

SMOOTH SURFACE FLOOR COVERINGS

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Smooth Surface Floor Coverings

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The more commonly used smooth floor coverings on the market today are: linoleum (inlaid) sheet or tile, vinyl sheet or tile, vinyl asbestos tile, regular asphalt tile and grease resistant asphalt tile, cork tile and vinyl cork tile, rubber sheet and rubber tile, printed enameled and vinyl printed felt base floor covering. These materials are often called resilient or composition flooring.

New materials, new combinations, or new treatments of present day materials can be expected on the market from time to time. Manufacturers trade names may or may not describe a type of material. Therefore, you may need to ask the dealer to explain the good and poor characteristics of the type of floor covering you are considering.

The kind of hard surface floor coverings you will choose for your home will depend on:

- Where it is to be placed—on a wood floor above grade level (suspended) or on a concrete floor in direct contact with the ground either at the grade level or below the grade level.

- Amount of traffic.
- Type of heating.
- Type of activity carried on in the room.
- Color and design you want.
- Need for quiet.
- Ease of maintenance.
- Cost.

You will want a floor that gives you satisfaction. Therefore, you will need to know the characteristics of the flooring you choose in order to fit the material to the situation and to the amount you can spend. For further information see the table on pages 6 and 7.

Some Guides

It is important to have a floor covering which is resistant to alkalis, grease, household acids, and stains in rooms where you cook, wash dishes, and do the laundry.

A floor that "gives" when you walk on it is especially desirable in rooms where you will be standing for fairly long periods of time—such as the kitchen or work room.

Floor covering that is quiet is especially desirable where you sleep, rest, or read.

Floors that will not scuff or show dirt easily and will clean readily are important where traffic is heavy.

Your heating system should be considered too. Some flooring materials are better conductors of heat than others. If your floor temperature is 85° or lower there will be no effect on floor covering. However, in the case of radiant heat, if the temperature exceeds 85°, which can happen if rugs or pads

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are laid on the floor, asphalt and vinyl asbestos tile become slightly softer and indent more easily. Some cork and rubber floorings are affected, too.

Hot sun constantly shining on flooring through glass is hard on some colors and materials. It may also cause shrinking and brittleness. Neutral colors have the best and pastel colors the poorest light resistance. Light will fade cork.

Denting, as in the case of vinyl asbestos and asphalt tile, can be reduced where special glides or cup-rests are used under furniture legs.

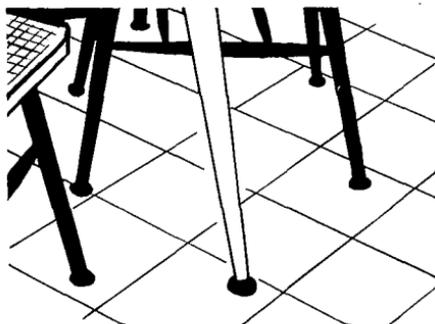


Fig. 1. Cup type furniture rests used under table and chair legs.

Wearing Quality

The wearing quality of a resilient floor covering is directly related to the thickness or gauge of the wear layer, to the composition of the flooring material, and to the type and thickness of the backing. The backing (when there is one) may be burlap, woven cotton, asbestos, or felt. In some plastic floor coverings the backing or base is made of cork and asphalt. Often a thinner gauge will be satisfactory if properly cared for—although a

thicker or heavier gauge will add to the quietness and comfort.

Length of wear of the floor covering is also related to the amount and kind of traffic, the type of care it is given, and the smoothness of the floor underneath. It has been estimated that some floor coverings may last as long as 25 or 30 years while others will be ready for replacement in 12 to 15 years. The life span of printed materials is shorter than other resilient floor coverings.

Color and Pattern

Your floors will show less soil if they are neither very light nor very dark. Tans and warm grays are unifying colors in a background such as the floor. The duller and more quiet the color the more satisfactory is the background—especially for large areas. A mingled or marbled effect is an excellent choice. Colors in plastic floorings are clear and bright while in linoleum they are usually soft and subtle. Brighter colors may be used successfully in hallways where you spend little time.

In good quality floorings the colors and patterns go through to the backing (this does not include printed materials). Patterns most commonly used are Jaspé—which is two or more colors blended to give a striped effect, and marbled patterns which are two or more colors swirled together to look like

marble. This type of pattern is easy to match at the seams and hides scuff marks.

