

SADEV USA TEST REPORT

SCOPE OF WORK

ASTM E488 TENSILE, COMPRESSION AND SHEAR LOADING OF CLASSIC 02 VP STYLE HOOK
GLASS MOUNTING FIXTURES

REPORT NUMBER

H4992.01-106-31 R0

TEST DATES

08/28/17 - 10/27/17

ISSUE DATE

12/22/17

RECORD RETENTION END DATE

10/27/21

PAGES

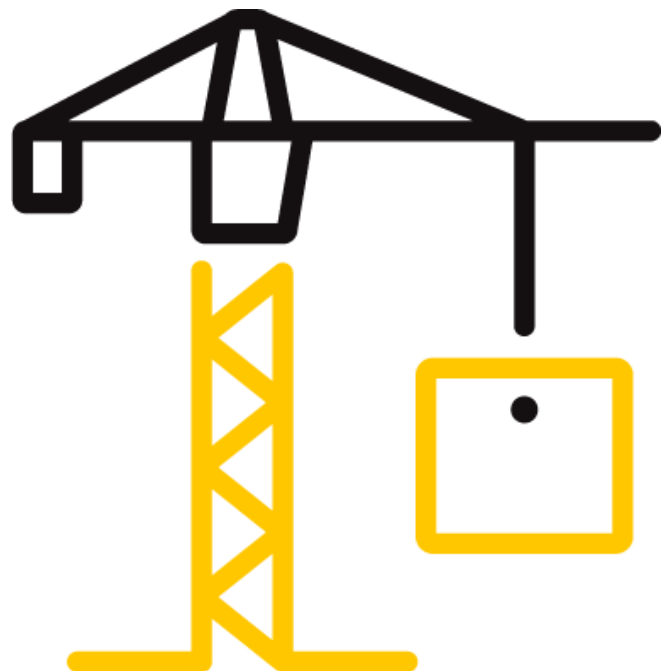
9

DOCUMENT CONTROL NUMBER

ATI 00231 (09/05/17)

RT-R-AMER-Test-2827

© 2017 INTERTEK



TEST REPORT FOR SADEV USA

Report No.: H4992.01-106-31 R0

Date: 12/22/17

REPORT ISSUED TO

SADEV USA

3201 Plank Road
Keokuk, Iowa 52632

SECTION 1

SCOPE

Products: Classic 02 VP Style Hook Glass Mounting Fixtures

Intertek Building & Construction (B&C) was contracted by Sadev USA to evaluate their Classic 02 VP Style Hook glass mounting fixtures in accordance with ASTM E488 practices to determine Tensile, Compression, and Shear loading properties. Results obtained are tested values and were secured by using the designated test methods. Testing was conducted at the Intertek B&C test facility in York, Pennsylvania.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

For INTERTEK B&C:

COMPLETED BY:	Joseph M. Brickner
TITLE:	Laboratory Supervisor Materials Laboratory
SIGNATURE:	
DATE:	12/22/17

JMB:dmc/kf

REVIEWED BY:	Dawn M. Chaney
TITLE:	Technician Team Lead Materials Laboratory
SIGNATURE:	
DATE:	12/22/17

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample(s) tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

TEST REPORT FOR SADEV USA

Report No.: H4992.01-106-31 R0

Date: 12/22/17

SECTION 2

TEST METHOD

The specimens were evaluated in accordance with the following:

ASTM 488/E488M-15, Standard Test Methods for Strength of Anchors in Concrete Elements

SECTION 3

MATERIAL SOURCE

The materials were provided by Sadev USA. The following were received: three Classic 02 VP Style Hook for each load orientation. Refer to the product description in Section 6 and the test photos in Section 9. The material was tested as received. Representative materials/test specimens will be retained by Intertek B&C for a minimum of four years from the test completion date.

SECTION 4

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Dawn M. Chaney	Intertek B&C
Joseph M. Brickner	Intertek B&C

SECTION 5

TEST PROCEDURES

All conditioning of test specimens and test conditions were at standard laboratory conditions unless otherwise reported. Refer to the test related photos in Section 9.

