

# MARKET APPLICATION FOCUS

**Commercial Buildings** 

**Waterproofing** 

**Expansion Joint Resealing** 

**Project:** Teachers Federal Credit Union Building

Long Island, NY

**Owner:** Teachers Federal Credit Union Teachers Federal Credit Union

**Year:** 1997

#### THE PROBLEM

Most of the joints of the 15 year old precast concrete headquarters building of this Long Island, NY, Federal Credit Union had failed in both cohesion and adhesion. Maintenance attempts at



preventing water leaking through several of the joints using a silicone sealant directly over the failed joint had offered only a temporary waterproofing solution and looked aesthetically unpleasant.

Waterproofing specialists, Restor Technologies Incorporated were asked by the owners to inspect the building and provide a long term solution, using a non-staining joint sealant, which had proven durability for the considerable temperature differential of this exposed location.

Following the condition survey of the building, Restor Technologies concluded the failure of the existing sealant was due to its inability to contain the considerable movement cycles from the large precast panels.

#### THE SIKA SOLUTION

Following mechanical removal of all existing sealant and backer rod, the walls of the joint were cleaned and Sikaflex 2c NS applied.

Sikaflex 2c NS, a two-component polyurethane sealant with thousands of project references over more than a decade across the USA, was selected by the contractor for this application, due to the capabilities to contain not only lateral movement in excess of 50%, but also the potential of shear movement. Furthermore, Sikaflex 2c NS, available in 40 standard colors, provides outstanding bond and durability when used to reseal joints as part of a maintenance program.



The Sikaflex specified will give the Federal Credit Union owners of this building a proven, elastic waterproofing system for many years to come.



# For Concrete Building Facades... Sika's System Approach to Concrete Repair and Protection

# **Anti-Corrosion Primer and Bonding Bridge**

Sika Armatec® 110 EpoCem®- protects the steel from corrosion in areas of inadequate cover. Improves bond of repair mortar to both the substrate and steel.

#### **High-Performance Repair Mortars**

**SikaTop®PLUS mortars** - two-component, polymer-modified materials containing Sika FerroGard 901 corrosion-inhibiting admixture.

#### **Corrosion-Inhibiting Impregnation**

**Sika FerroGard®903** - spray-applied to protect areas outside the repair zone against future damage. Proven to penetrate and reduce corrosion effects of carbonation and salt exposure.

# **Surface Levelling/Pore-Filling Mortars**

**SikaTop levelling mortars** - achieve a level surface by filling pores, bugholes, or other irregularities in the surrounding substrate. Also provides additional effective concrete cover.

#### **Anti-Carbonation Coatings**

**Sikagard®550W and 670W** - protect concrete facades from the damaging effects of carbon dioxide (carbonation), water and pollutants. Either crack-bridging (550W) or rigid (670W), both are high-performance protection coatings, available in a variety of decorative colors.

# **Crack-Bridging Deck Coatings**

Sikafloor®Traffic Systems - protect decks, ramps, grandstands, and walkways with a durable wearing surface which waterproofs and prevents chloride ingress.

#### Joint Sealing/Waterproofing

**Sikaflex** High Performance Sealants - are premium-grade polyurethane joint sealants that are fully compatible with Sika's concrete repair systems.

#### **Epoxy Injection and Bonding**

**Sikadur**®- epoxy resins help restore structural integrity by injection into cracks and voids. The most comprehensive range of epoxy products for structural bonding and grouting.

# **Structural Strengthening Systems (CFRP)**

**Sika CarboDur**®- a proven system of external strengthening using epoxy-bonded Carbon Fiber Reinforced Plastic (CFRP) laminate strips. Stronger than steel, yet lightweight and non-corrosive, this system can solve unique strengthening problems in a variety of concrete structures.

#### 1-800-933-SIKA NATIONWIDE

#### Regional Information and Sales Centers

For the location of your nearest Sika sales office, contact your regional center.







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