## Surface Preparation

Tile may be installed over most structurally sound substrates, if they are clean, smooth, dry and free of wax, paint, soap scum, grease and other foreign contaminants.

Any damaged, loose, or uneven areas must be repaired, patched and leveled.

Remove any moldings, trim, appliances, etc., which could interfere with installation.

# Applying Mortar

Carefully read and follow all instructions and precautions on the mortar package. For best results, use high quality, non-sag, latex modified thinset mortar.

Mix only enough to be used within 30 minutes.

Using the type of trowel recommended on the mortar package spread a 1/4" coat on the surface of one grid area, using the flat side of the trowel.

Next, use the notched side of trowel to comb mortar into standing ridges by holding trowel at a 45-degree angle.

Then remove excess mortar, leaving a uniform, ridged setting bed.

Don't spread a larger area than can be set in 15 minutes.

Aim for 100% mortar coverage - leaving no voids or hollow spots.

# Setting Tile

Set tiles one at a time using a slight twisting motion. Don't slide tiles into place.

Insert tile spacers as each tile is set or leave equal joints between tiles.

Fit perimeter tiles in each grid last, leaving 1/4" gap between tile and wall.

When grid is completely installed, tap in all tiles with a rubber mallet or hammer and wood block to ensure a good bond and level plane.

Remove excess mortar from joints with a putty knife and from tile with a damp sponge.

Do not touch the tiles until they are set (usually in 24 hours).

# **Grouting Joints**

Generally, you should wait about 24 hours before grouting. Carefully read and follow all instructions and precautions on the grout package. Make only enough to use in about 30 minutes.

Remove tile spacers and spread grout on the tile surface, forcing down into joints with a rubber grout float or squeegee. Tilt the float at a 45-degree angle.

Remove excess grout from surface immediately with the edge of float. Tilt it at a 90-degree angle and scrape it diagonally across tiles.

Wait 15-20 minutes for grout to set slightly, then use a damp sponge to clean grout residue from surface and smooth the grout joints. Rinse sponge frequently and change water as needed.

Allow for grout to harden and a light haze forms on the tile surface. Then polish with a soft cloth. Rinse again with sponge and clean water if necessary.

# Substrate Plane

Surface variation should be no greater than 1/4" in 10' and 1/16" in 1 foot, for tiles 15" or smaller. For tiles 15" or larger, substrate flatness should be no greater than 1/8" in 10' with no more than 1/16" variation in 24" when measured from the high points in the surface.

# Things Not To Do

- 1. Apply mortar in dots or dabs, as this can lead to tiles cracking or coming loose.
  - **Instead**: Spread evenly using the appropriate notched trowel that ensures full mortar coverage.
- 2. Grout too quicky after installation, as this can lead to grout lines cracking or coming loose.
  - **Instead**: Allow mortar to cure and dry before grouting (following manufacturer's instructions).