

Testing and Approvals

ASTM E-1592 Testing over 16 GA Huggers

Architectural Building Components 24 GA x 18" JSM200 DL

- Test A – Hugger and purlin spacing @ 5'-0"
- Test B – Purlins @ 5'-0", Sub-rafters @ 24" and Huggers @ 2'-6" over 26 GA "PBR"
- Test C – Purlins @ 5'-0", Sub-rafters @ 12" and Huggers @ 1'-3" over 26 GA "PBR"

Custom-Bilt Metals 24 GA x 16" CB-2000

- Test A – Hugger and purlin spacing @ 5'-0"
- Test B – Hugger and purlin spacing @ 1'-0"
- Test C – Purlins @ 5'-0", Sub-rafters @ 24" and Huggers @ 2'-6" over 26 GA "PBR"

Englert, Inc. 24 GA x 16" Series S-2500

- Test A – Hugger and purlin spacing @ 5'-0"
- Test B - Hugger and purlin spacing @ 2'-6"

Englert, Inc. 0.040" x 16" Series S-2500

- Test A – Hugger and purlin spacing @ 5'-0"
- Test B - Hugger and purlin spacing @ 2'-6"

Firestone Building Products 24 GA x 18" UC-6

- Test A – Hugger and purlin spacing @ 5'-0"
- Test B – Hugger and purlin spacing @ 1'-0"
- Test C – Purlins @ 5'-0", Sub-rafters @ 24" and Huggers @ 2'-6" over 26 GA "PBR"

Firestone Building Products 22 GA x 18" UC-6

- Test A – Hugger and purlin spacing @ 5'-0"
- Test B – Hugger and purlin spacing @ 1'-0"
- Test C – Purlins @ 5'-0", Sub-rafters @ 24" and Huggers @ 2'-6" over 26 GA "PBR"

MBCI 24 GA 16" SuperLok™

- Test A – Hugger and purlin spacing @ 5'-0"
- Test B - Purlins @ 5'-0", Sub-rafters @ 1'-0" and Huggers @ 2'-6" over 26 GA "PBR"
- Test C – Purlins @ 5'-0", Sub-rafters @ 24" and Huggers @ 2'-6" over 26 GA "PBR"

MBCI 24 GA "PBR over 26 GA "PBR"

- Test 06B – Hugger and purlin spacing @ 5'-0" fastened at 12"-12"-12"
- Test 06C - Hugger and purlin spacing @ 5'-0" fastened 7"-5"-7"-5"
- Test 06D – Purlins @ 5'-0", Sub-rafters @ 24" and Huggers @ 2'-6" fastened 7"-5"-7"-5"
- Test 06E – Purlins @ 5'-0", Sub-rafters @ 12" and Huggers @ 2'-6", fastened 7"-5"-7"-5"

Notes:

- All Testing per ASTM E-1592-01 - TAS 125-03
- Refer to Installation Section, pages 27 & 28 for Sub-rafter/Hugger details of construction
- Existing purlins spaced @ 5'-0" for all tests unless noted otherwise
- Dade County Lab Certification: No. 05-1122.13

AISI Gravity and Wind Uplift Load Base Testing

Standard Model "C" 16 GA Hugger with ¼" bridge above panel rib notch for 12" o.c. "R" Panel – Refer to Detail HL-01-G on page 53

Purlin Depth and Gauge	Existing Purlin Span FT	Wind Uplift % Increase	Gravity Load % Increase
8"X16	25'-0"	85%	42%
8"X14		50%	37%
8"X12		0.2%	25%

Special 16 GA Hugger with 1" bridge above panel rib notch for 12" o.c. "R" Panel – Refer to Details HL-02-G16 and HL-03-G12 on pages 54 & 55

Purlin Depth and Gauge	Existing Purlin Span FT	Wind Uplift % Increase	Gravity Load % Increase
8"X16	25'-0"	94%	79%
8"X14		65%	66%
8"X12		22%	37%

Notes:

- Dade County Laboratory Certification: No. 05-1122.13
- 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 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 Approvals

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.

System 5: Architectural Building Components' 24 Ga. JSM 200 DL 16" wide with slider clips over Roof Huggers @ 5'-0" O.C. over 26 Ga. PBR Panel and 16 Ga. Purlins spaced 5'-0" O.C. max

System 6: Architectural Building Components' 24 Ga. JSM 200 DL 16" wide with slider clips over Roof Huggers @ 2'-6" O.C. over Hats @ 2'-0" O.C. over 26 Ga. PBR Panel and 16 Ga. Purlins spaced 5'-0" O.C. max

System 7: Architectural Building Components' 24 Ga. JSM 200 DL 16" wide with slider clips over Roof Huggers @ 1'-3" O.C. over Hats @ 1'-0" O.C. over 26 Ga. PBR Panel and 16 Ga. Purlins spaced 5'-0" O.C. max

Product Approval – FL 9352.2

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

System 8: MBCI SuperLok 16" wide 24 Ga. With slider clips over Roof Huggers @ 5'-0" O.C. over 26 Ga. PBR Panel and 16 Ga. Purlins spaced 5'-0" O.C.

System 9: MBCI SuperLok 16" wide 24 Ga. With slider clips over Roof Huggers @ 2'-6" O.C. over 16 Ga. Hats @ 2'-0" O.C. over 26 Ga. PBR Panel and 16 Ga. Purlins spaced 5'-0" O.C.

Notes:

- Hats = Special Roof Hugger Sub-rafters (see Hugger Installation Section, pages 27 & 28)
- PBR Panel Manufacturer = MBCI
- Refer to Roof Hugger Florida Product Approval Bulletin dated January 2011 for more detailed information pertaining to Florida Product Approvals

Factory Mutual Standard 4471 Approval

Approval No. 3033681, Architectural Building Components 15-7/8" wide 24 Ga. JSM 238T with various clips over several Roof Hugger profiles @ 5'-0" O.C. met Classes 1-75, 1-120 and 1-195, Visit www.archmetalroof.com for details.