TAMPA INTERNATIONAL AIRPORT
Project Spotlight

CONTRACTOR: Architectural Tile & Marble
Tampa, FL

DISTRIBUTOR: Alpha Tile & Stone
Tampa, FL

ARCHITECT: Gresham Smith and Partners
Tampa, FL

BUILDING OWNER: Hillsborough County Aviation Authority
Tampa, FL
**Situation**

With 18 million travelers passing through each year, the Tampa International Airport has grown into a bustling hub of Southeast aviation. After nearly five decades since its last renovation, the airport has embarked on a massive $1-billion, multi-phase upgrade that will allow it to handle nearly 40 million travelers by the end of 2017.

As part of this renovation, the airport called for approximately 110,000 ft$^2$ (10,219 m$^2$) of new flooring in spaces, including the entire second level ticketing area and the Terminal F monorail drop-offs, international lobby and restrooms. This extensive project began in 2012 by Architectural Tile & Marble.

“As a boy in the late 1960’s, I traveled with my father to Italy to select marble tiles for Tampa International’s newest terminal at the time. The marble installed by my father on all of the columns of the main terminal remains in place today,” said Wil Ramos, Jr., President of Architectural Tile & Marble. “From one family company to another, my team was able to rely on LATICRETE employees and its products to produce high quality installations regardless of the situation.”

**Challenge**

Non-Stop Traffic: Remodel work is always a challenge; however, remodeling at an airport that operates around-the-clock can easily make working conditions problematic. To complete the flooring renovations at hand, Architectural Tile & Marble was required to work around travelers, often having to shift locations depending on that day’s transportation flow to minimize foot traffic.

High-Humidity Environment: The average yearly relative humidity in Tampa is 74 percent. Among the summer months, Tampa averages a relative humidity between 87 and 91 percent in the morning, making it one of the most humid cities in the nation. To set the tile throughout the airport, Architectural Tile & Marble was required to use products that could accommodate damp weather conditions and not contribute to mold or mildew.
A LATICRETE Solution

For Architectural Tile & Marble, utilizing LATICRETE® products that were easy-to-install, rapid-setting, able to withstand heavy use and maintain a clean air environment were vital to this renovation.

Before beginning any tile work, Architectural Tile & Marble used NXT™ Level, a cement-based underlayment, to produce a flat, smooth and hard surface. Once cured, NXT Level is durable, fire- and heat-resistant, non-combustible and maintenance-free, making it the perfect product to be at the foundation of a busy airport. Additionally, this product was chosen to level interior substrates because of its lack of contribution to mold or mildew growth, which was an important factor to consider due to the high levels of relative humidity throughout the airport. If indoor relative humidity reaches 60 percent, mold and mildew can begin to form and a musty odor will develop, but with NXT Level this is not a concern.

For conditions that existed at the monorail drop-off section, Blue 92 Anti-Fracture Membrane was used as an anti-fracture membrane. This two-part system consists of liquid rubber and reinforcing fabric that becomes highly flexible when cured. In many of the other areas, such as the international lobby, HYDRO BAN®, a thin waterproofing and anti-fracture membrane, was applied in two separate coats to offer anti-fracture protection of up to 1/8” (3 mm) over shrinkage and other non-structural cracks. These products were chosen because of their quick and easy application process, as well as their fast curing abilities. Within a few hours, Architectural Tile & Marble was able to begin installing tile.

To install large and heavy 12”x 24” (300 x 600 mm) porcelain tiles throughout the airport, Architectural Tile & Marble chose 4-XLT for its incredible non-sag performance. The multi-use, polymer fortified adhesive mortar not only exceeds ANSI A118.15, A118.4, and 118.11 Shear Bond Strength Requirements, but also meets the "Extra Heavy" rating per ASTM C627, making it the perfect large and heavy tile adhesive mortar to accommodate the project’s specific needs.

SPECTRALOCK® PRO Premium Grout® was chosen by Architectural Tile & Marble because of its high strength ability to withstand excessive traffic. The patented, epoxy grout is crack and chemical resistant and offers excellent color uniformity, durability and stain protection which will hold up nicely as the number of travelers per year at the Tampa International Airport continues to increase.

Outcome

“From the design stage to handling technical issues in the field, LATICRETE came through with flying colors whenever assistance was needed,” said Ramos.

The partnership between Architectural Tile & Marble and LATICRETE will continue through 2018 as the team currently works to complete 340,000 ft² (31,587 m²) of the third level’s main terminal flooring, as well as the restroom and flooring of the car rental facility (ConRac) and the automated people mover stations (APM’s). Due to the high-quality of the tile and flooring installations throughout the Tampa International Airport, Architectural Tile & Marble also have several new projects in place to continue renovations through 2020.

“The airport is typically the first and last impression of a city for travelers,” said Ramos. “As a lifelong Tampa resident, I am honored to have had the opportunity to work on such an influential landmark.”