

**EVALUATION REPORT OF
CENTRAL STATES MANUFACTURING, INC.
'29 GA. PANEL-LOC PLUS PANEL'**

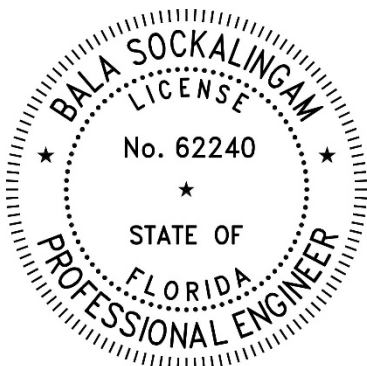
**FLORIDA BUILDING CODE 9TH EDITION (2026)
FLORIDA PRODUCT APPROVAL
FL 14026.6-R8
ROOFING
METAL ROOFING**

**Prepared For:
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**This report consists of
Evaluation Report (3 Pages including cover)
Installation Details (6 Pages)**

**Report No. C3076-6
Date: 10.18.2026**



This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

Printed copies of this document are not considered signed and sealed and this signature must be verified on any electronic copies.

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Manufacturer:	Central States Manufacturing, Inc.
Product Name:	Panel-Loc Plus Panel
Panel Description:	36" wide coverage with (5) 3/4" high ribs
Materials:	Min. 29 ga., 80 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755). Corrosion resistant as per FBC 2026 Section 1507.4.3.
Deck Description:	Min. 19/32" thick plywood for new and existing constructions. Fasten to joist with 8d x 2.5" long ring shank nails at 12" o.c. in the plywood field and at 6" o.c. at edges. Maximum joist spacing is 24" o.c. Designed and installed as per FBC 2026.
Underlayment:	Minimum underlayment as per FBC 2026 Section 1507.4.5.1
Lathing:	In lieu of the deck, lathing (nom. 2" x 4" wood, No. 2 or better) may be used. Lathing spaced at max. 24" o.c. and fastened to joists with (2) #8 x 3" long screws at each intersection. Maximum joist spacing is 48" o.c.
Underlayment:	Minimum underlayment as per FBC 2026 Section 1507.4.5.1
Slope:	1/2:12 or greater in accordance with FBC 2026 Section 1507.4.2. Requires applied lap sealant for roof slopes less than 3:12.
Design Uplift Pressure: (Factor of Safety = 2)	52.5 psf at fastener spacing of 24" o.c. along panel length
Panel Attachment:	#10-14 x 1.5" long wood screws with sealing washer or approved equal. Fastener shall be of sufficient length to penetrate through the deck a minimum of 1/4" and spaced at 9" o.c. across panel width at all locations. Fasteners are corrosion resistant as per FBC 2026 Section 1507.4.4. For installation in areas within 3000 ft. of a saltwater coastline, fasteners are corrosion resistant as per FBC 2026 Section 1711.
Test Standards:	Roof assembly tested in accordance with UL580-06 'Uplift Resistance of Roof'.
Code Compliance:	The product described herein has demonstrated compliance with FBC 2026 Section 1507.4.

Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2026 Section 1609 or ASCE 7-22 using allowable stress design. The maximum fastener spacing listed herein shall not be exceeded. Panels will be installed as per manufacturer's installation guideline. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not within the scope of this Evaluation Report. Refer to FBC 2026 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product. Metal ridge and hip covers shall comply with FBC 2026 Section 1504.3.1.1 and is not within the scope of this Evaluation Report. Compliance shall be obtained through other approved product subcategory.

