Scope: This is the cleaning program after tiling has been completed. Note: In instances where cleaning and maintenance recommendations provided by tile sealer manufacturer are different from those contained in this document, the tile sealer manufacturers recommendations must be followed.

1.1 Initial cleaning after fixing of tiles

The grouting process may leave a residual film on the surface of the tiles. It is important that this film is completely removed prior to the floor being brought into service. Residual cement film can be removed by treatment with appropriate proprietary acid cleaners. The floor should be wetted and free water removed prior to the application of the cleaning agent. It is important that this treatment is followed immediately by a thorough rinsing with clean water.

Proprietary products should be used in strict accordance with the manufacturer’s instructions. Where temporary sealers are employed they should be used strictly in accordance with the manufacturer’s instructions.

1.2 Routine cleaning

1.2.1 Manual cleaning

As frequently as is necessary, ceramic tiles require little maintenance and are easily kept clean by sweeping and then mopping with warm water to which a pH neutral detergent has been added. The frequency of cleaning will be determined by use. It is the detergent that facilitates the removal of residue or contamination.

Whichever detergent is used, it should be used in accordance with the manufacturer’s instructions. The cleaning solution needs time to work and should be left for a period of time (see manufacturers instructions) to allow it to penetrate and emulsify the dirt, after which it should be removed by rinsing thoroughly with clean water.

1.2.2 Mechanical cleaning

The normal cleaning recommendations described above will suffice to keep a ceramic floor in a satisfactory clean condition. However, large areas of plain or textured surface floor tiles are more readily cleaned with mechanical scrubbing machines.
These would fall into three main categories:

1. **Rotary Action**:  
   Whichever rotary machine is selected it should not be operated at speeds in excess of 400 r.p.m.

2. **Contra-rotating**:  
   Multiple brush heads make this type of machine easier to handle than the rotary action. However, its scrubbing action is less effective.

3. **Cylindrical**:  
   These machines tend to be light and extremely mobile. Most machines of this type feature bi-directional movement and are able to wash, collect dirt and remove surface water in one operation.

Having selected the most suitable type of machine the choice of brush heads is all important. The brushes have to be flexible enough to grip the floor and at the same time they must not be of a type to cause damage to the tiles or joints.

Two different types of brushes are recommended:

1. **Union Mix Brush**:  
   For washing tiles with a light scrubbing action.

2. **Polypropylene Brushes**:  
   Where the deposits of dirt are especially heavy. Use the appropriate pad. Many scrubbing machines are now provided with a suction drying facility. If so equipped the machine should first be used with the suction facility switched off to permit the water detergent solution used in the scrubbing process to remain on the floor to penetrate and emulsify the dirt layer.

   The detergent solution should remain on the floor for the period of time recommended by the manufacturer of the cleaning product after which time scrubbing operation should be repeated, but with clean water only, and with the suction drying facility switched on.

**High Pressure Cleaning**  
High velocity cold or hot water jetting equipment is in use in industrial locations particularly for the removal of obstinate deposits, which defy normal cleaning techniques such as dirt and grime present in heavy concentrations or in relatively inaccessible areas. Check with the manufacturer that the type of cleaning is appropriate. Because of the ease with which ceramic tile surfaces, both unglazed and glazed, can be maintained in a clean condition, high pressure equipment is not often used on such surfaces, but where it is employed the following points should be noted:
a) Whilst tiles will not be affected by high water pressure, excessive pressures may abrade the grouting material in the joints. For this reason care must be taken when using high pressure water jetting equipment to ensure that the water is not concentrated on one point for too long, but sprayed evenly across the entire surface being cleaned.

b) Sometimes abrasives, detergents and disinfectants are added to the high velocity water. Whilst correctly proportioned mixes of suitable detergents or disinfectants in water should not harm tiles or grouting material, abrasives added to the water may produce damage.

Therefore, water incorporating abrasive materials should not be sprayed over the tile surface. The use of steam cleaners is not recommended as they can cause stresses of the tile which may result in adhesion failure.

### 1.3 Periodic deep cleaning

All tiles will require a general maintenance schedule, when a deeper clean is required i.e. spring clean or a general refreshing of the surface finish. Any stubborn stains (e.g. rubber shoe marks, light oil stains) can normally be removed with special proprietary deep cleaner.

Care should be taken with these deeper cleaners, as excessive use can have an effect on surface sealants and polishes that have been used. Always follow manufacturer’s instructions or contact them for detailed instructions of use.

Household and commercial cleaning products must be used with caution as they may contain bleaching agents, or ingredients that may burn or discolour stone finishes.

If stains have occurred the following treatments will normally remove or minimize them, though the treatment should only be used on the offending mark. It is advisable to experiment on a small area first, particularly if the nature of the stain is in doubt.