor (rather than wall-to-wall, like carpet).

Salt and Pepper – a design term for multiple colour, distributed to give a textural look

Saxony – A Saxony is a cut pile carpet with upright yarns in which the individual tips of yarn are clearly visible. For centuries, Saxony has been the classic cut-pile construction.

Scrim – A reinforcing material glued to the seams in a rug to insure that they do not separate.

Seaming Tape – A tape, typically with an adhesive, used in the installation of carpet to bind two edges of carpet together.

Seams – In a carpet installation, the connection of the edges of two pieces of carpet using various seaming tapes, hand sewing or other techniques.

Seam Adhesive – (See **Seam Sealing**)

Seam Sealing – A procedure involving coating the trimmed edges of two carpet pieces of carpet to be seamed with a continuous bead of adhesive in order to prevent fraying and ravelling at the seam.

Secondary Backing – (See **Backing**)

Self-Tone – A pattern of two or more shades of the same colour. When two shades are used in a pattern or design, it is called “two tone” or “tone-on-tone”.

Selvage – The side edges of a rug or carpet. Most commercial carpets are shipped with the selvage on. Residential carpet is usually trimmed to the face yarn. Also known as "selvedge."

Semi-Worsted – During 'combing', the finest, longer strands of wool are separated from shorter less desirable wool. The term Semi-Worsted wool refers to a wool which has been produced by one of two ways: Either the very high grade wool (after being separated from low to mid grade), or the highest grade wool which is separated from the lowest grade and then is blended with a medium grade wool.

Serging – A method of finishing the edges of area rugs by use of heavy, coloured yarn sewn around the edges in a close, overcast stitch.

Side Match – when a yarns cut colour is dyed to match the side of another yarns side (side being yarn that is seen when it is looped)

Sisal – Sisal is a leaf fibre. It is very coarse and generally used in matting. It is occasionally used in blends with other fibres.

Sewing Pole – Any piece of wood or other material, more or less rounded, over which carpet may be laid in order to facilitate sewing and other related operations. Most installers prefer a wooden pole about four inches in diameter that has been slightly flattened on one side.

Shading / Tracking / Pooling – After installation, carpet often appears to change colour in certain areas. This phenomenon does not involve a true colour change, but rather a difference in light reflection between various surface areas. Shading is not a manufacturing defect, but is actually considered to be the beauty of a cut pile carpet, simulating the look of velvet or suede.

The condition occurs due to the difference in light reflection between the sides and tips of the yarn strands. As the pile surface is disturbed, the yarn sides will reflect more light than the tips, resulting in the highlighting feature so common in today's styles.

Shading can be temporary (such as foot marks) - or permanent, due to the yarn becoming crushed flat and set in this position due to frequency of traffic, humidity, soiling etc.

Shag – A carpet texture characterized by long pile tufts laid over in random directions in such a manner that the sides of the yarn form the traffic surface. Modern shags are made from plied, heat-set yarns and are either cut pile or cut and loop styles.

Shear – In carpet manufacture, this is the process whereby a carpet is run flat through a machine that has large rollers with blades running around them. This action takes the pile down by minute fractions of an inch to present a uniform finish.

Shedding (or Fluffing or Fuzzing) – New carpets may fluff or shed short fibres. This is not considered a manufacturing defect, but a natural occurrence in new wool and silk carpets. Frequent vacuuming, up to 2 times per day, is suggested up to six months after installation. The removal of loose fibres by the vacuum cleaning does not affect the carpet life or quality. This condition is most evident in high traffic areas. Shedding will gradually decrease. The length of time required to eliminate shedding is dependent upon the type and amount of vacuuming performed.

Shuttle – Part of a weaving loom that carries fill yarn back and forth across the fabric width. In conventional looms, it contains a spool of fill yarn called a bobbin.

Side-by-Side Sample – A small sample placing two component pieces of carpet together to show how the colouration would look in a rug design.

