

PIPELINE REHABILITATION COMMITTEE REACHING NEW HEIGHTS WITH CIPP

BY CHAD MILLER



THE CURED-IN-PLACE PIPE (CIPP) PROCESS

has come a long way since it was first introduced to the United States back in 1976 when it was used to repair a pipe in a Fresno, California zoo. Momentum has grown at such a pace that it is now one of the most commonly used trenchless rehabilitation technologies in the market today. Typically used for mainline and lateral pipe repair, one of the lesser known and growing markets for CIPP is for the repair of in-building vertical pipes or stacks.

An important benefit of rehabilitating vertical pipes with CIPP, versus replacing the old pipe with a new one, is the ability to repair the pipe without breaking up floors and tearing out walls. While this is important to homeowners, it is of critical importance to institutions such as hospitals, prisons, universities, churches and any other facilities that cannot afford disruption to their operations, or displacement of people being served within their walls. It is also of great value to owners of historic buildings, as original flooring and walls remain untouched.

Pipelining Technologies, Inc., located in West Palm Beach, Florida, was recently called upon to evaluate 33 sanitary sewer vertical stacks that penetrated the roof of the 22-story Eastpointe Condominium 1 building in Riviera Beach, Florida. The property, built in the 1970s, was experiencing ongoing breaks, leaks and blockages within their vertical plumbing.

After exploring a variety of alternate repair options, the property owner chose Pipelining Technologies' proposal to reline the pipes utilizing the CIPP inversion method with Max Wovoliner — mainly because of the ability to continuously line the pipe from the roof, down through the vertical stacks and around the 90-degree bends at the bottom into the horizontal piping, all with a single shot. The

liner's unique seamless construction and looped felt design aided in the wet-out and installation process by saving time and lowering pressures during the inversion. The owner also appreciated the contractor's ability to robotically reinstate the branch line connections from inside the pipe; but most notably, not having to do the work from inside each private residence was a major plus.

In total, 27 stacks penetrated the roof, but during the initial inspection it was discovered that some fixtures were unaccounted for, presumably tying into stacks that weren't penetrating the roof. After careful assessment by CCTV, six more sanitary vertical stacks were re-vented into parallel stacks on the penthouse floor. In this case, the walls did need to be opened to create access to the pipes. Equipment transport and installations from the top of the 22-story building and inside the six dwellings were made easy with their compact inversion unit. Each liner was shot from the vertical access to the horizontal transition located in the drop ceiling of the lobby floor.

The entire project was completed in five months, one month earlier than expected. It not only saved the property owner significant money, but also minimized the environmental impact associated with demolition waste, cast iron sewer pipe disposal and safety (fire/air quality/dust). Most importantly, the impact of personal stress and inconvenience to the property's residents was alleviated thanks to the outstanding benefits of CIPP, which are now becoming more prevalent in this exciting new market.

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