



Report Number: 0122
Originally Issued: 05/2010
Revised: 06/15/2012
Valid Through: 05/2013

DIVISION: 06 – WOOD AND PLASTICS
Section: 06460 – Wood Stairs and Railings

REPORT HOLDER:

GOPRO CONSTRUCTION SOLUTIONS, LLC
18800 COCHRAN AVENUE
CLEVELAND, OH 44110
(877) 577-4142
www.GoProConstruction.com

EVALUATION SUBJECT:

UNIVERSAL STAIR BRACKET

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes

- 2006 International Building Code®
- 2006 International Residential Code®

1.2 Evaluated in accordance with

- ICC-ES AC 13 approved October 2010

1.3 Properties evaluated

- Structural

2.0 USES

The Universal Stair Bracket (USB) is used to connect stair treads and risers to stringers (see Figure 1).

3.0 DESCRIPTION

The USB is a steel connector used to attach stair treads and risers on top of a wood stair stringer without cutting and notching the stringer (see Figure 1).

The USB has the shape of a triangular corner plate which is installed sequentially along the length of the stringer. The sides of the support are reinforced horizontally and vertically by a 90 degree bend. The ends of the bracket are wider and have a number of fixed holes to provide proper connection to stringers. There is a graduated rule near the end of the horizontal surface. The wide part of the vertical part of the bracket has vertical graduations. The horizontal rule is placed against the stringer at the desired step run. The vertical

graduations are placed against the stringer at the desired step rise. The horizontal rule overlaps the vertical rule of the preceding bracket. Reference Figure 2 and Figure 4.

The USB is formed using a stamping process (Figures 2) from ASTM A653 16 gage galvanized (G-185) 1008-1010 steel with a minimum tensile strength of 49.31 ksi, minimum yield strength of 41.33 ksi, and 20 percent elongation. The USB horizontal dimensions allow for runs from 9" to 11.5". The vertical dimensions allow for a rise from 6" to 8" (Figure 3).

The maximum allowable vertical load on any individual USB, once installed in accordance with the these instructions is 316 pounds.

4.0 INSTALLATION

The USB shall be installed in accordance with the manufactures installation instruction, this report, and the IBC. A copy of the manufacturer's installation instructions shall be made available on the job site during installation.

The USB is attached in the field to the stringer with (2) #8 flat head wood screws 1.5" long. The screw material shall be in accordance with ASTM F2282 and have a minimum yield strength of $F_{yb} = 90,000$ psi. For outdoor applications, these fasteners shall be corrosion resistant.

Both horizontal and vertical legs have several screw holes. The holes used for the installation depend on the particular rise and run of the stairway.

Each stair tread must be screwed to every USB by a minimum of (3) #8 flat head wood screws x 3/4" long.

5.0 CONDITIONS OF USE

The USB described in this report complies with those codes listed in Section 1.0 subject to the following conditions:

5.1 The USB is for interior and exterior residential use.

5.2 The stringer to which the USB is attached shall have the specific gravity equal to or greater than 0.49 with moisture content of 19% or less during the time of the installation. The design of stair stringer is outside the scope of this report.

EVALUATION REPORT



Report Number: 0122

Originally Issued: 05/2010

Revised: 06/15/2012

Valid Through: 05/2013

Exposure to corrosive and poor environmental conditions or chemicals is outside the scope of this report.

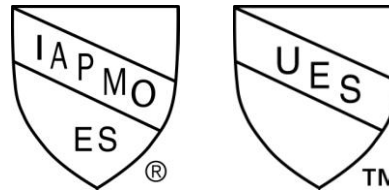
5.3 Tread depth (run) and riser height (rise) shall conform to section R311.5.3 of the IRC or section 1009.3 of the IBC, as applicable.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Joist Hanger and Similar Devices (AC 13), approved October 2010. Test results are from laboratories in compliance with ISO/IEC 17025.

