

Academy of Textiles & Flooring
FLOORCOVERING DICTIONARY

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AAMA - Acronym for the American Apparel Manufacturers Association.

AATCC - American Association of Textile Chemists and Colorists. A national scientific body with active sections in various parts of the country whose members are chemists and others active in the dyeing, finishing and other chemical phases of the textile industry. AATCC objectives are to increase knowledge of the application of dyes and chemicals in the textile industry; to encourage research on chemical processes and materials; to develop standards for fastness of dyes and finishes; to develop and improve test methods and instruments. It is located in Research Triangle Park, NC.

AATCC Gray Scale - A standard of comparison used to rate degrees of color change ranging from 5 (no change) to 1 (severe change).

AATT - American Association for Textile Technology, Inc. A national technical society, incorporated in New York state, whose members are qualified textile technologists engaged in development work, research operations, and testing in the field of yarns, fabrics and finishes. The objective of this association is to encourage mutual understanding in the fields of textile technology and marketing; the advancement of textile technology in all its branches; cooperation with established facilities for textile education; and the interchange and dissemination of professional knowledge among its members and with other industry groups.

abaca - Plant native to the Philippines and of the banana family. A tough bast fiber from the abaca plant. The long, strong fibers, off-white to brown in color are used primarily in ropes, mats and coarse fabrics. Also called Manila hemp.

abacisuc - (1) A small abacus. (2) A stone or tile in mosaic.

abacus [In relation to architecture] - The upper part of the capital of a column, either square or curved.

Abadeh (Native to Iran) - In southern Iran, on the road from Shiraz to Isfahan, lies the town of Abadeh, where the rugs of that name are made. Their foundation is cotton, the pile is wool, and their knots Senneh. The coloring is generally harmonious; red, terra cotta, brown and blue are used, and to a lesser extent, green. The designs, though very like those of Qashgai rugs, are essentially a mixture of Iranian and Caucasian rug designs. A central medallion is placed in a diamond shaped field with a red ground. Similar medallions often appear in the corners of the rug with a green ground. Small flower and leaf patterns are scattered imaginatively all over the rug, which is framed by narrow borders.

abamurus - A block of masonry, in buttress form, for the support of a structure.

abatment [In relation to water damage] - The ability of specialty trained water damage contractors to eliminate all water damage and environmental concerns in buildings, and return the building and its contents to a restored condition or material replacement. See **mitigation**.

abb - (1) Skirting or edgings obtained by the sorter in trimming the fleece for the wool trade. (2) Merino clothing warp wool, being skirted from the britch. (3) Short wool taken from the britch and cow-tail skirts of English and coarse fleeces used mostly for warp.

ABC - Aggregate Base Course.

aberration - (1) A departure from what is right, true, correct, etc. (2) A deviation from the normal or the typical.

ABIH - American Board of Industrial Hygiene.

abnormal crimp - A relative term for crimp that is either too low or too high in frequency and/or amplitude or that has been put into the fiber with improper angular characteristics.

above grade - (1) Any floor that is above the level of the surrounding ground on which the structure is built. (2) A suspended floor, usually wood on joists, with a minimum of 18" of ventilated airspace below, located above the level of the ground outside the structure.

Academy of Textiles & Flooring
FLOORCOVERING DICTIONARY

above grade subfloors - Floors above ground level. Normally an air space of at least 18" between the ground and the subfloor with proper cross ventilation in both directions, should be provided to help assure dryness.

abrade - To scrape or rub off, wear away by scraping or rubbing.

abraded yarns - Continuous filament yarns where the filaments are cut or abraded at intervals with an additional twist to present a certain degree of hairiness, so as to simulate the character of yarns spun from staple. Abraded yarns are usually plied or twisted with other yarns before using.

Abrams' Law - [In relation to concrete) A rule stating that with given concrete materials and conditions of test the ration of the amount of water to the amount of the cement in the mixture determines the strength of the concrete provided the mixture is of a workable consistency. Also see **water-cement ratio**.

abrush - (1) Variations in the shade of a single color within a rug which usually appears in a horizontal line. (2) **[A Persian term]** A change in color in the field and border due to differences in wool or dye batches. The color change extends across the rug, weft-wise. Abrash is more likely to occur at the top of a rug, as beginning yarn batches are used up, than at the bottom of a rug.

abrasion - (1) The wearing away of a solid surface by friction; occurs for example on coat sleeves, upholstering and rugs; the act of reducing material by grinding instead of cutting with tools. (2) Wear or scour by hydraulic.

abrasion mark - An area where a fabric has been damaged by friction.

abrasion resistance - (1) A measure of the pile fiber's ability to withstand wear. Abrasion testing is performed mechanically by a tetrapod or can be a visual rating or actual floor test samples under regulated traffic conditions. (2) **[Resilient]** Through one of several tests this shows degree to which the floor withstands foot traffic and daily wear. The ability to resist removal or damage from mechanical action. (3) **[In relation to hardwood finish]** It is not necessarily related to hardness, as some believe, but is more closely comparable to, or can be correlated with, gloss retention.

