Floor Coverings and Finishes

Floors are an important aspect of hotel interiors as they are both functional decorative. The guests first impression of a hotel is largely determined by the appearance of the flooring in the lobby ,the guest corridors , restaurants , guestrooms and so on.

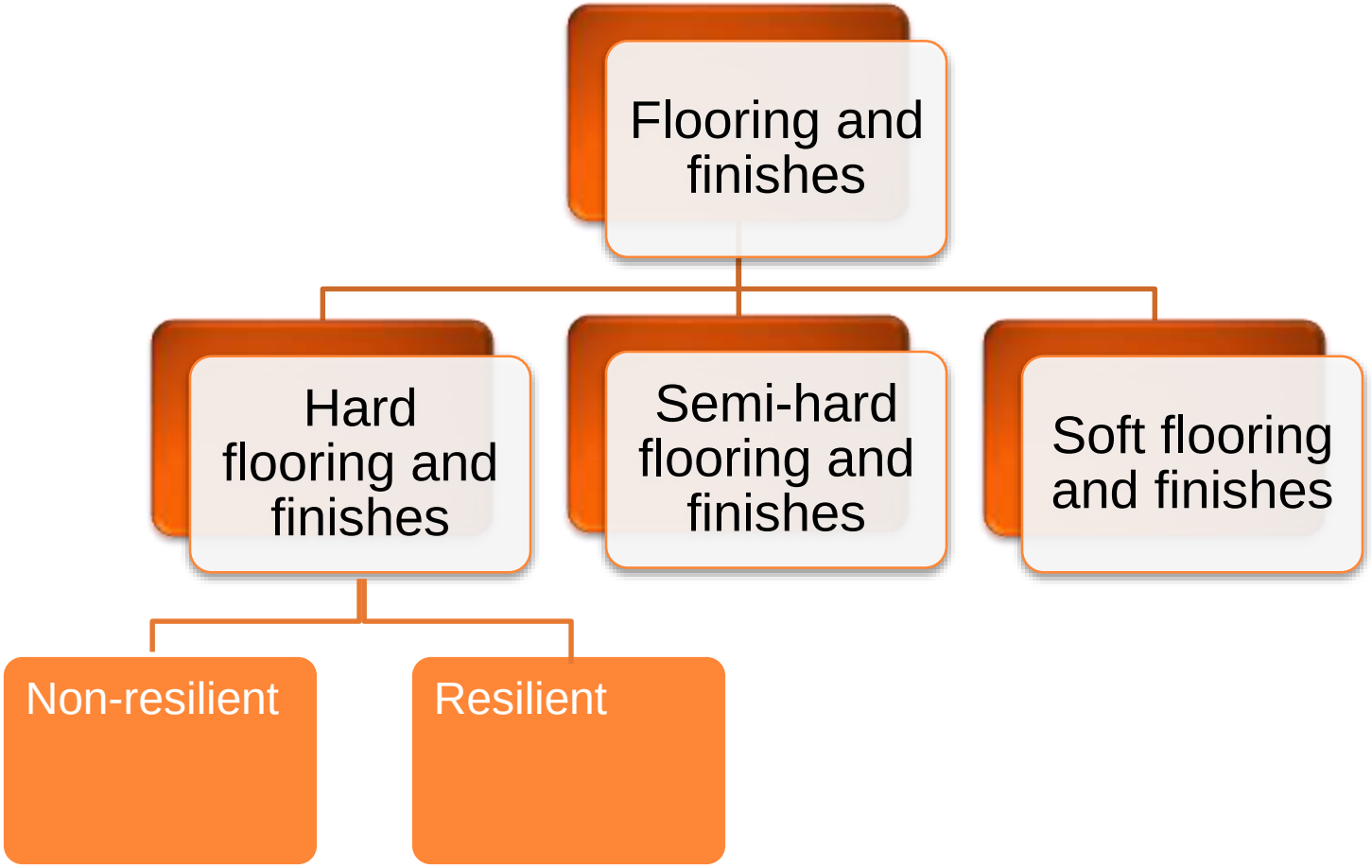
floors are subjected to more wear and tear than any other surface in hotels. The type of flooring chosen is thus an important consideration for housekeeping, as it affects the drawing up cleaning and maintenance schedules. These floorings are generally expensive and take lot of money and effort to fix them and maintain them and most of money in hotels is spent on maintaining floors. The floor is fixed with taking lot of things into consideration and with the consent of an interior designer.