Side Match (1) – The level of match of the colour and texture of a carpet from one side of its width to the other. Poor side matching can result in visible seams. (NB. the manufacturer should be informed about required side matching during order placement.)

Side Match (2) – When yarns are matched from the sides of the yarn. (See **End Matched**)

Side Seams – Seams running the length of the carpet. Sometimes called length seams.

Silk – Silk is one of the oldest fibres known to man. It is an animal fibre produced by certain insects to build their cocoons and webs. Although many insects produce silk, only the filament produced by the mulberry silk moth *Bombyx mori* and a few others in the same genus is used by the commercial silk industry.

Silk / Real Silk – is the strongest of the silks, made from the longest continuous filaments, and the most expensive. As the first silk removed from the cocoon real silk is the best quality and the most consistent. Real silk is the easiest silk to tuft and carve, however it takes colour strongly and colours can look “too bright”.

Silk / Delicate Silk – is very soft and is generally the shorter, finer silk that remains on the cocoon after processing real silk. It contains more yellow than real silk so dyeing delicate silk a pale shade can be a problem. Delicate silk is often used in blends with wool and other fibres.

Silk / Dull Silk – is made of the waste material from a variety of Chinese silkworms. It is soft, but its fibres tend to be short, which leads to fibre loss when used in carpets. Despite being a more difficult fibre to tuft and carve it is a popular choice for carpets, because it has a pleasing lustre and is less expensive than other silks.

Silk / Spun Silk – is the waste from silk processing. Fibres are quite short and fibre loss occurs in the final product. Best used as a loop pile yarn. Spun silk is irregular in quality and colour, which can make dyeing and spinning difficult.

Sisal – A product made of vegetable fibres such as coir, jute, paper and straw. It is susceptible to stains, mold and mildew, and has a harsh surface, providing no comfort under foot.

Skein / Hank Dyeing – This is the process of dyeing carpet in the yarn stage, where the yarn is gathered onto individual skeins (yarn holders) and dyed. The yarn is then re-wound onto yarn cones or yarn beams, and carpet is then tufted as “predyed” carpet.

Sliver – An intermediate stage in the production of staple yarns, where the yarn is carded (cleaned and aligned in the same direction) into a sliver, and is then drafted (properly proportioned) before being twisted and heatset.

Snags – Sharp edged objects can grab or snag a carpet yarn (exposed nails in ladies’ high-heels are a very common offender). If your carpet is snagged, simply cut off the snagged yarn with a pair of sharp scissors. Do not try to pull out these snags, as they are most likely attached to other yarns in the carpet itself.

Soiling – This is the build-up of particles of soil and similar materials that cling to carpet fibres. Thorough vacuuming and proper routine cleaning should minimize this problem. Improper cleaning can actually enhance the problem, as soap residue left behind from the cleaning attracts soil and increases the carpet fibre’s propensity for soil adhesion. NB. TAI PING does not recommend the addition of soil or stain protection once the carpet is “in service”, and some after market additives will actually void the warranties.

Soil resistance – the ability of a carpet fibre to resist dry soil and maintain its original appearance after intermittent or restorative cleanings.

Solution Dyed Nylon / SDN – A nylon yarn that is dyed by introducing pigments into the molten polymer before extruding into fiber, as opposed to skein or hank dyed (dyed after it has been converted to yarn).

Space Dyed – Yarn where each individual yarn is dyed two or more colours that alternate along the length. Space dyeing is a technique used to give yarn a unique, multi-coloured effect. While a typical skein of yarn is the same colour throughout, a skein of space dyed yarn is two or more different colours that typically repeat themselves throughout the length of the yarn. Space dyed yarn is sometimes referred to as dip dyed yarn. The secret to space dyeing yarn involves the use of a special chemical called a mordant. The purpose of a mordant is to help permanently fix the dye to the yarn after the space dyeing process. Since different colours of dye require different types of mordants, this makes it possible to dye the same skein of yarn many different colours.

