



CONCRETE REPAIR & PROTECTION SYSTEMS: Tstrata ISR™ Precast Sulfur Pit Roof System

struc'tural
TECHNOLOGIES

STRUCTURAL TECHNOLOGIES' Tstrata ISR™ Precast Roof System for Sulfur Pits are engineered to maximize long-term durability and provide a rapid installation solution while pits are removed from service.

The key feature of our engineered roof systems is the use of Tstrata ISR™, a sulfate resistant concrete restoration material which provides long-term resistance to the harsh conditions of molten sulfur containment structures. The premanufactured roof panels are fully cured to provide resistance to thermal shock while in operation.

Our team provides comprehensive roof design, material selection and fabrication. When STRUCTURAL TECHNOLOGIES teams with one of our specialty contracting companies – we offer our turnkey Investigate-Design-Build (IDB) approach to provide a seamless process from initial design through installation with single-source responsibility.



Key Features:

- Tstrata ISR™ concrete material offers long-term durability
- Premanufactured panels arrive on site and install rapidly for quick turnaround
- Custom designed for each application





Tstrata ISR™ Precast Roof System Components

Tstrata ISR™ Precast Roof Systems are custom designed for each unique application, but typically include the following critical components developed by STRUCTURAL TECHNOLOGIES:



Tstrata ISR™ – Sulfate Resistant Restoration Material:

Tstrata ISR™ Sulfate Resistance (ASTM C1012)	
28 Days	0.01%
6 Months	0.02%
12 Months	0.02%

Tstrata ISR™ is a specially formulated, microsilica modified, one part concrete restoration material with integral corrosion inhibitor designed specifically for restoration of sulfur pits' structural components.



Durable Joints

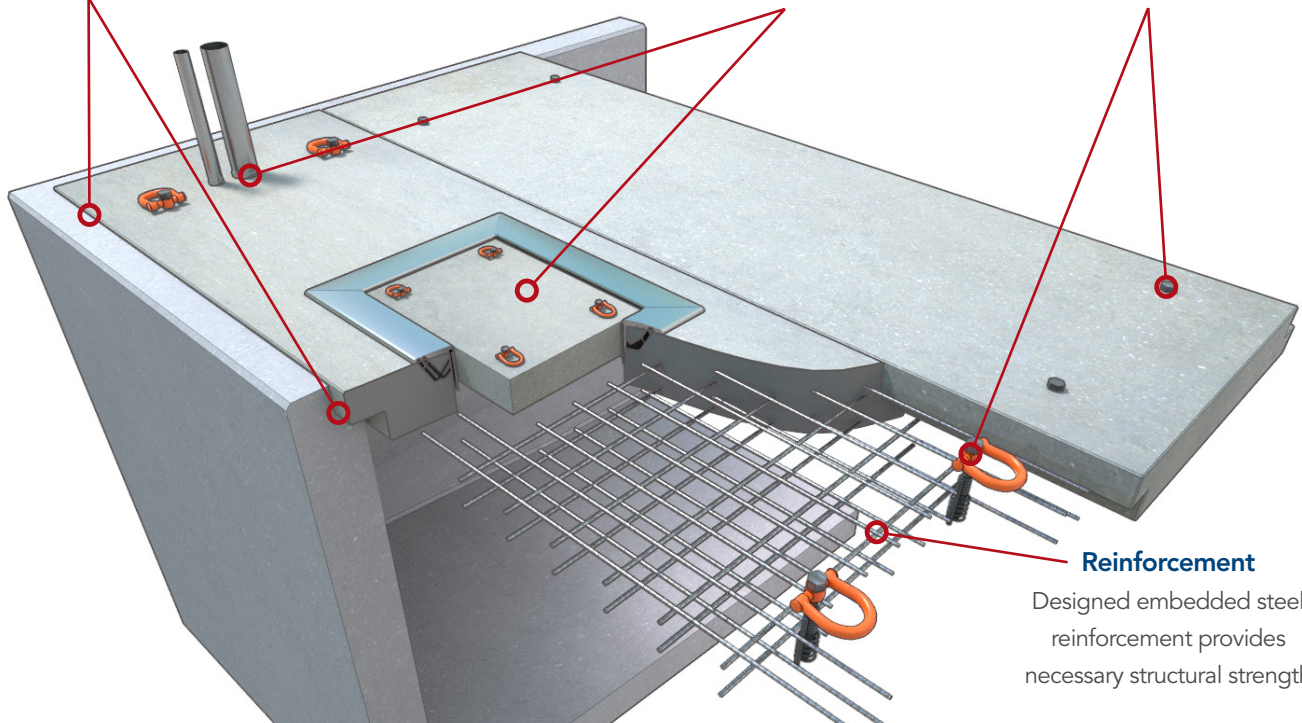
Wall/roof junctions utilize chemical-resistant sealants, high-temperature backer rods, and an engineered shiplap gasketed joint.

Penetrations

Manufactured with required mechanical and access penetrations utilizing stainless steel elements with integrated waterstops and surface sealant penetration curbs.

Lifting Anchors

Integrated corrosion-resistant anchors for installation. Hardware removed to mitigate tripping hazards after installation.



Reinforcement

Designed embedded steel reinforcement provides necessary structural strength