



Naples Fire-Rescue Station

General Contractors: Manhattan Construction

Architect: Architects Design Group

Tile Contractor: Creative Stoneworks

Merkrete Sales Representative: John McIntyre

Distributor: Emser Tile

Merkrete Products Used: Merkrete Hydro Guard SP-1

Merkrete 855 DUSTLESS XXL

LHT Mortar



Naples Fire-Rescue Department Fire Station No.1.

Rescue is one of the most important functions of every fire department. From the first day of recruit school, firefighters are trained that life safety is the number one priority. Rescues are situations where firefighters promise their communities that they will endanger their lives to try to save another. It is a job responsibility that requires continual preparation.

It was not too long ago that mentioning rescue in the fire service meant that someone was typically saved from a fire. Today, rescue comes in many forms. Besides saving people from the ravages of fire, firefighters are asked to respond to vehicular crashes, some that require extensive extrication of patients; hazardous materials incidents where people are exposed to chemicals and toxic waste; and a host of other rescue scenarios such as swift-water, ice, confined-space, structural collapse or any situation that requires removing someone from harm's way. There are some basic premises that apply to all these potential events and some special preparations for the unique challenges that they may present.

Time is critical in rescue situations as fires can spread rapidly, and the window of opportunity to make a difference is narrow. In serious injury crashes, trauma victims need to get to appropriate facilities within a specific time-period or potentially face negative outcomes. Fire-rescue departments understand the need for an adequate response time to the various incidents and have the ability to begin these rescue operations quickly and within established safe operating parameters.



Merkrete 855 DUSTLESS XXL LHT Mortar used for installing 24" x 24" Coral Stone throughout the exterior.

Whether it's police officers, firefighters, first responders or 911 dispatchers, many dedicated Americans work long hours and often in difficult conditions to make sure that when someone is in need, they are there to help.

Naples opens new fire-rescue station and emergency ops center

The Naples Fire-Rescue Department received a massive upgrade last May with the new Fire Station No.1. The first visible sign began on August 14, 2016, involving the demolition of the old Fire Station No. 1 at 835 Eighth Ave in Naples, Fla. The razing took about 30



Additional exterior areas installed using Merkrete DUSTLESS 855 XXL LHT Mortar.

days, clearing the way for a new \$6.5 million, two-story, 22,600-square-foot fire station, administrative headquarters and state-of-the-art emergency operations center.

The new building exceeds FEMA 100-year flood zone levels, has the ability to withstand category 5 hurricane winds and is also the most cost-effective way to get operations and administrative staff all under one roof. This new fire-rescue station will provide critical infrastructure to the city of Naples and will meet the city's public safety demands for at least 50 years.

Developed in collaboration between Manhattan Construction, Creative Stoneworks and Architects Design Group, the new building includes three and a half apparatus bays and associated apparatus support spaces, battalion chief office, bunk and restroom, general facility functions such as kitchen, dining, report writing, physical agility, dormitories, restrooms and showers, and equipment storage spaces. Fire administration is located on the second floor and includes an emergency operations center and multipurpose room.

Vision and Functionality Come Together

When Creative Stoneworks was approached by Manhattan Construction to supply the high-performing materials they required, they knew they would need a trusted and top-quality installation system to comply with the high standard building codes to ensure a job well done. Upon reviewing the scope of the project, all answers pointed definitively to Merkrete, the leader in waterproofing, crack isolation and setting materials technology.

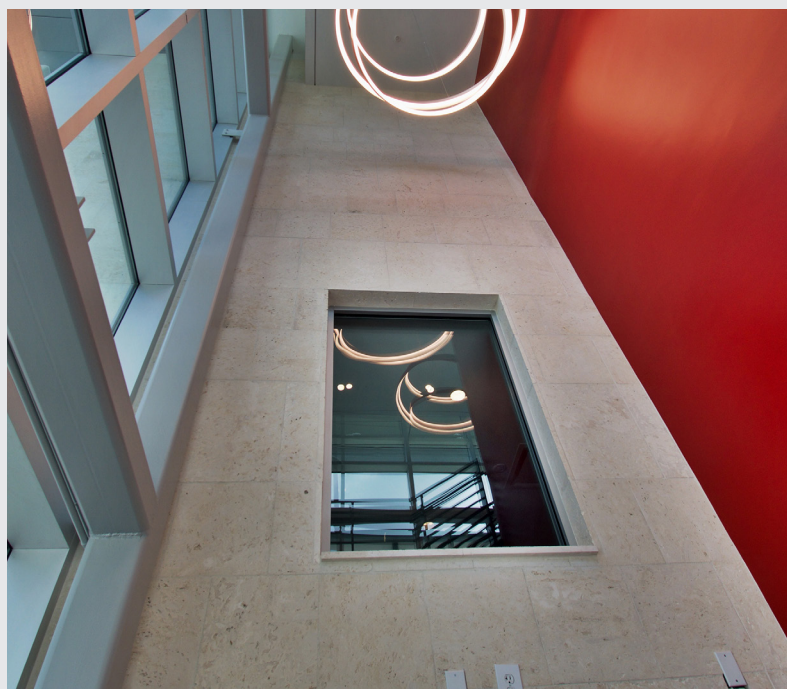
Creative Stonework's tile installation on the exterior of the new Naples Fire-Rescue Station consisted of approximately 10,000 square feet of 24 x 24 x 1.5 inch coral stone.