In patterned design a combination of two solid colors or of a Jaspé or marbled pattern and a solid color are set into backing material to form a geometric design. In embossed design, which is found in some linoleum, parts of the design are pressed deeper than other parts—they are attractive but not as easy to clean. Spattered patterns are made up of many colored dots, while another resembles Terrazzo (a kind of flooring made of small chips of marble set irregularly in cement and polished). You may expect new patterns to come out each year.

You can obtain many different patterns when you use tiles. Manufacturers provide

WHERE TO USE

KITCHEN—linoleum, vinyl, grease resistant asphalt, vinyl asbestos, printed enameled and printed vinyl.

LAUNDRY,
BATHROOM } Linoleum, vinyl, vinyl asbestos, rubber, grease resistant asphalt.

LIVING ROOM,
DEN,
LIBRARY } Linoleum, vinyl, vinyl asbestos, cork, rubber, printed materials.

BEDROOM—linoleum, asphalt, vinyl, vinyl asbestos, cork, rubber, printed material.

HALLWAY—linoleum, vinyl, asphalt, cork, rubber, vinyl asbestos.

BASEMENT ROOMS—asphalt, vinyl asbestos.

pattern leaflets with many suggestions for arrangement of tiles and for combining different colored tiles. It is possible to purchase strips (called feature strips) of the flooring material. They are usually 1 inch wide and about 36 inches long which can be used in making the pattern. You can get 2 or 3 inch wide strips on special order. They come in several different colors.

If you plan to make a pattern with tiles avoid "busy" patterns and remember to scale the pattern to the size of the room. If you want a custom made design on your floor, made by cutting and fitting together two different colored sheet flooring materials, it would be well to have a skilled worker do this as any little mistake in cutting may spoil a large piece of flooring material.

Installation

Usually the sheet materials should be installed by an experienced workman. Tiles can be installed successfully by the inexperienced workman providing he carefully follows the manufacturers directions for installation. If a portion of the floor is damaged, tiles are easier to replace than sheet material.

Any type of flooring can be used above grade on a suspended wood floor (see figure 2). If a floor is built over a crawl space instead of a basement, the crawl space should be at least 18 inches high and should be cross ventilated to prevent moisture collecting beneath the floor.

ON CONCRETE FLOORS—either on grade (ground level) or below grade (basement floor) use floor coverings that are not affected by moisture (see figure 2). Moisture rising from the ground through concrete combines with alkaline salts in the concrete and can cause adhesives or floor coverings to de-

teriorate. Linoleum (which contains linseed oil) is discolored and becomes brittle from this moisture.

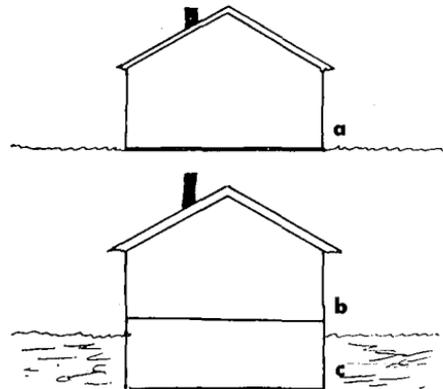


Fig. 2. a At grade floor.
b Above grade or suspended floor.
c Below grade floor.

Asphalt tile, rubber tile, vinyl asbestos tile, and some special vinyl plastics with special type of backing and special adhesives can be used at or below grade on concrete. It is important, however, to let concrete dry thoroughly for several months before covering it with any flooring material.

If a suspended concrete floor has an air space beneath it, is thoroughly dried, and if there is no problem of moisture—then you

can use asphalt, vinyl asbestos, cork, rubber, linoleum (special back), or vinyl (special back). It is important, however, to check carefully for the presence of moisture. See your dealer regarding the method of testing.

Surface moisture, as often found around laundry equipment and bathroom fixtures, may go through seams in the flooring and attack the adhesive. Asphalt, rubber, and vinyl asbestos are often used in these areas.

Cost

Included in the total cost of your installed floor surfacing are: the cost of materials, floor repairs, and labor.

The price of floor covering is influenced by such items as gauge or thickness, type and style, type of backing, whether it is a standard or special size, and the color and graining of the covering. The cost of flooring is usually figured by the square foot or the square yard.