Selection of floor coverings

Some of the points to be taken into consideration while choosing appropriate flooring

- Appearance
- Comfort
- Durability
- Life expectancy
- Safety
- Ease of cleaning
- Cost

Classification of flooring and finishes



Hard Flooring

These floorings are

> Durable
>Cold in feel
>Vermin proof
>Impervious to dry rot(except wood)
>Fire –retardant
>Easily cleanable

But the main disadvantage is

>They are noisy

These floors are further divided into
>Resilient
>non-Resilient

NON-RESILIENT HARD FLOORING AND FINISHES

This include

- ❑Stone
- ❑Concrete
- ❑Terrazzo
- ❑Vitreous/ Ceramic Flooring
- ❑Glazed ceramic tiles/clay tiles
- ❑Quarry tiles
- ❑Mosaic
- ❑Brick
- ❑Terracotta tiles
- ❑Pavers
- ❑Magnesite / Oxychloride
- ❑Resin flooring

Stone flooring

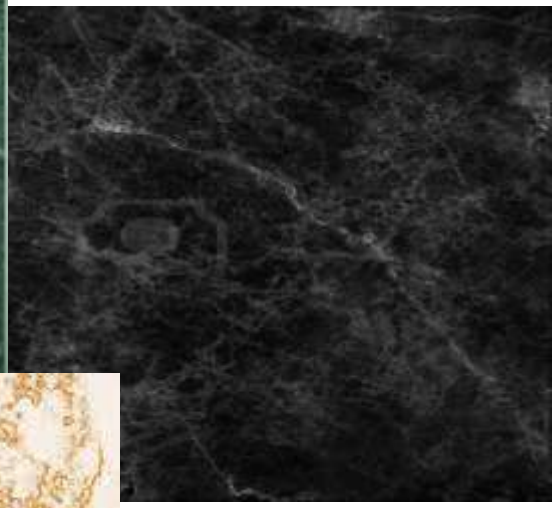
This is good choose of flooring for natural appearance and an almost indefinite life they are very heavy and should be laid on solid concrete sub floors they are resistant to wear and tear, water , indentation and to most of the cleaning chemicals

The various types of stones used are :

- Marble
- Slate
- Quartzite
- Sandstone , limestone and granite

MARBLE

This is the best know of all the stone floorings and is available in wide range of colors and textures .Marble is primarily crystallized limestone. It may have a banded(serpentine) pattern or may be mottled. Marble is durable, but lighter colors yellow with age .Honed marble recommended for commercial floors. It gives a satin finish with little or no gloss. Sandblasted marble or abrasive finished marble has a matte effect and is suitable for exterior use. Travertine marble is cheaper and is characterized by small cavities on the surface , which offer greater slip resistance; but at the same time , these allow dust to settle .Marble stains easily on coming in contact with ferrous metals and oils



SLATE

This is a hard.imprevious stone that may be given a polished ,swanr riven surface . Riven slate is split along its natural layers, so that the natural undulation give it a rippled surface that is less slippery when wet than a smooth surface would be the natural colours of slate are grey and blue grey

Quartzite

This is a crystalline rock with matte finish. Embedded quartz grains give it a slight sparkle, Its colours range from silver grey to olive, yellow and gold. Quartzite floorings are very hard wearing,non-slip,and suitable for both interiors and exteriors .The thickness of Quartzite stone depends upon the rock formation.

Sandstone, limestone and Granite

Sandstone is a sedimentary rock composed of compressed sand. Limestone is composed mainly of calcium carbonate. Granite is a granular crystalline rock of quartz, feldspar and mica all these stones make good flooring materials. Colours include various shades of grey beige, green and brown.