7.0 IDENTIFICATION

The USB shall be labeled with the name of GoPro Construction Solutions, the product name and the evaluation report number, ER-122.



IAPMO #0122

A handwritten signature in black ink, appearing to read 'Amir'.

Amir Zamanian, PE
Technical Director of Evaluation Service

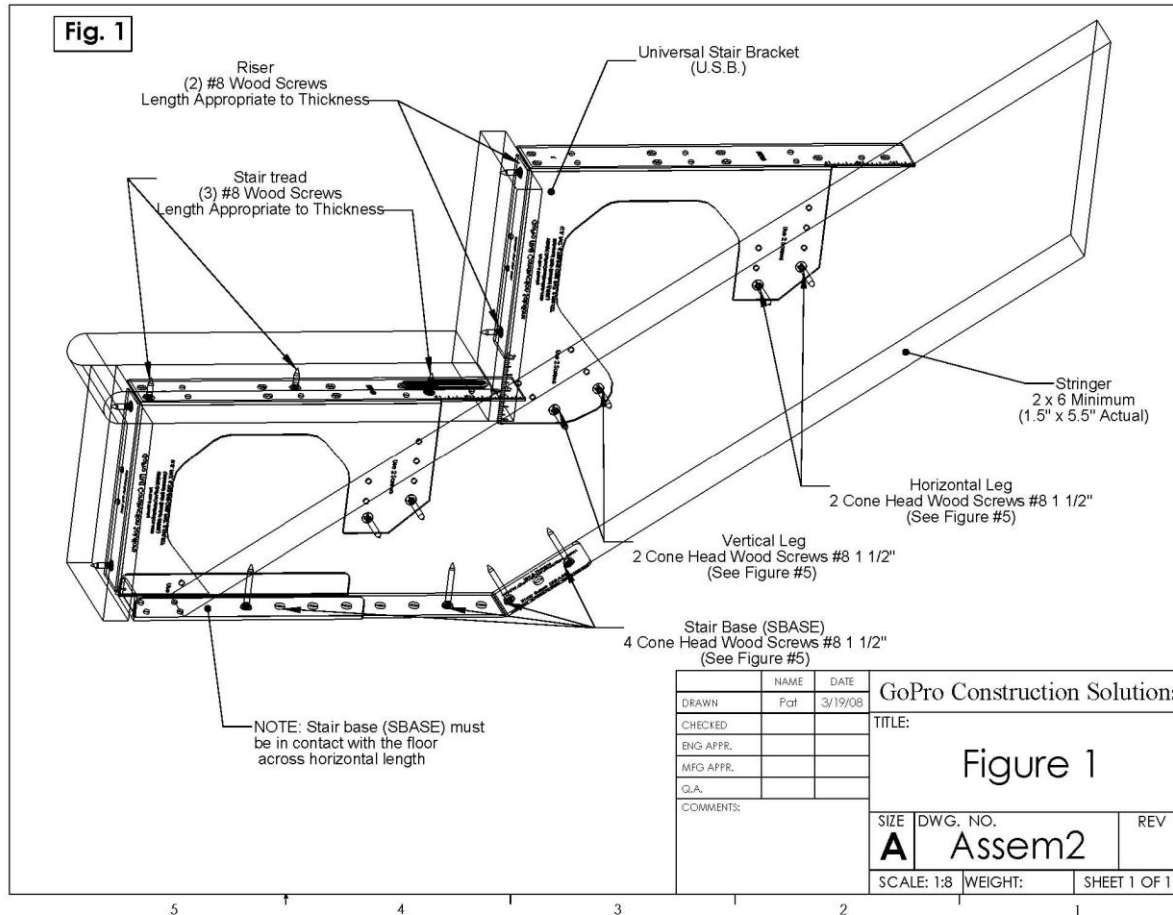
A handwritten signature in black ink, appearing to read 'Russ Chaney'.

