

Results of Preliminary Testing for the JVI Mini-V Connector

A total of five in-plane shear w/o tension load tests (3 monotonic load, 2 cyclic load) were carried out at the University of Wisconsin-Milwaukee Structures Laboratory during January 25-30, 2004. The tests were carried out on JVI Mini-V connectors embedded in 2 in. thick, 4 ft. by 4 ft. concrete slab panels. The test setup, protocol and the procedure followed earlier JVI Vector Connector Tests to be reported in the PCI Journal, March/April issue.

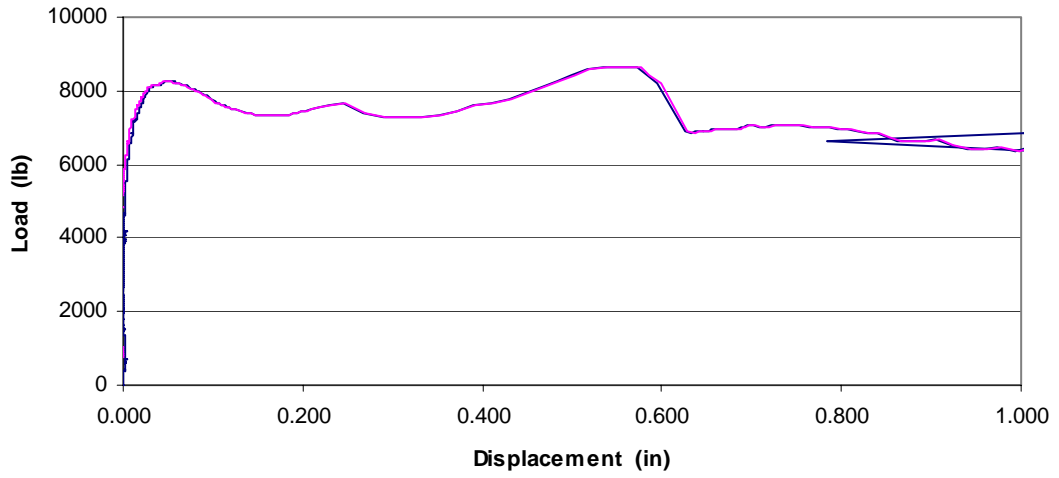
From the results of monotonic tests, the yield load was estimated at 8000 lbs. with a corresponding displacement of 0.03 in. The two cyclic load tests were done using a peak load of 6000 lbs (i.e. 75% of the yield load).

The failures in the three monotonic load tests occurred due to pullout of the tension leg of the connector.

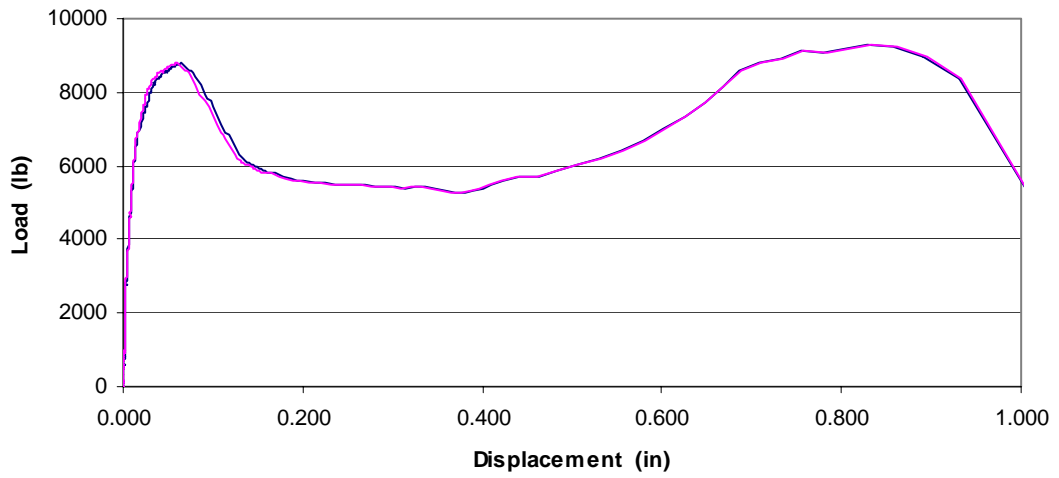
In the two cyclic tests the failure occurred due to tearing of the faceplate at the bends between the faceplate and the legs on both sides of the faceplate. In both tests, the peak displacements were observed to be about 0.36 in., which is 12 times the estimated yield displacement.

