Profiles: Gain an Edge in Ceramic Tile Protection

Finishing the edge of a tile project has traditionally meant using ceramic tile trim to conceal the edges of the installation. Trim pieces have round, decorative edges that transition the tiled surface to the surrounding floor or wall for a more refined appearance. Using specialty tile trim has always been most important when the ceramic tiles were installed on a mortar bed.

A typical bed is 1-1/2" thick and could raise the surface of the tile another inch or more above the surrounding painted wall surface. The problem with this method was the exposed edge of the mortar bed looked like rough concrete, requiring tile trim pieces to cover the edges as well as conceal the mortar.
Today’s ceramic tile selection has moved away from glazed, porous-bodied tile to more dense porcelain tile. Since most tiles are no longer placed on raised mortar beds, manufacturers do not make trim pieces for the large variety of ceramic tiles now available. Instead, tile is usually installed with the thin-set method described in ANSI A108.5 using polymer-modified cement mortars. With thin-set installation, only the edge of the tile and a thin bonding layer need to be covered. In many cases, the trim piece only needs to be 1/4” thick. An installer can grind and polish the edges of many through-body porcelain tiles, but this is time-consuming and special care must be taken to avoid damaging any of the tiles.

Now there is a simple solution that adds beauty, safety and simplicity to ceramic tile installations. Manufacturers of tile installation products have developed profiles to provide a transition from the tiled surface to the surrounding materials. Profiles (also called trim) are formed strips of metal or plastic designed to cover and protect the edge of the tile. The perforated anchoring leg of the profile is embedded into the thin-set mortar under the tile, leaving the decorative edge of the profile exposed. The Tile Council of North America (TCNA) has even recognized the need for thin profile trim by adding a Profiles definition to its 2013 Handbook.

Profiles are available in a variety of materials, colors and finishes to complement and protect ceramic tile installations. They are most commonly made of lightweight aluminum, but may also be constructed from stainless steel or brass. Stainless steel is the most chemical resistant, but is limited to a polished or matte natural finish. Aluminum profiles are available in a natural finish and can also be coated or anodized, offering a wider selection of colors. Aluminum is sensitive to alkaline materials and cleaners, although anodizing and coating help protect the metal for the life of the tile installation. While brass can add an elegant touch to the installation, care must be exercised during maintenance to avoid tarnishing.

Quality is an important factor to keep in mind when selecting the proper profile. To save costs, many manufacturers have reduced the thickness of the metal in their profiles. As a result, the thinner gauge metal can be easily bent and damaged during installation. Custom® Building Products has maintained a high-quality, thicker gauge metal in its products to make installations durable and provide maximum protection to the tile. Profiles made of PVC (polyvinyl chloride) plastic are also available at a lower cost. However, while these can be cost effective in some installations, they will not hold up as well as metal profiles in high traffic areas.
CUSTOM offers a full line of high-quality profiles to protect and accent any ceramic tile installation. The ProFloor™ Square-edged Profile (or L Channel) is commonly used to finish the edge of the tile in floor applications. This profile protects the edge of the ceramic tile from damage during normal traffic on the tiled surface. It can also be used on walls and backsplashes that transition to painted surfaces with minimal distraction from the aesthetics of the tile.

CUSTOM’s ProRound™ and ProDecor™ Q offer an attractive way to finish the outside corner above the front edge of a countertop in place of a ceramic bull-nose and V-cap trim piece. Inside and outside corner pieces are also available for ProRound and ProDecor Q to complete the edging around the countertop. Using profiles on countertops not only enhances the appearance, but in many cases, the edge with the metal trim is more durable than fragile ceramic trim pieces. Additionally, the profile pieces can be used to wrap tile around the outside corner of a wall and protect the tiled corner from the impact damage that can occur in activity centers like kitchens.

Most ceramic tile floor installations eventually transition to another flooring surface. In many cases, the height of the ceramic tile does not match the adjacent carpet, vinyl, wood or other floor covering. The subfloor and underlayment under the ceramic tile may have been modified to make it suitable for tiling or to help reduce sound transmission through the floor. These modifications can raise the ceramic tile surface above the adjacent floor coverings. To address these challenges, CUSTOM offers a selection of transitions that even out height differences and eliminate trip hazards. ProNivo™ is available in three shapes to smooth floor surface transitions for a variety of applications.

ProNivo K creates a gentle slope, providing effortless access from one flooring surface to the next that is ideal for wheeled carts and wheelchairs. If the heights of the adjacent floor coverings happen to be the same, CUSTOM ProDecor T Transitions provide a decorative and protective finishing edge to any tiled floor.

ProCove™ Cove Shaped Profiles form decorative corner joints between tiled surfaces or to bridge from tile to another hard or soft surface finish. ProCove offers end caps as well as inside and outside corner pieces that eliminate the need for a mitered edge treatment. The ProConnex™ family of Movement Joint Profiles can bridge expansion joints from 1/2" up to 1-3/16".

Ceramic tiled stairs have their own particular set of concerns. The edge of the tiled step is subject to chipping and loosening when furniture and heavy materials are moved between floors. CUSTOM ProBasic™ Step Profiles easily solve this common problem. ProBasic is positioned on the edge of the step and protects the tile on both the flat and riser of the step. Its non-slip finish is also ADA compliant to minimize slip and fall accidents, improving the safety of the installation.

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Custom Building Products offers a complete line of profiles and transitions that provide simple solutions for the most demanding installation challenges. Ideal for both commercial and residential applications, they conceal rough edges, protect tiles, offer design flexibility and ensure years of performance.

CUSTOM profiles and transitions are German-engineered for quality and backed with an extended warranty when a full system of CUSTOM brand products is installed. This innovative line enhances CUSTOM’s extensive offering of tile installation products and assures the customer of a beautiful-looking ceramic tile installation for years to come.

ABOUT THE AUTHOR

Steve Taylor is Director of Architecture and Technical Marketing for Custom Building Products and has more than 30 years of experience developing products for the construction industry. Steve is a member of the Tile Council of North America (TCNA) and Materials & Methods Standards Association (MMSA). In these roles, he helps to determine proper tile installation methods and standards. This includes simplifying the tile installation process to save tile professionals time and money.