abrasion testing - This test is usually performed with what is known as a Taber Abrader. This apparatus evenly wears away the face yarn of the specimen being tested at a uniform rate. The results of this test will be stated in the number of cycles and the percentage of face yarn worn away at specific intervals.

abrasive - Granular, often hard material, synthetically produced or of natural origin, incorporated into cleaning chemicals or tools to help physically scour and remove heavy soil or stains. Pumice and silica are common abrasives. *Abrasive paper* - Paper or cloth covered on one side with a grinding material glued to the surface, used for smoothing and polishing. *Abrasive tools* - All implements used for wearing down materials by friction or rubbing; includes grindstones which are made of pure sandstone, whetstone, emery wheels, sandpaper, and emery cloth.

abrasive cleaners - Products that clean through abrasive or scouring action such as finely ground silica, volcanic ash, powdered feldspar and powdered pumice. Seldom used alone in building work. These materials are generally compounded into powdered soaps, powdered synthetic detergents, powdered alkaline cleaners, or past products. (1) To be used to remove stubborn soil or spots and not as routine maintenance. (2) Can be used for renovation of badly soiled hard floors. (3) Have value in removing discolorations and rust stains from lavatory porcelain. (4) Also used in metal polishes.

abrasive wear - The wearing away of the pile surface of a carpet by friction created by walking or rolling traffic. See **shading wear**.

abreauvior - In masonry, the mortar joint between stones in a wall or between two arch stones.

abrisham [A Persian term] - Silk.

abs - Material used under a concrete slab, made up of crushed rock. Used in order to get a solid base for concrete.

absolute - A chemical substance that is not mixed (i.e., pure). An example is absolute alcohol, which is ethyl alcohol, 99% pure, containing not more than one percent by weight of impurities.

absolute humidity - Total water vapor in unit or mass. It usually is expressed in grams of water per kilogram of air. See **relative humidity**.

absolute pressure - The sum of the atmospheric pressure and gauge pressure.

absolute specific gravity - Ratio of the mass of a given volume of a solid or liquid, referred to a vacuum, at a stated temperature to the mass, referred to a vacuum, of an equal volume of gas-free distilled water at a stated temperature.

absolute volume - Of ingredients of concrete or mortar, the displacement volume of an ingredient of concrete or mortar; in the case of solids, the volume of the particles themselves, including their permeable and impermeable voids but excluding space between particles; in the case of fluids, the cubic content which they occupy.

absolute zero - The zero point on the absolute temperature scale, 450.69 degrees below the zero on the Fahrenheit scale, 273.16 degrees below the zero on the Celsius scale. It is the lowest possible temperature at which matter might exist; 0°K, -273.16°C.

absorb - Taking up of a substance into the carpet through pores or small opening (i.e. chalk, talc and sawdust are absorbent powders).

absorbance - The ability of a substance to transform radiant energy into a different form, usually with a resulting rise in temperature.. Mathematically, absorbance is the negative logarithm to the base 10 of transmittance.

absorbed moisture - Moisture that has entered a solid material by absorption and has physical properties not substantially different from ordinary water at the same temperature and pressure. See **absorption**.

absorbed stains - The staining material is present in the fibers. Penetration of the fibers has taken place. Examples: coffee, ink, urine.

absorbency - Ability to take up liquids; important in dyeing. Wool has high absorbency.

absorbent - A material that draws liquid or gaseous substances into itself, usually from surfaces or from the air. Absorbents are used in carpet cleaning, spotting, concrete cleaning and spill control. In limited cases, absorbents are used in dehumidification (e.g., lithium or calcium chloride), which causes them to change physically or chemically as they absorb water or other liquids.

absorbent cotton - Raw fiber with waxy and fatty matter removed in order to enable it to take up water readily. . Comes in either fiber form, or gauze for medical uses.

absorbent compound - In textile cleaning, sponge-like particles which when saturated with water or dry solvent and detergent and brushed into the textile, remove oil from the textile. It is a minimum moisture method used to clean moisture sensitive or non-colorfast fabrics. In heavily soiled areas, a preconditioner may be applied prior to the application of the absorbent compound. The amount of absorbent compound should be applied according to the directions on the container. The compound is worked into the carpet pile with a machine incorporating two counter-rotating brushes, with a rotary brush machine equipped with the proper brush, or with a hand brush. The absorbent compound is then allowed to remain in the carpet for approximately one-half hour, or until it appears to be substantially dry. The absorbent compound, with the absorbed carpet soil is then removed by vacuuming. It is possible to use the carpet during the cleaning and drying; however, it is normally better to keep traffic off the carpet until it has thoroughly dried, within one to three hours. See **powder cleaner**.

absorbent or bonnet cleaning - A process in which a low-residue detergent is applied to the carpet to suspend soil, which is then absorbed into a pad rotated by a drive block on a rotary machine.