GP Russ Chaney
CEO, The IAPMO Group

EVALUATION REPORT



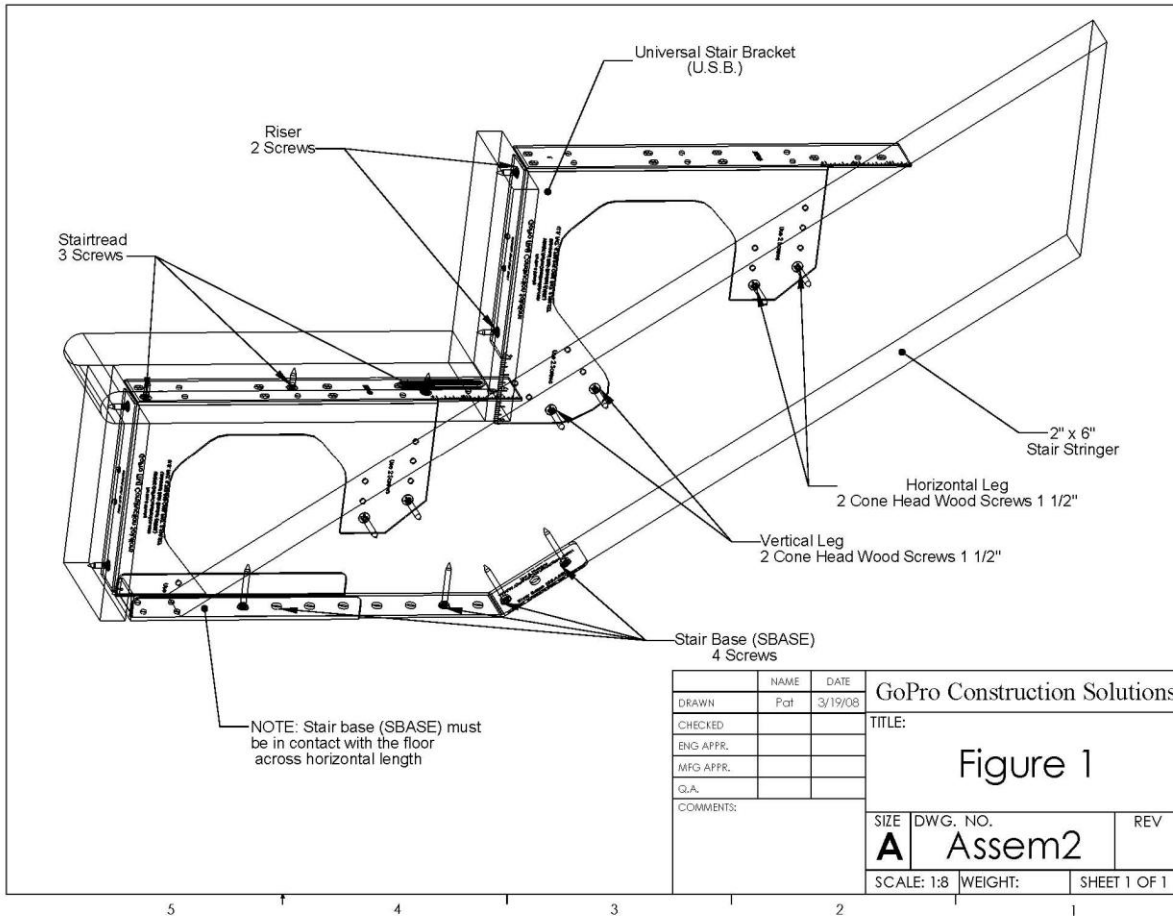
Report Number: 0122
Originally Issued: 05/2010
Revised: 06/15/2012
Valid Through: 05/2013



EVALUATION REPORT



Report Number: 0122
Originally Issued: 05/2010
Revised: 06/15/2012
Valid Through: 05/2013



EVALUATION REPORT



Report Number: 0122
Originally Issued: 05/2010
Revised: 06/15/2012
Valid Through: 05/2013

