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Rugs and Carpets

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Rugs and Carpets

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Agricultural Experiment Station
South Dakota State University
Brookings

BUYING TIPS

Buy your carpet from a reliable dealer after studying your needs and what is available.

Pick a color and texture that will create the mood you desire and be most complementary to your room. Medium colors, color mixtures and patterns are best for reducing signs of use between cleanings.

Select a fiber with characteristics that meet the needs of your room. Heavy traffic areas need a more durable floor covering than light traffic areas.

Pile that is close together (dense) wears longest. The pile may be short or high and wear well provided it is densely constructed of a good fiber.

Choose a carpet with a strong, durable back.

Compare backing material, density of pile, fiber content and estimated wear life with the price of the carpet. A low price for poor quality is not a bargain.

Choose a good padding as it will support and prolong the life of your carpet.

Take a sample home and try it in the room to see if it is really what you want.

A floor border around a rug should be about 8 inches in a small room or 10 to 12 inches in a larger room.

Select carpeting for outside areas labeled for "Indoor-Outdoor" use.

Carpets to be used in damp areas such as laundry, bathroom, pool or kitchen must be made of mildew resistant and rot-proof fibers and backing.

Plan to take good care of your new floor covering.

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Rugs and Carpets

By

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Carpets and rugs help to make a home attractive, cozy, and livable in any or all rooms — including the kitchen and bathroom.

It is important to select carpeting which will give you the most satisfaction and which is best suited for your particular needs and situation.

Points to consider in selecting a carpet or rug:

- Is traffic heavy or light in the room?

- Is this this a temporary or permanent location?

- Will the carpet be expected to give the longest possible service, or will it be discarded for a newer type or color after a comparatively short time?

- Value is determined by what you get from your carpeting in the way of service, durability, comfort and improvement in the appearance of the room.

- When selecting carpeting buy the best quality you can afford.

Types of Carpeting

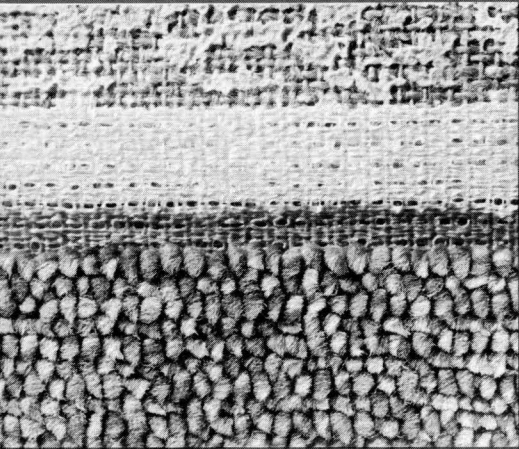
Rugs are soft floor coverings laid on the floor but *not fastened down*. A *carpet* covers the entire floor and *is fastened down*. Either may be purchased by the yard, cut to room size and used as a rug or laid wall to wall and fastened down. Carpeting and rugs woven in usual room sizes come in various types and qualities and are similar in every way except size.

The term *Broadloom* refers to seamless carpeting of any weave or structure made wider than six feet.

Rugs and carpeting were formerly sold on the basis of construction. Today, with so many types of fibers, more emphasis is placed on fiber content. Until a few years ago most carpeting was woven on machines where the surface pile and backing were worked simultaneously. These carpets include Wilton, Axminster and velvet.

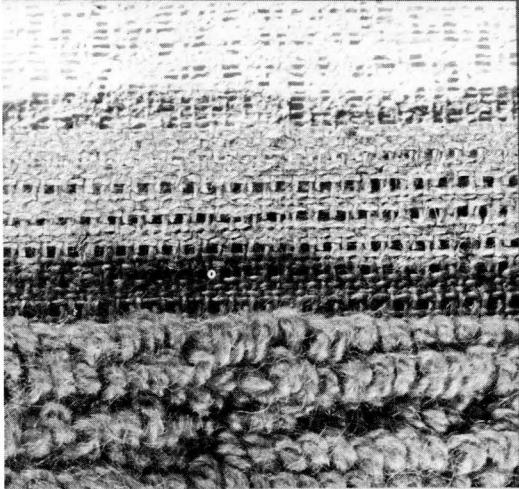
Most carpeting today is made by a process called tufting in which pile yarns are punched into a pri-

A — TUFTED CARPET. Sections of tufted carpet combinations separated to show construction features. Note punch holes in the primary backing pieces (center section of each photo). These punch holes indicate how close together the tufts were placed. Also, note deposits of latex left on both backings when pieces of carpet were separated.



A-1—Loop pile of 100% polypropylene face fiber. Woven polypropylene primary backing. Woven jute secondary backing.

A-2—Loop pile of 100% wool face fiber. Woven jute primary backing. Woven linen secondary backing.

