



# PC-10 PROOF TESTED Precast-to-Foundation Connection

**SIMPLE • SAFE • SECURE**

Recent full-scale testing of the AdvanConn PC-10 panel-to-foundation connection achieved a ductile tensile resistance of 17,900 lbs (1.79 times the code-required load of 10,000 lbs). In-Plane and Out-of-Plane loads were limited to 10,000 lbs and applied with a 1" space between the bottom of the panel and the top of the foundation. When panels are fully grouted, the clamping action of the PC-10 assures the engagement of friction forces and provides significant additional In-Plane and Out-of-Plane shear resistance.



#1 – Full-Scale Testing



#2 – PC-10 Test Panel



#3 – Shear Test  
In-Plane/Out-of-Plane



#4 – 17,900 lbs  
Tension

## PC-10 Test Results

Test	Yield Load (lbs)	Description
Tensile	17,200	Force to lift panel from foundation taken to ductile yield
In-Plane	10,100	Force applied parallel to width of panel (note: panel was 1" above foundation, no grout and was limited to 10,000 lbs.)
Out-Of-Plane	10,100	Force applied perpendicular to width of panel (note: panel was 1" above foundation, no grout and was limited to 10,000 lbs.)
Combined Shear	14,300	Both In-Plane and Out-of-Plane loads applied simultaneously
Second Tensile	17,900	Force to lift panel was applied to second pair of PC-10's after they had been subjected to In-Plane and Out-of-Plane loading



Concrete Anchor  
3/4" x 8 1/2"  
Installs in 1 minute!

## TEST NOTES

- Both tensile tests were taken to ductile yield. The devices did not fail; they simply would take no greater loading (see photo #4 above).
- The PC-10s were tested in pairs. For the first test each device was placed at 12" from the panel edge (joint) and placed at 18" for the second test.
- Each of the four devices were secured to the foundation with Simpson HD 3/4" x 8 1/2" Titen anchors. In all tests, the Titen anchors exhibited little if any signs of distress.
- Panels were cured for 30 days. Concrete cylinder sample 28-day compressive strength tests averaged 4,680 psi.
- Tests were developed and supervised by Bahram Shahrooz, Ph.D., Director of the University of Cincinnati Civil Engineering Testing Laboratory



## FOR MORE INFORMATION CONTACT

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