Installation Guide: Metal Mosaics

Elon® **ALWAYS** recommends that all installations be done in accordance with local building codes and adhere to Tile Council of North America specifications.

Purchasing

When purchasing Natural Marble with Aluminum:

- Identify where each marble with aluminum mosaic color can be installed:
  - Silver - Walls & Floors
  - Brass - Walls & Floors
  - Gold - Walls Only
  - Copper Rose - Walls Only
- Waste Factor:
  - Some intricate directional mosaic patterns (waterjet mosaics) may require up to 20% additional material for waste during installation.

Preparation

Prior to installation of Natural Marble with Aluminum:

- Open and inspect all mosaic cartons.
- All cartons should be opened, and material should be separated to allow the installer to layout all pieces and blend them together to give the final installation a uniform color blend, known as "Dry Laid."
- When laying out any mosaic installation, match grout joints with those found on the mosaic sheet.

Installation

When installing Natural Marble with Aluminum:

- Use white thinset for light-colored natural stones.
  - Avoid using grey thinset to prevent trowel ridges or shading through the mosaics affecting the finished installation color.
- On marble with aluminum mosaics with fiberglass backs, use a quality Latex Modified Thinset for proper adhesion.
- Manufacturers recommend using latex modified thinset for marble instead of mastics to avoid staining.
- When used in showers or tubs, Metal Mosaics should never be set with the bottom course extending into the shower base or tight to tub lip. Always leave a minimum gap of 1/4" above and perpendicular to the floor or lip of the tub or shower base and use a waterproof flexible sealant where they meet per TCNA specification B412-23.
- For marble shower floors, recommend installations with a Complete Water Management System (e.g., Bonded Waterproof Tiled Shower Assemblies - Schluter) vs. Traditional shower installations (Mud job).

Grouting
Grouting Natural Marble with Aluminum:

- Avoid using sanded grouts to prevent scratching of aluminum, polished, or high-honed marble.
- Pre-seal marble with aluminum mosaics before grouting to prevent pigments in grout colors from staining natural stone.
- Do not allow the sealer to dry on the aluminum surface; apply to small areas and remove excess sealer with a microfiber cloth before drying.
- Pre-sealing facilitates easier installation cleanup of grout residue.

Sealing
Sealing Marble and Grout Joints after installation regardless of the type of finish:

- Use a high-quality penetrating sealer like *Aqua Mix® Sealers Choice® Gold* to maintain the stone's natural color or a color-enhancing penetrating sealer like *Aqua Mix® Enrich 'N' Seal™* to enhance the natural color of the stone.
- Apply each coat of sealer in a different direction (e.g., first coat Left to Right, Second coat Front to Back).
- Do not allow the sealer to dry on the aluminum surface; apply to small areas and remove excess sealer with a microfiber cloth before it dries.
- Multi-sided or 6-sided sealing of material 48 hours before installation minimizes darkening of marble on shower floors caused by water absorption and reduces the formation of effervescence and rust.
    - Use in areas with excessive moisture exposure: shower floors, marble walls along the base of the shower or tub flange, soap niches.
    - As per National Tile Contractors Association Reference Manual, Custom, or Mapei technical articles.

Common Problems
Common problems in Natural Marble with Aluminum:

- Stain Removal:
    - Sealing marble helps reduce staining.
    - Clean up spills promptly.
    - Minor stains can be removed using a Product like *Aqua Mix® Poultice Stain Remover* per the manufacturer's directions.
- Etching in natural stone:
    - Sealing marble after installation helps minimize etching.
    - Enhancing Sealers may help hide the dullness of some etched stones, but professional repolishing may be required to eliminate it.
- Lippage or uneven surface height issues are often a result of improper installation.
    - Always inspect material for uniform thickness before installation.

<p style="text-align:center;color:red;font-weight:bold;">Installation is Acceptance</p>