absorbent pad - For cleaning textile floor coverings, a damp textile material (fabric, felt, sponge, or mop) used to agitate and wipe the pile and, in the process, absorb soil.

absorbent pad cleaning - A minimum moisture method of interim cleaning in which, following dry soil removal (vacuuming), detergent solutions are sprayed onto the carpet pile and onto an absorbent pad or "bonnet" made of cotton, rayon or combination thereof. Using a rotary shampooer with a drive block instead of a brush, the solution is "spin buffed" into the carpet pile, with the bonnet absorbing soil from the surface of the carpet as cleaning progresses. When one side of the bonnet becomes saturated with soil, it is turned over and cleaning continues. When both sides of the bonnet become saturated with soil, the bonnet is exchanged for a clean one; or the bonnet is rinsed in a wringer bucket before work continues.

absorbent powder - A commercially prepared powder of granulated corn cobs, or sawdust, or any other suitable carrier, containing a detergent and a dry solvent.

absorbent powder/dry extraction cleaning - A process in which a granular material impregnated with water, detergents, and solvents is brushed through the pile, dissolving, absorbing and adsorbing soil; when dry, the material is then removed by vacuuming. Absorbent powder/dry extraction cleaning utilizes an absorbent medium (sponge-like) usually impregnated with water and small amounts of detergent and solvent. The idea is to use the "sponges"/absorbent powder to carry and control the liquids necessary to loosen the soil. They absorb and control the vacuuming. With this control technique, much less total liquid is required to clean. A double-brush machine designed for this purpose is necessary for deep cleaning action...light or aggressive as carpet and soil conditions require. This action also is designed to revive pile before or during cleaning.

Academy of Textiles & Flooring
FLOORCOVERING DICTIONARY

absorption - (1) The property of a fiber, yarn or fabric which enables it to attract and hold gases or liquids within its pores. Dyes and pigments contribute to the color, or colors, seen by the eye through light and is called absorption. Also, a process in which a substance enters through a body surface such as the lungs, skin, or gastrointestinal tract, and ultimately into body fluids and tissues. See **absorbed moisture**. (2) When light strikes an object, some light is reflected and absorbed. The darker the object the more light it absorbed. (3) A process whereby a material extracts one or more substances present in an atmosphere or mixture of gases or liquids; accompanied by physical change, chemical change, or both, of the material. (4) Capillary, osmotic, or chemical action by which fibers, yarns or fabrics become intermixed with liquids or gases. (5) **[In relation to ceramic]** The relationship of the weight of water absorbed to the weight of the dry specimen, expressed in percentages.

absorption agent - A product that attracts into the body of one substance by another so that the absorbed substance disappears physically, e.g., a detergent, etc.

absorption chemical - A chemical, usually a dry powder, that allows soils to enter it. Used primarily in the dry powder cleaning systems where oily types of soil in carpeting are absorbed by the cleaning powder. The cleaning agent is then removed by vacuuming.

absorption rate - The amount of water absorbed by an item when it is partly immersed in water for one minute.

absorptive action - It is not always possible to obtain a quick release when attempting to remove stains. But, with patience a slow release of a staining material may be achieved. Given a sufficient amount of time some staining materials will migrate from the fiber onto other substances. Example: Absorbent action would be the use of absorbent powder or a weighted towel being placed on a stain.

absorptivity - The ratio of the amount of water to absorb in a material.

abudig - Medium fine wool from Morocco.

acanthus - Any of a genus of thistle like plants of the acanthus family with lobed, often spiny leaves and long spikes of white or colored flowers found in the Mediterranean region.

acarid - Any of an order of arachnids including mites and ticks.

accelerant - A chemical used to speed up chemical or other processes. For example, accelerants are used in dyeing triacetate and polyester fabrics.

accelerated aging - In textile processing and testing, use of controlled environmental conditions to promote rapid physical and/or chemical change in a textile material.

acceleration - The rate of change in velocity of air as a moving body over time that can dry building materials and contents.

accelerator - (1) An admixture which, when added to concrete, mortar, plaster or grout, increases the rate of hydration of a hydraulic cement, shortens the time of set, or increases the rate of hardening or strength development; a hardener or catalyst. (2) A pump for circulating water through a heating system.

accelerators - Materials used to speed up the setting of mortar.

accessories [tile accessories] Ceramic or non-ceramic articles, affixed to or inserted in tile work, as exemplified by towel bars, paper, soap and tumbler holders, grab bars and the like.

accident - In insurance terminology, a sudden unexpected event identifiable as to time and place.

accidental air - See **entrapped air**

acclimation - (1) The physiological adjustment of an organism or person to a new, unusual or modified environment. Often used in assessing persons who have adopted to a building environment which may have changed due to a water damage, flood or amplified building. (2) **[In relation to wood]** A process where seasoned lumber is stored in the area for equalization of moisture content prior to installation. Not required for laminated plank. In warm months the building must be well ventilated; during winter months heating should be maintained near occupancy levels at least five days before the flooring is delivered and until sanding and finishing are complete. When job site conditions are satisfactory, the flooring delivered and broken up into small lots and stored in the rooms where it will be installed. Allow 4 to 5 days or more for the flooring to become acclimated to job site conditions. If flooring is packaged it should be opened and removed from the package for acclimation.