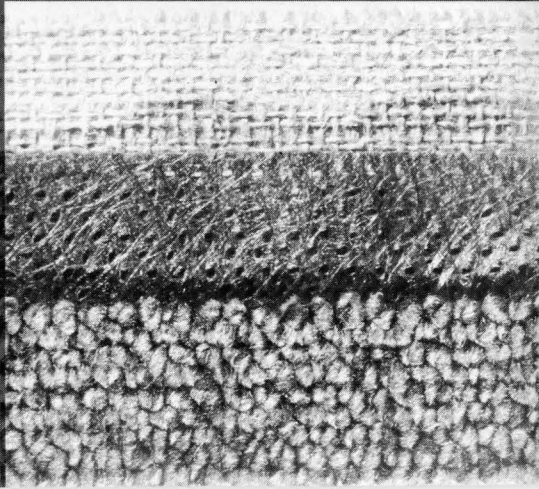


mary backing by wide multi-needled machines (Figure A). The yarns are held in place by a layer of latex on the back of the carpeting. The first tufted carpets were solid colors, but now it is possible to obtain stripes, squares, random ripple and other patterns. Shag is another illustration of a tufted carpet.

Closely related to tufted carpets is knitted carpeting which is made in one operation. The backing yarn, stitching yarn and pile yarn are looped together with three sets of needles. The succession of loops may be seen on the back side of the carpet. The knitted structure is usually made with uncut loops and may be one-level and multi-level (Figure B).

Flocked carpeting resembles velvet in appearance. Flocking is the technique whereby fibers are mechanically or electrostatically deposited on a backing such as rubber or vinyl. The fibers are deposited perpendicular to the backing with their ends entrapped in the backing or

A-3—Loop pile of 99.5% continuous filament nylon face fiber with 0.5% static control yarn. Non-woven polypropylene primary backing. Woven jute secondary backing.





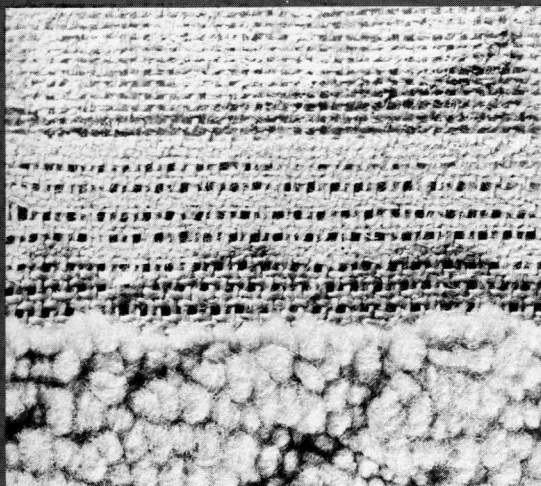
B — KNIT CARPET.

B-1—Interlocking loops of the knit in this folded piece of carpet may be seen by looking closely at the yarns.

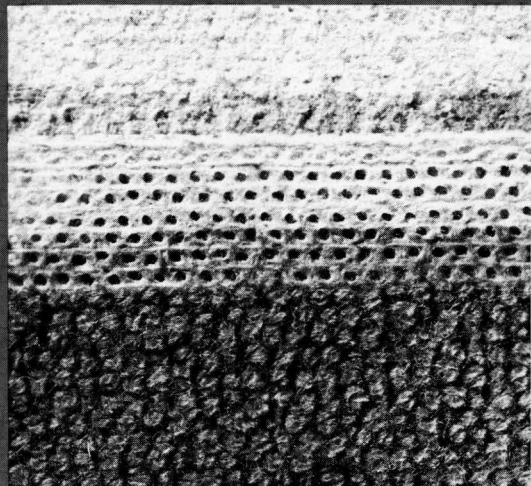
B-2—Enlarged cross section of the knit carpet.



A-4—Loop pile of 100% nylon face fiber. Woven jute primary backing. Woven jute secondary backing.



A-5—Loop pile of 100% acrylic face fiber. Non-woven polypropylene primary backing reinforced with parallel threads in one direction. Non-woven polypropylene secondary backing.



in an adhesive layer. Flocked carpets have a characteristic single-level cut pile surface. These carpets may be one color or they may be printed (Figure C).

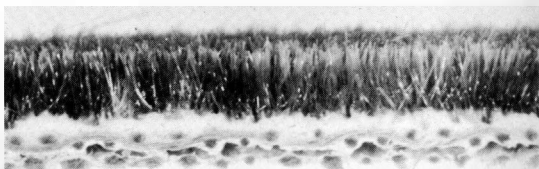
A non-woven, felt-like carpet now being produced is called needlepunched, needlebonded or needleloomed. Needle punched construction is a layer of carded fibers which is compacted and mechanically held together by the action of felting needles which interlock the fibers. The bottom surface is coated with latex for strength and stability. Some of this carpet has foam backing and is intended for use indoors only while another has only latex backing and can be used either indoors or outside (Figure D).



