

CASE STUDY



PROJECT SNAPSHOT

PROJECT

Rehabilitation of Sewerage Network System: Phase 4 - Eastern Area Contract 2

LOCATION

East Coast Area, Singapore

PROBLEM

Excessive I & I and corrosion

SOLUTION

Quadex®'s GeoKrete® Geopolymer spray-applied to 1/2" | 2mm thickness to achieve desired structural integrity and corrosion protection. Troweled to a smooth finish.

CONTRACTOR

PMPS Liner Technologies (s) Pte Ltd.
Singapore
Mr. Jackie Yeo, CEO
jackie@pmpsliner.com

PROJECT MANAGER

Brian Good
Busby Construction

CONTACT

Josh Marazzini
Technical Director
josh.marazzini@vortexcompanies.com

Sewerage System Rehab and Upgrade Utilizes GeoKrete® for Manholes

GEOKRETE GEOPOLYMER THE PREFERRED CHOICE TO REHAB 40 MANHOLES IN SINGAPORE

VORTEX
PRODUCTS
USED



THE CHALLENGE

As part of a much larger project, where over 17 miles | 28km of pipe was being rehabilitated on the East coast of Singapore, 40 manholes were also found to be in need of restoration to arrest I & I and corrosion. Once completed, the newly rehabilitated Sewerage Network System would not only be free of I & I and corrosion, but will also have increased capacity.

THE SOLUTION

The workers particularly liked the ease of application and the lack of "fall-down" of GeoKrete when compared to other materials. GeoKrete® Geopolymer also performed well in third Party Testing and the contractor, PMPS Liner Technologies, also demonstrated how easy it was to apply. With those two important factors, GeoKrete was approved. All 40 manholes were rehabilitated over a four month period. To ensure a smooth and consistent wall thickness, a special designed, chain driven, spin-casting spray apparatus was developed. Mounted on a tripod, then centered over the manhole opening, the apparatus is lowered, then raised up and down the manhole until the desired thickness is achieved.



Manhole Before



Manhole After