Rubber floor tile Indoor Installation

A. Subfloor Preparation

The objective of subfloor preparation is to create a surface which is dry, rigid, smooth, level, dimensionally stable and which provides a suitable finish to maximise adhesion.

In order to achieve a satisfactory installation of Central flooring, it is essential that the subfloor is correctly finished in accordance with British Standard codes of practice CP102, BS8203, BS5325 and subsequent and future amendments. In particular:-

- 1. Old floor coverings, paint and adhesives should be removed.
- 2. Concrete subfloors must be dry. ie.: relative humidity should not exceed 75% when measured with an Edney Hygrometer.
- 3. Propriety flooring screed should be used in accordance with the manufacture's instructions. Jaymart recommends the use of suitable Ardex UK Ltd. screeding compounds. (telephone 01440 714939).
- 4. Subfloors which are direct to earth should be protected by a damp proof membrane. If in doubt over whether such a membrane has previously been installed, Tretobond ES3000, or similar surface applied damp proof membrane should be used in accordance with the manufacturer's instructions.
- 5. The surface of the sub floor should be smooth, level, clean, dry, and free of all defects.
- 6. Suspended timber board floors and chipboard floors should be made sound, and for maximum rigidity, 6mm flooring grade plywood nailed down with ring shank nails or equivalent fixings at 4" intervals around the edge of each sheet, and at 6" intervals throughout the rest of the sheet. The nail heads must not protrude above the surface of the plywood.

In domestic and light contract installations, hardboard or plywood of less than 6mm thickness is often used successfully in place of 6mm plywood. Installers should satisfy themselves that such an underlay will be adequate for the intended usage before proceeding, as Jaymart cannot accept any responsibility for subsequent failure of floors installed on such substrates.

- 7. It is not recommended to install Central floorcoverings on woodblock floors, asphalt or bitumen subfloors.
- 8. Metal subfloors should be rigid, bare and abraded. Installers wishing to install Central flooring on coated metal surfaces should confirm with the coating manufacturer it's suitability as an underlay, bearing in mind the adhesive to be used.

B. Adhesive Selection

Jaymart supply four types of adhesive suitable for installing the Central range. The correct selection of adhesive depends upon the conditions to which the floor will be subjected, following installation, and also the type of tile being installed.

"Jaystick" double stick adhesive is suitable for use in areas which will not be subjected to surface water. It is suitable for use on both vertical and horizontal surfaces.

"PU2000" polyurethane adhesive is suitable for areas which may be subjected to some surface water after installation, and where excessively heavy traffic will occur, e.g.: fork lift truck traffic, dumbbell weightlifting etc. PU2000 is suitable for use on horizontal surfaces only.

"1635" Adhesive is suitable for use in areas subjected to surface water, and can be used on both vertical and horizontal installations. It is particularly recommended for use when an installation includes stair risers and skirtings, in "wet" areas.

"Treadfast 108" is a high performance adhesive for most rubber floor coverings. It is suitable for use in dry areas. It is only suitable for use on horizontal surfaces.

C. Product Selection

The Central range incorporates a wide range of apparently similar items. Customers and specifiers should refer to the Central catalogue to ensure that they choose a suitable selection of items for the job concerned. Jaymart Area Sales Managers and Sales office Staff are pleased to assist with the choice.

D. Installation

The surface temperature of the screed and the flooring materials to be laid should reach 18°C (64°F) for 24 hours prior and following installation. Where applicable, underfloor heating should be turned off 48 hours before and after installation.

In very cold weather it is recommended that boxes and/or other wrappings should be opened and the following materials spread out in the heated area in which they are to be in stalled, in order for them to achieve the correct working temperature.

Upon receipt and before proceeding with cutting or installing any materials, deliveries should be checked to ensure the correct materials have been received in good condition. Colour shade batching should also be checked. Please note, however, it is impossible to supply different items in the same colour shade batch.

The correct order in which items are installed depends on the package of items selected. The following ordered lists give some guidelines:-

Floor Tiles

When installing floor tiles, it is normal to begin installing in the centre of the floor, working outwards to the walls. This ensures an even border of cut-in tiles around the edge of the room. The centre of the floor is at the point where lines drawn from opposite corners intersect. Tiles are most usually installed "criss-cross" fashion, though in some instances a "brick-bond" installation may be preferred. Brick-bond is particularly useful for large floor areas where there may be an increased risk of tiles running out of alignment during fitting. The tiles can be "cut-in" at the edge of the room using a sharp cutting knife. Obstructions protruding from the walls should be templated and marked out on the tile prior to cutting. Unevenness in the wall can be marked out on the tiles using a "marking back" rod prior to cutting,:- the marking on the tile will correspond to the fluctuations in the wall against which the tile has to fit. In order to ensure consistent spacing between studs, hand cut tile edges should not be installed adjacent to other tiles.

Steps for Laying Tiles



Prepare a smooth surface



Lay out the tiles dry



Turn tiles over



Spread the glue



Glue the tiles down



Press firmly

The nosings, tread and risers may be covered using the convenient one piece sections. Care should be taken when handling the one-piece nosing tread riser units prior to fitting. The vertical part of the nosing may stretch and deform if the items are bent during handling.

The one-piece stair sections are intended for use on "standard" size staircases, with 90° or 83° angles between tread and riser. Rounded nosings should be "squared off" using suitable fillers prior to installation. The sections are not suitable for use on bullnose staircases unless the nosing is removed, and a suitable alternative nosing fitted.

Where the staircase is wider than the sections available, two or more sections may be used side by side. There is minor controversy over the positioning of joints between sections. Aesthetically they look better up the centre of the staircase. Technically the joint is better suited away from the main flow of pedestrian traffic. The decision is yours. If in doubt, consult the project architect for his preference.