ASTM E488 - Tension, Compression and Shear Loading

Tension, Compression and Shear properties of the glass fittings were determined utilizing a SATEC Model 50UD Universal Test Machine (ICN: Y002011) equipped with a 50,000-pound load cell (ICN: 88507A) operating at a crosshead speed of 0.10 in/min. All specimens were fixture appropriate to the load orientation. Loading was performed until material yield or structural failure was observed.

TEST REPORT FOR SADEV USA

Report No.: H4992.01-106-31 R0

Date: 12/22/17

SECTION 6

TEST SPECIMEN DESCRIPTIONS

TEST PROCEDURE	NUMBER OF SPECIMENS	NOMINAL SPECIMEN DIMENSIONS
ASTM E488	9	Classic VP Style Hook glass fittings

SECTION 7

TEST RESULTS

Tension Loading - Classic VP Style Hook

SPECIMEN	LOAD AT YIELD (lbf)	DEFLECTION AT YIELD (inch)	MAXIMUM LOAD (lbf)	DEFLECTION AT MAXIMUM LOAD (inch)
1	3,540	0.237	6,520	0.854
2	4,110	0.259	6,340	0.805
3	3,970	0.269	6,730	0.937
Average	3,870	0.255	6,530	0.865

Compression Loading - Classic VP Style Hook

SPECIMEN	LOAD AT YIELD (lbf)	DEFLECTION AT YIELD (inch)	MAXIMUM LOAD (lbf)	DEFLECTION AT MAXIMUM LOAD (inch)
1	5,010	0.221	6,660	0.510
2	4,360	0.161	6,900	0.499
3	3,710	0.239	5,440	0.722
Average	4,360	0.207	6,330	0.577

Shear Loading - Classic VP Style Hook (Vertical Leg Orientation)

SPECIMEN	LOAD AT YIELD (lbf)	DEFLECTION AT YIELD (inch)	MAXIMUM LOAD (lbf)	DEFLECTION AT MAXIMUM LOAD (inch)
1	388	0.117	3,960	1.179
2	338	0.126	3,870	1.248
3	300	0.091	3,850	1.278
Average	342	0.112	3,890	1.235

TEST REPORT FOR SADEV USA

Report No.: H4992.01-106-31 R0

Date: 12/22/17

Shear Loading - Classic VP Style Hook (Horizontal Leg Orientation)

SPECIMEN	LOAD AT YIELD (lbf)	DEFLECTION AT YIELD (inch)	MAXIMUM LOAD (lbf)	DEFLECTION AT MAXIMUM LOAD (inch)
1	2,720	0.377	5,060	0.873
2	3,120	0.392	5,100	0.906
3	2,670	0.398	4,940	1.005
4	2,830	0.414	4,970	0.941
5	2,500	0.332	4,860	0.994
Average	2,770	0.383	4,990	0.944

SECTION 8

CONCLUSION

The requested test method did not contain specific performance requirements.

TEST REPORT FOR SADEV USA

Report No.: H4992.01-106-31 R0

Date: 12/22/17

SECTION 9 PHOTOGRAPHS



Photo No. 1
Typical Setup for Tension Loading
Classic VP Style Hook Fitting



Photo No. 2
Typical Setup for Compression Loading
Classic VP Style Hook Fitting

TEST REPORT FOR SADEV USA

Report No.: H4992.01-106-31 R0

Date: 12/22/17



Photo No. 3
Typical Setup for Vertical Shear Loading
Classic VP Style Hook Fitting



Photo No. 4
Typical Setup for Horizontal Shear Loading
Classic VP Style Hook Fitting

TEST REPORT FOR SADEV USA

Report No.: H4992.01-106-31 R0

Date: 12/22/17



Photo No. 5

**Typical Failure for Horizontal Shear Loading
Classic VP Style Hook Fitting**



Total Quality. Assured.

130 Derry Court
York, Pennsylvania 17406

Telephone: 717-764-7700
Facsimile: 717-764-4129
www.intertek.com/building

TEST REPORT FOR SADEV USA

Report No.: H4992.01-106-31 R0

Date: 12/22/17

SECTION 10

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	12/22/17	N/A	Original Report Issue