C — FLOCKED CARPET

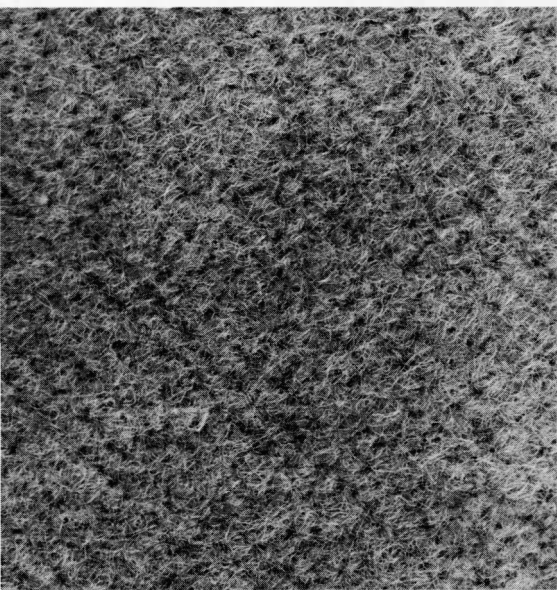
C-1—The surface of the flocked carpet appears similar to velvet or suede.

C-2—Enlarged cross section of the flocked carpet shows the short fibers embedded in the thick layer of backing and bonded to the sturdy woven jute back.

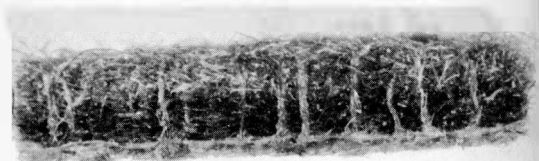


D — NEEDLEPUNCHED CARPET

D-1—Needlepunched carpet appears as a mat of fibers with tiny indentations covering the surface.



D-2—Enlarged cross section shows the reason for the tiny indentations on the surface: fibers are drawn through the web to lock the mat together.



Wearing Quality or Durability

Wearing quality or durability in a soft floor covering is based on:

- (1) type of fiber used,
- (2) construction of yarns,
- (3) closeness of weave,
- (4) pile height, and
- (5) construction of the backing.

Type of Fiber

Wool has been the traditional fiber in good quality rugs. Many new man-made fibers are now being used in carpets. Carpeting varies in quality as well as price. Select the type of fiber which most nearly satisfies your specific requirements.

Wool is considered good because it dyes beautifully, has superior ability to spring back after crushing, is warm and does not soil readily. Wool does not support combustion. Carpet yarns are made of coarse, wiry, tough fleeces from low-grade imported wool. Wool produced in the United States is too fine and too soft for use in carpeting.

Cotton, a soft fiber with a tendency to crush, does not stand up under heavy wear. It is inexpensive and most often is used in small-sized rugs that can be washed. Cotton soils readily unless treated for soil resistance.

Rayon is not resilient. It takes dyes well and produces rich colors, but it is not as resistant to abrasion as other man-made fibers. It is relatively inexpensive so might be used in low traffic areas.

Nylon fibers are well known for durability. They absorb little mois-

ture and dry fast, but do not have the resiliency of wool. Second generation nylons do not soil as readily as first generation nylons.

Acrylic fibers are soft, silky and warm and give the appearance of wool. They clean easily and dry rapidly.

Modacrylic fibers are similar to wool and have good resistance to abrasion and soiling. They are flame resistant and are often blended with acrylic.

Polyester fibers are strong and resistant to most chemicals and to abrasion. These fibers have a tendency to crush with a poor rate of recovery. The newer fibers take color well.

Polypropylene fibers have good abrasion resistance, are resilient and easy to clean. A denser pile may be achieved with polypropylene fibers. They do not absorb moisture, thus waterborn stains are not absorbed.

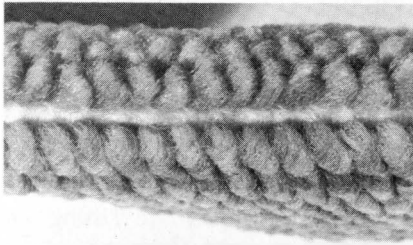
Construction of Yarn

Yarns must be strong, bulky, springy and have characteristics that form a durable crush-resistant pile. They may be single-, 2-, 3-, or 4-ply. Two-ply yarns of different colors may be twisted around each other to give a pebbled effect. The number of plies affects texture of the carpet, but not quality. Continuous filament yarns will help eliminate pilling, fuzzing and shedding problems encountered from staple yarns.

Closeness of Weave

The more tufts or loops per square inch the more durability and

resilience in the carpeting. Bend the carpet on the right side and note how close rows of tufts are placed. A wide space between tufts indicates the rug may not be of good quality and will not wear well (Figure E).



E — CLOSENESS OF WEAVE

E-1—A loop tufted pile carpet doubled back-to-back shows closeness of rows of tufts. For tufted pile the rows are not very close together. Note that tufts are not standing straight up and down.

E-2—A cut pile in the form of shag. These tufts are not close together, but for shag carpet they are very good.



