1 **STEP 1: SURFACE PREPARATION**

- Tile may be installed over most structurally sound substrates.
- Make sure surface is clean, smooth, dry and free of wax, soap scum and grease.
- Any damaged, loose or uneven areas must be repaired, patched and leveled.
- Remove any moldings, trim, appliances or anything that could interfere with installation.

2 **STEP 2: LAYOUT**

- Find the center point of the wall, using a level to draw a plumb line in the wall’s center.
- Lay out a row of loose tiles across the bottom of the wall from the center line leaving uniform joints between tiles.
  **NOTE:** Tiles can be butted together leaving a consistent 1/16 in. joint automatically.
  **TIP:** If cuts leave tiles smaller than half to their original size, adjust the center line a half tile closer to the wall.
- Stack two tiles here. At the top, draw a horizontal line on the wall and continue the line around all side walls to be tiled.
STEP 3: COUNTERTOP LAYOUT

- Begin with counter trim, then set full tiles from the first row working back thus all cut tiles will be placed on the back row against the wall. 
  NOTE: Trim pieces are available for use around recessed appliances.
- Snap parallel chalk lines on the substrate as needed to keep rows straight. 
  NOTE: Tile countertops should have a tile backsplash at least 4 inches high for protection.
  TIP: For backsplashes, match up joints with the countertop tile.

STEP 4: APPLYING ADHESIVE

- Mix only enough adhesive or mortar to be use within 30 minutes.
- Using the type of trowel recommended on the adhesive package, spread a 1/4 in. coat on the surface of one grid area, using the flat side of the trowel. 
  NOTE: Do not cover guidelines or a larger area than can be set in 15 minutes.
- Use the notched side of trowel to comb adhesive into standing ridges by holding trowel at a 45° angle.
- Remove excess adhesive, leaving a uniform, ridged setting bed.

STEP 5: CUTTING TILE

- Carefully measure tiles and mark with a pencil or felt-tip pen.
- Make straight or diagonal cuts with a tile cutter, curved cuts with a nippers (chipping away small pieces for best results), and full-length curved cuts with a rod saw. 
  Smooth out sharp-cut edges with a carborundum stone.
6  **STEP 6: SETTING TILE**

- Install tiles in the center, one grid at a time. Finish each grid before moving to the next. Start with the first tile in the corner of the grid and work outward. Set tiles one at a time using a slight twisting motion.
  
  **NOTE:** 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 in. gap between tile and wall.

- When finished, tap in all tiles with a rubber mallet or hammer and wood block, to ensure a good bond and level plane.

- Remove excess adhesive from joints with a putty knife, and from tile with a damp sponge.

- Do not use surface of tiles until they are set (usually in 24 hours).

7  **STEP 7: GROUTING JOINTS**

- Using the instructions on the package, make enough grout 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° angle and remove excess grout from surface immediately with the edge of float.

- Tilt it at a 90° 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, rinsing sponge often.

- Let dry until grout is hard and haze forms on tile surface, then polish with a soft cloth and wait 72 hours for heavy use.

  **NOTE:** Don’t apply sealers or polishes for three weeks, and then only in accordance with manufacturer’s recommendations.
8

STEP 8: INITIAL CLEANING

- The complete removal of grout and construction dirt after products have been installed will improve daily maintenance.
- Clean successfully by scrubbing the installation with hot water and a pH neutral liquid cleaner (soapless), followed by a thorough rinsing, then remove the rinse water with a wet vacuum or dry toweling.
- If some residue remains, further cleaning will need to be done in consultation with the grout manufacturer.
- For more aggressive cleaning, scrubbing machines equipped with nylon pads or brushes should be used. Wet vacuuming of the suspended dirt and grout is recommended.

A

GLOSSARY OF TERMS

- **Back-butter**: spreading of a bond coat to the back of a ceramic tile before placing the tile to ensure a strong bond with the thin-set mortar.
- **Balanced cuts**: perimeter tile cut at equal size and installed on opposite sides of an area; also, equally sized cuts on each side of a miter.
- ** Butt joint**: a plain square joint between two members with no grout joint.
- **Grout**: a mix used for filling tile joints, commonly based of cement.
- **Mortar**: a mixture of cement paste and fine aggregate used to bond masonry together.
- **Plumb**: perpendicular to true level.
- **Substrate**: the underlying support for a ceramic tile installation.

ATTENTION / ATENCIÓN / ATTENTION

Do not dry cut using motorized equipment due to the potential for exposure to harmful silica dust. Use a wet saw or a score and snap tool when cutting is necessary during the installation process.

No corte en seco usando equipo motorizado debido a la posibilidad de exposición a polvo dañino de silice. En caso de que sea necesario cortar durante el proceso de instalación, usar una sierra de corte en húmedo o una herramienta cortadora manual.

Ne pas couper à sec à l’aide d’un équipement motorisé en raison du risque d’exposition à la poussière de silice nuisible. Utiliser une scie à eau ou un outil à inciser et rompre lorsqu’il faut couper pendant le processus d’installation.