accord and satisfaction - Adjustment of a disagreement as to what is due and the payment of the agreed amount. On a check, indicates full settlement.

accordion fabric - A patterned circular knit fabric of two or more colors produced on single-needle machines. The pattern is achieved by combinations of knit, tuck and welt stitches.

accordion pleat - A series of narrow, regularly spaced, pressed folds in fabrics, usually running in the lengthwise direction in skirts and dresses. Accordion pleats show the entire upper surface of the fabric, as opposed to true pleats. See **pleat**.

Acele® - Acetate. Fiber for yarns in filament form.

aceta - German artificial wool resembling Vista, one of the many varieties of *Zellwolle*; see **staple fiber**.

acetate - The generic name for a type of synthetic or man-made fiber having a rich, silk-like hand and wrinkle resistant properties. A salt or ester of acetic acid. A synthetic fabric or yarn derived from the acetic ester of cellulose. Used in dress fabrics such as satins, taffetas, lingerie, etc. It requires care in drycleaning.

acetate fabrics - Made from cellulose acetate yarns. May be woven or knitted, of fine or coarse yarn, used alone or in combination with other fibers or blended staple and solution-dyed. Advantages: Resistant to moths and mildew, dyes readily with special dyes, dries quickly, holds permanent pleats and embossed patterns since moire fabrics are durable through washing and cleaning. Disadvantages: Weakened when wet, requires care in ironing, is harmed by nail polish remover, the blue color is sensitive to atmospheric fading unless treated for gas fading, and yarns will not take crepe twist.

acetate fiber - A manufactured fiber in which the fiber-forming substance is cellulose acetate. Acetate is manufactured by treating purified cellulose refined from cotton linters and/or wood pulp with acetic anhydride in the presence of a catalyst. The resultant product, cellulose acetate flake, is precipitated, purified, dried, and dissolved in acetone to prepare the spinning solution. After filtration, the highly viscous solution is extruded through spinnerets into a column of warm air in which the acetone is evaporated, leaving solid continuous filaments of cellulose acetate. These filaments are simultaneously twisted and wound onto a bobbin in the form of yarn which is ready for use without further chemical processing. In the manufacture of staple fiber, the filaments from numerous spinnerets are combined into tow form, crimped, cut to the required length, and packaged in bales. Acetate is also known as rayon. Acetate fabrics are fast-drying, wrinkle and shrinkage resistant, crisp or soft in hand depending upon the end use, and luxurious in appearance. The end uses of acetate include lingerie, dresses, blouses, robes, other apparel, linings, draperies, bedspreads, upholstery, carpet, umbrellas, formed fabrics, and cigarette filters.

acetate rayon - A chemical fiber produced by kneading cotton cellulose into a mixture of acetic acid, acetic anhydride and a catalyst or uniting element. The process produces solid filaments which are collected and wound on bobbins.

acetic acid - A colorless, pungent, liquid acid, that is the chief acid of vinegar. Its salts and esters (acetate) are used in textile application. It is used in textile wet processing, dyeing and printing, and in the manufacture of cellulose acetate and cellulose triacetate. It is a self-neutralizing, evaporating acid of which white vinegar is a 5 to 7% solution. White vinegar can be made into a tannin spotter by mixing it with two parts water. Professional concentrations of acetic acid vary from 7 to 28%. Acetic acid is most suitable for applications that require starting with an acid and then switching to an alkaline or vice-versa. It is not a satisfactory remedy for pH problems on yellowing and indicator dyes. See **aglacial acetic**.

acetic acid rinse - Acts as sour for detergent. Sets fugitive colors.

acetic anhydride - Anhydrous acetic acid. It is used in the acetylation process in the manufacture of cellulose acetate.

acetone - One of the most powerful organic solvents. A colorless, volatile, fragrant liquid used in dissolving organic substances, such as fat. Excellent solvent for nitrocellulose, cellulose acetate and many vinyl resins, with solutions of those resins producing low viscosities. Used extensively in lacquer formulations, pyroxylin cements, paint and varnish removers, and strippable vinyl films. Also valuable in extraction and crystallization. The current CAL/OSHA standard for permissible exposure is 1000 parts of acetone per million parts of air (ppm) averaged over an eight hour work shift. This may also be expressed as 2400 milligrams of acetone per cubic meter of air.

acetone recovery - A process for reclaiming the acetone solvent from acetate fiber or plastics manufacture. Usually the recovery process consists of adsorption by activate carbon and redistillation.

acetyl - The radical of acetic acid.

acetylation - A chemical reaction whereby the acetyl radical is introduced into a compound, as in the conversion of cellulose to cellulose acetate.

