

# STAFF REPORT

## CONCERNING APPLICATION FOR A CERTIFICATE OF APPROPRIATENESS



**Date:** October 17, 2019

**Application Number:** 2019-1011A

**Property Location:** 2119 Portage Avenue

**Architectural Style/Date/Architect or Builder:** Greek Revival / 1865 –  
“Isaac Marble House”

**Property Owner:** Jeff and Mary McKelvey

**Landmark or District Designation:** Local Landmark, Ordinance #7020-  
82

**Rating:** *Outstanding*

**DESCRIPTION OF STRUCTURE/SITE:** Two story Greek Revival (with ancillary one story wings) on brick foundation. Two chimneys and a later heater exhaust punctuate the roof line. Exterior is brick with a stretcher bond, stone sills and lintels. The roof is a shallow gable with short eave overhang and large frieze. The soffit was enclosed prior to landmarking. Two wings were added flanking the original structure, later windows were installed in those additions. Windows are double-hung 6-over-6 on the second story and double-hung 6-over-9 on the first story. Some fixed windows are found in the original structure. Casements exist in the later additions. A front porch spans the original structure, a side entrance has a stepped stoop.

**ALTERATIONS:** Two wing additions were added sometime in the 20<sup>th</sup> century (sometime after 1946?). COA #1986-0903 allowed for the construction of an addition to the west side of the garage, as well as reroofing of the south addition. COA #1986-1008 allowed for re-roofing and aluminum soffits on the south wing addition. A ‘cabana’ was constructed attached to the garage without COA in 1987. COA #1987-0807 allowed for the construction of the front porch. COA #1990-0606 allowed for reconstruction of the deteriorated chimney with new bricks. COA #1997-0829 allowed for masonry repairs to the main chimney. COA #1996-0912 allowed for additional repairs and modifications to the masonry of the main chimney. COA #2001-0417 allowed for the repair/replacement-in-kind of the split-rail fence on the property, landscaping, tree trimming. COA #2003-0929 allowed for the removal and replacement of exterior storm doors and entrance doors. COA #2006-0329-1 allowed for the re-roofing of portions of the garage, as well as repair of the damages to the main roof. COA #2006-0720A allowed for the re-roof of the main structure and garage with Tamko Heritage 30-year shingles, as well as the replacement of the static air vents.

**APPLICATION ITEMS:** “*Overlay metal on shingles, remove stove vent. (Standing-seam horizontal roof by Central States Manufacturing, Inc.)*”

**DESCRIPTION OF PROPOSED PROJECT:** Applicant seeks a Certificate of Appropriateness for changes on the structure:

1. Installation of a Horizon-Lock (produced by Central States Manufacturing, Inc.) standing seam, textured painted steel roof over the existing asphalt shingles,
  - a. Panels are 16”, fabricated in varying lengths to accommodate different roof sections.
  - b. 13” ridge cap (painted)
2. Remove the stove vent on the southern wing addition.

The proposed material is a departure from the existing material. Metal was a common roofing material in the 19<sup>th</sup> century, although no record of it being used on this structure can be found. The 1932 Assessor Card Indicates that wood shingles were in use in the early part of the 20<sup>th</sup> century (this is indicated by ‘W.SH’ on the assessor card). Standing seam metal roofs enjoy a long lifespan, if installed properly (by comparison, the current shingles are believed to be thirteen years old).

Staff expresses one point of concern: if the new material is laid on top of the existing shingles, the flashing of the new metal roof will come into conflict with the existing stone window sills, specifically at the front porch and at the rear second story window (where the window air conditioning unit is located in the supplied photographs). The front porch design (when originally submitted in 1987) was modified to ensure the second floor window sills would not be impacted by the roof line.

## **SITE VISIT REPORT:** N/A

### **STANDARDS AND GUIDELINES: Local Landmark “Group B”**

The Commission has the authority to determine the architectural merits and the extent of any proposed treatment, renovation, or addition to a historic landmark. The commission will require drawings, plans, specifications, and/or samples where appropriate.

#### A. Maintenance

The maintenance of any historical structure or site shall in no way involve any direct physical change except for the general cleaning and upkeep of the landmark. The Commission shall encourage the proper maintenance of all structure or sites.

#### B. Treatment

**Treatment shall be defined as any change of surface materials that will not alter the style or original form. Such improvements include re-roofing, glazing, or landscaping lawns and may involve a change that can potentially enhance or detract from the character of the landmark. A treatment change of any surface whether on the landmark or in its environment may require a Certificate of Appropriateness if it significantly alters the appearance of the landmark. Although these kinds of changes may not require a Building Permit, a Certificate of Appropriateness may be necessary. The commission should review the proposed treatment for character and style consistency with the original surfaces.**

#### C. Renovation and Additions

**Renovation is the modification of a structure, which does not alter the general massing while an addition, is a change in mass.** A modification, which involves the removal of a part of the landmark, should be considered under demolition (see demolition).

Additions to landmarks should not detract from the original form and unity of the landmark and should not cover singular examples of architectural detail. Additions to landmarks should be added in a manner that does not disrupt the visible unity of overall appearance of the site. The proportions, materials and ratios of the existing structures should be carried through in the additions. Care should be taken not to change or alter the following:

1. Structure—Necessary structural improvements, where safety demands should be accomplished in such a way as to cause minimal visual change to the original style and construction.

**2. Material—Additions and improvements involving any new material in the landmark should be of the same material as the original. It should be the same size and texture. An alternative material may be allowed if it duplicates the original.**

a. wood—all wood trim should conform with existing trim in shape and size.

b. siding materials—the Commission discourages the covering or alteration of original materials with additional siding. Structures already sided with incompatible materials should be returned to a siding similar to the original when renovation is considered.

#### D. Demolition

Historic landmarks shall not be demolished. When a landmark poses a threat to the public safety, and demolition is the only alternative, documentation by way of photographs, measured drawings, or other descriptive methods should be made of both the exterior and interior of the landmark. The person or agency responsible for demolition of the landmark shall be responsible for this documentation.

#### E. Moving

The moving of landmarks is discouraged, however, moving is preferred to demolition. When moving is necessary, the owner of the landmark must apply to the Commission for a Certificate of Appropriateness.

#### F. Signs

No neon or flashing signs will be permitted unless they are original to the structure. Billboards and super-graphics will also be disallowed. Only one appropriate identifying sign will be permitted per business.

#### G. Building Site and Landscaping (These standards apply to both A and B)

##### 1. Required

Major landscaping items, trees, fencing, walkways, private yard lights, signs (house numbers) and benches which reflect the property's history and development shall be retained. Dominant land contours shall be retained. Structures such as: gazebos, patio decks, fixed barbecue pits, swimming pools, tennis courts, green houses, new walls, fountains, fixed garden furniture, trellises, and other similar structures shall be compatible to the historic character of the site and neighborhood and inconspicuous when viewed from a public way.

##### 2. Recommended

New site work should be based upon actual knowledge of the past appearance of the property found in photographs, drawings, and newspapers. Plant materials and trees in close proximity to the building that are causing deterioration to the buildings historic fabric should be removed. However, trees and plant materials that must be removed should be immediately replaced by suitable flora. Front yard areas should not be fenced except in cases where historic documentation would indicate such fencing appropriate. Fencing should be in character with the buildings style, materials, and scale.

##### 3. Prohibited

No changes may be made to the appearance of the site by removing major landscaping items, trees, fencing, walkways, outbuildings, and other elements before evaluating their importance to the property's history and development. Front yard areas shall not be transformed into parking lots nor paved nor blacktopped. The installation of unsightly devices such as TV reception dishes and solar collectors shall not be permitted in areas where they can be viewed from public thoroughfares.

