

Strengthening Structures | Protecting Lives Worldwide.











Transportation

Buildings

Pipelines

Waterfront

Industry



Location: Patras, Greece

Project: Seismic Retrofit of RESILUX S.A.

Client: Resilux SA

Contract Duration: 15 days

Seismic Retrofit of RESILUX S.A.,

Industrial zone of Patras, Greece.

The 30 years old structure suffered damage following a close distance high magnitude earthquake. Due to non-seismic resistant connection of the prefabricated beams with the columns supporting them, the corbels and the connection areas of the prefabricated beams were cracked.

The project had to be realized without stopping the operation of the factory. The nature of the Tyfo® System allowed that as the application duration was minimized and the installation area required was the smallest possible. The total obstruction of the production was small enough to keep the operation of the factory running at almost full capacity.

Tyfo® SCH-41 Carbon Composite System was used to wrap the supporting corbels and achieve confinement of the corbel area and in parallel strengthening of the elements for flexure and shear. Special use of the Tyfo® SCH Carbon Anchor System was required in order to create a close loop at areas with obstacles.

The Tyfo® BC Glass Bidirectiona1 (+45°/-45°) Composite System was used for strengthening the horizontal joints of the prefabricated concrete panels at the perimeter of the building. The requirement was to strengthen the joints against movement parallel to their axis. Tyfo® BC System was ideal for that task as the +/-45 degrees alignment of the fibers allow the system to take tension in both directions and in parallel being properly anchored at the elements. The Tyfo® SEH Glass Anchor System was used to enhance anchorage.

Scope of Works:

Seismic Retrofit and Structural Strengthening of Bearing structure