Pile

Depth of pile depends on the type of weave and the kind of fibers used. Good rugs are made with both short and high pile. High pile is often more difficult to keep clean. The amount of fiber on the face of

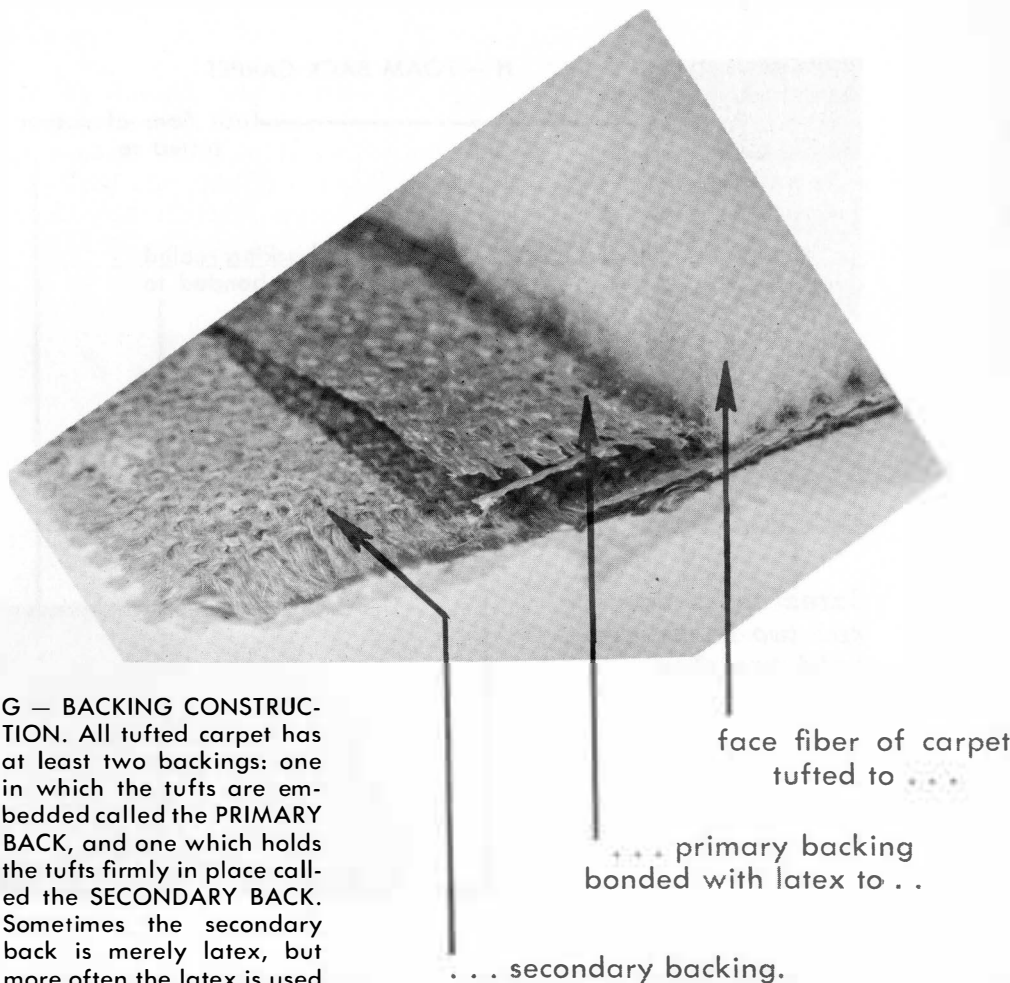


F — DEPTH OF PILE.

F-1—The tufts placed far apart in a high pile carpet (top) and a short pile carpet (lower) show how important it is to have the tufts close together. Notice how the tufts in the high pile carpet are bending toward the floor.

F-2—The tufts are much closer together in these carpets. They will wear far longer than the others.





G — BACKING CONSTRUCTION. All tufted carpet has at least two backings: one in which the tufts are embedded called the **PRIMARY BACK**, and one which holds the tufts firmly in place called the **SECONDARY BACK**. Sometimes the secondary back is merely latex, but more often the latex is used with some other materials.

the carpet is important for wear life. Dense or closely packed pile yarns support each other. If tufts are spaced far apart on high-pile carpets, the pile will flatten and show footprints more quickly than on low pile. It takes longer to wear pile down from the top than from the side (Figure F).

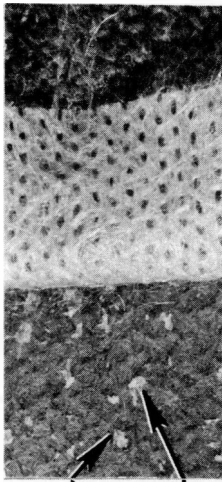
Backing Construction

A *primary backing* fabric is the foundation for the pile in the tufted

carpet. It may be synthetic fiber, jute, cotton, linen or kraftcord. Polypropylene is a synthetic fiber for backing. It may be woven or non-woven construction. The tufts are held in this backing with a latex coating of elastomers—of synthetic or natural rubber (Figure 7).