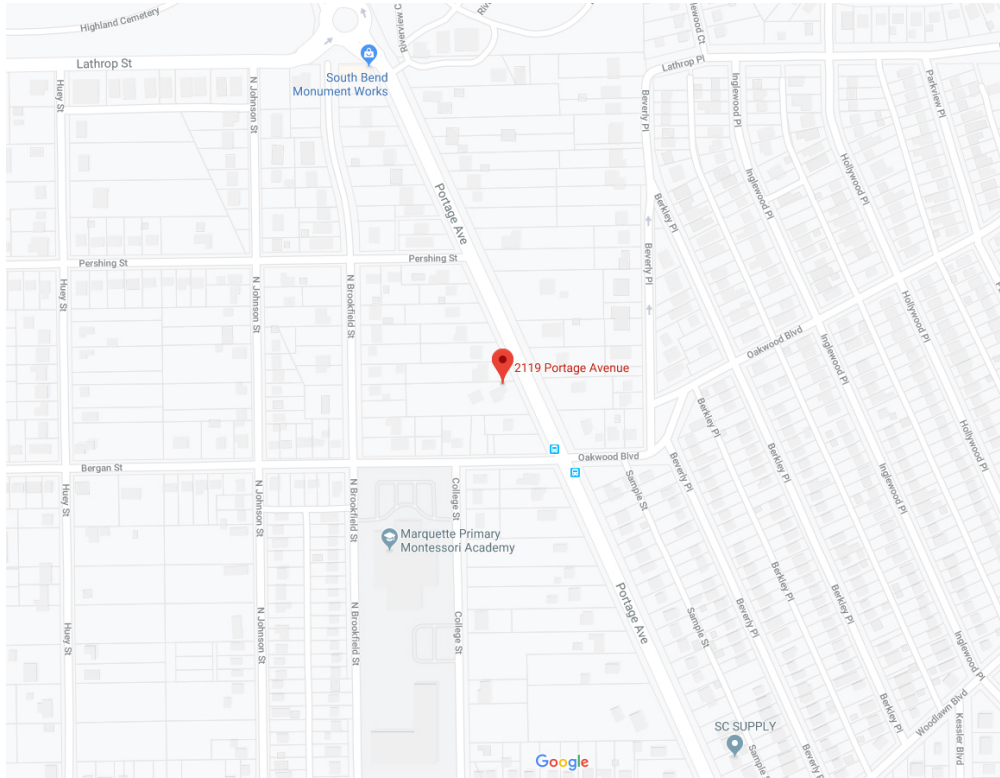
**STAFF RECOMMENDATION:** Staff recommends approval of the project as submitted, with the expressed concern that the stone window sill should not be adversely impacted by the addition of the metal roof material.

Prepared by  
Adam Toering  
Historic Preservation Specialist

Recommendation by  
Elicia Feasel  
Historic Preservation Administrator

# HISTORIC PRESERVATION COMMISSION OF SOUTH BEND AND ST. JOSEPH COUNTY

LOCATION MAP - Map showing location of the property and surrounding area (Google Maps)



AERIAL MAP - highlighted property on map



1895 Atlas, "W. O. Jackson" estate, center



MACOG 2019

**HISTORIC PRESERVATION COMMISSION  
OF SOUTH BEND AND ST. JOSEPH COUNTY**

FRONT PICTURE (East) - Picture of the front of the building, August 2019.



REAR PICTURE (WEST) - Picture of the rear of the building, August 2019



**HISTORIC PRESERVATION COMMISSION  
OF SOUTH BEND AND ST. JOSEPH COUNTY**

SIDE PICTURE (South) - Picture of the south side of the building, August 2019.



SIDE PICTURE (North) - Picture of the side of the building, August 2019.



**Martin's Steel Roofing Inc.**  
 PH# 574-862-4365  
 FAX# 574-862-1044  
 P.O. Box 707  
 Wakarusa, IN 46783

**Invoice**  
 Date 8/7/2019 Invoice # 87582

**PAID**  
 08/07/2019  
 by Matt McCall  
 # 107338

Bill To  
 In The Details Const.  
 Woody Bowers  
 2375 Yankee St.  
 Edwardburg, MI 49112

Ship To  
 269-350-4929

PO/Job Name	Terms	Due Date	Rep
2119 Portage Ave S. Bend	Cash/Carry	8/7/2019	JZ

Quantity	Length	Description	Color	Units	Price	Amount
CS. #1 Prime 26ga. Textured Painted Steel, Lifetime Paint Warranty, 10' Coverage						
Horizontal-Loc						
WANTS PAPER AND CARDBOARD						
60 pc	13' 6"	#1 Prime 26ga. Textured Painted, H-Loc	Onyx	810	2.11	1,709.00
17 pc	5' 1"	#1 Prime 26ga. Textured Painted, H-Loc	Onyx	86.36	2.11	182.22
32 pc	19' 0"	#1 Prime 26ga. Textured Painted, H-Loc	Onyx	608	2.11	1,282.88
11 pc	12' 4"	#1 Prime 26ga. Textured Painted, H-Loc	Onyx	135.663	2.11	286.25
8 pc	4' 11"	#1 Prime 26ga. Textured Painted, H-Loc	Onyx	39.36	2.11	83.05
23 pc	7' 0"	#1 Prime 26ga. Textured Painted, H-Loc	Onyx	161	2.11	339.71
24 pc	10' 1"	#1 Prime 26ga. Textured Painted, H-Loc	Onyx	241.92	2.11	510.45
--- Subtotal ---						
						4,393.66
14 pc	10' 1"	26ga. Textured Trim: Custom-Bend Flashing Trim, 1x6x6 w/ 1" O	Onyx	14	23.40	327.60
Item						
12 pc	10' 1"	Ridge Cap Painted, 13"(MSR) 7/12 O,	Onyx	12	25.80	309.60
Item						
24 pc	10'	Normal H-Loc Z-Closer	Onyx	17	8.99	152.76
17 pc	10' 1"	Concealed Fastener Rake, 4x3x3/4	Onyx	17	16.13	274.21
31 pc	10' 1"	Concealed Fastener Rake Cleat, 2x1-7/8x3/4	Onyx	17	8.74	148.58
2 pc	10' 1"	Z/E-Closers, 1 1/8x1 1/8	Onyx	31	6.68	207.08
23 pc	10' 1"	Simple-Frame for a Hemmed Panel, 2x1-2/3x2-7/8x1/2 5/12	Onyx	2	40.80	81.60
2250 pc		2" Pancake Clip Screw, Metal to Wood	Galv.	2,250	0.074	166.50
13 rolls		323" x 1" x .45" Butyl Tape Sealer	Black	13	7.99	103.87
6 pc		NovalFlex Metal Roof Sealant	Black	6	6.75	40.50
400 pc		Stainless Steel Pop Rivets, Painted-	Black	400	0.09	36.00
						<b>Total</b>

Thank-you, Have a Wonderful Day!!!!

Page 1

# PORTAGE TOWNSHIP ASSESSOR'S OFFICE

## SOUTH BEND, INDIANA

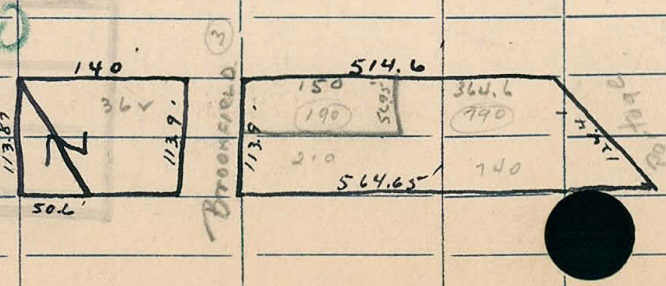
Depth a/c \_\_\_\_\_  
 Cu. Feet \_\_\_\_\_  
 Sq. Feet \_\_\_\_\_  
 Acres \_\_\_\_\_  
 Street Paved  X  
 Alley Paved  NO  
 Water  X Sewer  X  
 Gas  X Elec. Light  X  
 Restrictions \_\_\_\_\_

STREET Portage HOUSE No. 2119  
 BETWEEN Pershing AND Bergan  
 LOT No. East End Lots 6-7-8 Advanced Dr B Sub DIMENSIONS FRONT 124.4 DEEP See Plat  
+ Lot 10 Jacksons Sub ex 56.95 x 150 ft NW 1/4

OWNER Brinley Chas E & Daisy M DESCRIPTION 14-02-18  
116-4234

PERMIT NO. 2119 Portage Ave. LOCATION \_\_\_\_\_

YEAR	LAND						BUILDING		LAND AND BUILDING	
	DATE	FOLIO	SOLD FOR	ASSESSED	PER SQ FOOT	PER ACRE	ASSESSED	RATE PER CUBIC FT.	SOLD FOR	ASSESSED
19	32	HIGH CLASS		2160			1270			
19	47	WOOD		2000			1270			
19	47	ADDED X		2000			1370			
19	48	ADDED LAND		2030			1370			
19								DORM	NO	BA Y NO
19		COMPLETE								
19		CLASSIFIED						SI, W, D		
19		12-27-49								
19									NO ALE	
19										



# BUILDING

Class G Type 5  
 Stories 2 Year Built 1880  
 Construction C. BR - FR  
 Fire Proof Slow Burning Sprinklers \_\_\_\_\_  
 Occupancy Res  
 Cubic Feet 24,660 + 770

## MATERIALS

Ext. Walls B + FR Face Br Red Sides \_\_\_\_\_  
 Foundation C. Roof W. SH.  
 Floors S. W. Partitions SW.