Supporting Documents: UL580 Roof Deck Construction No. 560

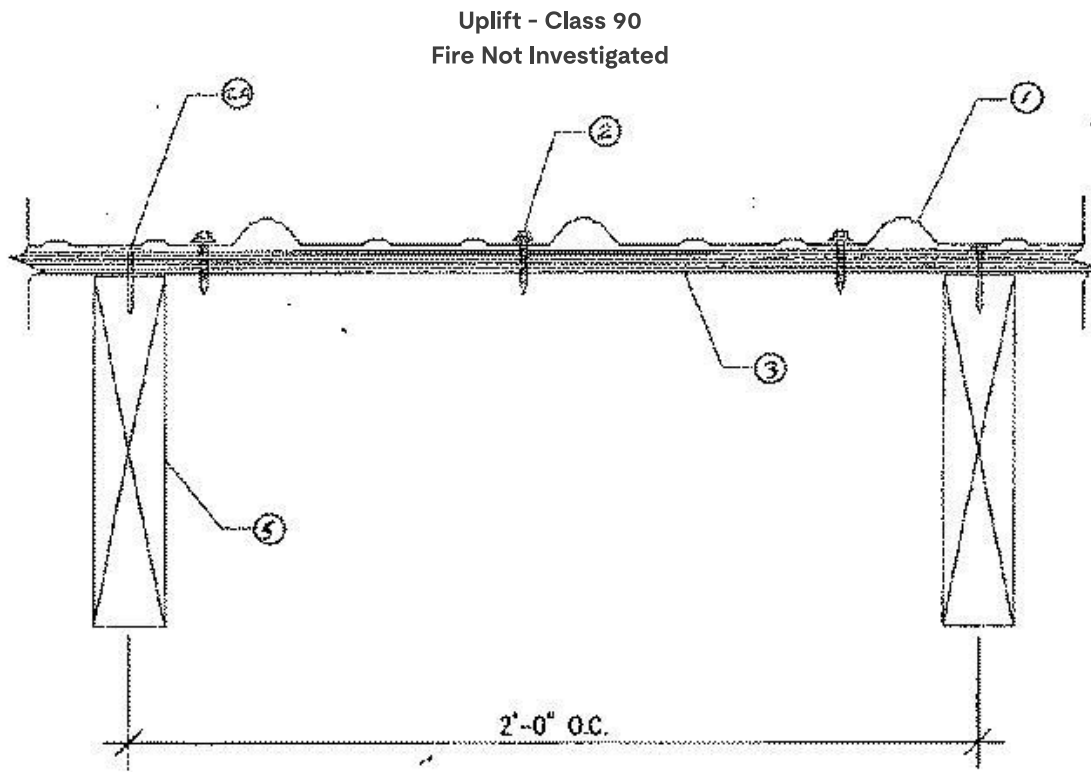
Design/System/Construction/Assembly Usage Disclaimer

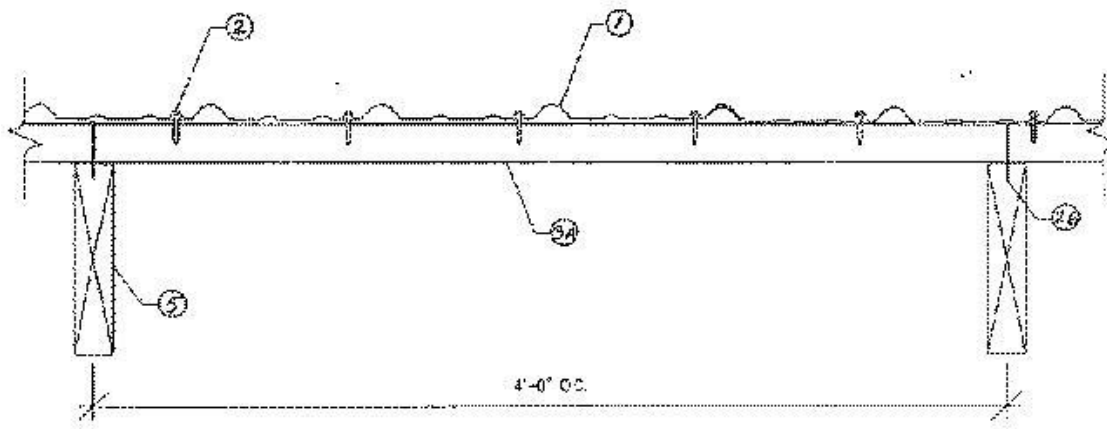
- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

[See General Information for Roof Deck Constructions](#)

Construction No. 560

October 15, 2026





1. Metal Roof Deck Panels* — No. 29 MSG min coated steel. Max panel width 36 in Rib height max 3/4 in. Panels continuous over two or more spans. Panels to overlap 6 in. at endlaps and must occur adjacent to a support when plywood decking (Item 3) is not used. A bead of sealant may be used at panel endlaps and sidelaps.