Academy of Textiles & Flooring
FLOORCOVERING DICTIONARY

acetylator - A chemical-reaction vessel in which cellulose pulp and acetic anhydride are combined to form cellulose acetate.

acetyl value - A measure of the degree of esterification or combination of acetyl radicals with cellulose in acetate or triacetate products.

ACGIH - American Conference of Governmental and Industrial Hygienists. An organization of professional personnel in governmental agencies or educational institutions located at 64500 Glenway Avenue, Building D-7, Cincinnati, OH 45211, which is engaged in occupational; safety and health programs. ACGIH develops and publishes recommended occupational exposure limits for hundreds of chemical substances and physical agents.

A.C.I. - American Concrete Institute.

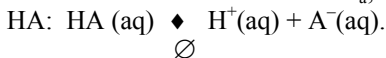
acid - Either an inorganic or organic compound (1) that reacts with metals to yield hydrogen; (2) that reacts with a base to form a salt; (3) that dissociates in water to yield hydrogen or hydronium ions; (4) that has a pH of less than 7.0; (5) that neutralizes bases or alkaline media. Acids have a bitter or sour taste and may cause severe skin burns. All acids contain hydrogen and turn litmus paper red. They are corrosive to human tissue and are to be handled with care. **[Relating to ceramic]** A chemical substance usually corrosive to common metals (iron, aluminum, zinc). Acids are generally divided into two classes: (1) Strong mineral or inorganic acids such as sulfamic, sulfuric, phosphoric, hydrochloric or nitric. (2) Weak organic or natural acids such as acetic (vinegar), citric (citric fruit juices), oxalic and fatty acids (oleic, palmitic, stearic, etc.). A substance which on being dissolved in water produces a

acid and alkali-resistant grout - A grout that resists the effects of prolonged contact with acids and alkalis.

acid chemicals - Chemicals with a pH reading of less than 7.

acid cleaners - Must be used with extreme caution but have their place in the cleaning field. They are formulated to meet a specific problem. (1) As bowl cleaners, they are used to remove lime encrustation from commodes and urinals in lavatory maintenance. (2) Weak citric acid solutions are used for damp wiping bronze trims, or a non-streak wash for stainless steel. (3) Phosphoric acid compounds can be used safely and effectively in cleaning exterior aluminum trim under controlled conditions. (4) Diluted hydrochloric acid is widely used in removing lime encrustations in the interior cleaning of piping in hard water areas.

acid dissociation constant - K_a ; the equilibrium constant for the following reaction of an acid



$$K_a = \frac{[\text{H}^+][\text{A}^-]}{[\text{HA}]}$$

acid dye - Acid dyes are derived from the dyeing process itself. Acid dyes are applied to wool, silk, and polyamides in the presence of an organic or inorganic acid. Acid dyes are anionic (negative charge) with a relatively low molecular weight.

acid dyeable nylon - Nylon polymer that has been modified chemically to make the fiber receive acid dyes. Acid dyeable yarns are available in different dye levels (light, medium and deep).

acid-dyeable variants - Polymers modified chemically to make them receptive to acid dyes. A class of dyes with excellent colorfastness when used with type 6.6 nylon. Acid dyeable yarns are available in different dye levels (i.e., light, medium and deep).

acid dye blocker - A compound used to "pack" nylon fiber dye sites with "transparent" dyes that repel negatively charged acid dyes.

acid-dye resisters - The fifth generation development in nylon fiber which provided a sulfonated phenolic coating to be applied which would resist acid based spills.

acid dyes - Acid dyes are derived from the dyeing process itself. Acid dyes are seldom used on cotton or linen since this process requires a mordant. Acid dyes are widely used on nylon when high washfastness is required. In some cases, even high washfastness can be obtained by after-treatment with fixatives. Acid dyes are anionic (negative charge) with a relatively low molecular weight. See **Acriland®**, **nylon & Orlon®**.

acid etch - A method of cleaning concrete by scrubbing it with acid, and then rinsing it with water.

acid fading - See **gas fading**.

acid-fast - A term used in laboratory analysis, to denote types of micro-organisms, such as the tubercle bacillus, that retain a stain even after being washed in acid alcohol.

acid hardeners - Chemicals, generally metal fluorosilicates, applied to concrete or terrazzo which react with the free lime and calcium carbonates present to form silica quartz, a very hard substance. The result is a concrete or terrazzo with a harder surface than obtained without acid hardening.

acidic - A term describing a material having a pH of less than 7.0 in water.

acidic rinse - Mildly acidic (acid chemical) solution used to neutralize a fabric with an alkaline condition, to prevent browning.