## INTERIOR

Floor W Tub 1  
 Bath Rooms 1 Showers \_\_\_\_\_  
 Walls PL Stall \_\_\_\_\_  
 Real \_\_\_\_\_ Floor \_\_\_\_\_  
 Fire Place NO Lav. D  
 Elec. \_\_\_\_\_ Walls \_\_\_\_\_  
 Vacuum System \_\_\_\_\_ Incinerator \_\_\_\_\_  
 Refrigeration \_\_\_\_\_ Plumbing \_\_\_\_\_  
 Basement P Size 32x20 Occupancy \_\_\_\_\_  
 Heating Plants { H.A. X Steam \_\_\_\_\_ H.W. \_\_\_\_\_  
 Oil \_\_\_\_\_ Arcola \_\_\_\_\_ Stove ✓  
 Elevators \_\_\_\_\_ Pass. \_\_\_\_\_ Freight \_\_\_\_\_  
 Rooms Finished 1st 3 2nd 5 3rd \_\_\_\_\_  
2 Car Garage (Metal \_\_\_\_\_ Wood ✓ Stucco \_\_\_\_\_ Brick \_\_\_\_\_)

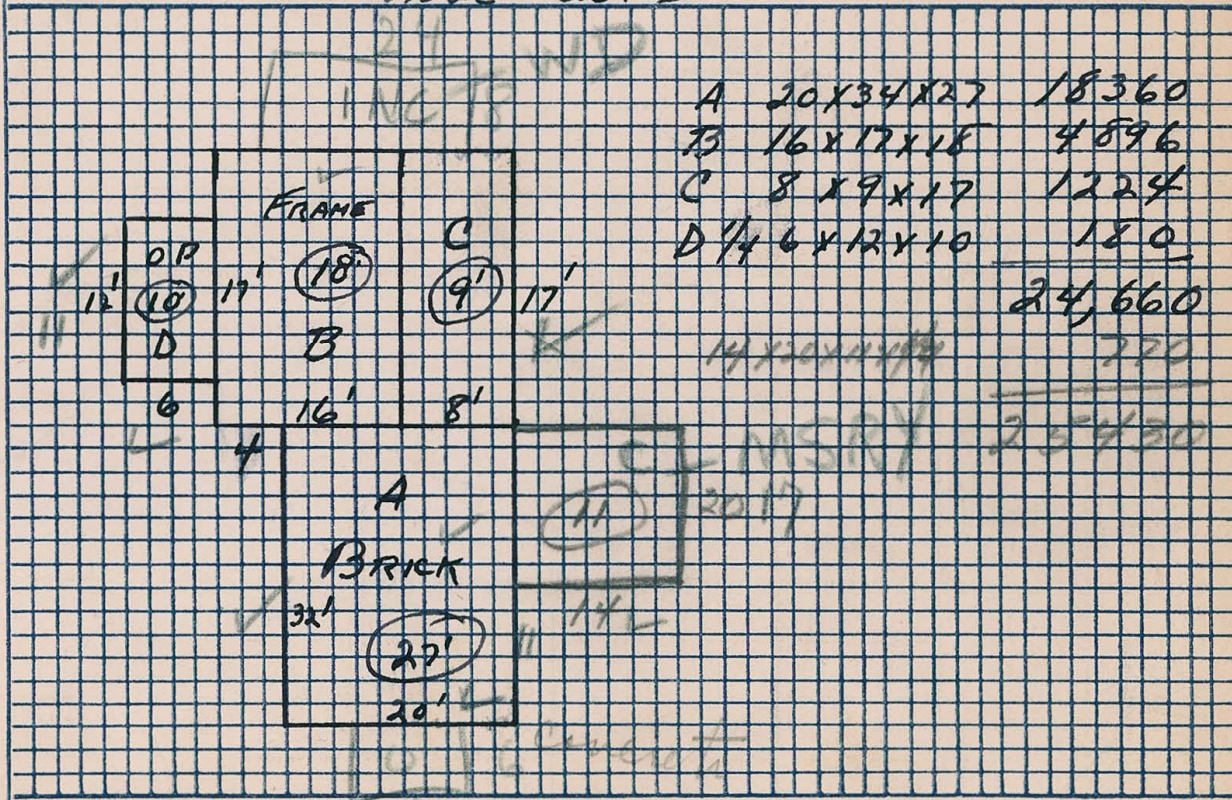
Misc. Buildings 2-2000  
 Remarks 1946 Built 14x20  
Open side porch old brick  
belong car floor  
1948 - 100% fur. J.V.

OWNER, BUILDER OR ARCHITECT \_\_\_\_\_

KIND OF BUILDING \_\_\_\_\_ CONDITION OF BUILDING - GOOD FAIR POOR  
 INTERIOR FINISH - - - - - GOOD FAIR POOR  
 FURNISHINGS - - - - - GOOD FAIR POOR

ASSESSABLE RATE PER CU. FT. .048 SQ. FT. AMOUNT 1270.00

DEPRECIATION Garage 60.00  
Misc 20.00



A	20x34x27	18360
B	16x17x18	4896
C	8x9x17	1224
D 1/4	6x12x10	180
		<u>24,660</u>

14x20x10  
770  
25430

Cubed by CEB Plans \_\_\_\_\_ Field \_\_\_\_\_ Date 5/28/52 Checked by \_\_\_\_\_

