MAYES TESTING ENGINEERS, INC.

April 1, 2016

Mark Borchardt Anchor Tabs NW 5527 33rd Avenue SE Seattle, WA 98105

Re: Anchor Tab in Concrete Panel Load Testing

Mayes Testing Engineers Project Number Q14017

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Dear Mr. Borchardt:

As requested, on December 14, 2015 Mayes Testing Engineers performed load testing of your Anchor Tab product installed in a concrete slab mockup delivered to our laboratory in Lynnwood, WA

Background

We understand that the Anchor Tab is a proprietary fall arrest tie-off point for use during the construction phase of a building. One end of the Anchor Tab is secured to reinforcing steel and cast into a concrete building element. The other end is used as an attachment point to secure a personal fall arrest lifeline.



Anchor Tab

Per ANSI / WISHA / OSHA standards, we understand that an anchorage used for personal fall arrest must be designed for or demonstrate a minimum ultimate capacity of 5,000 pounds-force.

In order to demonstrate the capacity of the Anchor Tab, you provided a test specimen consisting of a tab cast into a mockup section of concrete slab. The end of the Anchor Tab cast into the slab had a #4 (1/2-inch diameter) reinforcing bar tied through the tab opening. Three other perpendicular bars were also included to represent typical slab reinforcement.



Anchor Tab Mockup Prior to Concrete

Test Procedures

The test load was applied in direct tension to the exposed end of the Anchor Tab via a calibrated hydraulic ram and digital pressure gauge assembly. A reaction beam assembly was used to provide clearance around the Anchor Tab to allow the possibility of concrete breakout as a failure mechanism and to also allow sufficient space for connecting hardware between the Anchor Tab and the hydraulic ram.

Test Results

The Anchor Tab was subjected to a direct tension load of 5,000 lb-f, which was maintained for 1-minute without indication of damage or overstress. The load was then increased to 10,000 lb-f and then 15,000 lb-f, which were also maintained for 1-minute each without indication of damage or overstress. Review of the mockup after completion of the testing did not indicate any notable cracking or other damage.



Anchor Tab Mockup in Direct Tension

Summary

This Anchor Tab mockup easily met the ANSI / WISHA / OSHA standard that an anchorage used for personal fall arrest must demonstrate a minimum ultimate capacity of 5,000 pounds-force. For field use, we recommend that the structural engineer of record be consulted regarding the acceptable capacity of the structural element to which the Anchor Tab is being connected.

We trust this provides you with the information you require at this time.

Respectfully Submitted,

MAYES TESTING ENGINEERS

Special Projects Manager

Michael S. Dolder, P.E. Vice President