A Hurricane-Proof Solution Secures the Deal

John McIntyre, Merkrete technical sales representative, submitted a complete installation system including Merkrete Hydro Guard SP-1 waterproofing, crack isolation and air barrier membrane; and 855 DUSTLESS XXL LHT Mortar, a high-performance setting mortar that provides excellent non-sag characteristics for vertical stone applications in exterior conditions. This sole-sourced Merkrete installation system was submitted and approved by the team at Architects Design Group, and the Merkrete team was available as a resource for the project to answer any questions or address concerns relating to the installation system recommended.

The specifications called for crack isolation, waterproofing and air barrier on the exterior parts of installation to meet the new FEMA FIRM map elevations, as well as updated code required wind- and impact-resistant design.

Combined with an aggressive project schedule, work began using Merkrete Hydro Guard SP-1. Being a liquid-applied, fast-drying product, Hydro Guard SP-1 combines crack isolation up to 1/8" and a waterproof system to enable crews to prepare the substrate for setting tile at a faster pace. Hydro Guard SP-1 displays excellent elongation, adhesion and high-strength properties to provide a 100-percent-waterproof membrane that prevents the transfer of substrate cracks to the finished ceramic or stone tile surface. "Merkrete's liquid membranes have been a staple in the industry for



Interior porcelain panels installed with 855 DUSTLESS XXL LHT Mortar.



Exterior protected using Merkrete's Hydro Guard SP-1 waterproofing & crack isolation membrane.

many years and we rely on its performance," said Eric Gubelman, Creative Stonework general manager.

There was no doubt that setting the large tile and stones on a vertical surface would present its fair share of installation challenges due to the tight tolerances used to maintain the beauty of the tile and overall aesthetic of the installation. So, selection of the setting material was critical, especially when installing large and heavy tile (LHT). LHT mortars are not for leveling or truing the substrate, instead they are intended to help fill the irregular space between the tile and the underlayment.

Merkrete proved the perfect match for a specific challenge, considering the strength of the mortar it called for. "We used large and heavy natural stone, which required a mortar with a super high bondability that can handle the weight of the panels," said Gubelman. McIntyre added, "Merkrete 855 DUSTLESS XXL is a high-performing multipurpose polymer-modified setting adhesive for installing extra large format porcelain, ceramic tile and natural stone for both floors and walls and can be used as thin- or medium-bed setting adhesive for stone. Merkrete proved it could hold its weight allowing Creative Stoneworks the versatility they required."

Creative Stoneworks' preferred mortar for these types of applications was Merkrete's 855 XXL DUSTLESS LHT Mortar. "The smooth and creamy material makes for easy spreading, especially when speed is a factor," said Gubelman. 855 XXL LHT Mortar worked great for both floors and walls and offers high strengths and flexibility.

It was critical that Creative Stoneworks choose a company that would be able to get the products delivered when required to complete the job on time. Merkrete is a member of ParexGroup, one of the largest companies and a worldwide leader in tile setting materials, façade finishes and technical mortars, established in 22 countries with 68 manufacturing plants and over 4,100 employees. "Merkrete was perfect for this project's requirements, because we have plants and distribution centers all over the country, so our turnaround time and ability to get products from our Haines City, Fla., location to the job site were no problem," said McIntyre.

The Naples Fire-Rescue Department moved into their new home on May 1, 2019, to proudly protect and serve their community. Many thanks to all police officers, firefighters, first responders and military personnel who dedicate their lives to provide comfort and safety to all of us!



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Merkrete
Hydro Guard SP-1

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DUSTLESS XXL
LHT Mortar