acidity - The acid quality or condition of a substance. Acidity can be measured by 'pH factor' on a scale of 1 to 14; 7 being neutral; any factor below 7 being acid; any factor above 7 being alkaline. Normal healthy concrete is alkaline, having a pH of about 12.5. Acids are used for rust removal and anti-browning. Oxalic acid crystals, which can be bought in a drug store, can be used at a 1% to 8% solution in warm water for treating carpet rust spots. Citric acid or white vinegar (5% acetic acid) can be added to shampoos to counteract browning. See **browning**.

acid recovery - A reclamation process in chemical processing in which acid is extracted from a raw material, by-product, or waste product. In the manufacture of cellulose acetate, acetic acid is a major by-product. Acid recovery consists of combining all wash water containing appreciable acetic acid and concentrating it to obtain glacial acetic acid.

acid resistance - The property of withstanding contact or treatment with any acids normally encountered in use. The type of acid should be stated (i.e., organic or inorganic).

acid washed - The process of altering dyes in fabrics by washing them with chemicals.

actinomycetes - A group of soil borne bacteria that is mold-like in appearance. These organisms are sometimes found in flooded buildings. The characteristic musty smell of wet-damp soil comes from compounds released by this group of bacteria.

ACM - Asbestos Containing Material.

acne medications - In the past few years dozens of products have entered the market containing benzol peroxide as an active ingredient. This chemical is a very strong oxidizing agent and is capable of destroying most dyestuffs used in carpets. It is also the single most effective treatment for acne. Since it was approved by the FDA for over-the-counter sale, products containing it have been responsible for hundreds of complaints of mysterious yellow spots which appear where apparently no spill has taken place. The spots sometimes seem to appear spontaneously for several reasons. First, relatively high humidity is necessary for the bleaching action to begin; there have been reports of spots growing in size during a single rainy day for this reason. Second, the time between the contact and the appearance of the spot could be days, the spill having been forgotten. Third, many of the spots appear to have been brushed onto the carpet, from hands and faces rather than spilled - most of the creams are difficult to wash off the hands and a simple rinsing leaves just enough to cause bleaching. These spots begin as orange to yellow as the dye is bleached and progress to lighter yellow as the oxidation proceeds, on blue carpet they may appear slightly pink. In most cases they exhibit an orange ring or halo which moves outward as the spot grows. The spot may feel chalky from the presence of bentonite (fullers earth) used in medication to absorb skin oils. Other textiles such as pillow cases, sheets, towels, upholstery fabrics and clothing may also be affected.

acoustical foam [In relation to cushion] - Foam designed to attenuate, or dampen vibrations or sound waves.

acoustical insulation - The general application or use of asbestos for the control of sound due to its lack of reverberant surfaces.

acoustical properties - Absorbance, reflection or transmission of sound waves.

acoustical sealant - A sealant with acoustical properties used to seal the joints in the construction of sound rated ceramic tile installations.

acoustical tile - Any tile composed of materials having the property of absorbing sound waves, hence reducing the reflection of sound; any tile designed and constructed to absorb sound waves, usually found in the ceiling or walls.

acoustic materials - Materials which absorb sound, such as carpet and acoustic tiles. Most sound absorption materials, besides being good sound insulators, are also highly absorbent and are susceptible of retaining unwanted moisture and humidity after water damage flooding.

acoustics - A science dealing with the production, control, transmission, reception, and effects of sound, and the process of hearing.

acoustic tile - Tile-shaped blocks of sound-absorbent material used for ceilings or as wall facing.

Academy of Textiles & Flooring
FLOORCOVERING DICTIONARY

acquired character - A feature developed during the lifetime of an individual in response to use or environment.

acre - Unit for measuring land, equal to 43,560 square feet; 4,840 square yards; or 160 square rods.

acre foot - A unit for measuring volume, equal to 43,560 cubic feet. Equal to an area of one acre one foot deep. Used sometimes in measuring coal or water volume.

Acrilan® - Acrylic staple fiber, usually crimped. Properties of Acrilan® fabrics: light weight, bulkiness, warmth; low moisture absorption; resistance to wrinkling, pilling, chemicals, moths, mildew and fungi; response to dyes; high tensile strength; resilience and capability of holding durable pleats. (1) Acrilan® alone or in blends with wool, cotton, nylon or Orlon® is used for knitted or woven wearing apparel, blankets, carpets, work clothes. (2) In fiber form, it is used for comforter filling, acrylic fiberfill. Other acrylic synthetic fibers: Creslan® and Orlon®.

acrylic - (1) Acrylic fiber is made from a long chain of synthetic polymer composed of at least 85 percent by weight of acrylonitrile--a liquid derivative of natural gas and air. The fiber appeared on the market in 1949, went into full-scale production in 1952 and made its first appearance in carpets at the 1957 winter markets (introduced by Chemstrand, now Monsanto). Acrylic fibers disappeared from the market in 1988 due to superior performance from other synthetics, but were reintroduced in 1990 in Berber styling to take advantage of their wool-like appearance. A chemical identification test for acrylic is that it burns quickly with a large, orange flame and thick, black smoke to an irregular, rough ash that can readily be crushed. (2) **[In relation to ceramic]** A general class of resinous polymers used as additives for thin-set mortar and grout. See **latex portland cement mortar** or **grout**. (3) **[In relation to wood]** The generic name for wood-plastic-composites utilizing woods impregnated with acrylic monomers and polymerized within the wood cells by gamma irradiation. In the case of acrylic/wood parquet, a built-in finish is developed.