Synthetic backings such as polypropylene have some advantages especially if the carpet is to be placed in the kitchen, bathroom, or

H — FOAM BACK CARPET

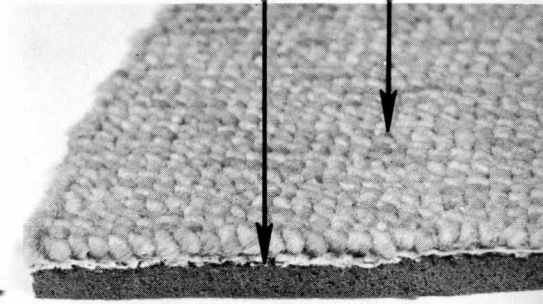


face fiber of carpet
tufted to . . .

. . . primary backing sealed
with latex and bonded to

. . . secondary backing of
foam.

*latex spots showing
how two backs are
held together*



areas where dampness is a problem. Polypropylene fibers do not absorb moisture and therefore are rot and mildew proof.

Secondary backings are added to the carpet in either of two ways: foamed directly onto the carpet, becoming an integral part of the construction; or made in a separate layer and laminated to the carpet. Materials used as secondary backings include jute, non-woven polypropylene, latex or vinyl foam and linen. This extra backing prevents stretching, shrinking and buckling

and gives additional body and dimensional stability to the carpet. Most good quality non-woven carpets have this second backing for greater strength. Where dampness is a factor indoors, vinyl foam is the least apt to mold or mildew (Figure H). In *extremely* damp areas such as outdoors on a porch or patio the foam will deteriorate so a flat polypropylene secondary backing would be more satisfactory.

Carpet Pads or Underlay

Pads or cushions which are placed under carpets act as shock ab-

sorbers, insulation, add comfort and reduce noise. They also extend the life of the carpet by 30% to 50%.

Two types of padding are felted and rubber. Felted pads are made of hair, hair and jute, or hair and jute mixed with rubber. The quality recommended for household use would be a 40-ounce pad. Rubber pads are of natural or plastic sponge or foam. The $\frac{3}{4}$ -inch padding is recommended for home use. Foam rubber padding is not recommended for installing directly over concrete. Felted pads tend to be firmer and the rubber more buoyant.

Research Helps Your Carpet Selection Study

Most consumers want carpeting to give maximum service—but appearance during the wear period is important too. A carpet may be attractive and resilient when new but after a short time may not be acceptable because of color change, yarn distortion or loss of texture.

Homemakers have been provided with helpful information in making the best and most economical selection of carpeting as a result of research at Agricultural Experiment Stations at South Dakota State University and the University of Minnesota.

Strict Standards Maintained

Research laboratories used carpeting of similar construction but of different fiber content and quality. Pieces of carpet were placed in heavy traffic areas on the two campuses. Type of carpet construction was tufted random shear with a high and low pile forming a pattern. Four fibers—acrylic, nylon, polypropylene and wool—were selected at

two price levels. Cost differences between “high” level and “low” level ranged from \$2.50 to \$3.50 per square yard which would be from \$30 to \$42 for a 9 x 12-foot carpet.

Carpetings were cut into 4x5-foot pieces, assembled in a long panel and placed in heavily used corridor areas on the campuses. Wear on these carpetings was not typical of that in a family living room. Carpets were vacuumed daily with a domestic type vacuum cleaner. When vacuuming would no longer remove visible soil, carpets were cleaned with a home-wet method. Concentrated liquid rug shampoo was mixed with cool water according to manufacturer's directions and applied with an electric rug shampooer. As each section was cleaned and while still damp, the pile was brushed in one direction to raise the nap and avoid streaking. After drying, the carpet was thoroughly vacuumed. The position of the carpeting pieces within the panel were then changed in accordance with a pattern of rotation so each piece of carpeting received equal wear throughout the study.

Research Findings

During the three years of service 12 shampoos were required. The number of weeks between shampoos varied somewhat with the season. As the study progressed it became necessary to shampoo the carpeting more frequently.

The method of cleaning was satisfactory. As in a previous study, wool carpeting did not show soil as soon as the synthetic fibers. Although all carpets were wet-cleaned at the same time, the wool car-

pet would not have needed as many shampoos as the synthetic fibers.

Depth of pile measured with a thickness gauge, was deeper when new for the higher priced carpets than for lower priced carpets of the same fibers. After three years, nylon carpeting had changed the least.