Spinning – A term for both yarn and fibre production. To the fibre manufacturer, spinning is synonymous with extrusion of polymer throughout the small holes of the spinneret into synthetic fibre. To the conventional textile yarn mill, spinning is the conversion of staple fibre into spun yarn; much like our ancestors did with spinning wheel yarns.

Split or Missing End/End out – used to describe a single end in the carpet that is completely void of yarn, it is used for the purpose of cutting the carpet after production for installation purposes.

Sprouting – The condition whereby small tufts of yarn “sprout” above the level of the rest of the carpet. Occasionally, tufts will dislodge from the backing of the carpet. These loose ends should simply be trimmed level with the surrounding surface pile with sharp scissors. Silk is particularly prone to sprouting as the sides of the yarn are slippery. Sprouting should disappear after two or three months of use and regular vacuuming.

Spun yarn – (See **Staple**) Spun yarn is made by twisting or otherwise bonding staple fibres together to make a cohesive thread, or "single yarn". Filament yarn consists of filament fibres (very long continuous fibres) either twisted together or only grouped together. Silk is a natural filament, and synthetic filament yarns are used to produce silk-like effects.

Stains – Stains are spills of normal household substances that have either not been tended to in time, or are of a material that somehow "over-dyes" the carpet. High quality carpet is dyed via the appropriate combination of water pH, temperature, and the presence of "dye stuffs". Some household products (such as coffee) can actually work very effectively as a carpet dye.

Stain Resist – a chemical finish applied to the carpet fibre and/or surface that inhibits the propensity for stains to attach to the carpet.

Staple – Short lengths of fibre that may be converted into spun yarns by textile yarn spinning processes. The fibres can be any variable length, from short pieces to 8 inches, and are then spun into yarn via carding, drafting, and finally, spinning.

Staple Yarn – Staple fibres are short in length and have to be spun into yarn through the process of blending, carding and spinning. To a certain degree you can control the size of the yarn - make it larger or smaller by how you spin it - and of course within the parameters of the fibre itself and the end use application. Cotton, Wool, Delicate silk and Spun Silk are staple fibres. Real Silk and Nylon are continuous filament fibres.

Stay Tacking – A carpet installation term for temporary nailing or tacking to hold the stretch until the entire installation is stretched over and fastened onto the tackless strip. An important technique in large contract installations, which are too large to stretch in one step.

Step Return – A term for that part of a staircase tread that extends over the riser. Also known as a bullnose or extended nosing.

Stipple yarn – Multiple legs of colours combined to produce one single yarn

Stipple Streaks – On Axminster productions the use of Barber Pole stipple yarn is strictly controlled due to the risk of visible lines appearing in the random stipple. This is due to slight variations in the yarn size when the yarn is spun so that when the two colours are twisted together the yarn that is slightly larger will dominate. However this dominance is not consistent throughout the yarn lot leading to the possibility of streaks and bands where the colour dominance shifts back and forth between the two ends of yarn.

Stitch (Stitches, Stitch Rate) – The number of individual tufts of carpet running lengthwise, usually measured per inch or per six inches.

Stitch Length – Total length of yarn from which a tuft is made. It is numerically equal to twice the pile height plus the associated back stitch behind the primary backing.

Stretch (or Stretch-In) – An installation procedure for carpet over separate cushion using a tackless strip.

Stuffer – A backing yarn in woven carpet. Stuffers are, normally, large warp yarns (lengthwise yarns) that increase weight, strength, hand, stiffness and stability.

Stuffer Box – In yarn manufacture, a device into which individual fibres are forced in mass in order to crimp or add volume to the fibres.

Swatch – A small carpet sample.

Synthetic Fibres – Synthetic fibres are, as the name implies, the result of a chemical synthesis of two or more chemicals. Most synthetic fibres are derived from combing by-products of the energy industry, i.e., petroleum coal or natural gas by-products. Synthetics are classified as thermal plastic resins.

