

Flow-Liner® Pipe Lining Project Of “Titanic” Proportions

The Miramar Mansion



History of the Titanic and the Widener Family Home

RMS *Titanic* was a passenger liner that sank in the North Atlantic Ocean on 15 April 1912 after colliding with an iceberg during her maiden voyage from Southampton to New York City. The sinking of *Titanic* caused the deaths of 1,514 people in one of the deadliest peacetime maritime disasters in history. She was the largest ship afloat at the time of her maiden voyage. One of three *Olympic* class ocean liners operated by the White Star Line, she was built between 1909–11 by the Harland and Wolff shipyard in Belfast. She carried 2,224 people

Very late on the evening of April 14, 1912, Eleanor Elkins Widener and her maid stepped into one of the lifeboats of the *Titanic* after the ship struck an iceberg. Also aboard the *Titanic* were her husband George, and son, Harry. The gentlemen did not survive. The Widener family was returning from a visit to Paris, collecting their daughter's wedding trousseau and meeting son Harry, a noted book collector since his student days at Harvard. They were also looking for furniture and decorative objects for the Newport house (**The *Miramar***) being designed for them by the Philadelphia architect Horace Trumbauer.

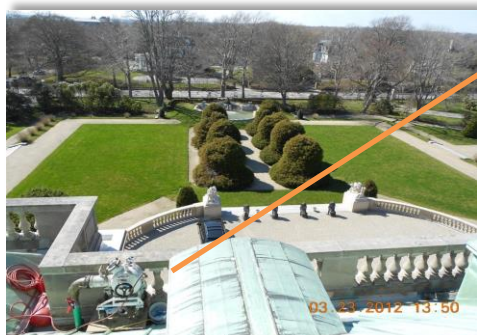
Upon her safe return to America, the widowed Mrs. Widener continued with plans for *Miramar*. Horace Trumbauer's design for *Miramar* was a classical French pavilion, inspired by 17th and 18th century French architecture, built to house Mrs. Widener's important collection of French furniture, boiserie, tapestries and porcelains, acquired under the guidance of the art dealer Joseph Duveen. Trumbauer was assisted by his gifted chief designer, Julien Abele, one of America's first successful African American architects. After some revision of the initial 1912 designs, construction on *Miramar* began in 1913 and continued with interior finish work and landscape installation until the official opening of the house in the summer of 1915. Recently *Miramar* has undergone extensive renovations.

Problem: The renovation contractor has several roof drain leader pipes in need of repair. The enclosed vertical roof pipes extend from the top of the roof, down to the storm water collection system.

Issues: The pipes are enclosed in decorative exterior stone walls. The contractor did not want to disturb the original decorative architecture and needed a non-invasive option to repair the pipes.

Solution: A certified and trained Flow-Liner® installer will line the roof leader pipes with the Flow-Liner® Cured-In-Place-Pipe Lining System.

Result: The roof pipes were lined without disturbing the buildings beautiful stone architecture. The contractor was able to complete his renovation project on schedule.



Flow-Liner®
Inversion unit shown
on roof

Roof pipe lined with
Flow-Liner®



Flow-Liner® is pleased to announce another successful project and add

Miramar Mansion

To our Roster of Happy Satisfied Customers