Concrete

This material is food for areas that take hard water, as it is highly resistant to chipping ,scratching ,indentation, heat and insects and rot most types of concrete is used for exteriors as patios, but concrete tiles and terrazzo are suitable for indoor use. Concrete floors are often found in utility areas or areas that will receive a great deal of traffic from heavy equipment ,Lodging properties often have concrete floors in parking areas, garages and exhibition areas

Concrete is a composite construction material composed primarily of aggregate, cement, and water. There are many formulations, which provide varied properties. The aggregate is generally a coarse gravel or crushed rocks such as limestone, or granite, along with a fine aggregate such as sand.

all types of concrete flooring are easy to clean ,but they should not be polished as they render the floor slippery .The cement in concrete flooring is absorbent and hence cleaning with strong alkalis should be avoided .Concrete may be marked by oil and spillage of such materials such as ink and beverages a solid concrete sub-flooring is required for all types of concrete flooring.

Granolithic concrete

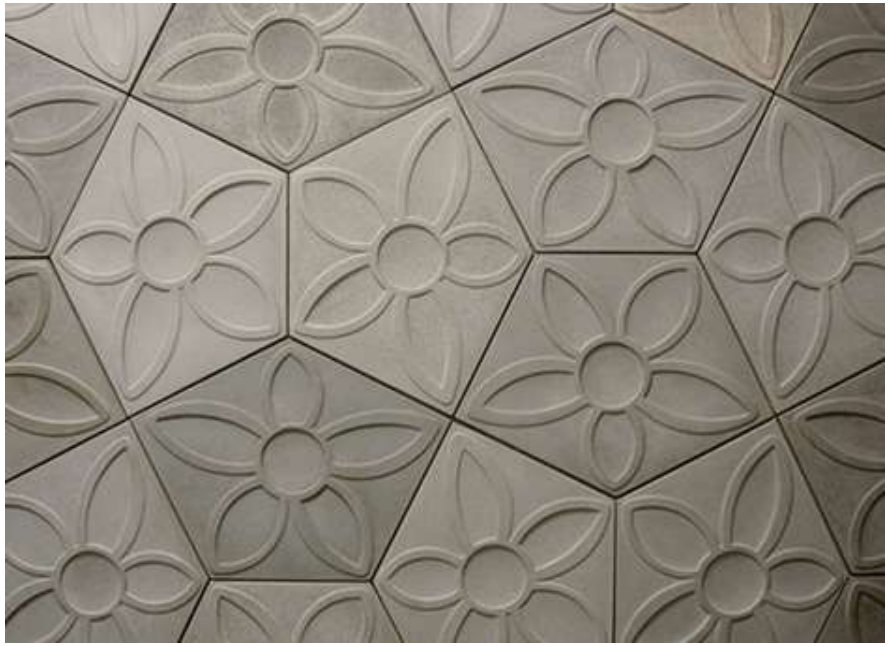
This is plain concrete structural flooring on which a surface of granite chipping and cement is cast on site .The final surface is hard wearing and its appearance is improved if the surface is polished to expose the aggregate in concrete .This heavy duty flooring is used for basement corridors ,storerooms, stairways and laundry areas.

Concrete flags

This low cost flooring is mainly used for terraces and garden paths. A variety of colours, sizes and shapes is available .Concrete paving stones are available with a finish the imitates the texture of natural stone. They should be laid on sand or a bed of weak-mix concrete .

Concrete tiles

These are made of colored cement and hard-wearing aggregate surfaces applied to a concrete backing .They have good wearing properties and are available in different sizes.



Terrazzo

Terrazzo is a composite material, poured in place or precast, which is used for floor and wall treatments. It consists of marble, quartz, granite, glass or other suitable chips, sprinkled or unsprinkled, and poured with a binder that is cementitious, chemical, or a combination of both. Terrazzo is cured and then ground and polished to a smooth surface or otherwise finished to produce a uniformly textured surface. Terrazzo is available in a wide range of colour and textures. They offer a very hard-wearing surface ,but some types can be dangerously slippery when wet ,unless special non-slip aggregates are used in the construction.

