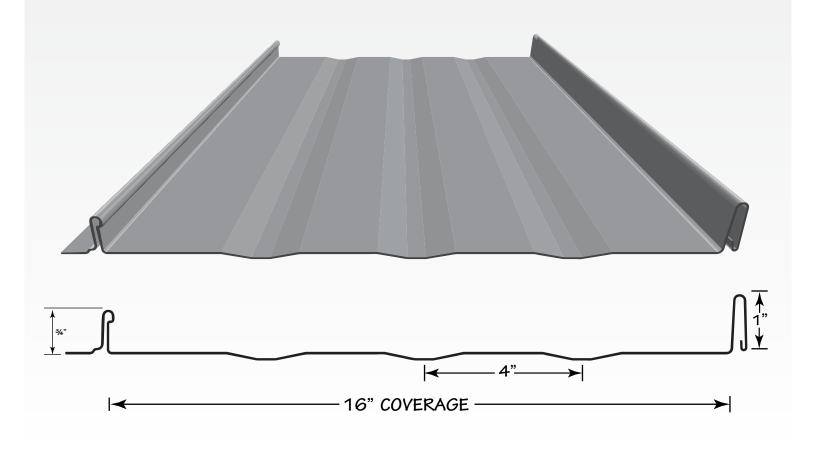
# H-LOC Product Guide

HELPFUL INFORMATION ON PANELS, TRIMS, GUTTERS AND ACCESSORIES





# The men and women at Central States Manufacturing, Inc. would like to welcome you.

Central States Manufacturing, Inc. is an employee-owned company that is **committed to excellence** in the manufacturing and the distribution of metal building products. We are **dedicated to personal growth** and to the well being of each team member. We are also dedicated to **increasing the value** of our company.

In appreciation of our customers, we are devoted to **exceeding their expectations**. It is our promise to **maintain total honesty and integrity** with everyone our lives may touch.

With thanksgiving for the blessings we have been given, we are **committed to serving** the communities where we live and work by giving back a portion of our time, talents and profits.



# **INDEX**

Information in the catalog may vary by plant location.

Please call your salesperson to verify product availability.

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### **Notice:**

The application and detail drawings in this manual are strictly for illustration purposes and may not be applicable to all building designs or product installations. Projects should conform to local building codes. Central States Manufacturing is not responsible for the performance of the material if it is not installed correctly.

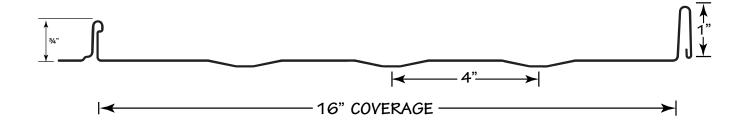
Information contained in this booklet was in effect at the time of publication and is subject to change without notice.

# H-LOC™ PRODUCT INFORMATION

Horizon-Loc<sup>™</sup> is available in 26ga AZ50 painted Galvalume® and bare Galvalume®. Central States uses either the CentralGuard® or Fluropon® paint system on all painted metals. Bare (non-painted) metals from Central States will have an acrylic coating. This acrylic coating helps protect the metal during manufacturing and installation. This clear organic treatment applied over the Galvalume® coating is invisible, but provides enhanced performance applicability and retained heat reflectivity. There is no need for oils to be applied during forming. This organic treatment eliminates fingerprinting and foot marking during installation. Bare, unpainted Galvalume® is not warranted for uniformity in appearance, whether it be color, sheen, or spangle. If the project requires a uniform appearance, please choose a painted product.

Central States' 26ga steel is manufactured to meet ASTM A792 specifications for Galvalume® and ASTM A653 for galvanized with a minimum yield of 50,000 PSI. Horizon-Loc™ also has UL2218/Class 4 Impact Resistance Rating and UL790 Fire Resistance. A minimum roof slope for the 1" tall Horizon-Loc™ is 3:12. The minimum pitch will allow for sufficient drainage of water. No load table available. Install Horizon-Loc™ over a solid decking with at least 30 lb. felt

paper or synthetic underlayment. A synthetic underlayment would be a better choice because it is designed to last the life of the metal and will not break down in 10-15 years. Horizon-Loc<sup>™</sup> provides 16" of coverage, and has 1/16" striations to provide strength and reduce the incidence of oil canning in the panel. The Horizon-Loc<sup>™</sup> panel is custom cut to the halfinch, in lengths from 3' to 40'. Longer lengths require additional handling, packaging, and shipping considerations. An extra handling charge may apply to panels over 40'. Horizon-Loc<sup>™</sup> panels should not be end-lapped. You must order full length panels to avoid end laps. Horizon-Loc™ has a 1" high rib, making it an excellent choice for residential and light commercial applications.



 $\label{lem:Galvalume} \textbf{Galvalume} \ \ \textbf{is a registered trademark of BIEC International, Inc.}$ 

# DESIGN

# CALCULATIONS FOR DETERMINING PANEL LENGTH

Central States pre-cuts each piece according to your order, to the nearest 1/2" (from 3' to 40'), so you must first figure out exactly how many pieces you'll need and how long each piece must be.

To figure the length of each section, measure from the top edge of the sheathing (where the roofing will end) to the bottom edge and then add 2" so that the roofing extends over the drip edge and allows for 1" hem. If the roof will include a ridge vent, the plywood decking and panels should be held 2" back from the ridge.

Trim and flashing are available to match the color of the roofing. Each type of trim and flashing must be anticipated and included in the order. Trim pieces come in multiple lengths: 10'2", 12'2", 14'2", 16'2", 18'2" and 20'4".

### PEAK, RIDGE, ENDWALL, HIP

Panels should be started 1" down from edge or peak (length of run minus 1"). If ridge or peak is ventilated, start sheet down 2" from edge or peak. This could vary depending on the type of ventilation being used. Consult the ventilation manufacturer for recommendations.



Contact your local building code officials or an engineer on proper ventilation practices for your area.

### INSULATION AND VENTILATION

Proper design and installation of ventilation systems are important to prevent condensation and the resulting problems of moisture damage and loss of insulation efficiency.

Condensation occurs when moisture-laden air comes in contact with a surface temperature equal to or below the dew point of the air. This phenomenon creates problems that are not unique with metal buildings; they are common to all types of construction.