Test #	Test Type	Ultimate Load	Load at Ultimate Displacement
		(lb)	(in)
1	Monotonic Horizontal Shear w/o Tension	8,650	0.55
2	"	9,300	0.83
3	"	8,730	0.71
4	Cyclic Horizontal Shear w/o Tension	8,925	0.036
5	"	8,550	0.055

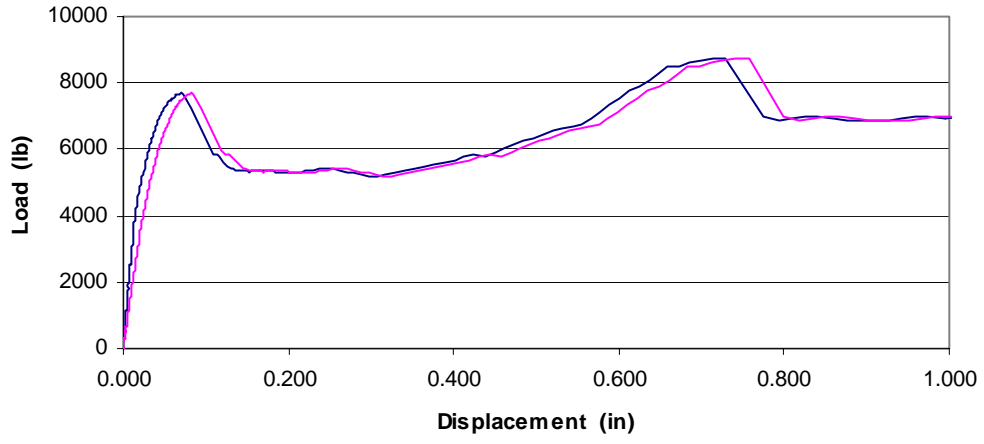
Test 1 -- Monotonic Horizontal Shear w/o Tension



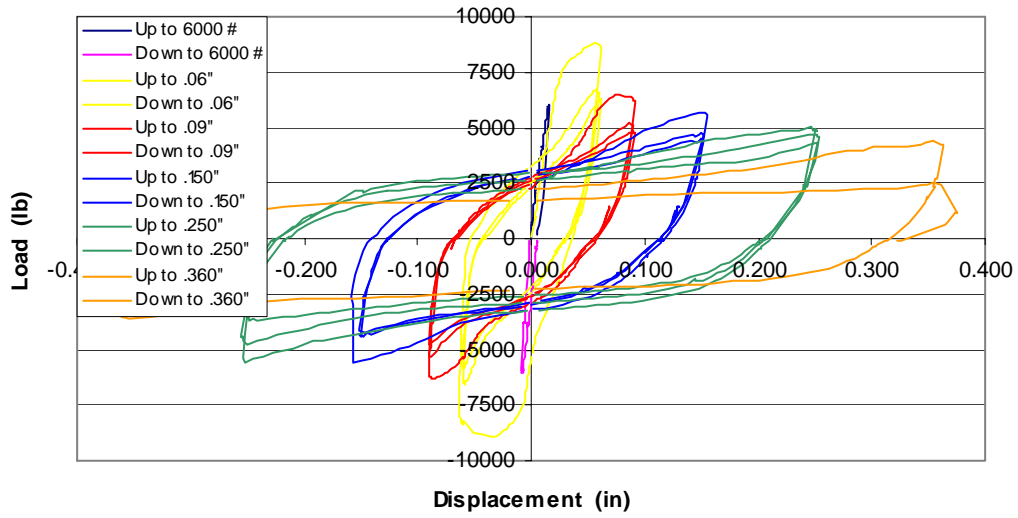
Test 2 -- Monotonic Horizontal Shear w/o Tension



Test 3 -- Monotonic Horizontal Shear w/o Tension



Test 4 -- Cyclic Horizontal Shear w/o Tension



Test 5 -- Cyclic Horizontal Shear w/o Tension

