WOOD

These hard surfaces are porous in nature and are used due to various reasons: -

- Appearance
- Resilience
- Cost
- Insulation

Porous materials absorb not only liquids but also dust. They scumb to fungal attack and pest infection. Regular inspection and maintenance are required for them to withstand regular wear and tear and to maintain it's appearance.

There are two types of wood in use – *hard wood* & *soft wood*

Hard wood is strong and is used for

- Floors (strips, board, block, parquet, mosaic)
- Furniture
- Wall (paneling)
- Incidental furniture (lampshades, picture frames)
- Kitchen and restaurant wares

It has more refined grains than softwood and the short fibers make it less likely to splinter, swell or dent. Hardwood is usually darker than softwood, and more expensive. They include teak, mahogany, oak walnut and beech.

Soft wood such as pine, dell and fir are used for construction of furniture, subfloor, joints, ceilings, broom handles, etc., where the wood is either covered up or out of public view.

WOOD PRODUCTS

These are less expensive as compared to solid wood items. The most commonly used ones include: -

- Plywood
- Chipboard

- Hardboard
- Blockboard

Plywood – It is made by bonding together a number of thin sheets (piles) of wood (usually hardwood) in such a way that the grain of one sheet lies at right angles to those on either side of it. It can be bent to any shape during manufacture and may have as many as nine piles. It's very strong and maybe covered with plastic laminate or a hardwood veneer.

Chipboard – It is used extensively for worktops, wardrobes, chests of drawers, etc. and nearly always has a wood veneer or plastic laminate. It is heavy and strong but flexible. It is made by mixing wood chips with a synthetic resin adhesive.

Hardboard – It is more flexible than chipboard and much thinner. Made from compressed brown fireboard, it is smooth on one side with a mesh texture on other. Hardboard is used as a backing for wardrobes, base of drawers, doorpanels, backing for pictures, base for floor tiles, etc.

Blockboards – This consists of strips of wood between veneers. The inner strips of wood are fairly thick (upto 30 mm) making it a strong material usually used for making shelves and table tops.

Wood products are nearly always faced with a plastic laminate, sunmica, formica or wood veneer. Hence they should be cleaned according to their outer surface. However all of them will deteriorate if excessive amount of water is allowed to penetrate.

CORK

It is used in the form of tiles or strips in varying width. It is extremely porous and will easily crumble, dent, burn and stain. Its high porous property

also means that it has good insulating properties. It is ideal for notice boards and bathmats, but is also used as floors and walls. Various forms of cork are –

- Natural
- Resin sealed
- Waxed
- Vinyl coated

Cork floors are made from granulated cork moulded into blocks and then subjected to high pressure and temperature. Natural resin is used to bind the granules. The blocks are then cut into tiles of requires size and thickness (usually 0.5-1 cm)

Advantages – Give a warm and tasteful appearance

Very quite

Disadvantages – Very absorbent

Burnt easily by cigarette ends

Have little resistance to indentation when granules become loose.

Uses – in offices, corridors, bathrooms, etc.

CANE, WICKER AND BAMBOO

These are names given to items made from thick grasses (bamboo), palms (cane), willow sheets (wicker). They have similar characteristics to timber products but are usually woven or plaited into chairs, tables, headboards, etc. They are easily damaged and regular cleaning is necessary. Cleaning includes brushing or vacuuming everyday and wiping approximately once a week with a solution of warm water and washing soda or solution of 5ml borax in 50-ml water. Both methods should be followed by rinsing with cold water in strands. Oil or wax polish maybe applied to polished surfaces. Items used for food items should not be polished e.g. breadbaskets.

PROTECTING WOOD SURFACES

Unprotected wood surfaces will absorb moisture, which causes the grains to swell and so creates gap into which dirt and germs can fall and become trapped when it dries. Liquids such as coffee and wine leave a stain on the surface, which is difficult to remove, and scratching is difficult to avoid, particularly on floors. The following are the most commonly found methods of protection and maybe referred to as *wood finishes*.

Cellulose lacquer – this is a fairly durable matt applied to solid timber furniture during manufacture. It should be dusted and wiped with a damp cloth and then dried with a soft one. Cream or spray polish may be applied to give a gloss finish. Heat, water and solvents will cause damage.

French polish – This is also easily damaged by heat, water and solvents. Deterioration is caused by light and atmostphere in general. French polishing is produced by rubbing the solid wooden surface with a solution of Shellac (a dark red resin) and methylated spirits. It should be dusted daily and polished in the way of the grain. Occasionally cream, liquid or paste polish maybe applied to remove light soiling and improve the gloss.

Oil – Solid wooden furniture can be given a matt protective finish by rubbing the surface with a mixture of oil (usually linseed oil) and resin. This process gives very little protection although it will help to reduce the absorption of water. Daily dusting is essential. Marks can be removed by lightly rubbing with very fine steelwool. About twice a year the surface should be rubbed with a mixture of equal quantities of turpentine and raw linseed oil. Proprietary polishes should be avoided.

Paint – This is very widely used on furniture, window frames, doorframes, skirting, staircase railings, etc. Gloss paint is tougher than matt or silk and

will withstand more frequent washings. All painted wood surfaces should be dusted daily and wiped with a synthetic detergent solution or solvent weekly. Spray or cream polishes can be used to retain the shine or gloss on surfaces. Heat, alkalis and abrasives easily damage paint.

Resin (varnish) – Natural and synthetic resins such as polyesters, melamine and polyurethane are used extensively on wooden furniture, window frames, skirting, floors and staircases. The finish maybe glossy or matt and is frequently applied to furniture made from chipboard. Resin is extremely tough and will resist heat, water, solvents and abrasives; but once damaged by scratching or chipping, it is very difficult to repair. Dusting should be done regularly. Cream or spray polish should be applied on glossy surface after damp wiping. Matt surface should be rubbed up occasionally using a mixture of 500ml turpentine, 100ml boiled linseed oil and 500ml vinegar.

Wax (bees wax) – This is applied on solid wood surfaces. It provides an attractive finish, exposing the pattern of the wood, but is easily damaged by heat, water and solvents. Waxed surfaces should be dusted daily and cleaned weekly with cream and liquid polish.

<u>REMOVING STAIN FROM WOODEN SURFACES</u>

Alcohol stain – Polish well. If the stain persists rub along the grain with a metal polish or a mixture of linseed oil and cigarette ash.
Burns (black marks) – Rub with metal polish. For wax or oil finishes, rub the mark hard with turpentine.
Heat marks (white rings) – Rub with turpentine in the direction of the grain.
Ink – Dab with vinegar, leave for 2-3 hrs, then wipe. If unsuccessful, use a matchstick or cotton wool and carefully dab with hypochlorite bleach, immediately wiping with a clean cloth or absorbent paper.
Scratches – Mask with similar coloured wax crayon, shoe polish or liquid polish dye.

Watermarks – Rub with turpentine in the direction of the grain. If the stain persists, rub with metal polish, followed with suitable furniture polish.