In addition to providing resistance to heat transfer, insulation can also protect against condensation forming on cold surfaces, either inside the building or within the wall/roof system cavity. The arrangement of the building's insulation system and vapor retarder is the responsibility of the building designer. These are some basic guidelines to help control condensation in a metal building:

- The insulation should have a vapor retarder face on the "warm" side of the insulation. For most buildings, this means that the vapor retarder is on the inside surface (toward the building's interior).
- The thickness of the insulation must be designed to maintain the temperature of the vapor retarder above the interior dew point, using the worst-case expected outside temperature.
- All perimeter conditions, seams, and penetrations of the vapor retarder must be adequately sealed in order to provide a continuous membrane to resist the passage of water vapor.
- Building ventilation, whether by gravity ridge vent, power-operated fans, or other means, contributes significantly to reduced condensation.
   The movement of air to the outside of the building reduces the interior level of vapor pressure.

On buildings that have an attic space or are being retrofitted with a metal roofing system, proper ventilation needs to be used in order to prevent a buildup of moisture (humidity) in the attic space.

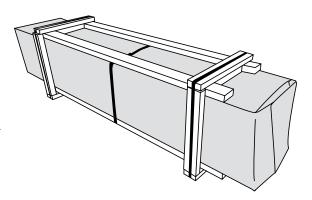
# **DELIVERY & PACKAGING**

### **LEAD TIME**

Contact your salesperson for lead times. Orders will be shipped LTL, and a charge will be applied to all job site deliveries (call distributor for current job site delivery pricing).

### **PACKAGING**

Horizon-Loc™ panels are packed in wooden crates to protect them during shipping. An example of the packaging is illustrated to the right. A crating charge will be applied to all orders.



# RECEIVING MATERIALS

Improper loading and unloading of bundles and crates may result in bodily harm and/ or material damage. Central States is not responsible for bodily injuries and/or material damages resulting from improper loading and unloading.



It is the responsibility of the purchasing party to unload material from the delivery truck. The purchaser shall be responsible for providing suitable equipment for unloading of material from the delivery truck.

After receiving material, check the condition of the material, and review the shipment against the shipping list to ensure all materials are accounted for. If damages or shortages are discovered, it should be noted on the shipping copy at time of delivery. If material is delivered by common carrier, a claim must be made with the carrier as soon as possible.

If replacement material is required, you must contact Central States Manufacturing, or your distributor immediately to place the order.

NOTE: Oil canning in the flat area of the panels is common to the industry and does not affect the integrity of the panel. Therefore, oil canning is not a reason for rejection.

# **GENERAL HANDLING**

Each bundle should be handled carefully to avoid being damaged. Care should be taken to prevent bending of the panel or abrasion to finish. Whenever possible, the bundle should remain crated until it is located in its place of storage. If bundles must be opened, we recommend you re-crate them before lifting. To avoid damage, please lift the bundle at its center of gravity.

Proper care is required in unloading and handling panel bundles in order to prevent panel damage.

- Bundles should remain crated during any handling, and until the individual panels in each crate are ready to be installed.
- Lift each bundle as close as possible to its center of gravity.
- If the panel bundles are to be lifted with a crane, use a spreader bar of appropriate length and nylon band slings. (Do not use wire rope slings, as they will damage the panels.)
- Depending on panel length, some bundles may be lifted by a forklift. When using a forklift, the forks should be spread apart to their maximum spacing, and the load must be centered on the forks.

- After panel bundles are opened, individual panels must also be handled carefully to prevent panel buckling or damage to the panel coating. When removing a panel from a bundle, it should never be allowed to slide over another panel.
- A panel should never be picked up by its ends. Instead, lift the panel along its longitudinal edge and carry in a vertical (not flat) position three feet in from both edges, to prevent buckling. For panels over 10' long, two or more people should lift the panel along the same edge.
- Soft gloves must be worn when handling panels.

# MECHANICAL HANDLING

### **FORKLIFT**

A forklift may be used for bundles up to 20' long. Please make sure the forks are at their maximum separation. Do not transport open bundles. When transporting bundles across rough terrain, or over a long distance, some means of supporting the panel load must be used.

### **CRANE**

A crane should be used when lifting bundles with lengths greater than 20'. Please be sure to utilize a spreader bar to ensure the even distribution of the weight to the pick up points. As a rule when lifting panels, no more than 1/3 of the length of the panel should be left unsupported. Canvas or nylon slings should be used to pick up panels. DO NOT use cable or chains because this will damage the panels.

# **STORAGE**

Bare Galvalume and painted panels can be expected to give many years of rust-free service when precautions are taken during storage. If metal is not to be used immediately, store inside a wellventilated, dry location. Any outdoor storage is at the customer's own risk. At time of delivery, inspect panels for moisture. If moisture has formed, the panels should be unbundled, wiped dry, and allowed to dry completely. Failure to remove the entrapped moisture between the sheets immediately will affect the service life of the metal. Under no circumstances should the sheets be stored near or come in contact with salt water, corrosive chemicals, ash, or fumes generated or released inside the building or nearby plants, foundries, plating works, kilns, fertilizer, and wet or green lumber.

If panel bundles are stored outside, the following list of requirements should be adhered to:

- The storage area should be reasonably level, and should be located so as to minimize handling of bundles during the construction process.
- Store bundles at least 12" above ground level to allow air circulation beneath the bundle, and to prevent rising water from entering the bundle.

- When stored on bare ground, place a waterproof tarp under the bundles to minimize condensation on the panels from moisture in the soil.
- Elevate one end of the bundle slightly to permit runoff of moisture from the top of the bundle or from between nested panels. A waterproof cover should be placed over the bundles, with allowance for air circulation under the cover. Never cover the metal with plastic, as this will cause condensation to form.
- Inspect stored bundles daily and repair any tears or punctures to your waterproof cover with a compatible waterproof tape.
- Re-cover opened bundles at the end of each day to prevent entry of moisture.
- Do not store in direct sunlight as protective plastic film on panels will adhere to the panel surface.



Never cover the metal with plastic, as this will cause condensation to form.

### **STORAGE ON ROOF**

To facilitate the handling of Horizon-Loc™ panel bundles can be lifted and placed on the roof. Bundles need to be placed parallel to the framing members and the slope of the roof. Load capabilities of the structure must be checked prior to placing bundles on the roof.

When lifting packaged sheets, make certain they are adequately supported. Panels less than 20' in length can normally be lifted with a forklift; however, when lifting panels in excess of 20', it is recommended that a spreader bar and slings be used. When lifting, no more than 1/3 of the length of the panel should be left unsupported.

Make a plan for bundle placement by determining how much area a bundle of panels will cover. Bundles should be placed on the roof in accordance with the direction the panel will be installed. Consider where the string line is to run at the eave to set the roof panels by. Roof bundles should not interfere with this string line.