911 D + R. V.

6-29-49



262-C **PORTAGE TOWNSHIP ASSESSOR'S FIELD CARD**

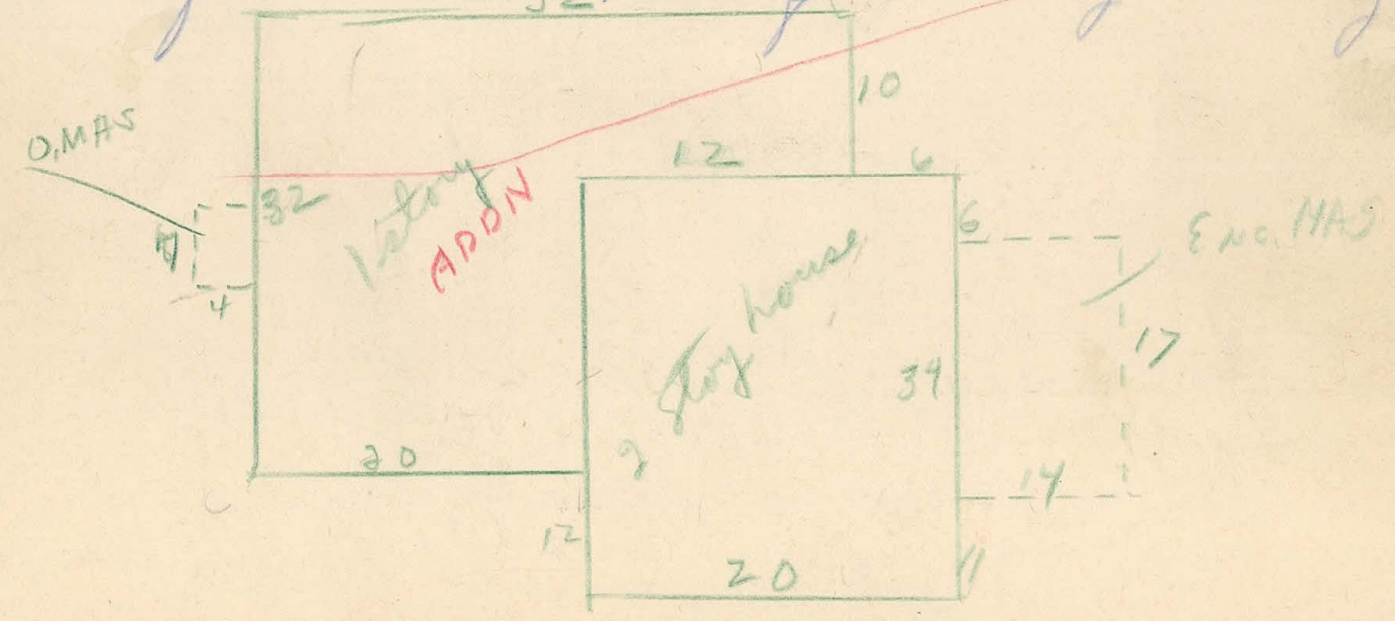
STREET Portage Ave HOUSE NO. 2119

BETWEEN \_\_\_\_\_ AND \_\_\_\_\_ DIMENSIONS

LOT NO. part of 10 Jackson Sub FRONT \_\_\_\_\_ DEEP \_\_\_\_\_

OWNER Wilson J. Brinley

Erect 32 x 30 frame add<sub>3/2</sub> rear of existing dwelling \$4,000-



RESIDENTIAL

STORIES		ROOMS	NO. APTS.	1 FOUNDATION	CONCRETE	CEM. BLOCK	BRICK	STONE
CLASSIFICATION		CONSTRUCTION	HIGH CLASS	2 BASEMENT	SIZE	CEM. FLOOR	FIN. ROOMS	
SINGLE DWLG.	FRAME	GOOD	3 WALLS	WD. SD.	STUCCO	ASHPALT	SOLID BRICK	
DOUBLE DWLG.	BRICK	AVERAGE		WD. SH.	CONC. BLK.	ASBESTOS	FIELD STONE	
DUPLEX	STONE	LOW QUALITY		BR. VR.	CIND. BLK.		CUT STONE	
APT. WITH STORES	CONCRETE		4 ROOFING	WD. SH.	ASB. SH.	SLATE		
			5 EXTER. TRIM	PLAIN	DORMER	BAY 1 STY	BAY 2 STY	
			6 INTER. TRIM	PINE	HD. WD.		FIREPLACE	
			7 FLOORS	PINE	HD. WD.	CONCRETE		
			8 ATTIC	UNFIN.	NO. OF ROOMS FINISHED			
CLASS	LIFE EXPECT.			9 HEATING	HOT AIR	STEAM	RADIANT	
REMARKS:				10 LIGHT	ELECTRIC	GAS		
32x32 common brick addn, concrete floor, basement, 1/2 bath, built in store & oven. 100% complete 1-15-61 H+C				11 PLUMBING	NO. OF BATHS	LAVATORIES	TOILETS	SEWER
					TILE FLOOR	TILE WALLS	WATER	GAS
The 32x32 add 2570 Comp 3/1/56 H.V. 3/5/56 (2 rooms + 1/2 bath) Basement under 20x32 part of add. (Take out 2 rooms + full bath.) REMOVE SECTION A, B, E + D and add the addition as shown on this card				12 PORCHES	OPEN SQ. FT.	COVERED SQ. FT.		
					ENCLOSED SQ. FT.	WOOD	MASONRY	
NOTE - check this new addition + home complete about July 1958 Not complete 3/1/58 H+C 3/22/58 check 3/1/59 - same as 9/15/58 - J+C 4-7-59				13 BUILT-IN GAR.	SIZE	NO. OF CARS		

32x32 common brick addn, concrete floor, basement, 1/2 bath, built in store & oven. 100% complete 1-15-61 H+C

The 32x32 add 2570 Comp 3/1/56 H.V. 3/5/56  
 (2 rooms + 1/2 bath) Basement under 20x32 part of add.  
 (Take out 2 rooms + full bath.)  
 REMOVE SECTION A, B, E + D and add the addition as shown on this card

NOTE - check this new addition + home complete about July 1958  
 Not complete 3/1/58 H+C 3/22/58  
 check 3/1/59 - same as 9/15/58 - J+C 4-7-59

Remodeling 70% comp 9/11/59 H+C  
 80% complete  
 will complete by Nov - 12/1/59 R+C



### HISTORIC PRESERVATION COMMISSION OF SOUTH BEND AND ST. JOSEPH COUNTY

County—City Building, South Bend, IN 46601  
http://www.southbendin.gov/government/department/community-investment  
Phone: 574/235.9371 Fax: 574/235.9021  
Email: hpcbsjc@southbendin.gov

A Certified Local Government of the National Park Service Elicia Feasel, Historic Preservation Administrator

### APPLICATION FOR A — CERTIFICATE OF APPROPRIATENESS

**OFFICE USE ONLY>>>>>>>DO NOT COMPLETE ANY ENTRIES CONTAINED IN THIS BOX<<<<<<<OFFICE USE ONLY**

Date Received: 10/11/2014 Application Number: 2014 - 1011A

Past Reviews:  YES (Date of Last Review) \_\_\_\_\_  NO

Staff Approval authorized by: \_\_\_\_\_ Title: \_\_\_\_\_

Historic Preservation Commission Review Date: 11/18/2014

Local Landmark  Local Historic District (Name) \_\_\_\_\_

National Landmark  National Register District (Name) \_\_\_\_\_

Certificate Of Appropriateness:  Denied  Tabled  Sent To Committee  Approved and issued: \_\_\_\_\_

Address of Property for proposed work: 2119 Portage Ave South Bend, IN  
(Street Number—Street Name—City—Zip)

Name of Property Owner(s): Jeff & Mary McKeley Phone #: 231-629-5292

Address of Property Owner(s): 2119 Portage Ave South Bend, IN  
(Street Number—Street Name—City—Zip)

Name of Contractor(s): Woodrow Bowers Phone #: 269 350 1079

Contractor Company Name: In the Details

Address of Contractor Company: 25375 Yurka St. Edwardsburg, MI 49112  
(Street Number—Street Name—City—Zip)

Current Use of Building: Single Family  
(Single Family—Multi-Family—Commercial—Government—Industrial—Vacant—etc.)

Type of Building Construction: Roof overlay  
(Wood Frame—Brick—Stone—Steel—Concrete—Other)

Proposed Work: (more than one box may be checked)  Landscape  New  Replacement (not in-kind)  Demolition

Description of Proposed Work: Overlay metal on shingles, remove stone vent. (STANDING SEAM - HORIZON-LOW roof by Central States Manufacturing, Inc.)

Owner e-mail: \_\_\_\_\_ and/or Contractor e-mail: Woodrow.bowers3@gmail.com

X \_\_\_\_\_ and/or X [Signature]  
Signature of Owner Signature of Contractor

By signing this application I agree to abide by all local regulations related to project and to obtain a Building Department Permit, if applicable.



# Residential Metal Roofing

Find the right product for the job.



**CENTRAL  
STATES**  
MANUFACTURING, INC.

METAL BUILDING COMPONENTS



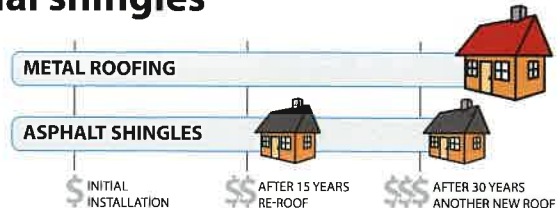
# Benefits of Metal Roofing

A metal roof on your home is practically unaffected by the forces of nature. Driving rain, blowing snow and harsh sun are no match for the ultimate protection of a metal roof. Most metal roofs have recycled content up to 95%. Conventional roofing shingles have a much shorter lifespan and use oil-based products as their primary raw material. Metal also has the added benefit of being 100% recyclable, reducing the future impact of raw materials.

Painted metal roof panels from Central States are available in a multitude of colors, all with limited 40 year paint warranties. Metal roof panels last 2-3 times longer than traditional asphalt shingles.

## Compare metal to traditional shingles

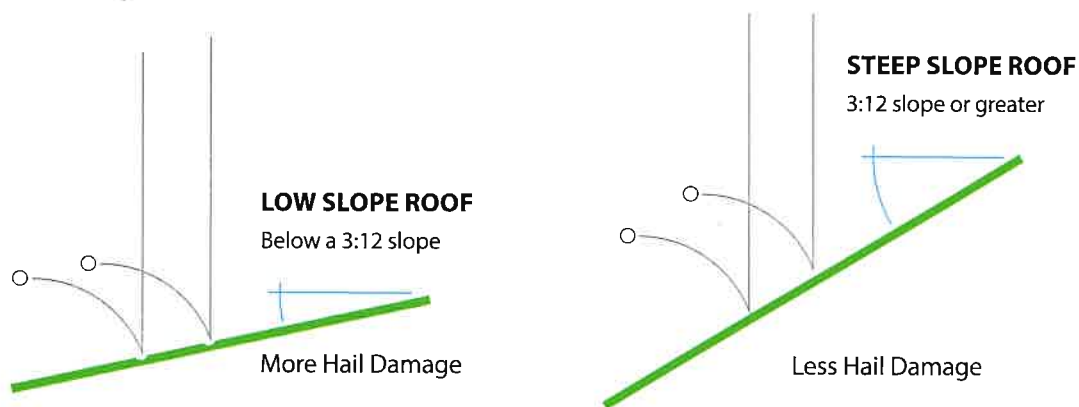
Metal roofing lasts two times longer than traditional asphalt shingles, saving you thousands of dollars.