Appearance of the carpeting was judged before and after shampooing by comparison with a set of photographic standards. Nylon

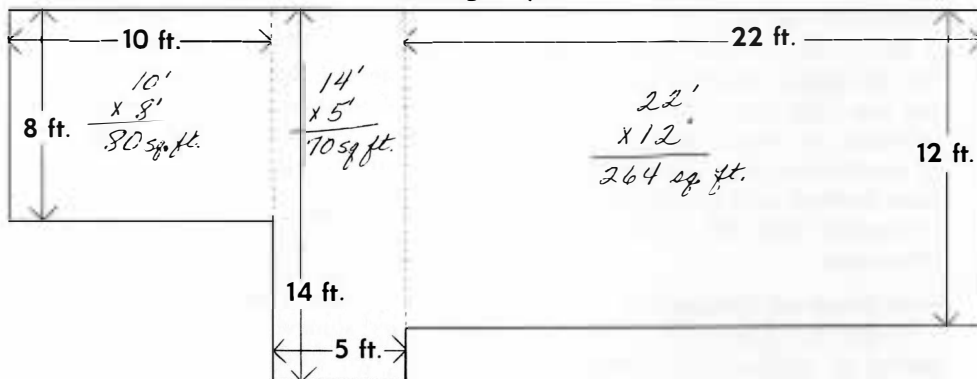
maintained its original appearance better than the other carpet fibers. Although the deeper pile polypropylene crushed and matted more than the lower pile polypropylene, patterns in both were obliterated by the end of the three-year wear period. However, these were some of the first polypropylenes on the market and polypropylenes have been improved since then. The one-level polypropylene pile has proven most satisfactory.

Measure to Estimate Carpet Cost

Rugs are usually priced as a unit according to their size and quality. Carpeting is sold by the square yard. In some instances the price per square yard includes the padding and installation while in other cases those are additional costs.

The room or area you plan to carpet must be measured. If the area is irregular in shape divide the area into squares or rectangles and measure each area. Add the results to give you the total square footage. Below is an example of how this is done:

Estimating Carpet Cost



264 sq ft.
80 sq ft.
70 sq ft.

414 sq ft. for the room area above

Your first figures will come out as square feet. Since carpeting is sold by the square yard our next step is to divide the square feet by 9 to get square yards.

$$414 \text{ sq. ft.} \div 9 = 46 \text{ sq. yds.}$$

Multiply the carpet cost by the number of square yards to give you the approximate cost. Cost of the carpet pad is also estimated by multiplying its cost by the square yardage needed. Padding size should be slightly smaller than the carpet, but for rough figures merely use the amount needed for the total area.

Static Control

Static electricity is generated by carpeting under various conditions. To alleviate this problem several methods are currently being used. They vary in cost and effectiveness.

By maintaining a comfortable but high relative humidity in your home, some control of static electricity is possible. You may need the aid of an air conditioner in summer and a humidifier in winter to maintain the humidity at the desired level. The desired level will depend on the fiber content of the carpet, its construction, the flooring material under the carpet and other variables which influence the generation of static.

Anti-static agents are available which reduce static temporarily. These come in powders or spray cans for general use and liquid chemicals are available for commercial use. Care should be taken when using these agents since some may cause the carpet to soil at a faster rate than normal.

A permanent means of dealing with static has been used by several manufacturers. Metal fibers are incorporated in the carpet construction. The metal transports the static charges down to a conductive latex backing. The conductive latex

serves as a ground thus eliminating the problem of static.

Each year will bring new knowledge to this subject and eventually carpet static may cease to be a problem.

Carpet Flammability and Smoke Emission

Carpets are now used widely in commercial buildings, hospitals, motels, schools and hotels. This use is being challenged in institutions that are subject to Federal regulations or to local codes based on Federal regulations. The reason is that several fires have occurred in which it was believed flame spread and smoke emission from carpet was a major contributor to the damage done by the fire. Homemakers would be wise to consider these factors when making purchases for use in their homes.

Several methods of testing fabric flammability are currently in use. Some of these methods are extremely effective while others are not. As research becomes more intense these methods will undoubtedly change. The present testing methods deal primarily with flame spread and less with smoke emission. Manufacturers are working on various means of solving both problems.

Broadloom or wall to wall carpet must pass the burning "pill" or tablet test for flammability if it is to be sold in interstate commerce. There is no labeling required on this floor covering for aid to the consumer. Rugs and small carpets (4x6 feet and smaller) that fail to pass this tablet test must be labeled "Flammable (Fails U. S. Dept. of Commerce Standard FF-2-70); Should not be used near sources of ignition." These small floor coverings are considered less of a risk than large floor coverings so are permitted to be sold with the use of the cautionary label, warning the consumer of the possible hazard.

State and local laws and regulations vary on requirements so it is wise to contact the state or local fire marshall or state health department prior to purchasing floor covering for a public building.

Although labels are not required on large carpets and rugs, many sample books show the flame spread and smoke emission factors. The larger these guide numbers become the higher the hazard becomes.

As of early 1972, South Dakota standards apply only to nursing homes and hospitals. In South Dakota the tablet test is not considered sufficiently effective so the tunnel test is preferred. The flame spread should not exceed 75 and the lower this number is, the better. The smoke emission factor must not exceed 150. Both of these figures are based on the tunnel test (A.S.T.M. E-84). The chamber test is under consideration for being acceptable in the state.

