



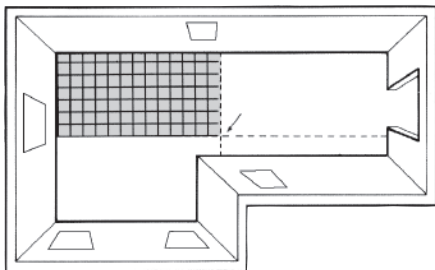
# CERAMIC TILE INSTALLATION

# INSTRUCTIONS

**Wear Q.E.P. Knee Pads (#79630 or #79632) and  
Gloves (#21591) to protect your knees and hands**

## PREPARATION

Use a Floor Scraper (QEP STK# 75006K or 20900) to remove any debris from the subfloor that cannot be easily wiped free (i.e., old adhesive, residue, etc.) with a broom or cleaning solution. Clean the subfloor of grease, paint or anything that would inhibit adhesive or thinset bonding. Patch any cracks and level the subfloor before beginning tile installation. Subfloors in poor condition can eventually crack the tile and grout.



1. Measure and mark the center point of two opposite walls.
2. Snap a chalk line between these two points to get a center line. Repeat this between the other two walls so you have two lines that cross in the center of the room. Check that the intersection is square with a carpenter's square and adjust if necessary.
3. Lay a row of loose tiles along one line, from the center point to the wall. If the space left between the last tile and wall is less than half a tile wide, snap another chalk line closer to the opposite wall until the last tile on each side of the room is the same size. Repeat this along your other center line. This will insure wide, even tiles around the perimeter of the room.

4. Prior to installing tiles, remove any molding and doors or cut door bottoms and jambs with an Undercut Saw or Jamb Saw (QEP STK# 10096 or 10-55). Reattach or replace molding and doors after job is completed and grout is fully dried.
5. Begin your installation along the chalk lines, working from the center out, one quarter section at a time. (Remember to leave yourself a way out of the room without stepping on the newly set tiles.) All the outside edge tiles should be cut last and laid at one time. (Leave a 1/4" space around the perimeter for expansion that will later be covered by molding.)

## TOOL CHECKLIST

- Bucket
- Cheesecloth
- China Markers
- Contour Gauge
- Float
- Gloves
- Grout Bag
- Grout Sponge
- Knee Pads
- Mixer
- Rubber Mallet
- Safety Goggles
- Scraper
- Spacers
- Suction Cup
- Tile Nippers
- Tile Pliers
- Trowel
- Wet Tile Saw or Tile Cutter

## INSTALLATION

### Applying the Adhesive

Thinset adhesive is used to adhere tile to the floor. Use the adhesive manufacturer's recommendation for the best coverage. The trowel notch size is usually based on the tile size and type that you are installing. The adhesive manufacturer will have recommendations on which notch to use. Q.E.P. offers notched Trowels in Economy, Traditional and Professional grades. Hold the trowel at a 45° angle to the wall or floor (see illustration). Apply adhesive evenly. The trowel should give you proper thickness and coverage.

**CAUTION:** Apply no more than 25 square feet at a time. Some adhesives dry faster than others so use the directions from the adhesive or thinset to be sure.

### Setting Each Tile

Set each "whole" tile with a slight twisting motion and press firmly into place (do not slide in). A Suction Cup (QEP STK# 75000-6) can be used to help position larger tiles.

### For Floor Tiles

To make sure tiles are firmly set, place a flat board across the surface and tap with Rubber Mallet. Do not walk on the floor after it has been tiled. Place a piece of plywood on the floor if you must walk on it until adhesive is fully set according to directions.

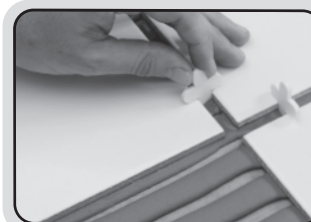
### Using Tile Spacers (Use Q.E.P. Tile Spacers, available in a variety of sizes)

1. Place the first tile into position on the setting line. When setting the next tile, place at least two spacers vertically between the tiles. The Spacers should be set "tombstone" style and not laid flat.
2. Continue setting the next tile against the spacers and repeat this procedure.
3. Wait until the adhesive has set up according to the manufacturer's instructions before removing spacers.
4. Q.E.P.'s patented LASH Tile Leveling Clips (QEP STK# 99720) and LASH Tile Leveling Wedges (QEP STK# 99725), make installing large tiles fast and easy by keeping tiles aligned and level.



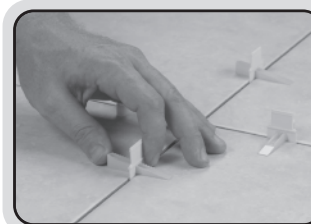
### NOTCHED TROWEL

The Notched Trowel is designed to apply tile adhesive to vertical or horizontal surfaces quickly and evenly. The ridges made by the notches allow the adhesive to spread evenly when you press tile into place.



### SPACERS

Use between tiles to provide uniform grout lines. Available sizes range from 1/16" to 1/2" wide.



### LASH™ CLIPS & WEDGES

Use to easily "Level, Align, Space and Hold" large tiles.

## CUTTING TILES

After the whole tiles have been set, you will have to cut and fit the remaining border and corner tiles.

### Tile Cutters and Tile Saws

Both manual tile cutters or wet tile saws are used to cut tile. Manual cutters (STK# 10214 for up to 14" tile — STK# 10220 or STK# 10552 for up to 20" tile — STK# 10600 for up to 24" tile) offer dust-free cutting and do basic straight cuts of wall and floor tiles. Wet tile saws (STK# 22500 or STK# 22650 cut any size tile) are used for larger projects, harder tile and where faster cuts are required. Make certain that you use a tile cutter or saw that will handle the tile size you are installing.

