



PINE COUNTY

JAIL



FEATURED PRODUCTS

Series 73 Endura-Shield
Series 161 Tneme-Fascure

Series 215 Surfacing Epoxy
Series 273 Stranlok ML

Series 280 Tneme-Glaze

Officials at the Pine County Jail in Pine City, Minn. had a very specific set of requirements for the shower stalls being built in their new detention facility. The stalls needed to be seamless, impact resistant, low maintenance and easy to clean.

Diversified Coatings, Fridley, Minn., was contracted to install a fiberglass mat-reinforced epoxy system in the shower stalls. A common problem when applying this type of a system to concrete block is the need to address mortar joints prior to installation of the fiberglass mat. Failure to fill the joints can lead to voids being left behind the mat, which can become weak spots once the area is put in service.

Filling the mortar joints can often be a difficult and expensive process. Many patching compounds lack structural integrity; 100% solids epoxies have a tendency to exotherm and/or lose viscosity when applied too thick; and epoxy mortars are difficult to apply. All of these problems can lead to high labor expenses, and ultimately a high installation cost.

Diversified initially tried filling the mortar joints at the new Pine County facility with an epoxy mortar, but experienced difficulty in achieving a smooth surface at a reasonable production rate. They turned to Tnemec coating consultant Kevin Renslow for assistance. Renslow recommended the use of Series 215 Surfacing Epoxy, an excellent epoxy material for surfacing, patching and filling voids and bugholes in concrete substrates. Series 215 is non-sagging, provides a smooth surface and is typically topcoated with high performance epoxies and urethanes.

Series 215 was spray applied and troweled at approximately 1/32 – 1/8”, then the fiberglass mat was laid into the Series 215 bedding coat while it was still wet. Next a coat of Series 280 Tneme-Glaze, a polyamine epoxy, was roller applied to saturate the mat and followed by a second coat of Series 280 to complete the system.

The use of Series 215 dramatically improved the production rate and in the end helped to provide the owner with a smooth, durable system. In additional, all metal in the facility received a coating system including Series 161 Tneme-Fascure and Series 73 Endura-Shield, both spray applied by Schoenfelder Painting, Minnetonka, Minn.

Initially constructed in 1983 with a capacity of 23 inmates, the new Pine County detention facility was designed to hold 135 inmates and is staffed by a fulltime Jail Administrator, Assistant Jail Administrator, Jail Programmer, 13 full-time jailers, 9 part-time jailers, a Jail Nurse, STS crew leader and a Jail Matron.

PROJECT INFORMATION

Project Location

Pine City, Minnesota

Project Completion Date

July 2007

Owner

Pine County, Minnesota

Architect/Engineer

BKV-Group
Minneapolis, Minnesota

Contractor/Applicator

Diversified Coatings
Fridley, Minnesota

Schoenfelder Painting
Minnetonka, Minnesota



After experiencing difficulties filling mortar joints with an epoxy mortar, contractors applied Series 215 Surfacing Epoxy to achieve a smooth surface in the shower stalls at the Pine County Jail in Minnesota.