# **MAINTENANCE**

With a little care and attention during service, a prepainted Galvalume® sheet will provide an extended service life. While durable, factory-applied finishes for metal building panels will last many years longer than ordinary paints; they should be cleaned thoroughly on a routine basis whenever the finish is not washed by rain. Applications where the paint finish is automatically washed by rain, such as roofing, do not require this maintenance.

Cleaning restores the appearance of the building, making repainting unnecessary, and maintains a pleasing appearance, as well as removing the buildup of corrosive materials. Applications requiring maintenance cleaning include soffits, siding under eaves, garage doors and the undersides of eave gutters.

# **CLEANING**

In many cases, washing the painted surface with clean water from a garden hose will remove most of the dirt and accumulated deposits. Ideally, washing should be done at least every six months and more frequently in coastal areas where marine salt spray is prevalent or where high levels of industrial fallout occur. In cases where spray washing is ineffective in cleaning stubborn dirt, mild detergents or household ammonia solutions can be used as described below. In all cases, test a small unobtrusive area for color-fastness before cleaning large areas.

- Use one cup of Tide® (or other common detergent containing less than 0.5% phosphate) dissolved in five gallons of warm water. NOTE: Detergents containing greater than 0.5% phosphate are not recommended for use in general cleaning of building panels.
- OR use one cup of household ammonia dissolved in five gallons of water at room temperature. Never mix ammonia with any kind of bleach.
- Never blend cleaners and bleach yourself.
   If bleach and detergent are required, use detergents containing bleach.

Using either solution, work from the top to the bottom of panels with a well-soaked soft cloth, sponge, brush with very soft bristles, or low-pressure spray washer to clean the surface. Washing from the top down avoids streaking. Application should be gentle to prevent shiny spots. Scouring powders or industrial solvents are not recommended, since they may damage the paint film. Solvent-containing cleaners such as Fantastik® are very effective and can be used.

If mildew or other fungal growth is a problem and cannot be removed as described above, detergent containing bleach, such as Tide® with Bleach, is recommended. The surface should be thoroughly rinsed with water after cleaning to remove traces of detergent.

# **COMMON RAFTER LENGTHS**

### (PEAK TO SIDEWALL)

Running Feet	1:12 Pitch	2:12 Pitch	3:12 Pitch	4:12 Pitch	5:12 Pitch	6:12 Pitch
1	1' 0"	1' 1/8"	1' 3/8"	1' 5/8"	1'1"	1' 1-3/8"
2	2' 1/8"	2' 3/8"	2' 3/4"	2' 1-1/4"	2'2"	2' 2-7/8"
3	3' 1/8"	3' 1/2"	3' 1-1/8"	3' 2"	3'3"	3' 4-1/4"
4	4' 1/8"	4' 5/8"	4' 1-1/2"	4' 2-5/8"	4'4"	4' 5/8"
5	5' 1/4"	5' 7/8"	5' 1-7/8"	5' 3-1/4"	5'5"	5' 7-1/8"
6	6' 1/4"	6' 1"	6' 2-1/4"	6' 3-7/8"	6'6"	6' 8-1/2"
7	7' 1/4"	7' 1-1/8"	7' 2-5/8"	7' 4-1/2"	7'7"	7' 9-7/8"
8	8' 3/8"	8' 1-3/8"	8'3"	8' 5-1/4"	8'8"	8' 11-3/8"
9	9' 3/8"	9' 1-1/2"	9' 3-3/8"	9' 5-7/8"	9'9"	10' 3/4"
10	10' 3/8"	10' 1-5/8"	10' 3-3/4"	10' 6-1/2"	10'10"	11' 2-1/8"
11	11' 1/2"	11' 1-7/8"	11' 4-1/8"	11' 7-1/8"	11'11"	12' 3-5/8"
12	12' 1/2"	12' 2"	12' 4-3/8"	12' 7-3/4"	13'0"	13' 5"
13	13' 1/2"	13' 2-1/8"	13' 4-3/4"	13' 8-1/2"	14'1"	14' 6-3/8"
14	14' 5/8"	14' 2-3/8"	14' 8-1/8"	14' 9-1/8"	15'2"	15' 7-7/8"
15	15' 5/8"	15' 2-1/2"	15' 5-1/2"	15' 9-3/4"	16'3"	16' 9-1/4"
16	16' 5/8"	16' 2-5/8"	16' 5-7/8"	16' 10-3/8"	17'4"	17' 10-5/8"
17	17' 5/8"	17' 2-7/8"	17' 6-1/4"	17' 11"	18'5"	19' 1/8"
18	18' 3/4"	18' 3"	18' 6-5/8"	18' 11-5/8"	19'6"	20' 1-1/2"
19	19' 3/4"	19' 3-1/8"	19' 7"	20' 3/8"	20'7"	21' 2-7/8"
20	20' 7/8"	20' 3-3/8"	20' 7-3/8"	21' 1"	21'8"	22' 4-3/8"
21	21' 7/8"	21' 3-1/2"	21' 7-3/4"	22' 1-5/8"	22'9"	23' 5-3/4"
22	22' 7/8"	22' 3-5/8"	22' 8-1/8"	23' 2-1/4"	23'10"	24' 7-1/8"
23	23' 1"	23' 3-3/4"	23' 8-1/2"	24' 3"	24'11"	25' 8-5/8"
24	24' 1"	24' 4"	24' 8-7/8"	25' 3-5/8"	26'0"	26' 10"
25	25' 1"	25' 4-1/8"	25' 9-1/4"	26' 4-1/4"	27'1"	27' 11-3/8"
26	26' 1-1/8"	26' 4-1/4"	26' 9-1/2"	27' 5"	28'2"	29' 3/4"
27	27' 1-1/8"	27' 4-1/2"	27' 9-7/8"	28' 5-5/8"	29'3"	30' 2-1/4"
28	28' 1-1/8"	28' 4-3/4"	28' 10-1/4"	29' 6-1/4"	30'4"	31' 3-3/4"
29	29' 1-1/4"	29' 4-7/8"	29' 10-5/8"	30' 6-7/8"	31'5"	32' 5-1/8"
30	30' 1-1/4"	30' 5"	30'11"	31' 7-1/2"	32'6"	33' 6-1/2"
31	31' 1-3/8"	31' 5-1/8"	31' 11-3/8"	32' 8-1/8"	33'7"	34' 7-7/8"
32	32' 1-3/8"	32' 5-1/4"	32' 11-3/4"	33' 8-3/4"	34'8"	35' 9-1/4
33	33' 1-1/2"	33' 5-1/2"	34' 1/8"	34' 9-3/8"	35'9"	36' 10-3/4"
34	34' 1-1/2"	34' 5-3/4"	35' 1/2"	35' 10"	36'10"	38' 1/4"
35	35' 1-1/2"	35' 5-7/8"	36' 7/8"	36' 10-5/8"	37'11"	39' 1-5/8''''

