



Metal Roof Certification & Listing Program

Certification Report



11033-001-KCI

145 Limekiln Road, Suite 100B
New Cumberland, PA 17070
www.keystonecerts.com

Issue Dated: 11/29/2017
Revision Date: 12/07/2017
Expiration Date: 11/29/2022

Construction Specifications Institute (CSI) Category:

Division: 07 00 00 – Thermal & Moisture Protection

Section: 07 41 13 – Metal Roof Panels

1. Program Licensee:



Reed's Metals, Inc.
19 E. Lincoln Drive NE
Brookhaven, Mississippi 39601
800-581-4645
<https://reedsmetals.com/>

2. Certified Roof Covering:

Reeds Metals PBR Panel through-fastened metal roof structural panels installed over minimum 16 gauge steel purlins (spaced supports) for use in new construction and re-roofing applications.

3. Scope of Certification:

This Certification Report provides technical data substantiating that the use of the certified roof panels in the evaluated roof systems are in compliance with the following:

- 2017 Florida Building Code - Building, 6th Edition, Section 1504.3.2 and 1504.7.
- Florida Product Approval Rule 61G20-3.

Properties Evaluated:

- Wind Uplift Resistance
- Impact Resistance

4. Evaluated Roof System Description:

4.1. **Roof Covering:** Reeds Metals PBR Panel metal roof structural panels are 36" wide (coverage) and cold roll-formed from minimum 26 gauge (0.020" / 0.508mm coated thickness) Grade 80 steel. The panels are coated per the following:

- aluminum-zinc alloy coated per ASTM A792 (AZ50)

Or:

- zinc-coated per ASTM A653 (G-90)

And Optionally:

- pre-painted per ASTM A755

and shall be installed in accordance with the manufacturer's instructions and this Certification Report.

4.2. **Roof Deck:** Reeds Metals PBR Panel metal roof structural panels are certified for use over minimum 16 gauge steel purlins complying with 2017 Florida Building Code, with a minimum slope of 4% (1/2:12).

4.3. **Anchorage:** Reeds Metals PBR Panel metal roof structural panels shall be through-fastened to the minimum 16 gauge purlins using #12-14 x 1-1/4" Triangle Fastener HWH SD with EDPM-sealing washer or approved equivalent in the fastener patterns described in Appendix 1.

5. Installation

Reeds Metals PBR Panel metal roof structural panels in new construction applications shall be installed in accordance with the 2017 Florida Building Code Section 1507.4, the manufacturer's published installation instructions and this Certification Report.



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Reeds Metals PBR Panel metal roof structural panels in re-roofing applications shall be installed in accordance with the 2017 Florida Building Code Sections 1507.4 & 1511, the manufacturer’s published installation instructions and this Certification Report.

The manufacturer’s installation instructions shall be made available at the time of installation. If there are differences between this report and the manufacturer’s installation instructions, this report shall take precedence.

6. Product Performance

The performance of the Reeds Metals PBR Panel through-fastened metal roof structural panels described in this Certification Report has been demonstrated via testing in accordance with the following referenced standards:

- ASTM E1592-05 (2012), *Standard Test Method for the Structural Performance of Sheet Metal roof and Siding Systems By Uniform Static Air Pressure Difference.*
- FM 4471-10, Section 4.4 *Foot Traffic Resistance.*

As tested & reported by the following independent accredited laboratory:

| Laboratory | Report Ref. |
|-----------------------------|----------------------------------|
| Force Engineering & Testing | 101-0212T-17A-D 101-0120T-12A |

The FM 4471-10 test standard is equivalent to the FM 4471-92 test standard.

6.1. Wind Resistance

The allowable Ultimate Positive Wind / Live Load Capacity and Ultimate Wind Uplift Capacity for Reeds Metals PBR Panels anchored as described in Appendix 1, when tested in accordance with the referenced standard with an applied safety factor of 2.0 are found in Table 1.

Table 1

| Description | Ultimate Positive Wind / Load Capacity | Ultimate Wind Uplift Capacity |
|--|--|-------------------------------|
| Over Minimum 16 Gauge Purlins, 12”-12”-12” Anchor Pattern, Maximum 5’ 0” O.C. | + 49.4 psf | -41.6 psf |
| Over Minimum 16 Gauge Purlins, 12”-12”-12” Anchor Pattern, Maximum 2’ 0” O.C. | +156.0 psf | -122.2 psf |

7. Conditions of Use

Reeds Metals PBR Panel through-fastened metal roof structural panels must be insulated against other materials or metals including concrete, lead, copper and treated lumber that contains corrosive materials.



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8. Limitations of Use

Reeds Metals PBR Panel structural through-fastened metal roof structural panels are not qualified for use in the High Velocity Hurricane Zone (HVHZ).

Fire classification, shear diaphragm design, roof deck design & attachment to supporting members are not within the scope of this Certification Report. Roof support framing shall comply with 2017 Florida Building Code Chapter 22 for steel and Chapter 16 for structural loading.

9. Licensed Manufacturing Facilities

This Certification Report is applicable only to Reeds Metals PBR Panel structural through-fastened metal roof structural panels manufactured at the following locations. Each licensed facility is subject to periodic inspection by Keystone Certifications to verify conformance with Keystone Roof Covering Certification & Listing Program requirements:

| |
|--|
| <p>Reed's Metals, Inc. 19 E. Lincoln Drive NE Brookhaven, Mississippi 39601</p> <p>Reeds Metals Inc. 16454 SE Highway 19 Cross City, Florida 32628</p> |
|--|

10. Identification

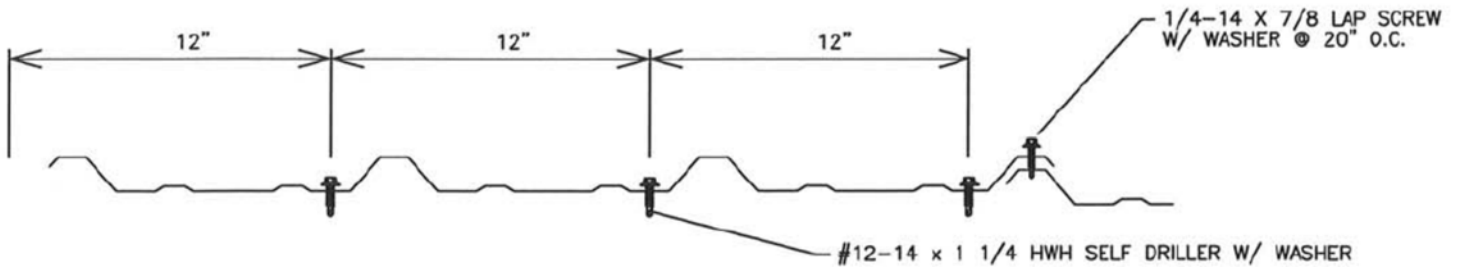
Reeds Metals PBR Panel structural through-fastened metal roof structural panels represented by this report shall be identified with Keystone Roof Covering Certification & Listing Program certification labeling illustrated below, to be applied to individual panels, packaging, invoicing or bills of lading:



Aaron Shultz
Validations Manager

Appendix 1

Notes: In all cases (new construction and re-roofing), the anchors shall fully penetrate the purlins. Lap sealant is required for slopes less than 3:12 (25%).





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Certificate Revisions

| Rev # | Date | Description |
|-------|------------|---|
| 0 | 11/29/2017 | Initial issuance. |
| 1 | 12/7/2017 | Revised coating spec and added FM 4471 equivalency statement. |