

## **WALL COVERINGS**

Wall coverings may be purely decorative, in which case, ability to bring colour, pattern, texture, light or shade to the room may be of the greatest importance. On the other hand the covering may be required to give an easily cleaned and hygienic surface. The choice is very wide and the style should suit the purpose, furnishing and the architectural aspects of the room. The type of finish selected will depend largely on: -

Contribution to décor: - The colour, texture and pattern will influence the apparent warmth and dimension of the room and the level and type of illumination used. The type of room, its existing size and decoration must be considered.

Ease of cleaning: - Smooth, hard, impervious surface, preferably light coloured can be cleaned easily; whereas textured surfaces tend to attract and hold dust.

State of existing surface: - textured and patterned finishes can be used to mask poor surfaces.

Resistance to abrasion and knocks: - Hard surfaces will be best for this purpose.

Stain resistance: - A non-porous surface has more resistance than porous ones.

Durability: - Surfaces subject to abuse, knocks, stains and abrasion require finishes that are resistant, can be cleaned easily, inexpensively restored or repaired whenever required.

Life expectancy: - Where décor of the room is intended to change relatively frequently, less expensive finishes are appropriate.

Insulation: - How-much-ever possible finishes with good sound insulation properties should be selected.

Cost: - While comparing cost of different finishes, not only should the cost of the material and its application be considered; but also the cost of its damage restoration and expected frequency of complete redecoration should be borne in mind.

## **TYPES OF WALL COVERINGS**

### **PAINTS AND LACQUERS**

Paints can be applied to almost any surface providing it is free from water, grease or dust and is of sound construction. E.g. plaster must be smooth, hard and not flaking from the underlying plaster or brickwork. As wall covering paints offer a wide choice of types, colours, degrees of gloss and designs (murals can be painted). For window frames and sills, door and skirting boards, slightly glossy paint is required so that along with providing a contrast in colour and texture to the main wall finish, it acts as a protective coating, and thus contributing to décor of the room. It is relatively cheap, easily applied and cleaned and can give a textured and multicoloured effect. The only disadvantage is that it shows soils (especially for matt paints) and wall imperfections (in gloss paints) more readily than any other wall covering.

The main types of paints used are:-

Emulsion

Alloyd

Multicoloured

Textured or Plastic

Microporous

Emulsion paints – They are water thinned but are based on dispersions of synthetic resins (e.g. polyvinyl acetate). They are tough, washable and wear resistant; and available in varying degrees of sheen, from matt, to semi-gloss, to silk finish. They are quick drying, low in odor and very suitable for redecoration of rooms, which cannot remain long out of use.

Alloyd paints – They are based on synthetic resins combined with vegetable oil such as linseed oil. The conventional types were natural resins, which are still used in primers and undercoat paints. Alloyed paints are generally easier to apply and have better durability and wearing properties than any other type. Polyurethane and silicone are sometimes included to give more scratch resistant surface. They are available in gloss, silk and flat finishes.

Multicoloured paints – They are usually dispersions of cellulose colours in water. Each colour is present in separate “blobs” or “spots”. The resulting effect depends on number of different colours, degree of contrast between them and the size and distribution of spots. This paint should be applied by spraying. It is extremely hardwearing and the multicolour effect helps in hiding irregularities and imperfections. It is usually applied on walls of corridors, sanitary accommodations, and similar areas, to give a stain and abrasion resistant finish, which can be washed and cleaned regularly.

Textured or Plastic paints – They are usually plaster based and are intended to give a textured or relief effect on surface. The texture is obtained by working over the material after application and while it is still wet, using combs, palette, knives, strippers, etc. Some are self-coloured while others may require painting when they dry. The modern types are based on heavy-bodied synthetic resin emulsion and may be applied by spraying directly on the concrete or similar surfaces; thus eliminating the need of plaster.

Microporous paints – they have a rubberised base which gives little gloss but offers elasticity and allowing movement when the surface expands or contracts.

## WALLPAPER

They may be smooth or have a textured surface effect. This may be done by superimposing or interlacing of other substance to give a rough surface, or by clever designing when visual effect gives an apparent depth (dimensional effect). Smooth finishes are more resistant to dust and dirt than rough ones, but generally stains show more in smooth finishes.

