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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 1" space between the bottom of the panel and the top of the foundation. When panels are fully grouted, the clamping option of the PC-10 ensures the engagement of friction forces and provides significant additional in-plane and out-of-plane shear resistance.



Full-Scale Testing

PC-10
Concrete Anchor
3/4" x 8 1/2"
Installs in 1 minute!



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-10s after they had been subjected to in-plane and out-of-plane loading

Test Notes

- Both tensile tests were taken to ductile yield. The devices did not fail; they simply would take no greater loading.
- 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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