# Dent Protection Explained

Each year, hail causes about 1.6 billion dollars worth of damage to residential roofs and barns in the United States. Hailstorms are most concentrated in the southern and central plains states, but can occur almost anywhere there are thunderstorms. Hailstones larger than 1 inch in diameter have the potential to cause damage to any exposed object. The level of damage depends on the size, density, falling velocity, and distribution of hailstones. Roofs may be especially susceptible to damage depending on the slope of the roof. Hailstones cause more damage to low slope than steep slope because the greatest damage occurs at a 90-degree angle of impact.



In general, damage can be categorized into two types: aesthetic damage and functional damage. Aesthetic damage has an adverse effect on appearance but does not affect the performance of the roof. Functional damage results in less water-shedding ability and a shorter expected service life of the roof.

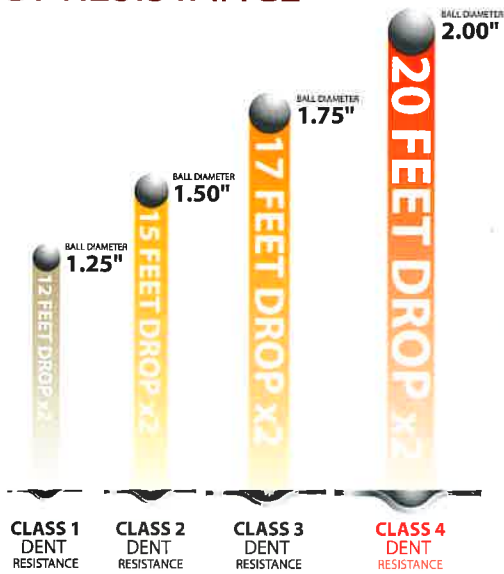


[WWW.CENTRALSTATESMFG.COM](http://WWW.CENTRALSTATESMFG.COM)

Copyright © 2018, Central States Manufacturing, Inc., All Rights Reserved.  
Galvalume® is a registered trademark of BIEC International, Inc.

FLYR\_Dent\_180201

# IMPACT RESISTANCE



Underwriters Laboratory has developed a test (UL 2218) to evaluate the impact resistance of roofing material. This test evaluates materials by dropping a steel ball onto the roofing panel twice at the same location. The material must show no evidence of fracture, cracking, splitting, or any other failure resulting in an opening of the roofing material. The sizes of the steel balls range from 1.25" to 2.00" and are dropped twice from a height of between 12 and 20 feet.

Central States uses metal with a Class 4 impact resistance rating.

# DENT PROTECTION

According to engineers at U.S. Steel Corp., dent resistance of a coated sheet is proportional to the square of the yield strength multiplied by the fourth power of the sheet thickness.

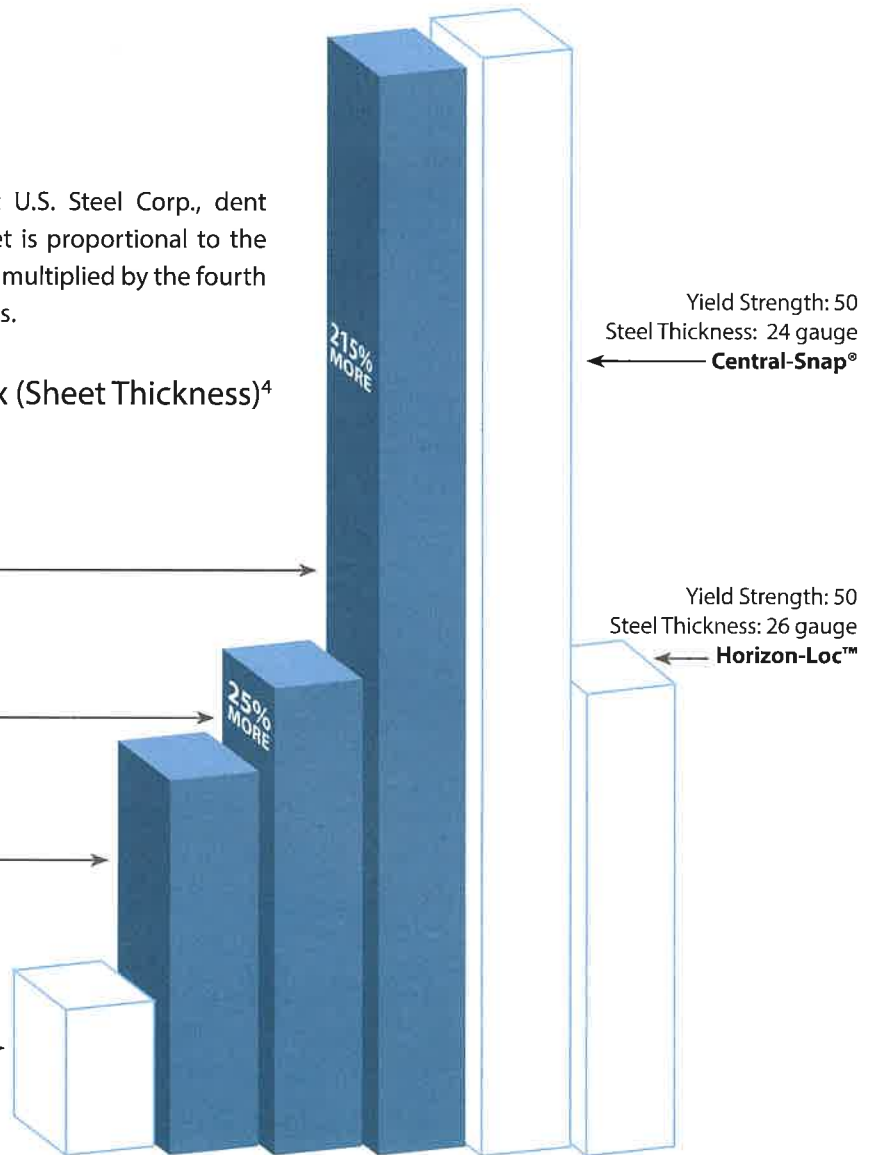
$$\text{Dent resistance} \propto (\text{Yield Strength})^2 \times (\text{Sheet Thickness})^4$$

Yield Strength: 80  
Steel Thickness: 26 gauge  
**Panel-Loc Plus™ Ultra**

Yield Strength: 80  
Steel Thickness: Thick 29 gauge  
**Panel-Loc Plus™ Prime**

Yield Strength: 80  
Steel Thickness: Thin 29 gauge  
**Panel-Loc Plus™ Standard**

Yield Strength: 33-50  
Steel Thickness: Thin 29 gauge  
**Most trim and trim-grade material being used to roll-formed panels**



# Horizon-Loc™

Color Selection Tool

26 GAUGE  
CONCEALED FASTENER



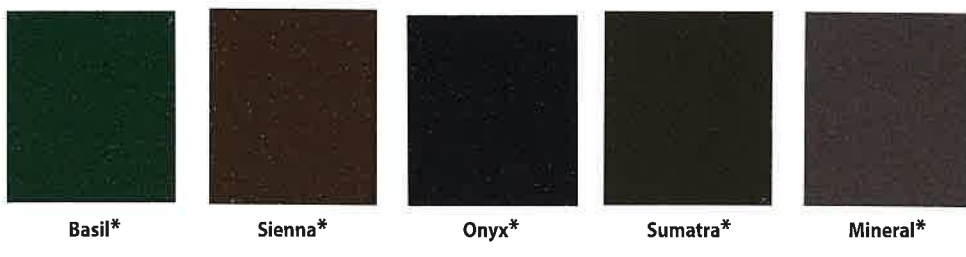
## PRIME SMP



PREMIUM COLORS

## PRIME SMP with Texture

Add a new depth of color with texture paint!



Galvalume\*<sup>‡</sup>  
Acrylic



www.centralstatesmfg.com

valspar®



Check our website to verify which colors meet ENERGY STAR\* requirements for steep slope roofs.