Vitreous/ceramic flooring

Ceramic tiles are beautiful, tough and enduring floor and wall covering material. Apart from its very presentable look, it is resistant to almost all of the common sources of wear endured by quality flooring.
Whether it is a public or residential, indoors or outdoors, ceramic tile can be counted on to perform with exceptional durability and unique visual appeal. After examining this selected list of advantages the next step is choosing the most suitable ceramic tile for the area you wish to tile. Work with your sales rep to discuss some of the issues that you feel may affect the longevity and general suitability of your ceramic tile. Moisture, foot traffic, and slip-resistance are good places to start.

the common types of ceramic floorings are

- Quarry tiles
- Bricks
- Glazed tiles
- Paver tiles

These are roughly divided into 2types

- Glazed
- Unglazed


3022
3042
3043
3044
3046
3054
3053
3049
3045
3047
3048
3052
Gạch granite lát nền
Porcelain Tiles
Size: 30cm x 30cm
GD3409
GD3401
GD3015
GD3016

Glazed ceramic tile/clay tiles

These are made from refined natural clays fired at high temperature and glazed. they are available in a wide range of colour s and patterns .
Ceramic tiles with a particular hard glaze and a wide range of colours are used for more of a decorative finish They are often used in luxuriuos Bathrooms and particos

Quarry tiles

Quarry tile is a building construction material, made by the extrusion process from natural clay or shales.

Traditional quarry tile was unglazed and either red or gray; however, modern "decorator" tiles come in a variety of tints and finishes. Industrial quarry tile is available with abrasive frit embedded in the surface to provide a non-slip finish in wet areas such as commercial kitchens and laboratories.

Mosaic

There are 3 types of mosaic tiles,clay,glass and marble>they are made in small squares and other shapes that can be assembled into larger patterns .A wide variety of colours shapes and sizes is available .Fully vitrified mosaic tiles are made specially for outdoor use.Ideally,mosiac tiles need a solid sub-floor ; but they can be laid on a suspended floor over a small area such as in a shower enclosure

Brick

Brick is the oldest human manufactured flooring material, and its use dates back thousands of years. Historically it has often been employed as an alternative to stone, and was commonly used in the construction of houses and manors that did not require the protective qualities of real stone. With the rise of cities it surged in popularity, due largely to the fact that it was a relatively durable, inexpensive, and fire proof building material. These are different from Terracotta tiles only in thickness and shape they are usually not glazed and are porous.

Terracotta,

Terracotta, in its unglazed and hard baked form, became fashionable as an architectural ceramic construction material in England in the 1860s, It was generally used to supplement brick and tiles of similar colour in late Victorian buildings.

Terracotta tiles are porous and therefore are sealed with linseed oil sealant and waxed for added protection. they should not be directly laid on concrete as migration salts may appear as a white stain on the tile surfaceover time ,terracotta may crack or chip.

Pavers

these are tiles that resemble natural quarry tiles. These are produced by compression and are available in a wide range of colours and are used either for appearance or for heavy-duty applications such as in driveways

Magnesite (Magnesium Oxychloride)

Magnesite flooring is not commonly used at the current time but was very popular for domestic applications in the period 1920 to 1940, It is usually a reddish pink colour although some floors were coloured using pigments. It was commonly applied on top of concrete ground floor slabs. Magnesite flooring was made from a mixture of calcined Magnesite and magnesium chloride solution with various fillers (e.g. wood flour, sawdust, asbestos). It was typically laid between 10 and 25mm thick, but two coat applications could be up to 50mm thick. Magnesite floorings are very vulnerable to dampness and if there is any doubt about moisture protection, it should be replaced. Chlorides may migrate from the Magnesite into the concrete below and corrode any reinforcement or gas and water pipes. Most Magnesite floors are now coming to the end of their life, only if they can be guaranteed to remain unaffected by moisture can they be used as a screed to receive other floorings, otherwise the flooring should be replaced.