ALFORD METALS INC. — [\(View Classification\)](#) "PBR Panel"

ALL STEEL BUILDINGS & COMPONENTS TUBULAR DIVISION INC [\(View Classification\)](#) — "Master-Rib"

ALLIANCE STEEL INC [\(View Classification\)](#) — "Alliance IP"

ALLSOUTH PRE-ENGINEERED COMPONENTS L L C [\(View Classification\)](#) — "Tuff-Rib"

ALPHA BUILDING CENTER [\(View Classification\)](#) — "A-Panel"

AMERICAN BUILDING COMPONENTS [\(View Classification\)](#) — "Imperial Rib"

BBM STEEL BUILDINGS INC [\(View Classification\)](#) — "Ag-Panel"

BEACON SALES ACQUISITION INC, DBA COASTAL METAL SERVICE [\(View Classification\)](#) — "Rib Loc"

BENTON METAL DEPOT INC [\(View Classification\)](#) — "Rib Panel"

BRIDGER STEEL [\(View Classification\)](#) — "3 ft. tuf-rib"

BUCKEYE METAL SALES — [\(View Classification\)](#) "Standard 5 rib"

BURROW CONSTRUCTION INC [\(View Classification\)](#) — "Quadra Loc Plus"

CAROLINA CARPORTS INC [\(View Classification\)](#) — ""Carolina Ridge""

CENTRAL STATES MFG INC [\(View Classification\)](#) — "Panel-Loc Plus"

CENTRAL TEXAS METAL ROLLFORMING INC [\(View Classification\)](#) — "Frontier Rib"

CHAMPION METAL SUPPLY LLC [\(View Classification\)](#) — "American Ag Panel"

DAKOTA STEEL & TRIM INC ([View Classification](#)) — "Strong Rib"or "Pioneer Rib"

DAVIESS COUNTY METAL SALES INC ([View Classification](#)) — "D.C. Rib"

DELTA METALS LLC ([View Classification](#)) — "Delta Max Rib"

EAST TEXAS ARCHITECTURAL SHEETMETAL L L C, DBA ETAS INC ([View Classification](#)) — "Tite Lock Plus"

ECONOMY METALS INC ([View Classification](#)) — "3/4" AG Panel"

EVERLAST ROOFING INC ([View Classification](#)) — "Everlast II"

FABRAL INC ([View Classification](#)) — "Grandrib 3", "TrustiRib", "Shelterguard", "5 Rib" or "Alu-Tuff"

FLATIRON STEEL ([View Classification](#)) — "Tuff-Rib"

GRABER POST BLDS INC ([View Classification](#)) — "G-Rib"

GUTTERMANS SUPPLY CORPORATION OF AMERICA ([View Classification](#)) — "RCTR75"

H&H METAL PRODUCTS INC ([View Classification](#)) — "Uni-Panel"

HIXWOOD METAL INC ([View Classification](#)) — "Super-Rib 9"

INDACO METALS L L C ([View Classification](#)) — "Indaco Duraloc"

IOWA STEEL MASTERS ([View Classification](#)) — "Ag Panel"

JNL STEEL COMPONENTS INC ([View Classification](#)) — Type "AG-PANEL"

JOHN FLANERY DBA METAL COUNTRY ([View Classification](#)) — "Max-Panel"

KAUFFMAN METAL ([View Classification](#)) — "G-Rib"

KINGDOM METAL DBA AFFORDABLE METAL MANUFACTURING ([View Classification](#)) — "Pro-Rib"

LEGACY METAL CENTER ([View Classification](#)) — "Tuff Rib"

Liberty Lumber and Metal Supply LLC ([View Classification](#)) — "Ag Panel"

LONG CREEK STEEL ([View Classification](#)) — "Tuff-Rib"

MARLYN METALS INC ([View Classification](#)) — "Mar-Rib"

MBCI ([View Classification](#)) — "Stormproof"

MCELROY METAL MILL INC ([View Classification](#)) — "Max-Rib" or "Mesa"

MENARDS/MIDWEST MFG ([View Classification](#)) — "Pro-Rib" or "Premium Pro-Rib"

METALLION INDUSTRIES INC ([View Classification](#)) — "Magna Rib"

METAL EXTERIORS LLC ([View Classification](#)) — "Parallel Rib"

METAL PANELS INC ([View Classification](#)) — "Strongseam AG Panel"

METAL ROOFING SUPPLY & MFG ([View Classification](#)) — "Low Rib Panel"

METAL SALES MANUFACTURING CORPORATION ([View Classification](#)) — "Classic Rib"

METAL WHOLESALE L.L.C ([View Classification](#)) — "3/4" Rib Panel"

METALMAX L L C ([View Classification](#)) — "Tuffrib Panel"

MID MICHIGAN METAL SALES — "Hardy Rib"

MIDWEST METAL ([View Classification](#)) — "Midwest Panel"

MIDWEST METAL ([View Classification](#)) — "Midwest AG Panel"

