



**SIKA AT WORK**

**BAHRIA TOWN TOWER KARACHI**

**STRENGTHENING OF CONCRETE BEAMS & SLABS**

BUILDING TRUST



# BAHRIA TOWN TOWER KARACHI

## REFURBISHMENT OF BAHRIA TOWN TOWER KARACHI WITH TM REFURBISHMENT PRODUCTS

### Project:

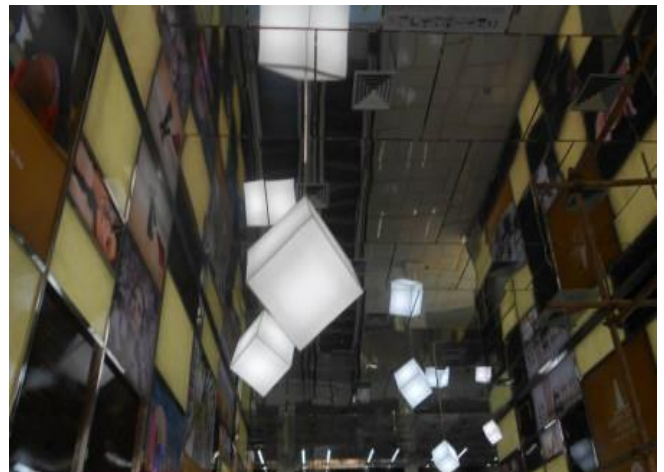
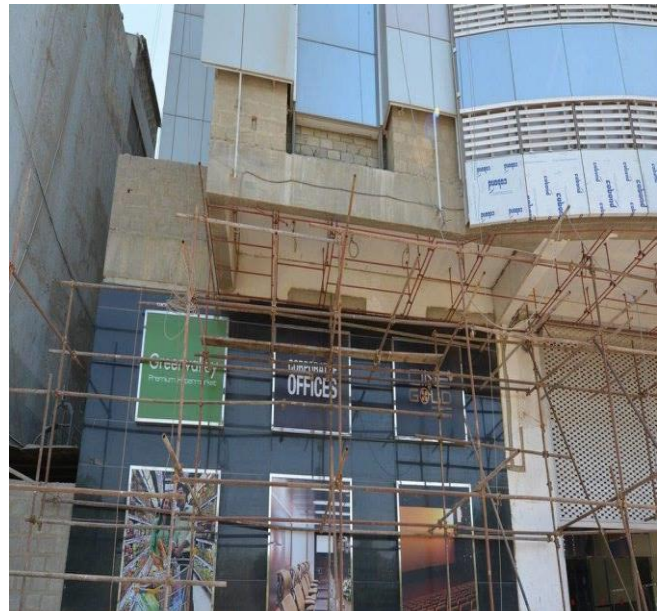
Bahria Town has been shaping landscapes and lives in Pakistan since the company's inception in 1996. Not just building homes, Bahria Town has developed value-added, master-planned communities housing thousands of families enjoying a complete living experience. Bahria Town Tower yet another marvel of Bahria Town Karachi is ideally located in the heart of the commercial hub of the metropolis. Bahria Town Tower Karachi is a multi-purpose building that will provide serviced apartments, corporate offices for Business Community of Karachi with proper place for business and residence in same location.

### Project Requirements:

The Tower is a 24 storey 275 feet tall building which aims to fulfill Complete residential needs under one roof. The serviced apartments are designed to change the life style of residents by exploring the world class living standard. Sika added its share by providing its World Class Construction solutions to meet the state-of-the-art needs of the housing tower. During the Construction of Bahria Town Tower Karachi, Client overlooked the Electronic Board that was to be placed at the Top slab during the designing of the structure. Client required refurbishment products in order to adhere to re-strengthening needs of the tower to bear the load of the Electronic Board. Refurbishment of Three floors of Bahria Tower Karachi was demanded by the Client. Carbon Fibre Fabric was required for beams and columns. In addition to this, Pultruded carbon fibre plates were required by the Client for increasing the capacity of floor slabs and beams. Structural adhesive was also demanded by the Client for bonding of carbon fibre plates to the structure.

### Sika Solution:

Sika Sales Team visited the site and recommended its Structural strengthening solutions. Following products were recommended: Sikawrap 230-C which is a woven carbon fiber fabric for structural strengthening was recommended for beams & columns. It is used for Strengthening of reinforced concrete structures, brickwork and timber in case of flexural and shear load due to Strength and ductility of columns, Structural design construction defects, Seismic movement etc.



In addition to this, Sika CarboDur Plates were recommended for beams and slabs. Sika® CarboDur® plates are pultruded carbon fibre reinforced polymer (CFRP) laminates designed for strengthening concrete, timber and masonry structures. Sika® CarboDur® plates are bonded onto the structure as externally bonded reinforcement using Sikadur®-30 structural adhesive. Sika® CarboDur® S512 & Sika® CarboDur® S812 were recommended. These were used to strengthen structures in case of load increase and also, for increasing the capacity of floor slabs and beams. Lastly, Sikadur-30 was recommended which is a structural adhesive and it's used for the bonding of Sika CarboDur plates. Sikadur-30 LP is a solvent-free, thixotropic, structural two part adhesive, based on a combination of epoxy resins. It is used as an adhesive for bonding structural reinforcement, particularly in structural strengthening works.



Final look of Bahria Town Tower, Karachi

**Project Name:** Bahria Town Tower Karachi

**Project Owner:** Bahria Town Karachi

**Consultant:** Loya Associates

**Contractor:** Athena Construction  
Chemicals