

# ASTM E-1592 Test Data

## ENGINEERING AND TESTING

### ASTM E 1592 Test Data

In addition to simply providing retrofit sub-purlins to its customers Roof Hugger, Inc. was the first to provide certified design tables and testing on, one - piece - notched "Z" sub-purlin retrofit systems. For testing, Roof Hugger uses only 16-gauge (.060" min), high strength 50 ksi min., structural steel with a G-90 finish coating.

Roof Hugger, Inc. is continually expanding its engineering tables and testing to the new ASTM E 1592 test standards to conform to current IBC code and industry requirements. Additional testing will be completed by the end of 2013. Engineering and testing is conducted by:

Force Engineering and Testing  
19530 Ramblewood Drive  
Humble, TX 77338  
Terry Wolfe, P.E. – Owner  
(281) 540-6603

Consulting Engineers:

Kwon Kim P.E., Incheon Engineering, Oklahoma City, OK  
Chuck Howard P.E., Metal Roof Consultants, Inc., Cary, NC  
Joseph Belt P.E., Belt Engineering, Tampa, FL  
Thomas Shingler P.E., Design Dynamics, Inc., Richardson, TX

### A partial listing of panel specific ASTM E-1592 testing to date includes:

- Custom Bilt CB2000 24 Ga. 2" - 16" Mechanically Locked over Huggers.
- Englert Series 2500 24 ga. 16" o.c. Standing Seam over Huggers on PBR panels 4 tests total
- Englert Series 2500 0.040 Alum 16 " o.c. Standing Seam over Huggers on PBR panels – 6 tests total
- Firestone UC-6 18" 24 Ga. Double Lock Panels over Huggers, 4 tests with various configurations
- Kingspan 42" King Zip panel 90 seam over Huggers with various configurations
- MBCI PBR over Huggers on PBR panels – multiple purlin spacing
- MBCI Super-Lok over Huggers on PBR panels - multiple purlin spacing
- MBCI Double Lok over regular and gusseted Roof Huggers on PBR panels
- MBCI PBR over Corru-fit™ Hugger on Corrugated Panels
- McElroy JSM 200 24 Ga. 18" Panels over Huggers on PBR panels
- McElroy 238-T over Huggers on PBR panels

- McElroy 238-T over Huggers on 24" Trapezoidal with Tall Clips
- McElroy 238-T Factory Mutual Testing over Huggers on various panel types
- Metal Span 42" CFR 2" Insulated panel 90 seam over Huggers various configurations

**Additional non-proprietary panel testing:**

- Integral Huggers on sub-rafter testing at 2'-6" purlin spacing of various panels over PBR panels
- Load Increase base line testing to measure Roof Hugger's strengthening properties to existing purlins

**Pending Tests as of: June 2013**

- MBCI 16" Super-Lok over Huggers on 18" Vertical Rib Standing seam with integral sub-rafter system 2'-6" o.c. assembly
- McElroy JSM 200 18" over Huggers on 18" Vertical Rib Standing Seam with integral sub-rafter system 2'-6" o.c. assembly
- Roll resistance testing to test the resistance of standard Roof Huggers to control drag loads imposed by snow or other forces
- Roll resistance testing to test the resistance of gusseted Roof Huggers to control drag loads imposed by snow or other forces

For more information and copies of Test Reports, please contact Roof Hugger, Inc.