Installation of
COUNTERTOP & WALL TILE

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: WALL 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.

CONTINUED ON NEXT PAGE
### 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 used 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.

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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 nipper (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.

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).
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.

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.
**GLOSSARY OF TERMS**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Back-butter</td>
<td>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.</td>
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<tr>
<td>Balanced cuts</td>
<td>perimeter tile cut at equal size and installed on opposite sides of an area, also, equally sized cuts on each side of a miter.</td>
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<td>Butt joint</td>
<td>a plain square joint between two members with no grout joint.</td>
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<tr>
<td>Grout</td>
<td>a mix used for filling tile joints, commonly based of cement.</td>
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<tr>
<td>Mortar</td>
<td>a mixture of cement paste and fine aggregate used to bond masonry together.</td>
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<td>Plumb</td>
<td>perpendicular to true level.</td>
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<tr>
<td>Substrate</td>
<td>the underlying support for a ceramic tile installation</td>
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