The "Pill" or Tablet Test

This is a test for large and small carpets and rugs. Their surface flammability is tested by exposing eight 9-inch square specimens to an ignited tablet of methenamine which burns for 90 to 120 seconds. If the fire spreads more than three inches in any direction from the location of the tablet, the specimen fails. One failure out of the eight samples is permitted. Small rugs and carpets that fail this test may still be sold provided they are labeled to warn the public of their potential flammability.

The Chamber Test

This test was recently developed by Underwriters' Laboratories under a research project sponsored by the U. S. Department of Health, Education and Welfare. This test exposes a 2x8-foot sample of floor covering to an impinging fire at one end. The sample is mounted in the normal floor position. Observations are made of the flame spread over the surface. Although a failure criterion has not been recommended for this test as yet, performance of carpeting when exposed to the igniting fire for 12 minutes has varied from practically no flame spread to propagation over the full sample length, depending upon the type of fiber, construction, and possibly other factors.

The Steiner Tunnel Test

This test is a national standard used for the measurement of flame spread and smoke developed from interior finish materials (NFPA 255). In a rectangular furnace the test sample is mounted on the lid of the furnace and exposed to an igniting fire from the underside. As the test material begins to contribute to the igniting fire, flame spreads down the sample. Observations are made of the time and distance of the flame spread

and a rating is assigned, based on a scale in which a noncombustible material has a zero rating and red oak flooring has a 100 rating. This equipment is also used to measure smoke generation during a test, and the rating scale again has zero for a noncombustible material and 100 as the smoke-developed rating for red oak flooring. This test is approved by the U. S. Public Health Service for regulating floor coverings in hospitals and nursing homes.

GLOSSARY OF CARPET TERMS

(From "The Carpet and Rug Merchandiser," April 1971. Published as an education aid by the Carpet & Rug Institute, Dalton, Georgia, 30720).

ABSORPTION—The property of a fiber, yarn or fabric which enables it to attract and hold gasses or liquids within its pores.

AFFINITY—The tendency of two substances to chemically unite as fiber or dyestuff.

ANTI-STATIC—The power of a fabric to disperse electrostatic charges which will prevent the build-up of static electricity.

BCF—A designation for bulked continuous filament yarn.

BLEEDING—Loss of color when wet due to improper dyeing or from the use of poor dyestuffs. Fabrics that bleed when wet will stain fabrics which come in contact with them.

BLEND—A fabric containing a mixture of two or more fibers or yarns, or a combination of two or more fibers spun into a yarn.

BRUSSELS—A term formerly, but now rarely, used to describe a loop pile or round-wire carpet woven on the Wilton loom.

BULKING—Any one of several procedures for crimping, curling, or looping a yarn so that it becomes bulked and occupies a volume greater than that indicated by the specific gravity of the fiber.

COMBINATION—A term which refers to yarns or fabrics: (1) A combination yarn is composed of two or more yarns having the same or different fibers or twists, e.g., one yarn may have a high twist; the other, little or no twist. (2) A combination fabric is one which uses the above yarns.

CONTINUOUS FILAMENT — Continuous strand of synthetic fiber extruded in yarn form, without the need for spinning which all natural fibers require.

CRIMPING—Processing yarn, usually by heat or pressure, to fix a wavy texture and increase bulk.

CROCKING—Term used to describe excess color rubbing off as the result of improper dye penetration or fixation.

CROSS-DYED — Multi-colored effects produced in a fabric with fibers of different dye affinities.

CUT PILE—A fabric, the face of which is composed of cut ends of pile yarn.

DENSITY — The amount of pile packed into a given volume of carpet, usually measured in ounces of pile yarn per unit volume.

DIMENSIONAL STABILITY — Tendency of a fabric to retain its size and shape; may be brought about by chemical treatment or mechanical means; e.g., a secondary backing adds dimensional stability to tufted carpet.

DOUBLE BACK — A secondary backing cemented to the back of tufted, knitted and some woven carpet as additional reinforcement, to provide greater dimensional stability.

DYEING—The process of coloring materials; impregnating fabric with dyestuff.

- (1) Solution dyed — Synthetic yarn which is spun from a colored solution; the filament is thus impregnated with the pigment.
- (2) Stock dyed—Fibers which are dyed before in staple form.
- (3) Yarn (or skein) dyed—Yarn dyed before fabricated into carpet.
- (4) Piece dyeing unfinished carpet — Carpet dyed "in a piece" after tufting or weaving but before other finishing processes such as latexing or foaming.
- (5) Cross dyeing — Method of dyeing fabrics with dyestuffs which have different affinities for different types of yarns.

- (6) Space dyeing—Process whereby different colors are “printed” along the length of yarn before it is manufactured into carpet.
- (7) Continuous dyeing—The process of dyeing carpet in a continuous production line, rather than piece-dyeing separate lots.

FILAMENT—A fiber of an indefinite or extreme length. In textile use, filaments of natural fiber must be spun into yarns, and synthetic filaments are extruded as yarns.

