

Home Innovation RESEARCH LABSTM

Summit Anchor Impact-Load Resistance Test

Test Report

Prepared For

SUMMIT ANCHOR CO., INC.

January 2, 2019

Report No. LA1226_01022019

Disclaimer

Neither Home Innovation Research Labs, Inc., nor any person acting on its behalf, makes any warranty, expressed or implied, with respect to the use of any information, apparatus, method, or process disclosed in this publication or that such use may not infringe privately owned rights, or assumes any liabilities with respect to the use of, or for damages resulting from the use of, any information, apparatus, method, or process disclosed in this publication, or is responsible for statements made or opinions expressed by individual authors.

Condition/Limitation of Use

Home Innovation Research Labs is accredited by IAS in accordance with ISO 17020, 17025, and 17065. The test methods within this report are included in the scope of accreditation.

This report may be distributed in its entirety, but excerpted portions shall not be distributed without prior written approval of Home Innovation Research Labs.

TABLE OF CONTENTS

BACKGROUND	. 1
TEST SPECIMEN	. 1
	• –
TEST METHODOLOGY AND RESULTS	. 1

This page intentionally left blank

BACKGROUND

Summit Anchor Co., Inc. requested dynamic drop testing on one (1) single-point anchor devices. An agreement was entered November 27, 2018, between Summit Anchor Co. and Home Innovation Research Labs, Inc.

TEST SPECIMEN

One (1) specimen was submitted directly to Home Innovation by the client. The specimen was not independently or randomly selected for testing. The specimen was not damaged during shipping and was not tampered with after to arrival. No special conditions or preparations were observed by Home Innovation. Specimen was received at Home Innovation on November 28, 2018 and testing was completed November 29, 2018.

TEST METHODOLOGY AND RESULTS

Testing was conducted, observed and documented by Home Innovation staff. The anchor specimen was installed on Home Innovation's W14x48 steel I-beam test frame per the client's installation instructions. The anchor specimen was bolted to the test frame using four (4) 5/8" dia. B8 Class 2 stainless steel bolts supplied by the client. Dynamic drop testing was performed using a 6-ft long, 3/8" stainless steel cable, supplied by the client, with a 300-lb weight connected to one end and the other end connected to the anchor eye, see Photo 1.



Typical Test Set Up

The test results are based on a visual assessment of observed breaking, cracking or permanent damage.

Normal Speed Test (<u>https://youtu.be/nC-wG9bf0hY</u>)

Slow Motion Test (https://youtu.be/gk_6hc0VUjw)

Test	Specimen ID	Base Plate Size	Tube Deflection Before Drop Test	Tube Deflection After Drop Test	Observations			
1	SM-1-8-12-12- (1035 EYE prototype)	8" x 8" x 1/2"	0.4° Down	4.7° Down	Base plate bent. No weld breakage.			
Deflec	Deflection measured with Husky H1300 digital level Device 000268 - calibrated 10/7/2017.							



Prepared By

Lance Barta Research Engineer

Signed for and on behalf of Home Innovation Research Labs

Thomas M. Kenney, P.E. Vice President Engineering & Lab Director



Report No.: LA1226_01022019 Page 2 of 2 Home Innovation Research Labs Summit Anchor Impact-Load Resistance Test