Some floorings are available in sheets or rolls and tiles and some in tiles only. Sheet flooring materials usually come 6 feet, 9 feet, and 12 feet wide while tiles are usually 9 x 9 inches square. Tiles also come in 6 x 6 inch and 12 x 12 inch squares. Cork tiles also come in oblongs 3 x 12 inches and 6 x 12 inches. When calculating the cost per square yard of tiles remember that in one square yard there are nine 12 x 12 inch tiles, sixteen 9 x 9 inch tiles, and thirty-six 6 x 6 inch tiles. Check the accuracy in the cut of the tiles.

When you buy your floor covering be sure to ask for the guarantee, if there is one. Read it carefully and file it where you will have it if you ever need it. Be sure you are getting top quality, if that is what you want, and not seconds.

In addition to the cost of floor covering itself you must figure the cost of:

UNDERLAYMENT—which is material needed to make irregular floors smooth. This may be wood or mastic. Wood is usually used to resurface wood floors and mastic is used on concrete floors and may also be used on wood floors. Mastic is a mixture of substances such as cement, gypsum, and sand. The best mastics contain a binder of asphalt or latex.

LINING FELT—which is material used over wood underlayment to prevent the floor

COMPARATIVE COST

LEAST EXPENSIVE

- Printed enameled floor covering
- Asphalt tile (dark colors)
- Printed vinyl material
- Linoleum inlaid (light weight)
- Asphalt tile (light colors)

MEDIUM COST

- Grease proof asphalt tile
- Linoleum and linoleum tile (standard)
- Vinyl asbestos tile

HIGHEST COST

- Vinyl sheet or tile
- Special linoleum tile
- Cork tile
- Rubber tile

covering from splitting or tiles from separating due to expansion and contraction of the surface.

ADHESIVE—which is material used to fasten the floor covering. It is important to use the adhesive recommended by the manufacturer.

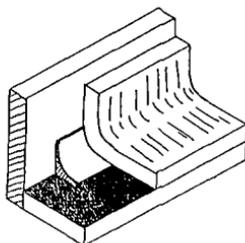


Fig. 3. Sheet material cove wall base.

You may need to buy or rent tools if you are installing the floor covering yourself. Common types of floor repair which add to the cost and to the labor involved are: replacing boards, sanding floors, and filling cracks in concrete.

Total cost for an installed floor can readily be estimated by the dealer or installer. The cost of materials in an installed floor (including labor) are usually from 50 to 75 percent of the total cost. Complex custom styled floors are more expensive than a single color laid wall to wall.

A cove or wall base 4 to 6 inches high and about 24 inches long can be purchased to be used with floor tiles of different type materials and should be included in materials and cost calculation.

One of the advantages of using a sheet type

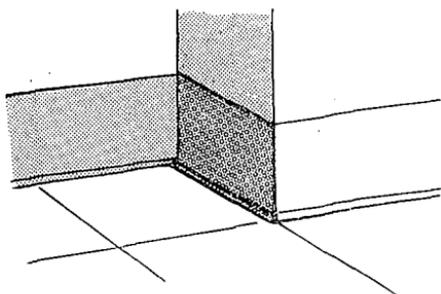


Fig. 4. Purchased cove wall base.

of resilient floor material is that it can be coved where the flooring material meets the wall. A coved base of sheet material 6 inches high adds about \$1.50 per linear foot to the installation cost.

Characteristics of Floor Coverings

MATERIAL	What you WILL LIKE about it	What you MAY NOT LIKE about it
LINOLEUM		
Sheet or rolls 6' wide Tile 9" x 9" May be obtained special order 6" x 12", 12" x 12", 18" x 36"	<ul style="list-style-type: none"> — Comes in different gauges or thicknesses — Grease resistant — Cuts, scratches, and dents appear to heal over — Resilient — Can be coved to make base-board — Easily cleaned — Wears well if good quality, well cared for, and not mis-used — Usually has felt backing (may be burlap) — Available with foam rubber layer attached to felt backing (more expensive) 	<ul style="list-style-type: none"> — Absorbs moisture which may cause it to deteriorate — Should not be used on floors which are in direct contact with ground — Needs to be waxed frequently to keep in good condition — May be stained by some substances — Can not be used on grade level concrete unless of special type with special adhesive (not on ground level)
VINYL		
Vinyl sheets or rolls 6' wide Vinyl tile 9" x 9" May be —unbacked (homogenous) (smooth or waffle back) or —backed with felt, cork, or degraded vinyl	<ul style="list-style-type: none"> — Resistant to grease, oil, household acids and alkalis — Resistant to most stains — Wears well — Flexible — Does not dent easily — Comes in many colors and designs; color remains bright as long as it lasts — Available with foam rubber layer attached to felt backing (more expensive) 	<ul style="list-style-type: none"> — Scratches if subjected to abrasion — May be stained by bluing, grape juice, dyes, ammonia, shoe polish — Unless of special type, with special backing, can not be used on concrete floor. Some manufacturers make a type that can be used on grade level concrete floor (but not on ground level)

