

PRECAST MAKES IT POSSIBLE

One in a series of case studies highlighting the unlimited possibilities of precast concrete construction.

PROJECT: TRUMBULL SUBSTATION SCREENING WALL

PRECASTER: SUPERIOR CONCRETE PRODUCTS INC. (www.concretefence.com)



Owner/Customer Name: United Illuminating Co.
Design/Specifying Engineer: Black & Veatch
Producer/Installer: Superior Concrete Products Inc.
Project Location: Trumbull, Conn.
Year Built/Installation Date: May 2008

THE CHALLENGE

The United Illuminating Co. needed to screen a new electrical substation with a 17-foot-high architectural wall to satisfy local residents' concerns about the aesthetic impact the facility would have on the neighborhood. Building a wall from typical construction materials such as brick, wood or stone would require a wider footprint to accommodate the greater height, which would gobble up valuable space and increase overall construction and maintenance costs. Finding materials that would continue to look attractive after years of harsh weathering would also be difficult.

THE SOLUTION

Precast concrete provided an ideal balance between strength, beauty, reliability and cost that ultimately satisfied the needs of the company and local residents. Superior Concrete Products supplied and installed a decorative precast concrete wall of modular design that met necessary wind loads, weathering, soil conditions and seismic factors without adding to the width. Superior's product also delivered greater cost effectiveness through reduced construction costs and maintenance requirements.

Project Details

- **Wall Material:** 5,000 psi reinforced integrally colored concrete with steel I-Beams
- **Length of Wall:** 1,015 linear feet
- **Height:** 17 feet
- **Completion time:** 2 1/2 Months

Precast concrete construction enabled the project to achieve a smaller footprint than with other materials. The wall is constructed from modular interlocking panels made of high performance fiber mesh and steel-reinforced concrete. Each piece is integrally colored in one of several tones. The tongue-and-groove design makes installation easier and faster than other types of walls and fences. The noise-reduction characteristics are equivalent to masonry as a reflective sound barrier.



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