acrylic co-polymers - Used as a topical treatment, these products repel water-based stains and act as a marginal soil retardant.

acrylic fiber - Acrylic fiber is made from a long chain of synthetic polymer composed of at least 85 per cent by weight of acrylonitrile, a liquid derivative of natural gas and air. The fiber appeared on the market in 1949, went into full-scale production in 1952 and made its first appearance in carpets in 1957. Acrylic fibers are produced by two basic methods of spinning (extrusion), dry and wet. In the dry spinning method, material to be spun is dissolved in a solvent. After extrusion through the spinneret, the solvent is evaporated, producing continuous filament which later may be cut into staple, if desired. In wet spinning, the spinning solution is extruded into a liquid coagulating bath to form filaments which are drawn, dried, and processed. Because acrylic fibers are thermoplastic, fabrics may be heatset for wrinkle resistance and to provide permanency to pleats. Acrylic fabrics have low moisture absorbency and dry relatively quick. In general, acrylic fibers are resistant to the degrading effects of ultraviolet rays in sunlight and to a wide range of chemicals and fumes. They provide warmth in fabrics which are lightweight, soft, and resilient. Acrylic fibers have relatively poor flame resistance compared with other fibers. Some acrylic fabrics, particularly knit types, approximate the hand of fine wool. Because of the composition and cross section of the fiber, fabrics made therefrom have a high bulk to weight ratio. This is further enhanced with the so-called high bulk spun yarns. Acrylic fibers are used for floor coverings, blankets and apparel such as suiting, pile fabrics, coats, collars, linings, dresses and shirts. The spun yarns have the closest resemblance to wool of any synthetic.

acrylic impregnated [In relation to hardwood floors] - The generic name for wood-plastic composites utilizing woods impregnated with acrylic monomers and polymerized within the wood cells by gamma irradiation. It means surrounding the wood fibers with plastic instead of water.

acrylic plastics - Noncrystalline thermoplastics with optical clarity.

acrylic resin - A polymer of acrylonitrile, used in the production of manufactured fibers, as a fabric finish and as a size. A synthetic material such as Lucite, which comes in flat, shaped or corrugated panels. It is white in color, very transparent, and resistant to discoloration, moisture, alcohol acids, alkalies and mineral oils.

acrylic styrene - A popular type of polymer blend for floor finishes.

acrylic/wood [In relation to hardwood] - The generic name for wood-plastic composites utilizing wood impregnated with acrylic monomers and polymerized within the wood cells by gamma irradiation. Some versions are cured by heat radiation. (In the case of acrylic/wood parquet, a semi-built-in finish is developed).

acrylonitrile - A colorless, volatile, flammable liquid used as a raw material in the manufacture of acrylic polymers and fibers.

ACS - See **Air Conveyance System**, also stands for Abnormal Chemical Sensitivity.

ACT - Association of Cleaning Technicians.

actinic degradation - See **ultraviolet degradation**.

actinic property - A reference to the energy contained in light. Often UV degradation is related to the actinic property of light.

actinic rays - Light rays esp. the violet and ultraviolet parts of the spectrum, that produces chemical changes as in photography.

actinic resistance - See **ultraviolet resistance**.

actinomycetes - Bacteria that look like long-branched filaments under a microscope, and that are malodorous bio-pollutants.

Action Bac® - The trademark owned by Patchogue Plymouth Division of Amoco Fabrics Company for a leno weave of slit-film and spun polypropylene yarns that form a stretchable, all-synthetic secondary backing fabric.

action level [AL] - (1) Under OSHA regulations, a measured concentration of certain airborne contaminants or noise in the workplace that require immediate attention by testing exposure levels. (2) The level of action emergency managers feel are necessary of worker's in entering and exposing themselves to contamination.

action stretch - A term applied to fabrics and garments that give and recover in both the lengthwise and the widthwise directions. Action stretch is ideal for tight-fitting garments such as ski pants.

activated alumina - Pelletized aluminum oxide used as a gaseous sorbent filter when treated with potassium permanganate.

activated carbon - A finely pulverized, black char that has been especially treated to give it the property of attracting and holding color and odor forming compounds in solvent.

activated charcoal - Carbon charcoal that has an increase absorptive capacity of retaining chemicals and some toxins from exposure to an environment.

activated complex - A species, formed by collision of energetic particles, which can react to form products or other intermediates.

active earth pressure - The horizontal push from the earth on a wall.

active ingredients - Ingredients which promote claimed results. Usually, this term is associated with products registered with the EPA, in which case the active ingredients are those constituents which are recognized as providing the claimed pesticidal properties, e.g., insecticide, rodenticide, bactericide, etc.

active layer - The layer at the surface of the ground, which moves seasonally as the soil-volume changes, expanding when frozen and shrinking when it thaws and dries.

activewear - Garments designed to provide properties such as comfort, support, insulation, and wear resistance required for vigorous exercise or sports activities.

activity - Of an antibacterial agent, a measure of effectiveness of the agent.

actual cash value - An object's current market value (current replacement value minus depreciation).

actual damage - Damage which really exists in fact, as distinguished from potential or possible damage.