VINYL ASBESTOS TILE

Tile	---	Resistant to grease, oils, and alkalis	---	Dents more easily than Vinyl
9" x 9"	---	Durable	---	Should use furniture cups or glides to prevent denting
(no backing)	---	Can be used on concrete floor on or below grade		
	---	Among medium price materials		

ASPHALT TILE

Regular or standard	---	Wears well	---	Softened by grease, oils, and cleaning solvents
	---	Resistant to mild alkalis and acids	---	Not as resilient as other materials
9" x 9"	---	Easily cleaned	---	Brittle
Also 3" x 3"	---	Can be laid over concrete (above or below grade)	---	Dents readily, otherwise durable
and 18" x 25"	---	Low cost	---	Light colors cost more than dark colors
Grease Resistant Asphalt	---	Same as regular Asphalt tile, except it is resistant to grease and oils	---	Same as regular Asphalt tile except slightly more expensive
			---	Not softened by grease, etc.

CORK TILE

9" x 9"	---	Resilient	---	Absorbs oil and grease
6" x 6"	---	Durable	---	Requires considerable care
6" x 12"	---	Quiet	---	Can be used on concrete if it is not in direct contact with the ground, and if it is thoroughly dry
12" x 12"	---	Comfortable	---	Among most expensive floor coverings
	---	Light, medium, and dark tones of tan and brown	---	Colors limited
Vinyl Coated Cork Tile				
9" x 9"	---	Same as cork tile, except it is grease and stain resistant and more easily maintained	---	Among most expensive floor coverings
6" x 12"				

RUBBER

Sheet				
3', 4' wide	---	Resilient	---	Grease softens rubber
Tile	---	Quiet	---	Can be used on concrete floor
9" x 9"	---	Wears well under heavy traffic if good quality	---	a special adhesive must be used if floor is in contact with the ground
3" x 3"				
6" x 6"	---	Variety of colors which go through to backing and last life of covering	---	Among most expensive floor coverings
18" x 36"				

PRINTED ENAMELED FLOOR COVERING

Rolls				
6', 9', 12' wide	---	Resistant to grease and stains	---	Enameled coating wears off
Rug and runner sizes	---	Can be used without cementing to floor	---	design printed on surface
	---	Surface can be repainted		
	---	Low cost		

VINYL PRINTED FELT BASE

(Also referred to as Vinyl-Plated sheets)	---	Resistant to grease and stains	---	May show scratches and scuff marks
Rolls	---	Easy to clean	---	Thickness of plastic coating determines wearing quality
6', 9', 12' wide	---	Needs only occasional waxing	---	
	---	Can be used without cementing to floor		
	---	Wide variety of colors and design		
	---	Low cost		

TO KEEP YOUR FLOORS IN GOOD CONDITION . . .

Wait until adhesive is thoroughly set before washing the floor—at least 4 or 5 days after laying.

Sweep daily with dry mop, soft broom, or vacuum cleaner floor brush.

Wipe up anything spilled or tracked in at once.

Use liquid floor cleaner and wax recommended by the manufacturer.

Avoid frequent washing—wash *only* when needed.

Avoid using strong soap and syndets or abrasives.

Avoid use of solvents or oil mop on waxed surface or on asphalt and rubber.

Wax only dry floors—use correct type of wax—put on thin coat.

Use only liquid self polishing wax (water base) on rubber and asphalt.

Use furniture cups or glides where flooring dents easily.

Do not use varnish, shellac, or lacquer on resilient floor coverings.

Follow the manufacturer's special recommendations for care.

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