

Lining of Sewer Aerator Floats

Case study

Focus product: Intercrete® 4840

Location: Iran

Client: Qom Waste Water Authority, Iran

Contractor: Delfard Sistan Co, Iran

Summary: External and internal protection of steel aerator floatation units in contact with sewage



Background

The sewer aerator floatation units were suffering from advanced corrosion owing to aggressive attack of acidic waste water combined with the inevitable effects of impact damage.

The surface deterioration was exacerbated by exposure to harsh direct sunlight, and the historic use of coal tar or epoxy coatings had proved unsuccessful. The Qom Waste Water Authority sought modern alternatives, and the prospect of a novel cement based material was welcomed by the Client.

The solution

Intercrete 4840 is a polymer and epoxy modified cementitious coating which is applied without a primer, its unique reactive passivating mechanism giving immediate protection. It was chosen due to ease of application by unskilled labour using simple brush techniques. Prior to application of the product, the contractor used ultra high pressure water washing to remove corrosion and surface contamination, whilst also cooling the surface immediately prior to application. Intercrete 4840 does not require preparation to Sa2½ providing cost-effective corrosion control.