ACTWU - Acronym for the Amalgamated Clothing and Textile Workers' Union.

acute - Describing a sudden exposure to a significant dose of a dangerous substance. See **chronic**.

acute effect - An adverse effect on a human or animal body, with several symptoms developing rapidly and coming quickly to a crisis. Examples include dizziness, nausea, skin rashes, inflammation, tearing of eyes, unconsciousness and even death.

acute exposure - A single exposure to a toxic substance which results in biological harm or death. Usually characterized as lasting no longer than a day. See **chronic**.

acute health effects - A circumstance in which a chemical or substance results in the rapid development of severe symptoms.

acute toxicity - The ability of a substance to cause poisonous effects resulting in severe biological harm or death soon after a single exposure or dose. Any severe poisonous effect resulting from a short-term exposure.

Academy of Textiles & Flooring
FLOORCOVERING DICTIONARY

ADA - The Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities has established guidelines for all ground and floor surfaces, level changes, carpet construction requirements and slip resistance.

adaptation - Changes in an organism's structure or behavior that help it adjust to its surroundings. An increase or decrease in sensitivity to a given stimulus that results from exposure to that stimulus.

addition - (1) To cement, processing additions designed to aid the cement manufacturer in grinding or otherwise processing or handling his cement; functional additions added primarily to modify the end properties of the cement. (2) To a structure, a construction project physically connected to an existing structure. (3) To contract sum, amount added to the contract sum by change order.

additional extended coverage - An endorsement for insurance policies covering dwellings and similar property, extending the coverage to include insurance against direct loss caused by water damage from plumbing and heating systems, rupture or bursting of steam or hot water heating systems, vandalism and malicious mischief, vehicles owned or operated by the insured or by a tenant, glass breakage, ice, snow and freezing, as well as fall of trees and collapse. A deductible is required in most states.

additional living expense - A form of "extra expense insurance" on dwellings. The insurance company provides additional funds to compensate for the extra costs caused by the interruption, e.g., extra cost of living in a hotel, compared to the normal living costs.

addition polymer - A polymer produced by reaction of a monomer, usually a derivative of ethylene, adding to itself; no other product is formed.

addition polymerization - A reaction yielding a polymer in which the molecular formula of the repeating unit is identical with that of the monomer. The molecular weight of a polymer so formed is a simple sum of the molecular weight of the combined monomer units. Combination occurs by means of rearrangement of the chemical bonds.

additive - (1) A supplementary material combined with a base material to provide special properties. For example, pigments are used as dope additives to give color in mass dyeing. (2) **[In relation to laminate floors]** Special material incorporated in a plank during manufacture to impart special properties. Includes preservatives, water repellents, and fire retardants, but not adhesives.

additive primary colors - See **primary colors**.

add-on - In textile processing, the amount of any material, chemical finish, coating, sizing, etc. that is applied to a textile. See **wet pick-up**. The add-on is usually determined as a percentage of either the dry or conditioned weight of the textile prior to processing.

adelaide wool - South Australian wools which are mainly in and shipped from the port of Adelaide. See **botany wool**.

ademine - A white, crystalline purine base contained in the DNA, RNA and ADP of all tissue; it links with thymine in the DNA structure.

adequate wetting [In relation to asbestos] - This is the prevention of fiber emissions by sufficient mixing or coating of asbestos-containing material with amended water. Wetting shall be performed using a dispenser or water hose with a nozzle that permits the use of a fine, low-pressure spray or mist.

adhesion - The property that causes one material to stick to another. Adhesion is affected by the condition of the surface to be coated and by the closeness of contact, as well as by the molecular forces of the unlike substances. Thus, the surface should allow a certain amount of penetration, should be chemically clean and not too smooth, hard or non-porous for good adhesion. See **adhesion, mechanical** and **adhesion, specific**.

adhesiion, mechanical - Adhesion between surfaces in which the adhesive holds the parts together by interlocking action.

adhesion promoters - Products used to treat the smooth fiber-face of closely constructed base fabric to provide a chemical bonding site for subsequent coating. This step is done because it is difficult to get good coating adhesion via strike through and mechanical bonding in closely constructed fabrics. Products containing the isocyanate group are the most widely used promoters. See **dip treating**.

adhesion, specific - Adhesion between surfaces which are held together by valence forces of the same type as those which give rise to cohesion.

adhesion test - In coated and laminated fabrics, a test to determine the force per unit length required to separate the layers.