

Kaohsiung Subway Stations Mosaic Art Work

Kaohsiung, Taiwan



INSTALLER:

- Hommoukang Mosaic Studio

PRODUCT FEATURED:

- ABA 662.V General Purpose Substrate Bonding Primer
- ARDEX STS 8 Superior Tensile Strength Tile Adhesive
- ARDEX E90 Mortar Admix For Use with ARDEX Cement-Based Adhesives
- ABA 680.J Cement-Based Tile Grout
- ABA 695.J Polymer Modified Cement-Based Grout

CHALLENGES:

- Mosaic tile design on floors, walls and statues (360 m² / 3875 ft²)
- Humid and hot environment

PROBLEM:

In creating the Kaohsiung Rapid Transit System (KRTS), the Kaohsiung Rapid Transit Corporation (KRTC) hoped to increase development to the Kaohsiung region in South Taiwan. Eventually they realized high quality design should be beautiful and functional if it is going to attract attention. The KRTC incorporated a mosaic display into the transit station design to support public art and become a driving force in improving the surrounding community. Part of this art installation design was pieced together with the assistance of ARDEX products. Since the temperature was extremely humid, a thinset with a sufficient open time and extended pot life was needed.

SOLUTION:

Mosaic tiles were to be installed on the concrete floors, enamel walls and decorative statues. Through the use of design maps, the installation was quickly implemented using ARDEX STS 8 Superior Tensile Strength Tile Adhesive and ARDEX E90 Mortar Admix. High humidity allows for limited working time and causes tile adhesives to set extremely fast. Due to the high humidity, workers needed to install the tile quickly. The use of design maps allowed workers to cut tiles into the desired shapes to expedite the installation.



Each substrate was initially treated with ABA 662.V General Purpose Emulsion Bonding Primer to create a strong bond for the tile adhesive without a need for mechanical treatment. ABA 662.V is used to seal absorbent, porous substrates and improve the adhesion of ARDEX Tile Adhesives. ABA 662.V can be used indoors and outdoors, for residential or commercial applications and on walls or floors because it is fast drying and contains no hazardous solvents. Once the ABA 662.V dried, Hommoukang Mosaic Studio applied a slurry of the ARDEX STS 8 Superior Tensile Strength Tile Adhesive with ARDEX E 90 Mortar Admix. This product combination increased the bond strength between the tile and the substrate.

Once tiles were placed, ARDEX recommended two types of grout: ABA 680.J Cement-Based Tile Grout for indoor installations and ABA 695.J Polymer Modified Cement-Based Grout for outdoor installations. ABA 680.J and ABA 695.J can be used with every type of tile, and are especially suited for tile installations with joint widths of 5 to 10 mm wide, as there is no shrinkage when drying. ABA 695.J is ideal for outdoor installations because it is mold resistant, water repellent and does not trap dirt. These properties improve the likelihood that the tile artwork would not become damaged over time from outdoor weather conditions in a tropical climate. Both grouts are available in a wide range of colors to further customize installations and can be used for indoor and outdoor installations.

For additional information, please contact ipss@ardexamericas.com

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