NCI BUILDING SYSTEMS L P ([View Classification](#)) — "Imperial Rib" or "Master Rib"

NCI Group, Inc. — ([View Classification](#)) "MasterRib"

NCI Group, Inc. DBA Fortify Building Solutions ([View Classification](#)) — "Residential" or "MasterRib"

NORTHLAND STEEL AND TRIM ([View Classification](#)) — "D-Rib"

PARAMOUNT METALS INC ([View Classification](#)) — "Smart Rib Plus"

PLATINUM METALS LLC ([View Classification](#)) — "Ultra Pro Panel"

PREMIER METALS ([View Classification](#)) — "Premier Rib"

PROTECH STEEL LLC ([View Classification](#)) — "Tuff Rib"

RAMCO BUILDER AND SUPPLY LLC ([View Classification](#)) — "Ram-Panel"

RUSH RIVER STEEL & TRIM ([View Classification](#)) — "Tuff-Rib"

SAN ANTONIO QUALITY METALS ([View Classification](#)) — "AG" Panel

STEEL BUILDING SUPPLY INC ([View Classification](#)) — "Max-Rib" or "AG" Panel

TAYLOR & SONS PIPE & STEEL INC ([View Classification](#)) — "AG-Panel"

TERRY BUILDING CO INC ([View Classification](#)) — "Ag" Panel

TEXAR METALS INC ([View Classification](#)) — "AG Panel"

THE BRYER CO ([View Classification](#)) — "GT-36"

TSB INDUSTRIAL INC ([View Classification](#)) — "Ag/Tuff-Rib" Panel

TREMCO CPG INC. ([View Classification](#)) — "TremLock Ultra-Rib"

WAGLER METAL SALES ([View Classification](#)) — "EZ Rib Panel"

WHEATLAND STEEL AND TRIM LLC ([View Classification](#)) — "Tru-D-Rib"

WHIRLWIND STEEL BUILDINGS INC ([View Classification](#)) — "Sturdi-Rib"

2. Fasteners — (Screws) — For panel attachment to wood deck (Item 3), fasteners to be 1/4 in. -14x1-1/2 in. long Type AB of No. 14x1-1/2 in. long Type A when substructure is plywood decking (Item 3). When 2x4 lathing (Item 3A) is used, fasteners may be any of the following: 1/4 in. -14x1-1/2 in. long Type AB, No. 14x1-1/2 in. long Type AB, No. 14x1-1/2 in. long Type A, No. 10x1-1/2 in. long Woodgrip or No. 10-14 x 1-1/2 in. hex-washer head wood screw with bonded neoprene washer. Fasteners to be installed 24 in. OC along the length of the panel. Fastener spacing across the width of panel to 9 in. on center beginning 1-3/4 in. from the center line on one side of each major rib. Fastener spacing at panel ends to be in a 1-3/4 in. from the center line on one side of each major rib. Fastener spacing at panel ends to be in a 1-3/4, 5-1/2, 3-3/4, 5-1/2, 3-3/4, 5-1/2, 3-3/4, 5-1/2 in.

2A. Fasteners — (Screws and Nails) — For attachment of plywood deck (Item 3) to joists (Item 5), fasteners to be min. No. 6x1-7/8 in. long bugle head screw or annular ring-shank nails. Spacing to be 6 in. OC at plywood edges and 12 in. OC at intermediate supports.

2B. Fasteners — (Screws) — For attachment of 2x4 lathing (Item 3A) to joists (Item 5), fasteners to be min. No. 8x3 in. long bugle head screw, two screws per attachment point.

3. Substructure — (Plywood) — Plywood decking to be a nom 5/8 in. thick, exposure sheathing span C-D, 40/20 plywood. All butt joints to be sealed against leakage by using tape and/or caulk or with one- part urethane sealant.

3A. Substructure — (Lathing) — Lathing to be nominal 2x4 wood, No. 2 or better, spaced 24 in. on center max.

4. Moisture Barrier — (Optional) (Not Shown) — Any suitable membrane to protect substructure (Item 3 or 3A).

5. **Joists** — Joists spaced at 2 ft, 0 in. OC when plywood decking is used and 48 in. on center when 2x4 lathing (Item 3A) is used, may be one of the following:

A. Nom 2 by 10 in. wood joists No. 2 or better.

B. Nom 2 by 4 in. wood when used on a top cord of a wood truss, No. 2 or better.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Refer to general information, Roof Deck Construction, (Roofing Materials and Systems Directory) for Items not evaluated.

Last Updated on 2026-10-15

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