Resin flooring

These are composed of synthetic resins, usually epoxy, polyester, or polyurethane, with appropriate hardness. Vinyl or marble chips may be included to give a more decorative flooring ,resembling terrazzo .polyurethane flooring are the most common of this type ,and give an extremely heavyduty,hard surface. They are unaffected by spillages of water ,food ,alcohol and most chemicals. In spite of the shiny surface, they are non-skid and suitable for use in kitchen s, canteens,bathrooms,corridors and laundries. Epoxy forms a continuous flooring materials that has been thus far confined too loading docks, storage areas and other areas of heavy traffic due to certain disadvantages .Breakthrough in product formulation have recently seen the development of transparent ,low odour epoxies .When combined with decorative quartz granules or flat multi- coloured chips, they form a seam-free , highly decorative floor they can provide excellence wear or abrasion resistance,usually 2-3 times that of concrete they can provide excellence wear or abrasion resistance,usually 2-3 times that of concrete.

Resilient hard flooring And Finishes

This includes

- WOOD
- ASPHALT
- BITUMASTIC FINISHES

Wood

The oldest material used for resilient flooring. Soft wood such as pine and fir have a high degree of resillence,where as hardwood such as oak and maple have low resilience,

Hardwood is obtained from broad-leafed trees such as oak , teak, maple, walnut , birch, beech and so on each has its individual colour, grain and rate of wear

Softwood is wood from gymnosperm trees such as conifers. Evergreen trees are often called softwoods I.E from Pine, fir ,Spruce

Durability of the wood depends upon the maintenance and quality of the wood. Hardwoods are resistant to abrasion and indentation,buit they should not be used in wet areas. Soft wood boards look good when they have just been sanded and sealed, but do not wear well under heavy use

Wooden floors are warm to touch and tend to be noisy they are not slippery unless too much polish is used. The biggest disadvantage of wood floors is their porosity, absorbency, and susceptibility to damage by water. To prevent absorption of spills and dirt, Wood flooring should be sealed and/or polished.
Strong alkalis cause wood to disintegrate, discolor and splinter .Wood Flooring are poor conductors of heat and so are good insulators. Wool is however, inflammable, susceptible to dry rot and scratch less and splinters with dragging of heavy articles across it. Some types of wood finishes are outlined below

- WOOD PARQUET
- PLYWOOD
- HARDWOOD STRIP AND BLOCK
- WOOD MOSIAC

Wood parquet

A high-Quality hardwood flooring in which decorative hardwood are cut into blocks and formed into panels, permitting elaborate geometric patterns such as herringbones, basket weaves and strips. the panels can be laid over any rigid wooden sub-floor. Parquet is rarely used these days as it is very expensive and the genuine article should not be confused with plywood. Parquet, which is really just a kind of wooden tile

Plywood

These are made into tiles that can be used to similar wood parquet, but are generally called ‘parquet’ these days even when laid simply to resemble a board floor. various ready-patterned tiles in herringbone ,basket weave ,or strip are available Plywood parquets are not durable in areas of heavy wear.

Hardboard strip and block

These are high quality wood flooring made of hardwood .A well maintained hardwood floor improves with age .Hardwood blocks vary in thickness and size etc.While lying down these blocks they are fixed with concealed nails .Hardwood blocks must be laid out on a dry, solid sub-floor and held in place with cold bituminous adhesives.

Wood mosaic

Hardwood ‘Fingers’ arranged in a basket-weave pattern are stuck to a sheet of backing material to form panels 18inchs square and 3/8inch thick .wood mosaic has a very good wearing characteristic

Asphalt tiles

These are a close relative of linoleum because of the asphalt used in their construction .Generally they are composed of asbestos fibers, pigments and inert fillers bound with asphalt in the case of the darker varieties and with some other resinous binder in the case of lighter colours .

