



Commercial, Municipal and Residential Buildings

The Tyfo® Fibrwrap® advanced composite systems can be used to increase the strength of existing beams, slabs, walls, columns and structural connections. Strengthening applications typically include seismic retrofit, strengthening due to corrosion, change of use (e.g. commercial-to-residential, the addition of high-capacity filing systems, computer servers, topping slab material, HVAC equipment, heavy machinery, removal of bays and addition of new openings), or in some cases, the correction of an existing defect due to a construction or design error. The Tyfo® Fibrwrap® systems have been implemented in hospitals, government structures, churches, schools, parking structures, office buildings, homes and many other structures. These buildings have been both occupied and unoccupied at the time of retrofit.

Potential structural uses include the following:

- Seismic retrofit of structural elements
- Historic preservation and structural preservation
- Strengthening for added loads
- Strengthening for change of use
- Rehabilitation of corroded or distressed members
- Repair of an existing construction and/or design defect

The majority of the structural elements completed have been reinforced concrete and pre-stressed/post-tensioned concrete. However, steel encased members, steel members and wood components (piles, timber elements, glulam elements and truss members) can all be enhanced to some degree.