\*Contact your sales person for accurate pricing. † Color variation between orders is normal and not cause for rejection. ‡ Weathering and appearance variation, including color, sheen, and spangle, is common in non-painted materials and is not a cause for rejection. For consistent appearance, choose a paint-finished product.

Colors on this chart are close representations of actual metal color, limited by printing and viewing conditions. Color matching is optimized for outdoor viewing.



# Upgrade to Horizon-Loc for the ultimate protection from rain and snow.

Horizon-Loc gives you the beauty and protection of a standing seam panel at an affordable price. Its hidden fasteners give superior leak prevention and protection from rain and snow.

Horizon-Loc also features CentralGuard, our specific combination of everything that goes into making the highest-quality metal panels. The CentralGuard name is a guarantee that you have the best protection and a lifetime paint warranty.

Choose Horizon-Loc for the ultimate protection from rain and snow, plus the perfect balance of fade protection, rust blocking, and dent resistance.

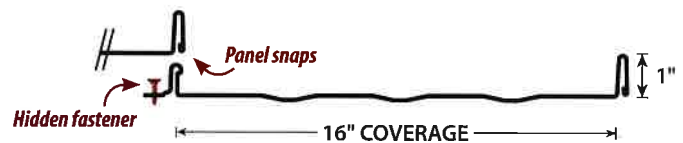
**BEST LEAK  
PREVENTION**

	PANEL-LOC PLUS PRIME CentralGuard	<b>HORIZON-LOC</b> PRIME CentralGuard
<b>LEAK PREVENTION</b>		
Fasteners	Exposed	Hidden from elements
<b>FADE PROTECTION</b>		
Paint Warranty	<b>LIFETIME</b>	<b>LIFETIME</b>
Paint Thickness	THICKER 1.0 mil	THICKER 1.0 mil
Fade Warranty	30-YEAR	30-YEAR
Fade Protection	✓✓	✓✓
<b>RUST BLOCKING</b>		
Advanced Rust Blocking	✓	✓
Perforation Warranty	20-YEAR	20-YEAR
Substrate Thickness	1.60 mil	1.60 mil
<b>DENT RESISTANCE</b>		
Advanced Dent Resistance	✓	✓
Steel Thickness	THICK	THICKEST
Steel Gauge	29 ga.	26 ga.

*Horizon-Loc features UL2218 approval for impact resistance and may qualify for a homeowners insurance discount. See your local insurance agent for qualifications.*

	APPEARANCE	BEST USED FOR	PAINT SYSTEM	COST
<b>PRIME SMP with Texture</b>	Matte	Mimics the texture of shingles	SMP Siliconized Modified Polyester	\$\$\$
<b>PRIME SMP</b>	Uniform	Traditional applications	SMP Siliconized Modified Polyester	\$\$
<b>Galvalume® Acrylic</b>	Non-Uniform	Vintage/classic look	None	\$

## Horizon-Loc™





# Fade Protection Explained

The paint on your panels is made up primarily of two components: *resin* and *pigment* (a third, *solvent*, is used to transfer the two to the metal surface and is released during the application process). Understanding the attributes of each of the components will help you choose the best paint for you.

## PIGMENT

Pigments are the particles of color that are suspended in the resin to create color. Inorganic and ceramic pigments offer the best protection against fade over organic compounds. **Fading occurs when environmental influences attack the pigments causing them to change color over time.** Pigments are rated on their ability to resist fading. In this rating the lower the number the better.

Central States products use the trademarked CentralGuard® protection system. It includes a cross-linked matrix resin and UV blockers that deter fading.

## RESIN

Resin binds the pigment to the metal surface. The stronger the binding agent, the more resistant it is to sun, rain and pollution. Resins are rated according to their resistance to chalking.

**Chalk, or the appearance of a whitish, powdery substance on the panel surface, is the result of a breakdown of carbon bonds in the finish.** Resins protect the pigments and give UV resistance to help them fade less over time. Higher resin content means a longer lasting film, more abrasion resistance and more panel protection.

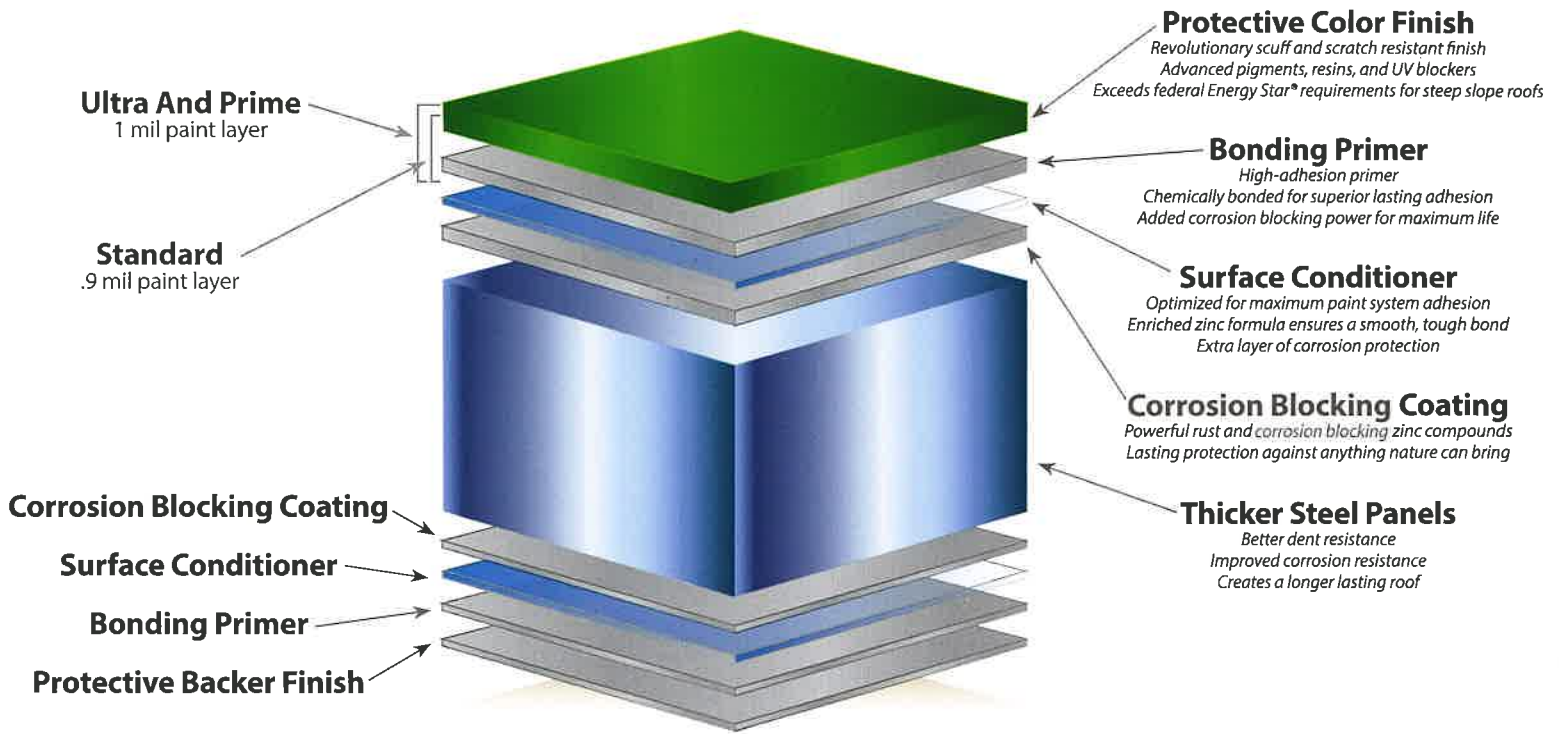
CentralGuard's advanced resin system resists color washout with a unique chalk-resistant formula that does not break down in harsh sunlight and extreme weather like traditional resins.