# **CONVERSION CHARTS**

### **DECIMAL EQUIVALENTS**

1/64	0.0156
1/32	0.0313
3/64	0.0469
1/16	0.0625
5/64	0.0781
3/32	0.0938
7/64	0.1094
1/8	0.1250
9/64	0.1406
5/32	0.1563
11/64	0.1719
3/16	0.1875
13/64	0.2031
7/32	0.2188
15/64	0.2344
1/4	0.2500

.1410	
17/64	0.2656
9/32	0.2813
19/64	0.2969
5/16	0.3125
21/64	0.3281
11/32	0.3438
23/64	0.3594
3/8	0.3750
25/64	0.3906
13/32	0.4063
27/64	0.4219
7/16	0.4375
29/64	0.4531
15/32	0.4688
31/64	0.4844
1/2	0.5000

33/64	0.5156
17/32	0.5313
35/64	0.5469
9/16	0.5625
37/64	0.5781
19/32	0.5938
39/64	0.6094
5/8	0.6250
41/64	0.6406
21/32	0.6563
43/64	0.6719
11/16	0.6875
45/64	0.7031
23/32	0.7188
47/64	0.7344
3/4	0.7500

49/64	0.7656
25/32	0.7813
51/64	0.7969
13/16	0.8125
53/64	0.8281
27/32	0.8438
55/64	0.8594
7/8	0.8750
57/64	0.8906
29/32	0.9063
59/64	0.9219
15/16	0.9375
61/64	0.9531
31/32	0.9688
63/64	0.9844
1	1.0000

### SINGLE SLOPE PITCHES ONLY

(FASCIA, EAVE, ENDWALL, GUTTER)

(17100171) 27112 (21		77 LEE, GG 1 1 E1 1)
1:12 PITCH	=	94.76 DEGREES
2:12 PITCH	=	99.46 DEGREES
3:12 PITCH	=	104.04 DEGREES
4:12 PITCH	=	108.44 DEGREES
5:12 PITCH	=	112.62 DEGREES
6:12 PITCH	=	116.57 DEGREES
7:12 PITCH	=	120.26 DEGREES
8:12 PITCH	=	123.69 DEGREES
9:12 PITCH	=	126.87 DEGREES
10:12 PITCH	=	129.81 DEGREES
11:12 PITCH	=	132.51 DEGREES
12:12 PITCH	=	135.00 DEGREES

### **DOUBLE SLOPE PITCHES ONLY** (HIP, VALLEY)

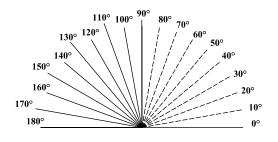
1:12 PITCH	=	173.00 DEGREES
2:12 PITCH	=	167.00 DEGREES
3:12 PITCH	=	160.00 DEGREES
4:12 PITCH	=	154.00 DEGREES
5:12 PITCH	=	148.00 DEGREES
6:12 PITCH	=	143.00 DEGREES
7:12 PITCH	=	138.00 DEGREES
8:12 PITCH	=	134.00 DEGREES
9:12 PITCH	=	130.00 DEGREES
10:12 PITCH	=	126.00 DEGREES
11:12 PITCH	=	123.00 DEGREES
12:12 PITCH	=	120.00 DEGREES

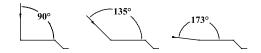
### (RIDGECAP)

1:12 PITCH	=	170.00 DEGREES
2:12 PITCH	=	161.00 DEGREES
3:12 PITCH	=	152.00 DEGREES
4:12 PITCH	=	143.00 DEGREES
5:12 PITCH	=	135.00 DEGREES
6:12 PITCH	=	127.00 DEGREES
7:12 PITCH	=	120.00 DEGREES
8:12 PITCH	=	113.00 DEGREES
9:12 PITCH	=	106.00 DEGREES
10:12 PITCH	=	100.00 DEGREES
11:12 PITCH	=	95.00 DEGREES
12:12 PITCH	=	90.00 DEGREES

Effective date July 28, 2005 Subject to change without notice

### Degrees of bend **Transition Trims**





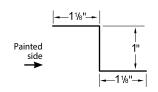
Specify Degrees when ordering

# **CONCEALED FASTENER TRIMS**

Orders for trims other than 10'2" in length must be in 9:00 am the day of your cutoff. All angles are  $90^{\circ}$  or  $45^{\circ}$  unless otherwise noted. All trims are 26 gauge unless otherwise specified.

### ALL HEMS ON CONCEALED FASTENER TRIMS ARE 1/2" OPEN HEM





PART # LENGTH

GIRTH

NOTES

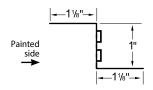
HLZC102(color)

10'2"

3.25"

butyl tape required.

### **VENTED ZEE CLOSURE**



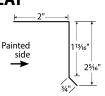
HLVZC102(color)

10'2"

3.25"

butyl tape required.

### **CLEAT**



HLCL102(color)

10'2"

10'2"

4.5625"

14"

14"

14"

14"

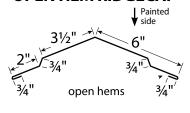
14"

14"

18"

17.5"

### **OPEN HEM RIDGECAP**

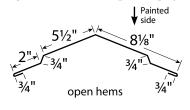


	•	,
CFRC1	22(co	lor)
CFRC1	42(co	lor)
CFRC1	62(co	lor)
CFRC1	82(co	lor)
CFRC2	04(co	lor)

CFRC102(color)

12'2" 14'2" 16'2" 18'2" 20'4" Zee needed. specify pitch. recommended 6:12 or less

### **OPEN HEM WIDE RIDGECAP**



<b>1</b> F
CFWRC102(color)
CFWRC122(color)
CFWRC142(color)
CFWRC162(color)

CFWRC182(color)

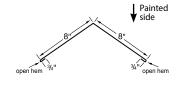
CFWRC204(color)

CFFRC204(color)

10'2"	18"
12'2"	18"
14'2"	18"
16'2"	18"
18'2"	18"

specify pitch.
recommended 7:12 or less

### **OPEN HEM FLAT RIDGE**



CFFRC102(color) 10'2" 17.5"

CFFRC122(color) 12'2" 17.5"

CFFRC142(color) 14'2" 17.5"

CFFRC162(color) 16'2" 17.5"

CFFRC182(color) 18'2" 17.5"

20'4"

Zee needed. specify pitch.

Zee needed.

