



Innovations in Precast, Drainage & Wastewater Products



Zabel®
A Division of Polylok Inc.

January 15, 2019

This letter is to document testing on Polylok's Zinc Threaded Inserts.

The materials for the inserts are made of a zinc alloy meeting ASTM B86 specifications. Testing was performed using ten test samples separately cast into a 4" thick x 6" x 6" test block using a 4,000 PSI concrete mix. After curing, a 2" x 2" x 12" steel strap was bolted into the threaded inserts using a Grade 8 bolt. The bolts were threaded into the inserts at 75% of the available thread length of each insert. The test block was placed in a hydraulic press inverted on 3" spacers. A load was applied to the steel strap using a spreader bar. All test inserts were subject to loading until failure. Below are the testing results:

Insert Code	Part Number	Thread	Safe Working Load	Failure Load
15T	30383-15T	1/4-20	600 lbs	2,100 lbs
24T	30381-24T	3/8-16	1,000 lbs	3,500 lbs
25T	30381-25T	3/8-16	1,200 lbs	4,500 lbs
25T-OB	30381-25T-OB	3/8-16	1,200 lbs	4,500 lbs
35T	30380-35T	1/2-13	1,500 lbs	4,950 lbs
36T	30380-36T	1/2-13	2,200 lbs	7,300 lbs
45T	30382-45T	5/8-11	1,800 lbs	6,000 lbs
46T	30382-46T	5/8-11	3,000 lbs	9,100 lbs
55T	30384-55T	3/4-10	1,600 lbs	6,700 lbs
56T	30384-56T	3/4-10	4,000 lbs	12,200 lbs

Should you have any questions or require clarification, please do not hesitate to contact me.

Yours sincerely,

Charles Brix
Vice President
Design & Development

T: (203) 626-6123
F: (203) 284-8514
www.polylok.com