Follow the directions provided with the tile cutter or tile saw for proper results. (NOTE: When using a tile saw, it is recommended that you use a blade that is designed for the type and hardness of the tile that you are cutting.)

**Tile Nipper Directions** (Use QEP Tile Nippers, STK# 32015, STK# 32025 or STK# 10003 for Ceramic or Porcelain Tile — STK# 32010 for glass tile.)

1. When cutting shapes in tile, first make an outline on paper, cut out the shape (or use a Contour Gauge STK# 10032) and use it to trace the shape on to the tile with a China Marker (QEP STK# 38776).
2. With the Tile Nipper, make small cuts or "nibbles" until desired shape is achieved. Use QEP's glass tile nipper (STK# 32010) when cutting shapes in glass tile.
3. For straight edge cuts, nip small bites along the length of the tile.
4. Use Safety Goggles to prevent injury while making cuts.

**Tile Plier Directions** (Use QEP Handheld Tile Cutter STK# 10094-6 to score and snap glazed wall tile.)

1. Using a ruler, make a China Marker line (QEP STK# 38776) on the glazed surface of the tile to be cut.
2. Use the ruler as a cutting guide by placing it along the marked line. Hold the tile cutter firmly with the scoring wheel against the ruler.
3. The tile plier's wheel breaks the glaze on the tile and makes it easy to make a clean cut. Slowly make a single, straight scoreline, running the cutter wheel along the ruler towards yourself. Make sure the score runs the whole length of the tile without gaps and that the cutting wheel runs off the edge of the tile.
4. Place the tile between the jaws of the tile cutter, scored side up, with the score line in the center of the jaws.
5. Squeeze the handles together firmly. The tile should break cleanly along the scored line.

### Drilling Holes

Use the Brutus Diamond Drill Bit (STK# 10566 for 5/16" holes — STK# 10568 for 1/4" holes) or the Brutus Diamond Hole Saw (STK# 10569 for 1 3/8" holes) when drilling holes in all types of tile, including hard Porcelain tile.

## GROUTING

Let the adhesive or thinset cure per manufacturer's instructions before you begin grouting (Usually 24 to 48 hours). Mix the grout according to package instructions with a Mixer (QEP STK# 75001, 61205 or 61210).

*NOTE: Remember to remove all spacers.*

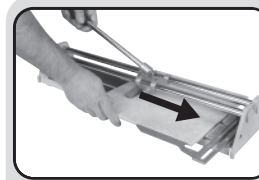
1. The grout bag (QEP# 76000) is the perfect tool for small grouting jobs. The bag allows the installer to easily keep the grouting job neat and clean, without exposing hands to harsh setting grout and chemicals. Simply mix a small amount of grout, using the grout manufacturer's instructions. Fill the grout bag and squeeze it to spread grout directly into the joint. Use a Grout Float (QEP STK# 10060, 10061, 10062, 10063, 10073 or 10074-8) to spread grout diagonally across the face of the tile, and into the joints. Apply grout to only 25 square feet at a time. You can use an old toothbrush handle for narrow joints and corners. Be sure that the grout is forced into the joints so that they are completely filled with no voids or air pockets.
2. Wipe off the excess grout by drawing the edge of a float, holding it at a 45° angle, diagonally across. Remove as much excess grout as possible.
3. Wait 15–20 minutes before cleaning. Soak a Grouting Sponge (QEP STK# 70005, 70007 or 70010) in clear water\* and wring it out thoroughly. Wipe the tiles diagonally, removing any remaining grout, while rinsing sponge often. Repeat until the joints are smooth and level with the tiles, and the tiles are as clean as you can get them with the sponge. For best results repeat this step over the next two days to allow grout to cure slower and stronger.  
*\*Be sure not to over wet sponge when cleaning grout, it will pull color out of grout causing uneven coloration.*
4. After the remaining grout has dried to a haze, polish it off with a soft cloth or Cheesecloth (QEP STK# 76030).

*CAUTION: Keep water away from newly tiled surfaces for at least 48 hours.*

## SEALING

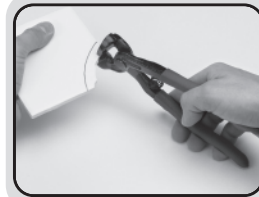
Seal grout lines, after it has cured per manufacturer's recommendation, to keep grout looking its best, protect your grout and prevent liquid absorption, which may cause grout staining.

1. Fill Q.E.P. Grout Sealer Applicator Bottle (#10279 or 19999), as directed by the sealer manufacturer's instructions.
2. Simply follow the grout lines with the applicator tip to apply the sealer. Wipe clean any excess on the tile.



### TILE CUTTER

For making large cuts, use a manual tile cutter and simply score and snap.



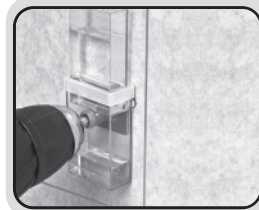
### TILE NIPPERS

Use Tile Nippers to cut smaller tile pieces, remove points from corners, fit pieces around fixtures, outlets and to make other irregular cuts.



### GLASS TILE NIPPERS

Use Glass Tile Nippers (STK# 32010) in a scissor action to trim glass tile to fit around pipes, cabinets and walls or cut glass mosaics.



### DRILLING

Use a Diamond Drill Bit or Diamond Hole Saw for drilling holes in tile for hanging shelves, shower doors, cabinets etc.



### GROUT FLOAT

Use a Grout Float to push grout into joints between tiles.



### SPONGE

Using a Grout Sponge, diagonally wipe the tiles clean.