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Company: Haala Industries
Address: 2101 Hwy. 4 South
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Attn: Mr. Steve Haala

Report Number: ESP009248P
Date: January 23, 2012

Tension Testing of Lifting Insert/Anchor

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Engineer under the laws of the State of Minnesota.

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Prepared By:

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INTRODUCTION:

This report presents the results of testing performed by Element Materials Technology; on Haala Industries precast concrete insert/anchor. The scope of our work was limited to the following:

1. Conduct pull out testing of the insert/anchor.
2. Prepare a report in regards to the results.

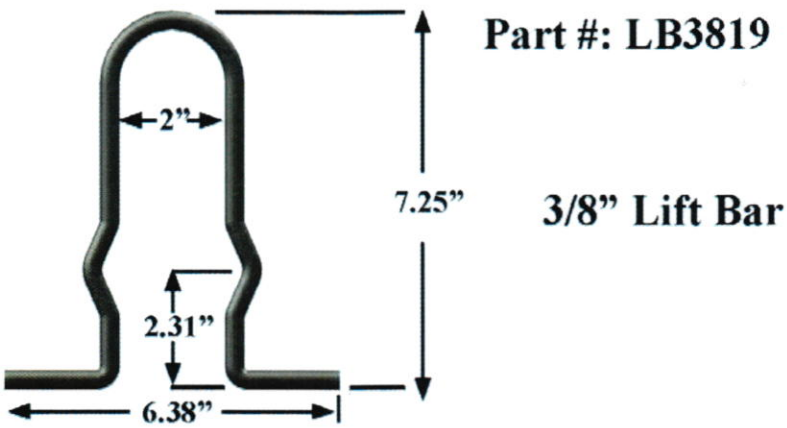
Our work was authorized by Mr. Steve Haala of Haala, Industries on February 16, 2012, and approved under there purchased order 33236.

CONCLUSION:

The precast concrete insert/anchor was tested on February 17, 2012. One sample was loaded to failure in accordance with the Test Procedures found on page 3 of this report. The failure mode for sample consisted of steel failure. **The ultimate load of the sample was 16,688 pounds**.

TEST SAMPLE:

The insert/anchor samples were submitted by the client to Element Materials Technology, St. Paul, Minnesota, where they were received on February 9, 2012. A single concrete block with two embedded lifting inserts/anchors was submitted. Haala Industries Insert/Anchors are used with precast concrete. The top of the insert/anchor was installed above the surface of the concrete approximately 2-1/2". Sample drawing as received is shown below.



TEST PROCEDURES:

The tests were conducted as tension tests in accordance with the test provisions listed in ASTM E 488 - 96 "standard Test Method for Strength of Anchors in Concrete and Masonry Element". The International Accreditation Service, Inc. (IAS) issued a Certificate of Accreditation TL-217, December 21, 2010, listing Element Materials Technology as an accredited laboratory for a scope of services that includes testing to ASTM E 488.

CONCRETE:

The concrete structural member was designed and cast by others. A description of the mix design as received can be found on page 7 of this report. No concrete strength was determined at time of testing.

ANCHOR INSTALLATION:

The concrete insert/anchor tested in this project was pre-installed by the client. Element has no information as to the installation of the anchor in general.

EQUIPMENT:

The test load was measured with load cells, CME-SPC-401 last calibrated on 06/21/11. Displacement was measured with a string transducer, CME-SPC-505, calibrated on 11/09/11.

REMARKS:

The remains of the concrete sample and insert/anchor test specimens are subject to disposal thirty days from the date of this report.