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 trafficked surfaces. 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 met with the maintenance department to review the issues and determine the best repair solution. Following a thorough assessment, Five Star Products’ technical experts conducted patch tests on several taxiways by applying Five Star® Rapid Surface Repair Easy Mix™. Based on the test results, RSR Easy Mix was approved for use. RSR Easy Mix provided a permanent bond eliminating FOD (foreign object debris) which can be sucked into airplane turbines or shoot across runways. 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 applied as the solution for surface repair.

Five Star® Rapid Surface Repair Easy Mix™ is a self-leveling, low viscosity, two-part liquid polyurethane-hybrid polymer. When supplemented with its proprietary blended aggregate, this product is used to repair and rehabilitate concrete and asphaltic concrete pavements. Traffic ready in as little as 30 minutes (traffic time dependent upon air and substrate temperature), these durable, long-lasting repairs are able to handle vibration, heavy traffic, and thermal movement. RSR Easy Mix eliminates product preparation problems; it’s pre-measured and extremely simple to mix and trowel down.

**ADVANTAGES**

- No priming required to bond to concrete, asphalt, steel or wood
- Waterproof, chemically resistant membrane protects substrates from freeze-thaw spalling
- Stops further corrosion of reinforcing steel
- Traffic ready in as little as 30 minutes* (Standard version); 2 hours* (LPL version)
- Use neat or with aggregate
- Very low odor
- Make repairs year round — can be used in temperatures down to 0°F (-18°C)

**USES**

- Expansion joint and bridge header reconstruction
- Control joint filler
- Repair cracks, potholes, spalls
- Resurface runways, walkways, floors, and parking lots

**FIVE STAR® SERVICES**

- Design-A-Spec™ engineering specification assistance
- Technical on-call center with field and project experienced staff
- Field support representatives for on-site consultation
- Corporate research laboratory available to customize products for unique applications

*Traffic time dependent upon air and substrate temperature.