



Globally Proven
Construction Solutions

VOLUSIA COUNTY WASTE TRANSFER STATION

Project Snapshot - L&M™ EMERYTOP 400™



Situation

Tipping floors found in waste transfer stations and material recycling facilities (MRF) undergo attacks that are extreme and unique to the solid waste industry. In fact, there isn't a more abused floor than one found in this environment. The attacks come in three forms: impact, abrasion, and chemical.

Orlando-based Cornerstone Construction Services has an ongoing waste transfer station project located in Deland, FL. Cornerstone has many years of experience placing L&M™ EMERYTOP 400™, an emery aggregate topping for concrete surfaces, and the contractor's clients have enjoyed great success with the topping's durability and protection against abrasion, impact, and chemical attack.

Since facility uptime is vitally important, the Volusia County waste transfer station floor is broken-up into 4,000 sq ft (372 m²) sections to keep the transfer station operational during the concrete work. Waste transfer station flooring projects are typically long-term, and Volusia County is no exception. This project split the three service bays over a 5 fiscal year contract.

Challenge

Cornerstone begins by removing the top 1" (2.5 cm) of concrete. They then clean and prepare the surface.

Hardener toppings require a bonding agent to bind the existing prepared concrete to the new topping. Cornerstone uses DRYTEK™ Epoxy Primer, a 100% solids epoxy binder, to ensure a strong bond between the two surfaces.

CUSTOMER:
Volusia County Transfer Station
Deland, Florida

INSTALLER:
Cornerstone Construction Services
Orlando, Florida

**WASTE TONNAGE
PER DAY:**
400 to 600 tons



A LATICRETE Solution

Tons of material is required when mixing and placing L&M™ EMERYTOP 400™, even in sections. Supersacks weighing 3,000 lb (1361 kg) are hoisted above the mixers and lowered into the back of the truck for agitation with water.

L&M EMERY TOP 400 is placed just like regular concrete. It is mixed in a ready mix truck and then poured out onto the prepared surface. Cornerstone's crew then places and levels off the topping.

Just after placing the fresh topping, the Cornerstone crew uses L&M Dress & Seal™ WB 30, a curing and sealing compound, and Burlene curing blankets. This combination ensures proper hydration and longevity of the new surface.

Outcome

With years of experience placing L&M EMERYTOP 400 in waste transfer stations, Cornerstone's projects typically go almost flawlessly. The company works both regular and off-hours in order to see projects to completion.

The Volusia County waste transfer station remains open during all preparation and placing phases of the L&M EMERYTOP 400. The new surface cures and is then returned to service. The fast turnaround time is a differentiating feature of the L&M EMERYTOP 400 topping, often allowing facilities to re-open after a partial weekend shut-down.

Volusia County management are happy with their new transfer station floor, even several years after the first phase of the installation. Despite 400 to 600 tons of waste and chemicals pushed across the floors daily, transfer station surfaces protected with L&M EMERYTOP 400 experience minimal wear, even in the harshest conditions. The Volusia County waste transfer station project was finished in 2015.