20'4"

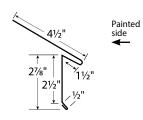
# **CONCEALED FASTENER TRIMS**

Orders for trims other than 10'2" in length must be in 9:00 am the day of your cutoff. All angles are 90° or 45° unless otherwise noted. All trims are 26 gauge unless otherwise specified.

### ALL HEMS ON CONCEALED FASTENER TRIMS ARE 1/2" OPEN HEM

### PART# **LENGTH GIRTH NOTES OPEN HEM VALLEY** Painted side CFVT102(color) 10'2" 20.5" specify pitch. CFVT122(color) 12'2" 20.5" 1/2" open hems 14'2" 20.5" CFVT142(color) CFVT162(color) 16'2" 20.5" 18'2" 20.5" CFVT182(color) 20'4" 20.5" CFVT204(color) **WIDE VALLEY** Painted side 10'2" 30" HLWVT102(color) specify pitch. 30" use on valley longer than 30'. HLWVT122(color) 12'2" 14'2" 30" HLWVT142(color) HLWVT162(color) 16'2" 30" 30" HLWVT182(color) 18'2" HLWVT204(color) 20'4" 30" **VALLEY CLEAT** HLVC102(color) 10'2" 5.5" Matte black only. Painted side 160

### **DRIP EDGE**



HLRDC102(color)	10'2"	9.5"
HLRDC122(color)	12'2"	9.5"
HLRDC142(color)	14'2"	9.5"
HLRDC162(color)	16'2"	9.5"
HLRDC182(color)	18'2"	9.5"
HLRDC204(color)	20'4"	9.5"

specify pitch.

# **CONCEALED FASTENER TRIMS**

Orders for trims other than 10'2" in length must be in 9:00 am the day of your cutoff. All angles are 90° or 45° unless otherwise noted. All trims are 26 gauge unless otherwise specified.

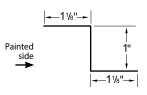
### ALL HEMS ON CONCEALED FASTENER TRIMS ARE 1/2" OPEN HEM

	PART #	LENGTH	GIRTH	NOTES
OPEN HEM RAKE				
<b> </b> ←─── 4" ────	CFRA102(color)	10'2"	9.5"	Zee & Cleat needed
Painted	CFRA122(color)	12'2"	9.5"	
side 3½" 34"	CFRA142(color)	14'2"	9.5"	
3"	CFRA162(color)	16'2"	9.5"	
open hems	CFRA182(color)	18'2"	9.5"	
<b></b>	CFRA204(color)	20'4"	9.5"	
OPEN HEM SIDEWALL/EN	IDWALL			
ŦI	CFSI102(color)	10'2"	7.75"	Zee needed.
Painted	CFSI122(color)	12'2"	7.75"	specify pitch.
3" side <del>▼</del>	CFSI142(color)	14'2"	7.75"	
4"	CFSI162(color)	16'2"	7.75"	
3/4" open hem	CFSI182(color)	18'2"	7.75"	
	CFSI204(color)	20'4"	7.75"	
OPEN HEM GAMBREL				
Painted vide	CFGA102(color)	10'2"	12.75"	Zee needed.
3" open hem ▼ Side	CFGA122(color)	12'2"	12.75"	specify pitch.
2"	CFGA142(color)	14'2"	12.75"	
3 <sub>3/4</sub> " open hen	CFGA162(color)	16'2"	12.75"	
	CFGA182(color)	18'2"	12.75"	
	CFGA204(color)	20'4"	12.75"	
FLAT SHEET	(color)CQ	10'2		Additional pallet charge on orders of 10 or more. Order
				quantity under 10 sheet will be packaged in a roll.

Orders for trims other than 10'2" in length must be in 9:00 am the day of your cutoff. All angles are 90° or 45° unless otherwise noted. All trims are 26 gauge unless otherwise specified.

### ALL HEMS ON EXPOSED FASTENER TRIMS ARE 1/2" CLOSED HEM

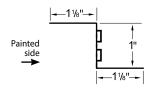




PART # LENGTH GIRTH NOTES

HLZC102(color) 10'2" 3.25" butyl tape required.

### **VENTED ZEE CLOSURE**



HLVZC102(color)

HLRH204(color)

10'2"

3.25"

16.5"

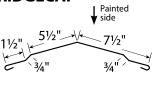
20.75" 20.75" 20.75" 20.75"

20.75"

20.75"

butyl tape required.

### **RIDGECAP**

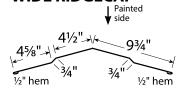


HLRH102(color)	10'2"	16.5
HLRH122(color)	12'2"	16.5
HLRH142(color)	14'2"	16.5
HLRH162(color)	16'2"	16.5
HLRH182(color)	18'2"	16.5

20'4"

specify pitch. recommend 6:12 or less.

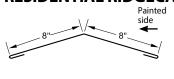
### **WIDE RIDGECAP**



MRC2(color)102	10'2"
MRC2(color)122	12'2"
MRC2(color)142	14'2"
MRC2(color)162	16'2"
MRC2(color)182	18'2"
MRC2(color)204	20'4"

specify pitch.	
recommend 6:12 or less.	

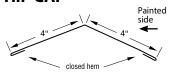
### RESIDENTIAL RIDGECAP



RRCP102(color)	10'2"	17"
RRCP122(color)	12'2"	17"
RRCP142(color)	14'2"	17"
RRCP162(color)	16'2"	17"
RRCP182(color)	18'2"	17"
RRCP204(color)	20'4"	17"

specify pitch.