Bitumastic flooring

This is a joint-less, low cost flooring and consists of a type of asphalt rolled onto a solid sub floor in a hot plastic state .It is soft in texture ,through the appearance is that of a hard floor .However it is completely impermeable to water.Bitumastic flooring is normally black ,red, brown mostly used in public rest rooms, hospital corridors, and other heavy traffic areas, it is also used as a moisture proof membrane to protect other floorings against dampness , however it is damaged by heat and heavy weights and is also harmed by spirits, oils and acids

Semi-Hard flooring and Finishes

Semi-hard or smooth floor finishes are durable ,but normally less permanent than hard floor finishes. They are all resilient. Except thermoplastic tiles. These floorings are resistant to pests as well as easy to clean.

Semi hard flooring finishes Include

- Linoleum
- Cork
- Untreated cork tiles
- Cork tiles with PVC surface
- Rubber
- Plastic

Linoleum

Linoleum is a floor covering made from renewable materials such as solidified linseed oil (linoxyn), pine rosin, ground cork dust, wood flour, and mineral fillers such as calcium carbonate, most commonly on a burlap or canvas backing; pigments are often added to the materials. The finest linoleum floors, known as 'inlaid', are extremely durable; they were made by joining and inlaying solid pieces of linoleum. Cheaper patterned linoleums came in different grades or gauges, and were printed with thinner layers which were more prone to wear and tear. Good quality linoleum is sufficiently flexible to be used in buildings in which more rigid material would crack.

Cork flooring

Made from the bark of the cork oak tree, cork flooring is fluid in their looks and durable in quality. They give a natural and are scratch resistant. It can easily be cleaned they are supple on your feet, they reduce noise and do not act or react to any fluids. In other words clean it with whatever you want, there is nothing going bad. The only drawback review it faces is that it can be gauged by any heavy article. So even if your pots fall on it, there is a depression mark that is created..

But then again any heavy-duty article falling on the floor can be the reason for it to chip.

Untreated cork tiles

These are formed by compressing the natural granules of cork and baking them to form tiles binded by its natural resins, These provide a greater stability and comfort. The tiles may be waxed or sealed with polyurethane or a special cork seal after lying. Ready waxed tiles are also available

Cork tiles with PVC Surface

A thin PVC skin is bonded to the cork surface to increase its durability. This also seals in moisture and makes it even more necessary to ensure that the sub flooring is completely dry before laying the cork.PVC faced cork is slippery when wet and can be dangerous for flooring in bathrooms and kitchens. They require less maintenance then waxed or untreated cork, Though.

Rubber Flooring

Rubber flooring is made from a rubber tree, a 100% renewable resource. It is easy to install and maintain, is anti-static and provides effective sound insulation and vibration reduction. Rubber flooring is also resistant to fading and cigarette burns. Some rubber flooring is made from synthetic rubber, this is not a sustainable product.

Plastic flooring

A wide range of colours ,designs ,textures are available in these types of tiles they are very cheap and hence are versatile Any sub floor ios suitable for these type of flooring except for Thermoplastic and vinylized thermo plastic tiles, Which need solid construction

All types of plastic are resistant to wear , water , indentation, and to most of the cleaning agents the various types of plastic floorings are underlined here :

- Thermoplastic and vinylized thermoplastic tiles
- Vinyl asbestos tiles
- Vinyl composition tiles
- Homogeneous flexible vinyl
- Reverse printed PVC
- PVC with various backing

Thermoplastic
and
vinylized thermoplastic tiles

These are made from a variety of asphaltic binders with inert fillers and pigments .they are rigid tiles, set as closely as possible in adhesive .They are laid down in a thermoplastic state, but harden on cooling and may be carried up the wall to form a small covered skirting .these floorings are porous. However they are hard and noisy since they are non resilient these floorings are normally used in bathrooms, Corridors and offices they dent and scratch easily, Soften with heat and are damaged by strong alkalies they are also harmed by grease and spirits