Transfer – (Installation) Application of the carpet floor adhesive with full coverage onto the carpet backing, including the recesses of the carpet back, while maintaining full coverage of the floor.

Tackless Strip (Grippers/Gripper rods) – Wood or metal strips fastened to the floor near the walls. The strips have two or three rows of nails angled up toward the walls, to which carpet backing is attached during a stretch-in installation.

Template – Material (typically paper) used to trace the dimensions of a room where measurements are critical, such as in the manufacture of a wall-to-wall rug.

Tensile Strength – The greatest stretching force a yarn, fabric or carpet can bear without breaking.

Tertiary Backing – Woven or nonwoven fabric laminated to the back of carpet with latex or other adhesive. Double backed carpet has enhanced dimensional stability and strength and protects floor finishes in the case an underlay or non-slip pad has not been applied.

TEX (tex) – Tex is a unit of measure for the linear mass density of fibers, yarns, and thread and is defined as the mass in grams per 1000 meters. The most commonly used unit is actually the decitex, abbreviated dtex, which is the mass in grams per 10,000 meters. When measuring objects that consist of multiple fibers the term "filament tex" is sometimes used, referring to the mass in grams per 1000 meters of a single filament.

Texture – Surface characteristics of carpet pile, including such aesthetic and structural elements as high-low or cut / loop patterning, yarn twist, pile erectness or layover, harshness or softness to the touch, lustre, and yarn dimensions.

Texture Retention (or conversely, Texture Loss) – (See Appearance Retention)

Thermal Conductivity – The ability of a material to transmit heat. Good insulators, including some carpet, have high thermal resistivity (R-value) and low thermal conductivity.

Tip shearing – shaving off tufted high loops in the finishing process to create a cut and uncut texture or pattern. A carpet texture created just like random shearing, but is typically less pronounced.

Total Weight – The weight of a finished carpet (per square yard), including pile, primary backings, secondary backing, latex and any coatings added.

Tread – The upper horizontal part of a step.

Tuft – a cluster of yarns drawn through a fabric and projecting from the surface in the form of cut yarns or loops.

Tuft Bind – A measure of the individual tuft's adhesion to the carpet backing. The force required to pull a tuft from a carpet.

Tufting – A carpet manufacturing term, tufts of yarn are inserted through a carpet backing to create a pile of cut and/or loop ends.

Tuft Length – (See **Pile Height**)

Twist – A yarn manufacturing process, whereby the fibre bundles are brought together and wound around each other (twisted and then heatset) to help the yarn bundle stay together and to improve performance by increasing its resistance to pile crush. Twist describes the number of turns per inch and direction of twist of either the singles or plies around their axes. Twist direction is either right or left handed, also called "Z" or "S" twist.

Underlay – The carpet cushion or padding that lies underneath carpet or rugs. The proper padding not only feels best, but will also dramatically improve the carpet's performance. Carpet must always be installed over underlay. Rugs should be laid over anti slip.

Unitary Backing – A backing style whereby no physical secondary backing is used; rather, a heavy application of latex serves as the backing.

Velvet Cut Pile – Cut pile carpet with an incredibly smooth surface refinement. The individual tufts of yarn are virtually imperceptible, creating an elegant, formal look that is reminiscent of suede or velvet.

Viscose – Viscose is derived from wood pulp. Also known as rayon or artificial silk, viscose is relatively inexpensive to produce and very easy to dye. Its appearance can be very lustrous so it is often used instead of silk in small areas of carpets. Viscose is not particularly resilient and is therefore prone to flattening. Poor flammability.

(VOCs) Volatile organic compounds – VOCs are organic chemicals that have a high vapour pressure at ordinary room temperature which causes large numbers of molecules to evaporate or sublime from the liquid or solid form of the compound and enter the surrounding air, a trait known as volatility. Some VOCs are dangerous to human health or cause harm to the environment. Each country has regulations on the emissions of VOCs, products must be tested according to a standard and shown to conform to the regulations.