The pattern maybe floral, geometric, abstract, striped, etc. The choice depends on the room’s aspect, height, size and use of room. Large patterned

papers tend to overpower and tend to make the room appear smaller than it actually is. Wastage is also higher as patterns have to be cut to match each other. In addition to conventional wallpapers, now many paper-backed materials are also available, e.g. fabrics, wood, veneers, plastic, etc.

The main types are –

Surface printed paper – A pattern is applied to the surface of the paper by one of the following methods – hand printing

Screen-printing

A wide range of colours and designs are produced with usually a smooth surface finish. The cost is related to the design and the method of reproduction. The paper is not washable and damp wiping must be undertaken with great care. It can be easily soiled and stained.

Spongeable paper – They are specially treated during manufacturing to withstand water. They are similar in all other aspects to surface printed paper.

Washable papers – Similar to surface printed papers, but has a plastic coating giving it good stain resistance and enabling it to withstand washing.

Anaglypts – It's an embossed paper that is relatively inexpensive. Used to cover poor surfaces, it is normally painted after hanging. It's stain resistance and washability depends on the type of paint applied.

Lincrusts – A heavily embossed paper that may have a plastic coating, containing a paper backed textured composition and frequently stimulating wood paneling.

Oatmeal papers (wood chip) – Wooden floor or chips are sandwiched between two layers of paper. It's properties are similar to anaglypts paper.

Flock papers – A raised patterned pile is fixed by adhesive to a paper backing. The piles maybe cotton, silk, wool or synthetic. It attracts and holds dust and is expensive. The surface of the paper maybe damp wiped.

Metallic papers – Paper printed with gold or other metallic powder.

Food grain paper – Photographic reproduction of various food grains waxed during manufacture.

Paper backed hessians – Strands of hessians fixed to a paper backing to give the appearance of a hessian coverings. It is not washable but surface can be damp wiped. It is easily stained and damaged by abrasion. It's available in large variety of colours.

Paper with felt backing.

Paper backed woven grasses – Pieces of grass are fixed by adhesives to a backing of paper or silk.

Paper backed wools – Fine or coarse strands of wool in natural colours or bright dyes are laid in a parallel fashion on a paper backing. They give a warm effect and provide good insulation.

Advantages of wallpaper: -

Contribution to décor

Ability to cover poor surfaces

Insulation

Disadvantages: -

Costly

Limited use

Not abrasive resistant

Stains easily

Difficult to clean

Cannot be easily restored

Not very durable

PVC Cloths – They are woven cotton finished with a layer of PVC, and are used to form decorative panels on walls or doors. It maybe plain or quilted, involving the use of a foam stuffing and fixed by adhesive or metal studs. It produces a luxurious effect, improves sound and thermal insulation but is expensive and difficult to repair satisfactorily.

Leather (hide) wall coverings – They are extremely expensive but very decorative. They maybe padded and studded with brass studs. They are usually not used to cover the whole wall. It's effect wherever required can be stimulated with plastics.

Plastic wall coverings – They are available in large variety. Owing to their abrasion resistance, they are more hard wearing and easily cleaned than any other covering. As they are non-porous, tendency for growth of moulds is higher. Therefore, adhesive should contain fungicides, or fungicidal wash should be applied on the wall prior to applying the wall covering.

The various types are: -

Paper backed vinyl – The vinyl may have the appearance of almost any material. E.g. silk, tweed, hessain, cork, grass paper, wood, stone or brick.

Fabric backed vinyl – Similar in appearance to the paper backed ones but is more durable.

Vinyl flock paper

Plastic wall tiles – Imitating ceramic tiles.

Laminated plastic – As a veneer or surface board, melamine is the resin frequently used during manufacture of these plastic laminates which may stimulate wood paneling. E.g. Formica.

Expanded polyurethane – It is used in sheets or tiles on walls and ceiling to give heat and sound insulation, and helps eliminate condensation. It can be painted with emulsion paint or covered with paper. Spirit dissolves it and hence if oil paint is to be applied on it, it has to be lined with paper and given a coat of emulsion paint to act as a buffer. Polyurethane is inflammable, and hence it has to be treated to avoid fire risks.

Fabric wall coverings – it is possible to cover the wall surface with any fabric and its durability will depend on the type of fiber and the weave used during its manufacture. Fabrics used as wall coverings can be divided into two categories – Woven fabrics, e.g. hessian (used as wallpaper)

Hangings, e.g. tapestries,

oriental carpets, drape.

Fabrics chosen should not be liable to sag, buckle or stretch when hung permanently on the wall and should not collect excessive dust or dirt.