[WWW.CENTRALSTATESMFG.COM](http://WWW.CENTRALSTATESMFG.COM)

Copyright © 2018, Central States Manufacturing, Inc., All Rights Reserved.  
CentralGuard® is a trademark of Central States® Manufacturing, Inc.  
Galvalume® is a registered trademark of BIEC International, Inc.  
FLYR\_Fade\_180201

# LAYERS OF PROTECTION



# MEASURING FADE AND CHALK RESISTANCE

**FADE** is measured in **Hunter Units**. One Hunter Unit denotes the smallest degree of color change visible to the naked eye. *Lower numbers are better*



**CHALK** is measured by the amount of powdery material that is deposited on a black cloth when painted metal is rubbed. *In this case higher numbers are better.*

## Central States Protection

**Roof Panel**  
**7** units of **Fade**  
over the next **30 years**

**Wall Panel**  
**5** units of **Fade**  
over the next **30 years**



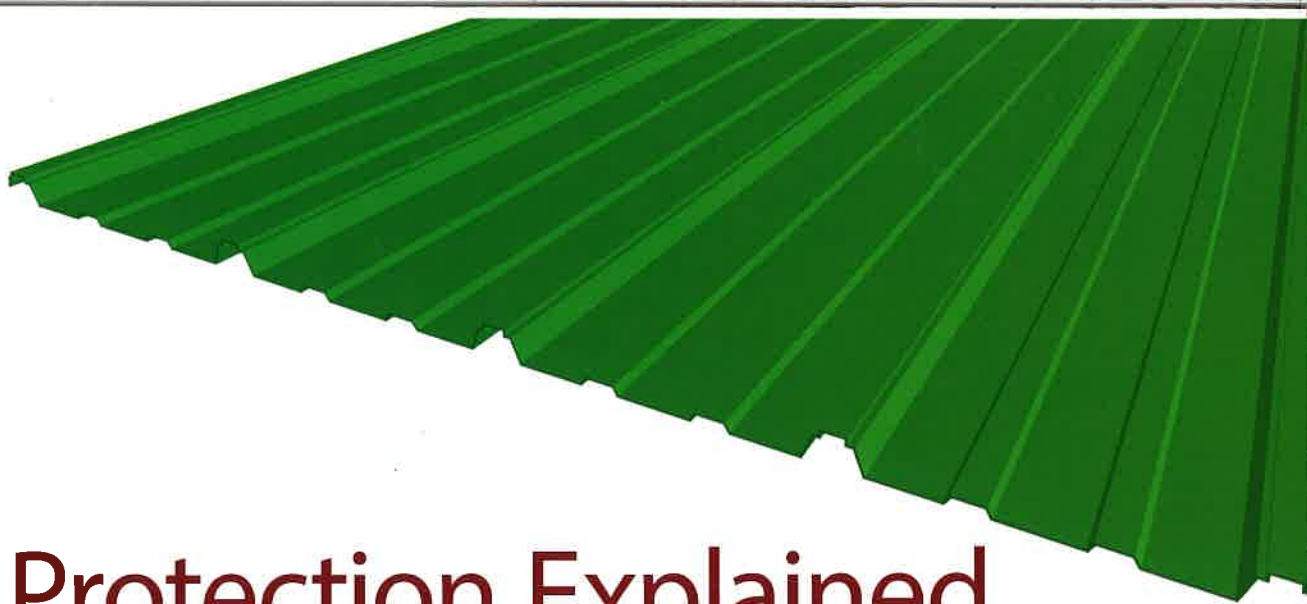
## Central States Protection

**Roof Panel**  
**6** Chalk rating  
over the next **30 years**

**Wall Panel**  
**8** Chalk rating  
over the next **30 years**

## Hunter Unit Scale

	1 Hunter Unit	3 Hunter Units	5 Hunter Units	7 Hunter Units
<b>FADE COMPARISON</b> For comparison only. Fade may vary by color.	CentralGuard® by Central States	FADE	FADE	FADE
	Brand New Roof	After 7 Years	After 15 Years	After 22 Years
	Substandard Metal Roofs	FADE	FADE	FADE
	2.5 Hunter Units	5 Hunter Units	7.5 Hunter Units	10 Hunter Units

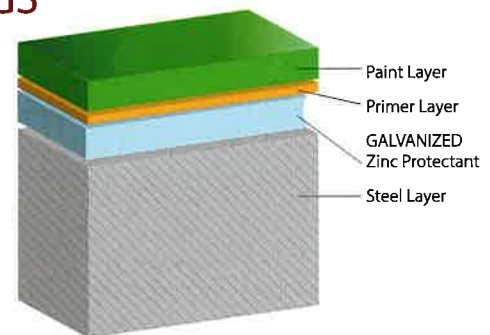


# Rust Protection Explained

Along with the paint, a rust-blocking Galvanic coating protects the steel from moisture and the elements. The two most popular rust-inhibitive coatings are Galvalume® and Galvanized zinc coatings. Galvanized coatings use a strictly zinc-based protectant, while Galvalume® uses both zinc and aluminum. Both have benefits that must be considered when choosing the right protection for your job.

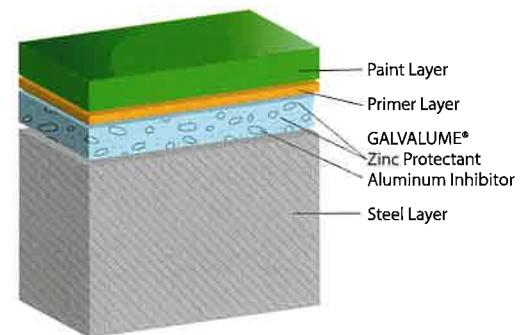
## KEY BENEFITS OF USING GALVANIZED COATINGS

- Best protection **short term**: Shows little or no edge-rust for the first 10 years
- Long-term industry standard



## KEY BENEFITS OF USING GALVALUME® COATINGS

- Superior protection **long term**. After a small amount of initial edge-rust, has up to 4 times the protection of comparable options.
- 20 year rust-through warranty for painted materials, 25 year for non-painted.



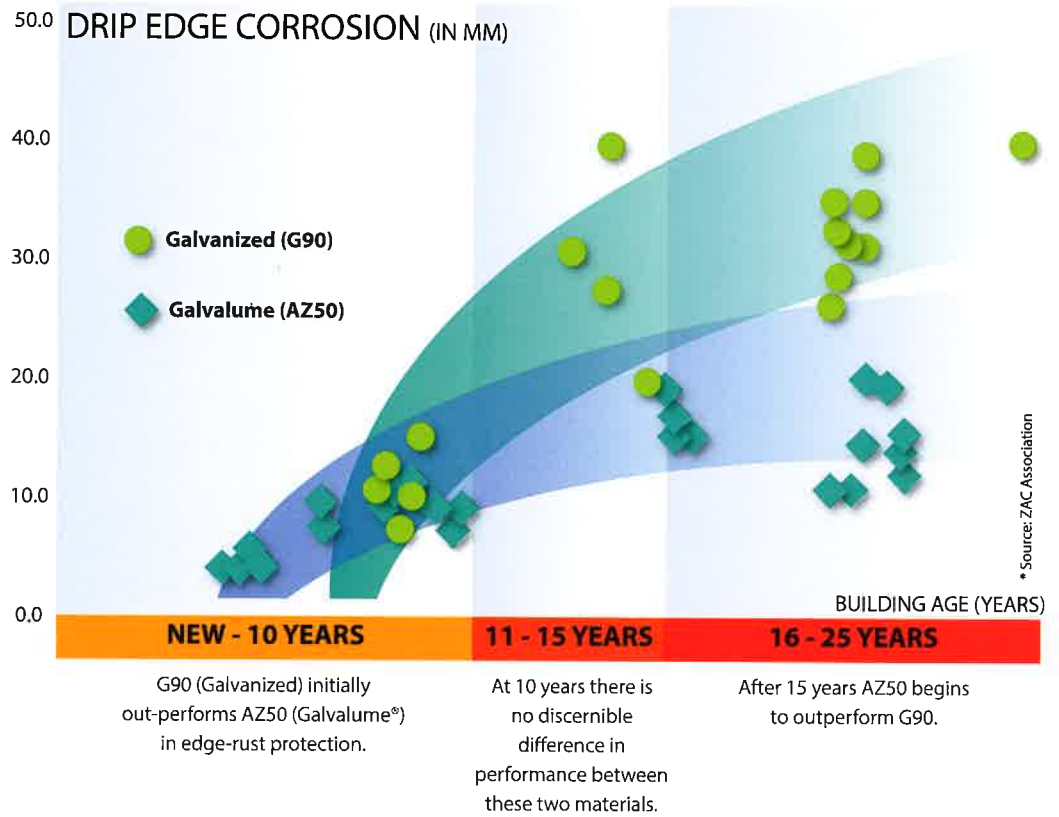
[WWW.CENTRALSTATESMFG.COM](http://WWW.CENTRALSTATESMFG.COM)

SOURCE: U.S. Steel Corporation Bulletin: Hail Damage on Coated Steel Roofing  
Copyright © 2018, Central States Manufacturing, Inc., All Rights Reserved.  
Galvalume® is a registered trademark of BIEC International, Inc.

