Sulfuric Acid Resistant Mortar

BACKGROUND

- Typical concrete structures are considered to have *fifty-year durability* based on the idea that the primary cause of their degradation is *neutralization*.
- Sewerage facilities have far less durability because of highly corrosive sulfuric acid.
- The concrete corrosion rate by sulfuric acid goes far exceed neutralization.
- The durability improvement of the concrete structure has been one of the biggest challenges for sewerage facilities over the years.
- Japan Sewage Works Agency(JS) suggests two methods for sulfuric acid resistant: Coat-type lining method; Sheet lining method.
- JS released "The Corrosion Control Guideline for Concrete Structures in Sewerage Facilities" ("JS' Corrosion Control Guideline") that sets the specifications of sulfuric acid-resistant mortar as a concrete section repair material.
- Today, sewerage service coverage became up to 78% in Japan, and most of the facilities have no measures for sulfuric acid corrosion.
- Reducing lifecycle cost of sewerage facilities needs a durability improvement of the concrete structure.

Sulfuric Acid Resistant Mortar

Apply sulfuric acid resistant mortar on the concrete surface

Sulfuric acid resistant mortar