Wild silk or other beautiful fabric maybe padded for heat and sound insulation but silks and tapestries are expensive, and thus found only in luxurious establishments only. Hessian, linen and some acetate viscose fabrics are cheaper and used more extensively. Fabrics are subject to attack by moths and mildew, hence proper proofing should be done.

#### WOOD PANELING

Wood used for paneling are usually hard, well seasoned and of a decorative appearance. Most commonly types used are oak, mahogany, teak, etc. it may cover the wall from corner to corner. It maybe solid or veneered and finished with wax polish, french polish or lacquer. It will last for years with little maintenance, providing precautions are taken in respect of dry rot and rot worm, though initial installing cost will be high. Wood paneling is usually found in entrance halls, staircases, assembly halls, boardrooms and restaurant.

#### GLASS WALL COVERING

Glass can be used in the form of decorative tiles, mosaics, bricks or full sheet. Glass bricks allow light to pass through the wall itself. Coloured opaque glass sheets or tiles maybe used in bathrooms. Mirror tiles are used to reflect light and to alter the apparent size of the room or corridor.

Sometimes antique mirror tiles are used to give a duller surface with lesser reflection. Large uniform mirrors maybe used to cover the whole wall like over a vanity unit, or dressing table or on a corridor wall. A glassless mirror is also available which is lighter (almost 1/5th the weight of the conventional mirror), does not form mist and will not shatter if dropped. It consists of polyester film, vacuum coated with aluminium and mounted on a flat frame.

#### METAL WALL COVERING

Metals may be used as wall coverings for their hygienic qualities. Copper and anodised aluminium are decorative and maybe used in areas such as bars where metals in combination with rows of bottles and interesting lighting creates an impressive effect. Stainless steel is used in tile



form in kitchens where they present a durable, easily cleaned, hygienic surface. Metal skirting boards covers edges between wall and floor surfaces. Metal foil can be elegantly and sparingly used as a wall covering. Foil is available in variety of colours.

#### OTHER MATERIALS

Various flooring materials can also be used as wall coverings. They provide different colours, patterns and texture. Though expensive, they are hardwearing and abrasion resistant. The various types are: - Linoleum

Cork (in tiles or sheets)

Carpets

Marble

Terrazzo

Ceramic tiles

Granite

Bricks & stones (these can be used for exterior wall

and left unplastered.

Also used in fireplaces and

chimney breasts to give a

Decorative finish.)

#### CLEANING PROCEDURES

##### PAINTED SURFACE –

Remove light dust

Damp wipe or wash if necessary and permissible (when washing start from the bottom and work upwards)

Never apply wax polish or oil to gloss painted surface.

Do not use harsh abrasive, strong solvents, or strong soda solution.

##### WALL PAPERS

Remove surface dust (use low suction for flock papers)

Remove marks by rubbing or sponging

Attempt to remove grease.

##### FABRIC WALLCOVERINGS

Remove surface dust

For beautiful hangings dismantle and send to professional drycleaners.

Where hessians is stuck to the wall, scrub very lightly. If necessary use warm water and detergent.

##### WOOD PANELLINGS

Remove surface dust

Polish if necessary

Where paneling has become dirty or greasy, wipe with white spirit or vinegar and water. Then repolish.

Dark oak maybe wiped over with beer.

### GLASS WALLCOVERING

Dust or wipe with a damp chamois leather or scrim.

Care should be taken while cleaning mirrors so that the damp does not go into the back.

### METAL WALLCOVERINGS

Dust or wipe with damp cloth

Polish if necessary. (not required daily)

### LEATHER WALLCOVERINGS

Remove surface dust

Apply polish sparingly and rub well.

### PROTECTION

Life expectancy of a wall covering or finish can be increased and the cost of cleaning, maintenance and restoration reduced in several ways.

Selection of finish should be suitable for the degree of soiling, abuse and damage expected.

Select a covering that does not hold and attract dust, can be easily cleaned and restored if damaged or stained.

Use a more durable and easy to clean and maintain surface for the lower part of the wall.

Use plastic sheets on less durable surfaces that are subjected to staining and knocks.

Fit fingerplates on doors, light switches and other places where hands will constantly come in contact with the surface.

Use doorstoppers to prevent damage to surfaces behind the door.

Use kick plates to protect the lower part of the door.

Treat porous surfaces with soil retardant finish.