FLUFFING—Appearance on carpet surface of loose fiber fragments left during manufacture; not a defect but a characteristic which disappears after carpet use and vacuuming.

FUZZING—Hairy effect on fabric surface caused by wild fibers or slack yard twist; or by fibers slipping out of yarn or contour in either service or wet cleaning. Carpet of continuous filament yarn is fuzzed by filaments snagging and breaking. It is corrected by shearing in manufacturing or by the professional cleaner.

GRIN—A term used to indicate the condition where the backing of the carpet shows between the rows of pile tufts; e.g., some carpet may show the backing when laid over the nosing of a step.

HAND—The “feel” of a carpet in the hand—determined by such factors as pile height, quality and kind of fibers, type of construction, type of backing and dimensional stability.

HEAT SET—Stabilization of yarns to insure no change in size or shape; the process of heat-setting in an autoclave, using super-heated steam under pressure.

HIGH DENSITY—A term to describe a material with heavier than normal weight-per-unit volume.

HIGH DENSITY FOAM—Rubber product applied as a liquid foam, then cured, to form an integral part of the carpet back. Weights vary from 38 oz. to 45 oz. per square yard.

HIGH LOW—A multi-level pile, sometimes combining cut and looped surface yarns.

HOT MELT—A blend of polymer and filling applied in a heated state to a carpet back, to lock in surface yarns and for lamination.

METALLIC FIBER—A manufactured fiber composed of metal, plastic-coated metal, metal-coated plastic or a core completely covered by metal. The most important characteristic of metallic fiber in carpet is to reduce build-up of static electricity.

MODULUS OF ELASTICITY—Ratio of the stress in a material to the strain (elongation) within the elastic limit of the material.

MONOFILAMENT—A single filament large and strong enough to be used directly as a yarn for making textiles through any established process.

MORESQUE—Single strands of different colors of yarn twisted, or plied together to form one multicolored yarn.

MULTIFILAMENT—A yarn consisting of many fine continuous filaments or strands.

PADDING—Also called “cushion,” “underlay” or “lining.” Separate material serving as a cushion under a carpet or rug.

PILLING—A condition in certain fibers in which strands of the fiber separate and become knotted with other strands, causing a rough, spotty appearance. Pilled tufts should never be pulled from carpet, but may be cut off with sharp scissors at the pile surface.

PLY—The number of strands of yarn twisted together to form a multiple yarn, as in “2-ply” or “3-ply.”

RANDOM-SHEARED — Texture pattern created by shearing some of the top or higher loops and leaving others looped.

REPEAT — The distance from a point in a pattern figure to the same point where it occurs again, measuring lengthwise of the fabric.

RESIDUAL SHRINKAGE —

Amount of shrinkage remaining in a fabric after the decrease in dimensions has been determined by preshrinking; decrease in dimensions of a fabric after washing or dry cleaning.

RESILIENCE—The ability of a carpet fabric or padding to spring back to its original shape or thickness after being crushed or walked upon.

SCRIM BACK — A double back made of light, coarse fabric, cemented to a jute or kraftcord back in tufted construction.

SECONDS—Carpet or rugs rejected for having certain imperfections, flaws, or deviations of weave and marked as “seconds” or “imperfect” by the manufacturer.

SHADING—An apparent change of color in carpet pile—caused when light is reflected in different ways as pile fibers are bent; not a defect, but a characteristic, especially of cut pile fabrics, including upholstery and clothing.

SHEARING—The process in manufacture in which the fabric is drawn under revolving cutting blades as in a lawn mower, in order to produce a smooth face on cut pile or to cut selected tufts on random shear and tip sheared carpet.

SHOOTING OR SPROUTING — Individual strands of yarn protruding above the surface of the pile. This condition is not a defect and the sprouting can simply be eliminated by clipping off the yarn. Never attempt to pull the yarn out.

SHRINKAGE—The contraction of carpet and rugs after shampooing or washing and redrying.

SOIL RETARDANT — Agent applied to carpet pile yarns to resist soiling.

SPUN YARN—A yarn consisting of fibers of regular or irregular staple length usually bound together by twist.

STABILIZING—Treating a fabric so that it will not shrink or stretch more than a certain percentage.

STAPLE—Fiber in the natural, unprocessed state, usually in short lengths, which must be spun or twisted into yarn, as opposed to continuous filament.

TENACITY—Stress applied to produce a particular elongation in a fiber. The breaking tenacity is the stress required to elongate a fiber to the breaking point.

TENSILE STRENGTH—Breaking strain of yarns or fabrics. High tensile strength means strong yarns or fabrics.

THERMAL CONDUCTIVITY — The measurement of heat flow through a material.

TIP-SHEARING — Texture pattern created in the same way as random-shearing, but generally less definite than random-sheared.

TRAFFIC—The passing to and fro of persons with special reference to carpet wear resulting therefrom.

TWIST—The number of turns about its axis per unit of length observed in a yarn. Normally expressed as turns per inch.

References and Additional Information

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