

Case History

ECP Steel Piers™ PPB-350,
PPB-300 & PPB-250



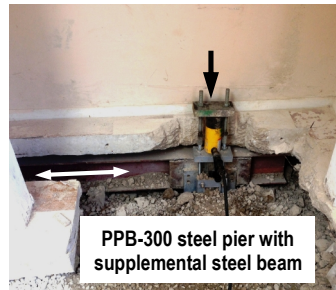
Sewer Line Leak Under Slab, No Problem?...

BIG PROBLEM!

Six homes in this 16 unit condominium suffered 3-1/2 inches of settlement on the perimeter and up to five inches of interior slab settlement. The engineers determined the cause of the foundation failure was leaks in the sewer lines below the floor.

The general contractor removed portions of the slab and replaced all sewer lines under

the floors. Forty-eight ECP Steel Piers™ were used to raise this structure and recover lost elevation. Some of the piers required supplemental steel beams under portions of the building that had insufficient concrete beams. US Waterproofing also replaced approximately 3,000 square feet of concrete slab following the pier installations and restoration to original elevation.



The engineer specified 25 PPB-350 steel piers that were generally located on the perimeter where the structural loads were highest. This product consists of an under footing bracket and 3-1/2 inch diameter pier pipe. Twelve PPB-300 systems with 2-7/8 inch diameter pier sections were located under interior bearing walls. Eleven PPB-250 interior pier systems were installed under non-load bearing walls.



Project Summary	
Project:	Stratford Green Condo Restoration
Engineer:	Joseph A Meyer & Associates
Installer:	US Waterproof – Chicago, Illinois
Products Installed:	25 ECP PPB-350 Steel Pier™ (3-1/2" dia.) 12 ECP PPB-300 Steel Pier™ (2-7/8" dia.) 11 ECP PPB-250 Steel Pier™ (2-7/8" dia.)
Depth to Bearing:	39 to 70 ft. - PPB-350 39 to 42 ft. - PPB-300 84 to 144 ft. - PPB-250
Ultimate Limit Capacity:	86,000 lb. - PPB-350 68,000 lb. - PPB-300 54,000 lb. - PPB-250
Average Test Load:	52,500 lb. - PPB-350 26,000 lb. - PPB-300 24,000 lb. - PPB-250
Amount of Lift:	Perimeter: Up to 3 inches Interior: Up to 4 inches

ECP Steel Piers™ were chosen as the best product for this restoration because ECP Steel Piers™ are rapidly installed using quiet, vibration free hydraulics. Once all ECP Steel Piers™ were installed and field load tested to verify competent load bearing, the structure was lifted to recover lost elevation and then a new floor slab was installed.

US Waterproofing completed this large restoration project in only 26 working days. The project was constantly inspected during construction and the finished job was approved by the engineer.