Fitting of the one piece stair sections should begin at the bottom of the staircase. The first riser can be cut from a one piece section, retaining the nosing for use of the landing edge. When fitting the one piece section the nosing should be forced over the nose of the stair. It is essential that the front edge of the tread portion is supported by the stair beneath. Failure to do this will constitute a safety hazard, and may also result in premature wear. The vertical part of the nosing should not be adhered to the riser. The nosing has a built in spring which holds the vertical part firmly against the riser below.

When applying adhesive to the reverse of the one piece nose tread riser unit, care should be taken <u>not</u> to "fill" the folding grooves between tread and riser with adhesive. Adhesive should be applied over the grooved area with a stiff paintbrush. The reason for this is that if the grooves are filled, the excess adhesive retains solvent longer than adhesive elsewhere on the unit. The solvent then tries to escape following installation of the unit, and "bubbling" results.

E. Adhesive Use

Before using any of the adhesives described bellow, Users should familiarise themselves with the relevant "Health and Safety" data sheets, available on request. In particular "Jaystick" should be used in well ventilated areas, and away from naked flames. Smoking should not be permitted.

The various recommended adhesives for the Central (see section B, above) are applied in different ways.

1. "Jaystick" contact adhesive is supplied in cans, ready to use. It should be evenly applied with a V notched trowel (1mm x 4mm) to both the floor surface and the reverse of the Central to be installed.

Jaystick contains solvents which are present to allow it to be spread. After application and before fixing the item in position, the solvents must be allowed to evaporate. This process may take up to 40 minutes, or even longer in certain conditions. It is possible to determine when the solvents have evaporated as the adhesive <u>will feel dry to the touch</u>. Failure to allow this evaporation process to occur will result in "bubbling" of the floor covering.

Special care should be taken when installing one piece stair sections. The solvent in the adhesive applied to the stair riser tends to evaporate at a slower rate than those on the tread. Installers should then apply the touch test to both tread and riser. Once the adhesive has become <u>touch-dry</u>, the item to be installed should be "curled" precisely into position. Particular care should be taken to ensure to align tile corners and edges with previously installed tiles.

It is essential to "get it right the first time" as the adhesive "grabs" the item, and subsequent removal for repositioning may result in distortion of the product.

After positioning the tile on the adhesive it should be pressed down all over to ensure total contact between the tile, adhesive and substrate. It should then be rolled, in both directions with a 68kg flooring roller in order to expel any trapped air bubbles, and further ensure total contact of the bond.

Pedestrian traffic should be excluded from the newly installed area for 24 hours in order to allow the adhesive to fully cure. A "Health and Safety" data sheet is available on request.

2. "PU2000" polyurethane adhesive is a two part adhesive. Before the adhesive can be used, the contents of the two cans should be thoroughly mixed together. The largest can contains sufficient empty space to accept the contents of the smaller can.

The mixed adhesive should be applied within two hours of mixing, to the floor only, using a 1.5mm x 5mm V-notched trowel with the standard pre-abraded smooth backed tiles. The tiles should be laid into the wet adhesive, pressed down to ensure total contact, and rolled with a 68kg flooring roller to exclude air.

Care should be taken to ensure that the tiles remain in contact with the wet adhesive during the curing process. Failure to do this may result in an unsatisfactory bond, and subsequent deterioration in the finished floor. Normally the 4mm tiles are sufficiently heavy and flexible to avoid the need for weighing them down to maintain contact, but in some circumstances eg. where the floor is not level in order to facilitate drainage, it is advisable to weight the tiles down with sandbags or similar.

Excess adhesive may squeeze up between the tiles. Use a solvent cleaner to remove the excess adhesive whilst it is still wet. Under no circumstances should the excess adhesive be allowed to dry on the upper surface of the tiles. The cleaner should also be used to clean the adhesive application tools.

The curing process, mentioned above, usually takes about 48 hours. It is essential that traffic is prevented from traversing the finished floor this period. Failure to do this may disturb the chemical hardening process as it takes place, and then result is an unsatisfactory bond. A "Health and Safety" data sheet is available on request.

3. "1635" adhesive is a two part, water resistant, contact adhesive. Before use the two parts should be thoroughly mixed. It is suitable for use with smooth backed products only (ie. not peduncle backed tiles).

An even coating with a flat spreader should be applied to the reverse of the Central item, and applied to the subfloor with a 1mm x 4mm notched trowel. For maximum water resistance, ensure that there is adequate adhesive on the tile edge and on the corresponding area of the subfloor.

The solvents present in the adhesive should be allowed to evaporate for 5 to 15 minutes approximately, until the <u>adhesive</u> is touch <u>dry</u>. The item should then be curled into position, taking care to align it properly and place it correctly the first time. The item should then be pressed firmly to ensure overall contact, and rolled in both directions with a 68kg flooring roller.

4. 'Treadfast 108' should be thoroughly stirred before use. Porous surfaces must be primed with Treadfast 108 diluted 1:1 with clean water, by paint roller and allowed to dry. Spread the adhesive evenly on the substrate only with a 1.5mm x 5mm V-notched trowel. Immediately roll with a long handled paint roller which has been pre-wet with adhesive to smooth out the trowel serration marks to give a uniform, smooth appearance.

F. Finishing off the job

Finally, the floor should be fully cleaned. Jaymart recommend the use of Nova products, available from "British Nova Works" (telephone 01295 254030). These products should be applied in accordance with a separate data sheet, "Jaymart Rubber Flooring-Cleaning and Care", available upon request.