

Testing and Approvals

ASTM E-1592 Testing for 16 GA Huggers

TAS 125-03 - Per ASTM E-1592-01

MBCI 24 GA SuperLok™ over 26 GA “PBR”
Huggers with 5’-0” Purlin Spacing
Dade County Lab Cert: No 05-1122.13
Dade County Test Notice: No. 07022

TAS 125-03 - Per ASTM E-1592-01

MBCI 24 GA SuperLok™ over 26 GA “PBR”
12” O.C. Hats with Huggers @ 2’-6”
Dade County Lab Cert: No 05-1122.13
Dade County Test Notice: No. 07024

TAS 125-03 - Per ASTM E-1592-01

MBCI 24 GA SuperLok™ over 26 GA “PBR”
24” O.C. Hats with Huggers @ 2’-6”
Dade County Lab Cert: No 05-1122.13
Dade County Test Notice: No. 07023

TAS 125-03 - Per ASTM E-1592-01

MBCI 24 GA “PBR” over 26 GA “PBR”
Huggers @ 5’-0” Purlin Spacing
Dade County Lab Cert: No 05-1122.13
Dade County Test Notice: No. 029-030

TAS 125-03 - Per ASTM E-1592-01

MBCI 24 GA “PBR” over 26 GA “PBR”
12” O.C. Hats with Huggers @ 2’-6”
Dade County Lab Cert: No 05-1122.13
Dade County Test Notice: No. 07021

TAS 125-03 - Per ASTM E-1592-01

MBCI 24 GA “PBR” over 26 GA “PBR”
24” O.C. Hats with Huggers @ 2’-6”
Dade County Lab Cert: No 05-1122.13
Dade County Test Notice: No. 07020

Hats = Special Hugger Sub-rafters (see pg ##)

Existing Purlin Strengthening Testing

AISI Gravity Load Base Testing

New 26 GA Whirlwind Super Span Profile
Standard Model “C” Hugger (“R” Profile)
Over Existing 8”X 2 ½”X 16 GA Zee Purlins and
Over Existing 8”X 2 ½”X 12 GA Zee Purlins
Building Bay Spacing = 25’-0”
Dade County Lab Cert: No 05-1122.13

Purlin GA	Moment Reduction Factor w/ Hugger	Moment Reduction Factor w/o Hugger	% Increase
16	1.450	0.811	79%
14	1.394	0.840	66%
12	1.254	0.913	37%

AISI Wind Uplift Load Base Testing

New 26 GA Whirlwind Super Span Profile
Standard Model “C” Hugger (“R” Profile)
Over Existing 8”X 2 ½”X 16 GA Zee Purlins and
Over Existing 8”X 2 ½”X 12 GA Zee Purlins
Building Bay Spacing = 25’-0”
Dade County Lab Cert: No 05-1122.13

Purlin GA	Moment Reduction Factor w/ Hugger	Moment Reduction Factor w/o Hugger	% Increase
16	0.740	0.382	94%
14	0.754	0.458	65%
12	0.791	0.647	22%

Notes:

- All roof assemblies were tested with LGSI standard Purlins with 26 GA roof panels attached to top flange
- All roof assemblies were tested with bottom flanges completely unbraced
- All roof assemblies were tested with a 2.875” tall X 16 GA notched Roof Hugger (Model “C” for 12” o.c. “R” profiles)
- All tests were conducted in compliance with AISI TS-8-02 Base Test Method for Purlins supporting a standing seam roof.

Testing and Approvals

Florida Product Approval

Product Approval – FL 9561

Reference: 9B-72.070(4), F.A.C.

System 1: 24 Ga. PBR Panel, 36" wide with 1¼" Tall Rib, 12"-12"-12" Fastener pattern over Roof Huggers @ 5'-0" O.C.

System 2: 24 Ga. PBR Panel, 36" wide with 1¼" Tall Rib, 7"-5"-7"-5"-7" Fastener pattern over Roof Huggers @ 5'-0" O.C.

System 3: 24 Ga. PBR Panel, 36" wide with 1¼" Tall Rib, 7"-5"-7"-5"-7" Fastener pattern over Roof Huggers @ 2'-6" O.C. over 16 Ga. hats @ 24" O.C. over 26 Ga. PBR Panel over 16 Ga. Purlins @ 5'-0" O.C.

System 4: 24 Ga. PBR Panel, 36" wide with 1¼" Tall Rib, 7"-5"-7"-5"-7" Fastener pattern over Roof Huggers @ 2'-6" O.C. over 16 Ga. hats @ 12" O.C. over 26 Ga. PBR Panel over 16 Ga. Purlins @ 5'-0" O.C.

Product Approval – FL 10141

Reference: 9B-72.070(4), F.A.C.

System 1: 26 Ga. PBR Panel, 36" wide with 1¼" Tall Rib, 12"-12"-12" Fastener pattern over Roof Huggers @ 5'-0" O.C. over 26 Ga. PBR Panel over 16 Ga. Purlins @ 5'-0" O.C.

System 2: 26 Ga. PBR Panel, 36" wide with 1¼" Tall Rib, 7"-5"-7"-5"-7" Fastener pattern over Roof Huggers @ 5'-0" O.C. over 26 Ga. PBR Panel over 16 Ga. Purlins at 5'-0" O.C.

System 3: 26 Ga. PBR Panel, 36" wide with 1¼" Tall Rib, 7"-5"-7"-5"-7" Fastener pattern over Roof Huggers @ 2'-6" O.C. over 16 Ga. hats @ 24" O.C. over 26 Ga. PBR Panel over 16 Ga. Purlins @ 5'-0" O.C.

System 4: 26 Ga. PBR Panel, 36" wide with 1¼" Tall Rib, 7"-5"-7"-5"-7" Fastener pattern over Roof Huggers @ 2'-6" O.C. over 16 Ga. hats @ 12" O.C. over 26 Ga. PBR Panel over 16 Ga. Purlins @ 5'-0" O.C.

Product Approval – FL 9352.1

Reference: 9B-72.070(4), F.A.C.

Bottom Panel: 26 Ga. PBR Panel, 36" wide with 1¼" Tall Rib

Roof Huggers @ 5'-0" or 2'-6" on center

Top Panel: MBCI Super Lok 16" Wide 24 Ga. with Slider clips

For 2'-6" O.C. Roof Hugger Spacing: 16 Ga. Hats @ 24" O.C. between the Roof Hugger and the PBR Panel.

Existing Purlin Spacing: 5'-0" O.C. max

Product Approval - FL 9352.2

Reference: 9B-72.070(4), F.A.C.

Bottom Panel: 26 Ga. PBR Panel, 36" wide with 1¼" Tall Rib

Roof Huggers @ 5'-0", 2'-6" or 1'-3" on center

Top Panel: Architectural Building Components JSM 200 DL 18" Wide 24 Ga. with slider clips

For 2'-6" & 1'-3" O.C. Roof Hugger Spacing: 16 Ga. Hats @ 24" O.C. between the Roof Hugger and the PBR Panel.

Existing Purlin Spacing: 5'-0" O.C. max

Hats = Special Hugger Sub-rafters (see pg ##)

PBR Panel Manufacturer = MBCI