

# Quality By Design.

## Structural Engineering

### Some of the different services we have provided are:

- Inspection, evaluation, and analysis of several alternatives to structurally retrofit a 64 year old manufacturing building in order to remove the original boiler and replace it with three 120,000 lb. boilers for BASF Corporation. Work included strength modifications of existing foundations, structural framing, and floor systems.
- Evaluation of the roof structure in various areas of a 320 ft. long x 60 ft. wide building for Tagsons Papers. Visual inspection consisted of the roof trusses, girders, and purlins to determine the extent of deterioration caused primarily by moisture due to climatic conditions of the building. A structural analysis was performed to determine its capacity.
- Evaluation of the roofs of two buildings, each approximately 250,000 sq. ft. in size for General Electric Co. Reinforcements were designed for existing members that were found to be structurally deficient.
- Structural evaluation for the rehabilitation of the original brick masonry structure at Albany County Correctional Facility. Services included designing and detailing vertical expansion joints, rebuilding damaged walls, repainting mortar joints, and replacing steel lintels.



**Clough Harbour & Associates' LLP (CHA)** Structural Engineering experience includes providing designs for a varied range of clients from public and private sectors. Our work extends from structural investigations to multi-million dollar projects for highly visible structures. We are committed to providing creative quality-oriented solutions that meet our clients' needs and budgets.

### Our Services Include:

- **Foundations**
- **Substructures**
- **Pipe & Equipment Supports**
- **Facade Support Systems & Restorations**
- **Structural Investigations**
- **Building Evaluations**



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*"Satisfying our Clients with Dedicated People Committed to Total Quality"*