Vinyl asbestos tiles and flooring

These use vinyl as binding agent and asbestos as a filler. Vinyl is practically inert in nature, so it does not combine readily with other chemicals .these floors are thus resilient and easy to maintain, However this types of flooring is no longer used as Asbestos is considered to be carcinogenic

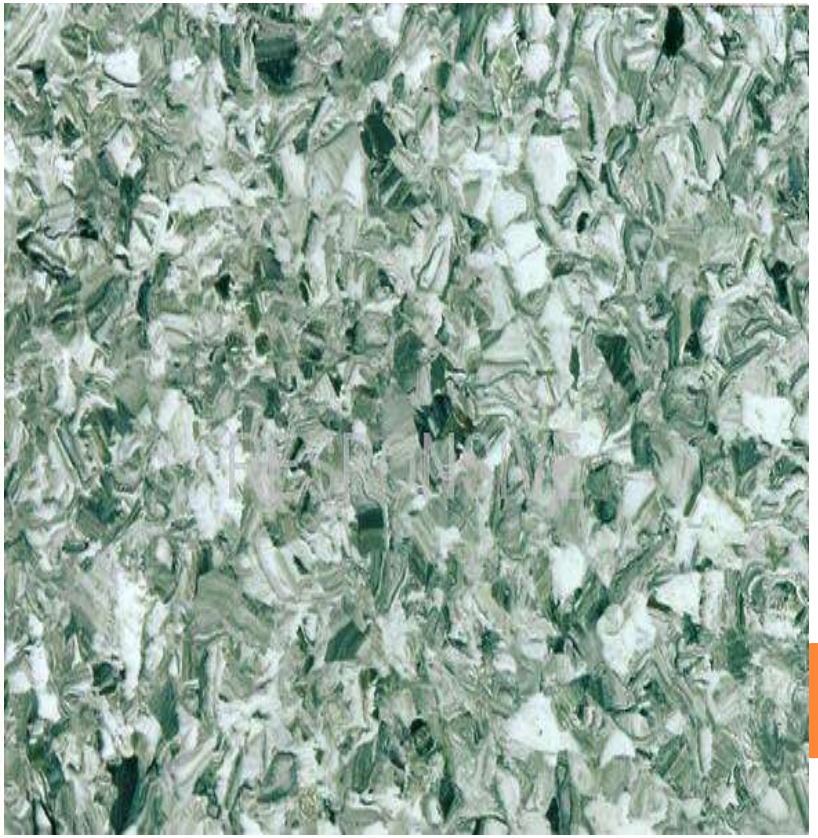
Vinyl composition tiles

Vinyl composition tiles are a finished flooring material used primarily in commercial and institutional applications. Vinyl tiles are composed of colored vinyl chips formed into solid sheets of varying thicknesses (1/8” is most common) by heat and pressure and cut into 12” squares. Tiles are applied to a smooth, leveled sub-floor using a specially formulated vinyl adhesive that remains tacky but does not completely dry. Tiles are typically waxed and buffed using special materials and equipment.

Vinyl tile is favored over other kinds of flooring materials in high-traffic areas because of its low cost, durability, and ease of maintenance. Vinyl tiles have high resilience to abrasion and impact damage and can be repeatedly refinished with chemical strippers and mechanical buffing equipment. If properly installed, tiles can be easily removed and replaced when damaged. Tiles are available in a variety of colors from several major flooring manufacturers. Some manufacturers have created vinyl tiles that very closely resemble wood stone, terrazzo, and concrete. Tiles can easily be cut and assembled into colorful and decorative patterns.

