Airport Surface Repair
Fast, Easy & Permanent

Build on our strength
Unique Solutions for Problem Airport Surface Areas

Concrete pavement is widely used for constructing runways, taxiways, and apron areas. Airports are busier than ever and operating at capacity. They cannot afford to have paved areas cause gate closures or reduced landing/takeoff capacity due to maintenance and repair. Problems can occur in any number of ways; for instance, stresses may develop in airport concrete pavements such as: cracking (corner, longitudinal, transverse, durability/materials related); joint related (spalling, pumping, joint seal damage); and surface defects (scaling, pop outs, map cracking).

Every airport repair project comes with its own unique set of challenges. This is precisely why Five Star Products developed best standards and stringent quality guidelines to assure its products meet and exceed the requirements of each repair and rehabilitation project.

Moreover, Five Star Products’ expert engineering and technical teams will help you understand your options, and work with you to create unique solutions to overcome any challenge you face.
Within minutes of placement, durable, long-lasting repairs are able to handle vibration, heavy traffic, and thermal movement. They provide resistance to oil, grease, gasoline, salts and other chemicals. Five Star Products overcomes challenges anywhere on the airfield. Quality doesn’t just happen. It results from knowledge, product dedication and a proven track record. The right materials are vital for producing high quality and long lasting airfield concrete solutions. In short, quality is built into every Five Star® product.
Reduce Runway Downtime

Rapid Surface Repair Easy Mix™
Use for spall repairs; airport lighting; expansion joints; control joint filler; repair of cracks and potholes; and resurfacing runways, walkways, floors and parking lots.

TRAFFIC READY IN AS LITTLE AS 30 MINUTES

SIMPLE BUCKET MIX

EASY TO INSTALL

HIGH COMPRRESSIVE & BOND STRENGTHS

Spall Repairs

Taxiway Repairs

NO PRIMER REQUIRED
Safety Issue: ELIMINATED
LAX (LOS ANGELES INT’L. AIRPORT)

Five Star® Rapid Surface Repair Easy Mix™

THE CHALLENGE
A large US international airport which handles over 650,000 takeoffs and landings yearly* was dealing with cracking, holes and loose material on a variety of taxiways, taxi lanes and other high-traffic surfaces. Loose material, or FOD (foreign object debris), can be sucked into airplane turbines or shoot across runways — a serious problem requiring a permanent solution. In-pavement or inset lights have specific uses and different colors to signify their purpose along runways and taxiways. Just as on runways and other surfaces, a variety of stresses affect the pavement in which the lights are installed. Stresses on runways and taxiways are imposed by dynamic impact; by static, torsional and hydraulic loads; by temperature differentials; and by abrasion and corrosion.

THE SOLUTION
Five Star Products technical experts met with the maintenance department to review the issues and determine the best repair solution. Following a thorough assessment, Five Star Products’ technical team conducted patch tests on several taxiways by applying Five Star Rapid Surface Repair (RSR) Easy Mix. Based on the favorable test results, RSR Easy Mix was approved for use. RSR Easy Mix provided a permanent bond eliminating the potentially dangerous problem of FOD (foreign object debris). It does not require any primer—an advantage since most existing primers do not adhere well to asphalt. RSR Easy Mix worked superbly on surface areas and the in-ground lighting systems and continues to be used as the solution for surface repair.

Speed Up Your Repair Jobs

**Highway Patch**

Use for airport runways and taxiways; highways and bridges; spall repairs; parking decks and ramps; expansion joint rebuild; dowel bar retrofit; cold weather repairs.

- **OPEN TO TRAFFIC IN 2 HOURS**
- **HIGH EARLY STRENGTH & HIGH BOND STRENGTH**
- **1 COMPONENT – EASY TO USE**
- **COLD-WEATHER INSTALLATION**

**Structural Concrete®**

Use for repair of concrete structures; parking structures; fast repairs for coatings; concrete floor repairs and overlays; construction joint repair; marine and hydraulic structure repairs; and repair of tanks, sumps and curbs.

- **FAST TURNAROUND**
- **HIGH 3-HOUR STRENGTH & HIGH BOND STRENGTH**
- **APPLICATION THICKNESS 1/4” TO 12”**
- **VERY LOW SHRINKAGE**
Structural Concrete® V/O
Use for the rapid repair of vertical and overhead surfaces such as load bearing walls, ceilings and other structural members; parking structures; column repairs; rapid repairs during shutdown; and marine and hydraulic structure repairs.

- **RAPID SETTING**
- **HIGH 3-HOUR STRENGTHS**
- **CAN BE COATED IN 8-24 HOURS**
- **VERTICAL & OVERHEAD SURFACES**

Structural Concrete® ES
Use for deep, large-volume repair of concrete structures and machinery foundations (pours up to six cubic yards); concrete floor toppings and overlays; hot weather concrete repair; and heavy industrial repairs and retrofits.

- **RESTORES STRUCTURAL INTEGRITY WITHIN HOURS**
- **HIGH EARLY STRENGTH**
- **LONG 45-MINUTE WORKING TIME**
- **COARSE AGGREGATE EXTENSION UP TO 80%**

MORE VOLUME WITH FEWER POURS
Cementitious Grouts
Epoxy Grouts
Concrete Repair & Overlays

Nuclear Safety Application Products
Specialty Concrete Repair
Infrastructure & Commercial Concrete Repair

Adhesives & Sealants
Coatings & Waterproofing
Chemical Grouts & Polyurethanes

Five Star Value

Pre-placement meetings
On-site support
Engineering & technical support

Five Star Products provides a comprehensive support system including technical, specification and customer support. From the planning stage to walking the site, our field engineering experts stay with a project until results are attained.