### **HIP CAP**

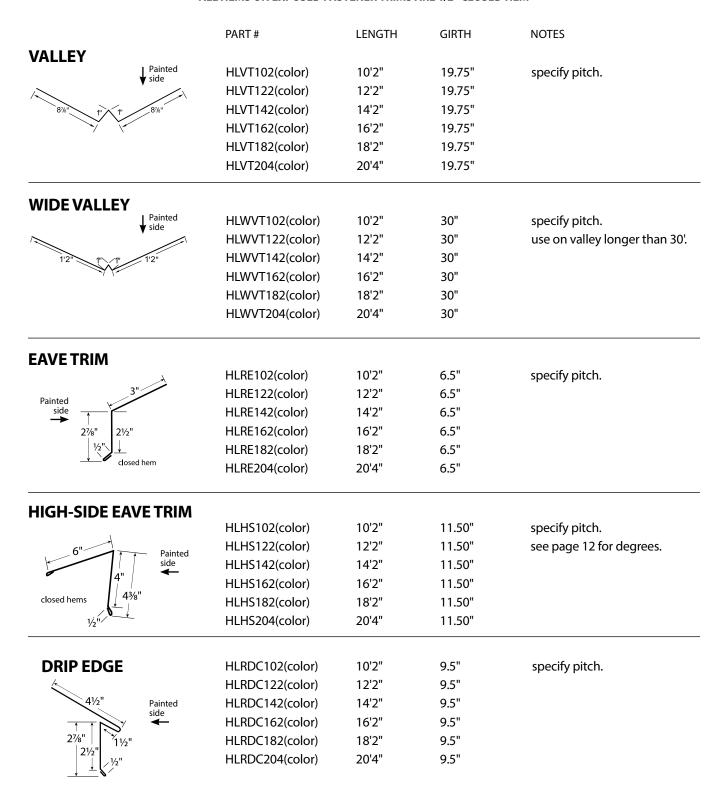


,		
HIP102(color)	10'2"	9"
HIP122(color)	12'2"	9"
HIP142(color)	14'2"	9"
HIP162(color)	16'2"	9"
HIP182(color)	18'2"	9"
HIP204(color)	20'4"	9"

specify pitch.

Orders for trims other than 10'2" in length must be in 9:00 am the day of your cutoff. All angles are  $90^{\circ}$  or  $45^{\circ}$  unless otherwise noted. All trims are 26 gauge unless otherwise specified.

### ALL HEMS ON EXPOSED FASTENER TRIMS ARE 1/2" CLOSED HEM



Orders for trims other than 10'2" in length must be in 9:00 am the day of your cutoff. All angles are 90° or 45° unless otherwise noted. All trims are 26 gauge unless otherwise specified.

### ALL HEMS ON EXPOSED FASTENER TRIMS ARE 1/2" CLOSED HEM

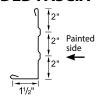
PART#

LENGTH

GIRTH

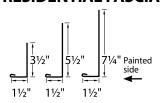
**NOTES** 

**BEADED FASCIA** 



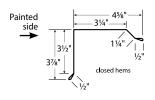
BFT(color) 10'2" 8.25"

### **RESIDENTIAL FASCIA TRIM**



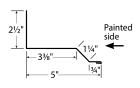
RFT312(color) 10'2" 5.5" RFT512(color) 10'2" 7.5" RFT712(color) 10'2" 9.5"

### **RAKE TRIM**



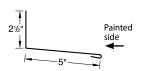
HLRRT102(color) 10'2" 10" HLRRT122(color) 12'2" 10" HLRRT142(color) 14'2" 10" HLRRT162(color) 16'2" 10" HLRRT182(color) 18'2" 10" HLRRT204(color) 20'4" 10"

### SIDEWALL TIE-IN



HLSW102(color) 10'2" 8.375" HLSW122(color) 12'2" 8.375" HLSW142(color) 14'2" 8.375" HLSW162(color) 16'2" 8.375" 18'2" 8.375" HLSW182(color) HLSW204(color) 20'4" 8.375"

### **ENDWALL TIE-IN**



HLEW102(color) 10'2" 8" HLEW122(color) 12'2" 8" HLEW142(color) 14'2" 8" 8" HLEW162(color) 16'2" HLEW182(color) 18'2" 8" 8" HLEW204(color) 20'4"

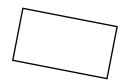
specify pitch.

Orders for trims other than 10'2" in length must be in 9:00 am the day of your cutoff. All angles are 90° or 45° unless otherwise noted. All trims are 26 gauge unless otherwise specified.

### ALL HEMS ON EXPOSED FASTENER TRIMS ARE 1/2" CLOSED HEM

	PART#	LENGTH	GIRTH	NOTES	
J-TRIM   11/8"-+   Painted side    1/8"	HLJT102(color) HLJT122(color) HLJT142(color) HLJT162(color) HLJT182(color) HLJT204(color)	10'2" 12'2" 14'2" 16'2" 18'2" 20'4"	5.75" 5.75" 5.75" 5.75" 5.75" 5.75"		
PANEL CAP	HLPC102(color)	10'2"	5.25"		
Painted 116" + 1	HLPC122(color) HLPC142(color)	12'2" 14'2"	5.25" 5.25"		
side	HLPC162(color) HLPC182(color)	16'2" 18'2"	5.25" 5.25"		
	HLPC204(color)	20'4"	5.25"		
Painted side 3"	HLSF102(color)	10'2"	3.5"		

### **FLAT SHEET**

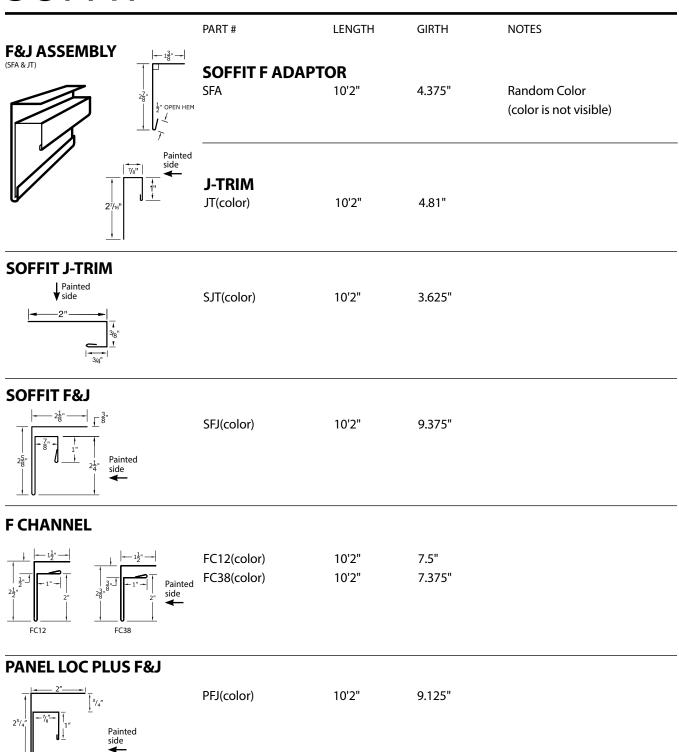


(color)CQ

10'2

Additional pallet charge on orders of 10 or more. Order quantity under 10 sheet will be packaged in a roll.