Homogeneous flexible vinyl

This has become the most popular of all types of flooring. it is flexible, so it doesn't not crack, it is also very tolerant to most of the cleaning agents it is available as sheets or tiles with embossed or textured finishes

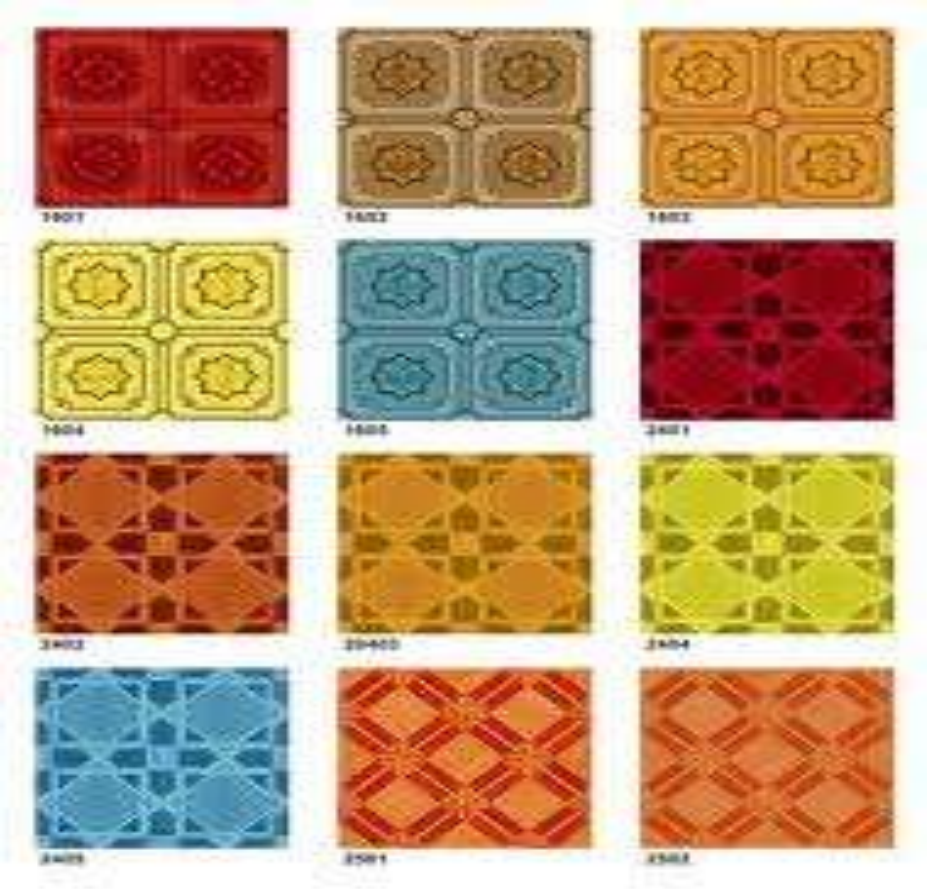


Reverse printed PVC

This type of flooring is produced by a process in which a pattern is printed on the reverse side of clear PVC sheet, which in turn bonded to a PVC backing or printed directly onto the backing This process allows any type of pattern imitating. However the durability is only that of the clear PVC layer that protects the pattern

PVC with various backing

In order to increase the comfort of PVC sheet fibers which are often relatively thin and comparatively non-resilient , some softer sheet materials are bonded to the PVC in this type.



Soft Floor coverings

These are resilient floorings and include all types of carpets, rugs and mats. Soft floorings are quite, warm and slip-resistant . They are available in a variety of colours, textures and patterns.

Carpet

A **carpet** is a textile floor covering consisting of an upper layer of "pile" attached to a backing. The pile is generally either made from wool or a manmade fiber such as polypropylene, nylon or polyester and usually consists of twisted tufts which are often heat-treated to maintain their structure.

Mats and Rugs

They are made with fiber or hard material mainly used to keep the dust away

Non-slip/Slip resistant flooring

These floors are constructed from flexible PVC with chips of carborundom incorporated into it during manufacturing thus renders the surface less slippery. These are used in areas such as shower cubicles, kitchens, ramps and sloping corridors

Anti-static/
Anti-Conductive floorings

Synthetic flooring materials have a tendency to build up static electricity due to friction from the movement of equipment or human traffic. In such cases if the atmosphere is charged with a flammable substance such as a solvent cleaner, the slightest spark can cause a fire or even an explosion It is therefore important to have an anti static flooring in computer rooms , maintenance rooms etc.


Thank You!