

A CASE HISTORY

Loading dock reduces column capacity by 60%

Job Description:

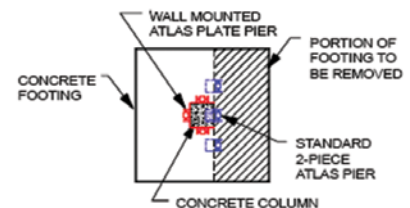
In Arlington Heights, IL, plans called for a new loading dock to be added to this structure for a computer manufacturer. The problem was that a concrete spread footing supporting 300,000 pounds had to be reduced by approximately 40% to allow for construction of the ramp to the dock.

Background Information:

The engineers proposed to install three Atlas Resistance® 2-Piece Plate Piers at the concrete column base and three Atlas Resistance® 2-Piece Piers along the cut portion of the concrete footing. The three Plate Piers were installed first. The Pier Pipe penetrated through cored holes in the existing concrete footing. The three Plate Piers were tested and loaded to 50,000 pounds each. The contractor removed 3-1/2 feet of footing to allow access for the ramp. Three Atlas Resistance® 2-Piece Piers were then installed along the cut edge of the footing, tested and also loaded to 50,000 pounds each.

Rapid Installation:

The Atlas Resistance® Pier offers rapid vibration free installation, heavy load bearing capacity, minimal disruption to other activities



This Plan view shows the pier placement. The total added capacity was 300,000 lbs.

and low cost. The installation configuration is shown above. Notice how the drive stand maintains proper vertical alignment. A steel plate encases the column on the footing will be cut.



PROJECT SUMMARY

Number of Piers:	6
Part Number:	AP-2-UF-4000.219 (Std. Pier) AP-2-PP-4000.219 (Plate Pier)
Avg. Pier Depth:	35-40 feet
Ultimate Capacity:	90,000 Pounds
Avg. Working Load:	50,000 Pounds
Factor of Safety:	1.8 : 1 (Ultimate to Load)