*Tai Ping products emit zero VOCs and have been certified as Green Label Plus by an independent laboratory that measures indoor air quality based on emissions of VOCs (13 chemicals). Tai Ping products are also ISO 16000 certified, the recognized standard for VOC testing in Europe. VOC certification is required for all sustainable building schemes, LEED, BREEAM, etc. as applied by all commercial building projects. (See **LEED**)*

Wall-to-Wall Rugs – Rugs manufactured specifically to be installed in a wall-to-wall fashion, as you would normally install carpet.

Warp – A weaving term for yarns that run lengthwise in woven fabrics and carpets. Warp yarns are usually delivered to the loom from a beam, a large spool with hundreds of ends of yarn wound on it, mounted behind the loom. Woven carpets usually have three sets of warp yarns, which may be wound on three loom beams. These include stuffer warp for lengthwise strength and stiffness, pile warp, which forms the carpet surface tufts, and chain warp, which interlaces with fill yarn to lock the structure together.

Watermarking – (See **Shading**)

Weaving – A fabric formation process used for manufacturing carpet in which yarns are interlaced to form cloth. The weaving loom interlaces lengthwise (warp) and widthwise (filling) yarns. Carpet weaves are complex, often involving several sets of warp and filling yarns. (See **Axminster, Wilton and Velvet**)

Weft – The yarn that runs width wise in woven cloth or carpet, interlacing with the warp yarns. (See **Filling Yarn**)

Wilton Carpet – A woven carpet, originally a loop pile construction. The loom became known as a “Wilton” when cut pile was introduced. Wilton carpets produce high quality cloth in either plain colouring or patterned, in a limited number of colours. The Wilton weaving method is used largely for creating plain carpet and patterned carpet with up to five colours. In this type of weaving, the pile and the backing materials are closely interwoven.

Wool – Wool is the preferred fibre for hand-tufted carpets. At Tai Ping we mainly use the finest white New Zealand wool because it is soft, lustrous and an extremely versatile fibre to work with to create beautiful carpet designs. Wool can be used for tufting cut pile, loop pile or shag pile carpets and the final product will wear well, have low flammability and be relatively easy to keep clean.

Woolen System Yarn – Spun yarn, composed of any natural or synthetic fibre, manufactured by the woolen system spinning process. Compared to worsted-system or parallel-spun yarns, which are common to most tufted carpet, woolen yarns are soft, bulky and hairy. Staple for woolen spinning is short, in the 3.5 to 5.5 inch range.

Worsted Yarn – Spun yarn composed of any natural or synthetic fibre, manufactured by the worsted, or parallel spinning process. Most yarns for tufted carpet are parallel, spun. Staple for worsted spinning is long, often in the 6 to 8 inch range. In worsted yarns, the fibres are relatively parallel, and the yarns are relatively smooth and compact in structure. (See **Semi-Worsted**)

Woven Carpet – Carpet that is manufactured on a weaving loom in which the lengthwise yarns and widthwise yarns are interlocked to form a fabric.

Yarn – A continuous strand composed of fibres or filaments and used in tufting, weaving and knitting to form carpet and other fabrics. Carpet yarn is often plied and may be either spun or continuous filament. Yarn is measured in terms of cotton count and yarn density.

Yarn Beams – A method of supplying yarn to the tufting machine, whereby the yarn is wound onto large beams (many yarns to a beam) which are then used to supply yarn to the individual needles.

Yarn Cones – A method of supplying yarn to the tufting machine, whereby the yarn is wound on individual cones (one yarn to a cone) which are then used to supply yarn to the individual needles.

Yarn Dyeing – (See **Skein Dyeing**)

Yarn Ply – (See **Ply**)

Yarn Encapsulation – The degree to which the yarn on the back of the primary backing is surrounded by and infused with latex before the secondary backing is applied.

Yarn weight – total amount of yarn used in the manufacturing of carpet. It is measured in ounces per square yard.