# **SOFFIT**

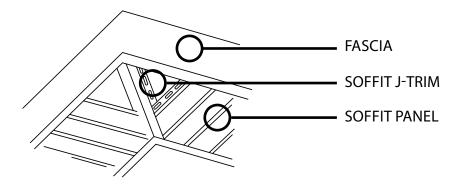


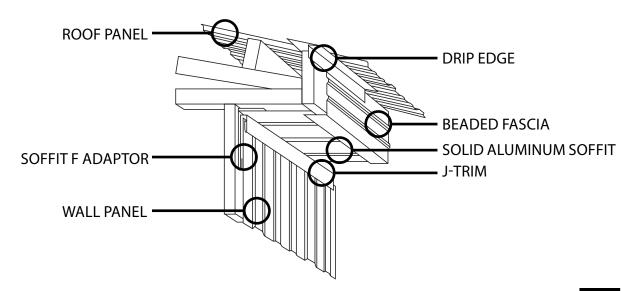
# **SOFFIT**

	PART #	LENGTH	GIRTH	NOTES	
ALUMINUM SOFFIT  Painted side	VS(color)12 SS(color)12	12'0" 12'0"	n/a n/a	Vented Solid	
BEADED FASCIA	BFT(color)	10'2"	8.25"		

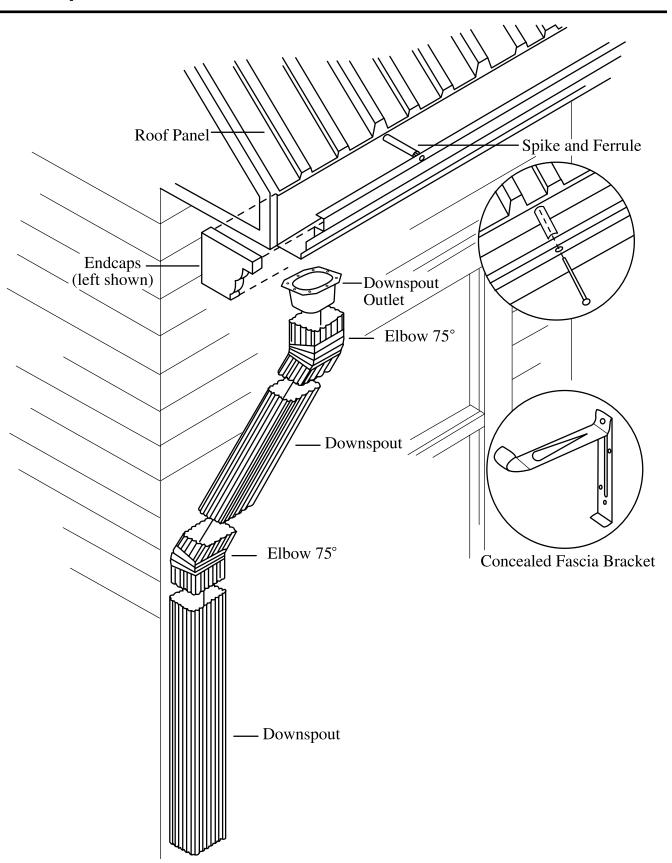
### **RESIDENTIAL FASCIA TRIM**







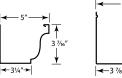
# K-5 / K-6 GUTTERS



# K-5 / K-6 GUTTERS

K5 Gutters not available in Gold, Galvalume®, Hawaiian or Polar. \*Available from our Michigan City plant only.

### **GUTTER**



PART# K5G206(color)

K6G206(color)\*

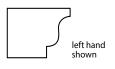
LENGTH 20'6"

20'6"

**GIRTH** 

**NOTES** 

### **GUTTER END CAP**



K5GECR(color) K5GECL(color)

K6GECR(color)\* K6GECL(color)\*

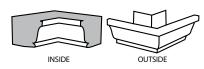
Right

Specify right or left hand

Left

Right Left

### **CORNER BOXES**



K5GISQCR Inside K5GOSQCR Outside

K6GISQCR\* Inside K6GOSQCR\* Outside White only

White only White only

White only

### **CONCEALED FASCIA BRACKET**



K5GCFZ Sold separately or 100 per box

### **K6 GUTTER HANGER**



K6GUTTERHG\*

Sold separately or 100 per box

### **SPIKES & FERRULES**



K5GS8 K5GF5

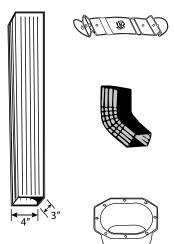
K6GS8\* K6GF6\* 8" Spike 5" Ferrule 8" Spike

6" Ferrule

Sold separately or 100 per box Sold separately or 100 per box

Sold separately or 100 per box Sold separately or 100 per box

### **FLUTED**



### **DOWNSPOUT - Fits both K5 AND K6 GUTTERS**

K6GDS10(color) 10'0" 14'0" KYNAR ONLY K6GDS14(color)\*

Sold separately or 15 per box Sold separately or 15 per box

### **DOWNSPOUT STRAP**

K6GSCB(color)

Sold separately or 100 per box

### **DOWNSPOUT ELBOW**

K6GEA(color)

Sold separately or 20 per box

### DOWNSPOUT OUTLET W/FLANGE

K5GOOFZ - Fits inside K5 Gutter K6GOOFZ\* - Fits inside K6 Gutter

Sold separately or 20 per box Sold separately or 20 per box

# **ACCESSORIES**

### **PROFILE RIDGE VENT**

PART#

LENGTH

**WIDTH** 

**THICKNESS** 





100' per package

### **PROFILE RIDGE VENT CLIP**

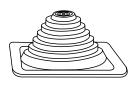


### **SSRVENTCLIP**

Use only flat ridgecap with clips.

25 per box

### **MASTER PIPE FLASHING**



NOTE: Install as "diamond", not square to panel rib.

PART#	LENGTH
MPF	1/4" to 4"
MPF2	1 1/4" to 3"
MPF4	3" to 6"
MPF5	4" to 7"
MPF6	5" to 9"
MPF7	6" to 11"
MPF8	7" to 13"

MAXIMUM TEMPERATURE 250 DEGREES

MPF9

PART # LENGTH

3SMPF 1/4" to 4"

4SMPF 3" to 6"

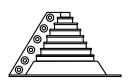
6SMPF 5" to 9"

8SMPF 7" to 13"

10SMPF 13" to 26"

MAXIMUM TEMPERATURE 500 DEGREES

# MASTER PIPE FLASHING WITH ZIPPER



MPF1ZIP 1/2" - 4" with zipper MPF2ZIP 4" - 9 1/4" with zipper

10" to 18"

### **BUTYL TAPE**



PART#	LENGTH	WIDTH	THICKNESS	ROLLS PER BOX
BTR	40'	7/8"	3/16"	10
BTL	45'	3/4"	3/32"	24
BT3/8	45'	3/8"	3/32"	40

Install between fastener and exposed edge.