FLYR\_Rust\_180201

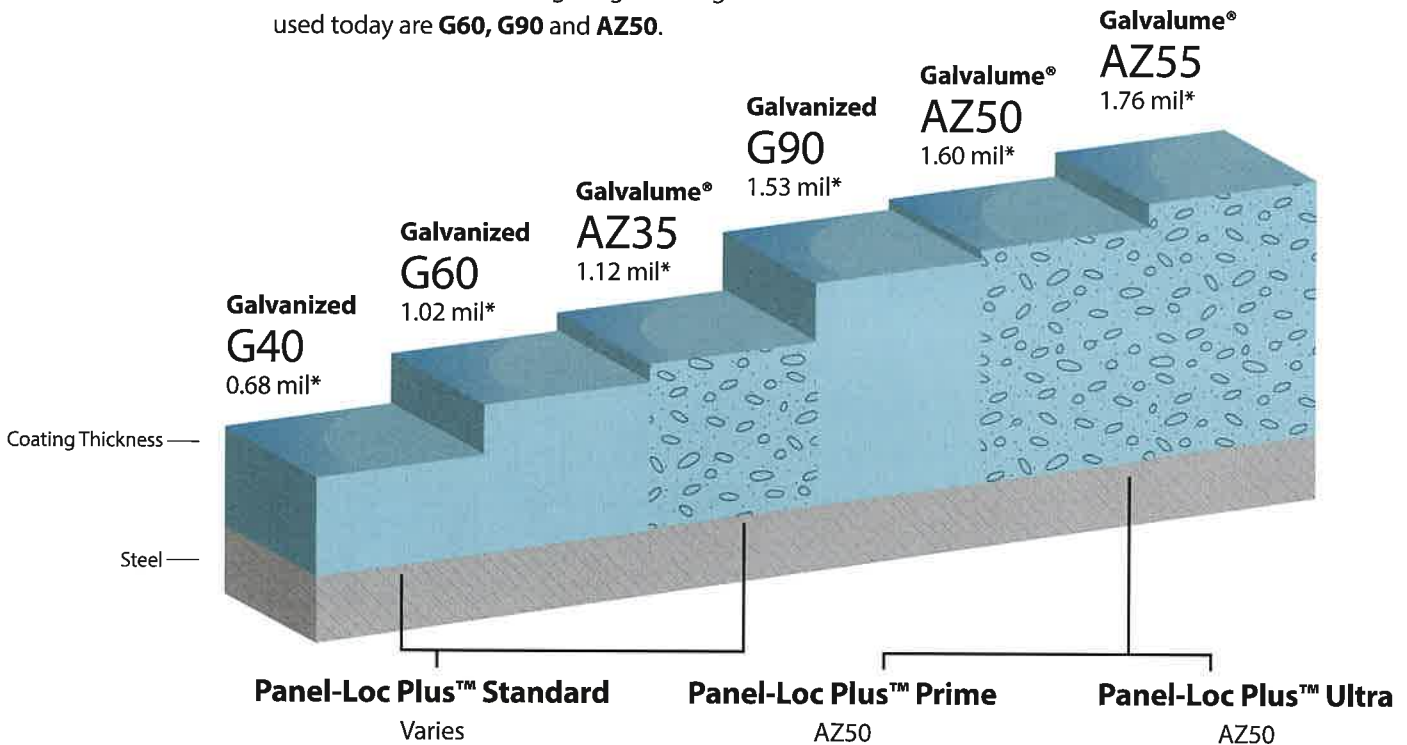
# GALVALUME® AND GALVANIZED PROTECTION OVER TIME

It is important to note that there are various thickness of Galvalume® and Galvanized coatings. Although the chart to the right compares G90 to AZ50, the corrosion protection varies when comparing other thickness of Galvalume® and Galvanized coatings.



## COATING THICKNESS

Coating thickness is an important factor in the effective application of the protectant layer to the substrate. The most common coating weights being used today are **G60**, **G90** and **AZ50**.



\* Total minimum thickness for both sides of the substrate  
 Source: United States Steel Corporation Technical Bulletin - TCP 2012.4



### Horizon-Loc

Horizon-Loc™ is a durable concealed fastener roof system with easy snap together installation. This architectural panel system uses hidden fasteners, giving your building a clean, attractive finish. The panel's easy snap-on ribs attach rapidly without mechanical seaming, so installation is less expensive than traditional standing seam.



### Panel-Loc Plus™

Panel-Loc Plus™ is a low rib (3/4") panel which provides durable performance with an added striation on top of the rib that gives it even more strength. Panel-Loc Plus™ gives agricultural and light commercial projects, as well as residential roofs, the protection of steel with an attractive appearance.



### R-Loc™

This 26 gauge commercial panel is an excellent choice for projects that require commercial grade performance. R-Loc™ is designed to maximize the potential of your structures, specifically the steel frame. R-Loc™ has an added purlin bearing rib, so you can count on easier installation and a more pleasing appearance.



### M-Loc™

M-Loc™ is a structural roof and wall panel that can be installed directly over purlins or joists. The M-Loc™ panel is available in 26 gauge. This commercial panel has long served customers with lasting durability in commercial type applications.

## Metal roofing increases your homes value

As with any investment, the initial cost of buying a quality metal roof is higher than using shingles. However, a superior metal roof can increase the resale value of your home up to 6% versus homes with asphalt shingles.\* Check with your insurance agent for homeowners discounts, because some states offer up to a 35% discount on your homeowners insurance simply for installing a metal roof.

## Metal roofing lasts longer than shingles

A metal roof will likely be the last roof you buy. A typical asphalt shingle roof has to be replaced every 10 to 20 years. The durability of a metal roof is unmatched by other roofing materials. Warranties on a metal roof last 40 years.

## Metal roofing lowers your electric bills

A metal roof can save you up to 25% in energy costs. The paint in metal roofs, both light and dark colors, has special pigmentation that reflects the heat from the sun. Not only does a metal roof reflect (reflectivity) the heat from the sun, it also keeps it from absorbing (emissivity) into your attic space and house. Almost all of Central States colors are Energy Star approved.

\*According to Remodeling Magazine

## For a more upscale look Central Span & Central Snap

These two standing seam profiles offer reduced risk of leak at the rake. The long smooth lines are aesthetically pleasing and will add years of worry-free protection to any roof.



## Which panel fits your needs?



## Which panel fits your job?

Pitch		Substrate		
Greater than 3:12	Less than 3:12	Over Shingles	Over Solid Decking	Open Rafters
Horizon-Loc			Horizon-Loc	
Panel-Loc Plus Ultra-Kynar		Panel-Loc Plus Ultra-Kynar	Panel-Loc Plus Ultra-Kynar	Panel-Loc Plus Ultra-Kynar
Panel-Loc Plus Ultra		Panel-Loc Plus Ultra	Panel-Loc Plus Ultra	Panel-Loc Plus Ultra
Panel-Loc Plus Prime		Panel-Loc Plus Prime	Panel-Loc Plus Prime	Panel-Loc Plus Prime
Panel-Loc Plus Thrifty		Panel-Loc Plus Thrifty	Panel-Loc Plus Thrifty	Panel-Loc Plus Thrifty
R-Loc / M-Loc Prime	R-Loc / M-Loc Prime	R-Loc / M-Loc Prime	R-Loc / M-Loc Prime	R-Loc / M-Loc Prime

*Always consult your installer for proper technique over shingles.*

## Frequently Asked Questions

### Isn't it loud?

This is the single biggest misconception about metal roofing. Most people picture an old porch with a rocking chair and a loud rainstorm. In reality, a metal roof is installed with solid sheathing and underlayment, causing it to insulate noise much better than other roofing materials.

### Doesn't lightning strike it often?

Having a metal roof does not increase the likelihood of a lightning strike on your house. If your house does get struck by lightning, a metal roof would do a better job spreading out the energy to protect your home.

### Isn't all metal roofing the same?

Most people think that "metal is metal." But, there is wide variety of thickness, hardness, and substrates that protect your home from dents, rust, and fading. Never consider a roof based solely on price. Weigh all factors of quality, durability, as well as price to find the best value. Don't spend the next 40 years regretting the difference of a few hundred dollars. Visit [allmetalnotequal.com](http://allmetalnotequal.com) for more information.



Lowell, AR

Michigan City, IN

Cedar Hill, TX

Mount Airy, NC

Jasper, AL

Hartford, SD