# **ACCESSORIES**

	PART#	COLOR	LENGTH	#PER BAG	#PER BOX
LOW PROFILE PANCAKE HEAD SCREWS	SSR1WOOD		1"	250	5000
METAL/	1(color)MW	all	1"	250	3000
WOOD SCREWS #10	1 1/2(color)MW	all	1 1/2"	250	2500
1/4" head	2(color)MW	all	2"	250	2000
	2 1/2(color)MW	all except gold	2 1/2"	250	1500
	3(color)MW	all except gold	3"	250	1000
		*order in increments		ments of 250pc	
METAL/WOOD	34(color)ST	all	3/4"	250	3000
STITCH SCREWS 1/4" head				*order in increments of 250pc	
METAL/	34(color)MM	all	3/4"	250	2500
METAL SCREWS #12	114(color)MM	all	1 1/4"	250	2500
5/16" head	112(color)MM	White, Hunter, Brilliant, Stone, Bare	1 1/2"	250	2500
	2ZMM	galvanized	2"	250	2000
				*order in increments of 250pc	
METAL/METAL	78(color)LAP	all	7/8"	250	2500
LAP SCREWS #14 5/16" head				*order in incre	ments of 250pc
TOUCH UP PAINT	PART #	SIZE			
	4(color)SP	0.6oz bottle wi	th brush		
SEALANT	GEO(color)	10.3oz tube		clear, q	ray, white
	MRS(color)	10.3oz tube		call for colors	
	MRSCLEAR	10.3oz tube		clear	

### CENTRAL STATES PRIME 40 YEAR LIMITED PAINT WARRANTY

FOR CENTRAL STATES MANUFACTURING (CSM) ROOFING AND SIDING PANELS. **THIS WARRANTY COVERS PRIME MATERIAL ONLY**, PAINTED WITH OUR CENTRALGUARD PAINT SYSTEM. THRIFTY MATERIAL IS COVERED BY A SEPARATE WARRANTY.

CSM warrants that the color-coated finish applied to its steel roofing and siding panels will not, within a period of forty years after installation or forty years and one month after the date of shipment (whichever comes first), crack, check, peel or lose adhesion. This does NOT include minute fracturing, which may occur in proper fabrication of the building parts. Failure due to substrate corrosion is excluded.

CSM also warrants that the color-coated finish applied to its steel roofing and siding panels will not, within a period of thirty years after installation or a period of thirty years and one month after the date of shipment (whichever comes first), chalk or lose color according to the following grids. Additionally, chalk ratings are measured in accordance with the standard procedures specified in ASTM-D-4214-98 method D659. Color (fade) ratings are measured in accordance with the standard procedures specified in ASTM-D-2244-02. Color change shall be measured on an exposed painted surface that has been cleaned of surface soils and chalk, and the corresponding values measured on the original or unexposed painted surface. It is understood that fading or color changes may not be uniform if the surfaces are not equally exposed to the sun and elements.

Sidewall		Roof		
Color	Chalk	Color	Chalk	
5	8	7	6	

(Exception: Gallery Blue - Sidewall: Color: 8/Chalk: 6, Roof: Color: 10/Chalk: 5).

- 1) DISCLAIMER OF WARRANTY: THE EXPRESS WARRANTY STATED HEREIN IS THE EXCLUSIVE WARRANTY APPLICABLE TO CSM PRIME PAINTED MATERIAL ONLY, ROOFING AND SIDING PANELS. CSM MAKES NO WARRANTIES OR GUARANTEES, EITHER EXPRESSED OR IMPLIED, BEYOND THE FACE HEREOF INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. CSM SHALL HAVE NO OTHER LIABILITY WITH RESPECT THERETO. This warranty will apply to those panels refinished or replaced but only for the period of time left on the original warranty. No employee or representative of CSM is authorized to change this limited warranty in any way or grant any other warranty regarding the product.
- 2) LIMITATION OF LIABILITY: THE EXCLUSIVE REMEDY FOR ANY AND ALL CLAIMS ARISING FROM THIS LIMITED WARRANTY SHALL BE LIMITED TO CSM REFINISHING OR REPLACING DEFECTIVE PANELS OR REFUNDING THE PURCHASE PRICE OF SUCH PANELS AS CSM SHALL ELECT. CSM SHALL NOT BE LIABLE FOR ANY LOSSES, DAMAGES, OR EXPENSES, WHETHER DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. IF OUR CENTRALGUARD™ SILICONIZED POLYESTER COATINGS FAIL TO COMPLY WITH OUR LIMITED WARRANTY, WE WILL PAY FOR THE LABOR AND THE MATERIALS REASONABLY NECESSARY TO REPAINT, REPAIR OR REPLACE, AT OUR OPTION, THE BUILDING PART SHOWING THE FAILURE. CSM'S TOTAL LIABILITY IS EXPRESSLY LIMITED TO THE PURCHASE PRICE OF THE CSM STEEL ROOFING AND SIDING PANELS.

- Claims under this warranty must be made in writing to CSM at the address set forth below within 30 days after the discovery of the defect. The notice to CSM shall include adequate identification of the material involved, nature of the claimed defect, date of the installation, date of shipment and order number. Failure of the claimant to provide such information in the time provided shall be deemed as a waiver of the claimant's rights herein. CSM shall have an additional 30 days to inspect the CSM steel roofing and siding panels before any further action shall be taken.
- CSM does not warrant or guarantee the interior or reversed side finish or prepainted materials used for interior application.
- 5) CSM does not warrant or guarantee claims arising from damage to panels due to exposure to salt and salt water, water spray, corrosive or harmful chemicals (whether solids, liquids or gases), airborne contaminants, hail or other agents of a similar nature.
- 6) CSM does not warrant or guarantee claims arising from the following
  - Damage or defects caused by acts of God, falling objects, external forces, explosion, fire, riots, civil commotion, acts of war, excessive radiation, or other similar or dissimilar occurrences beyond CSM's control.
  - b) Minor hairline cracking of the paint finish.
  - Defects or damages to the painted steel roofing and siding panels caused by handling, shipping, transit, processing, storage or installation; damage due to failure of the substrate.
  - d) Damage caused by moisture or other contamination prior to installation.
  - Steel shavings or minute iron particles from sawing sparks that come in contact with the painted surface.
  - f) Non-vertical panels that don't have an adequate degree of pitch so as not to allow any free standing or accumulation of standing water.
  - g) Stored or installed in a way that allows for contact with animals or animal waste.
  - h) Deterioration to the panels caused directly or indirectly by panel contact with fasteners. The selection of suitable fasteners rests solely with the buyer.
  - i) Weather uniformity under non-uniform conditions.
  - Unusual harmful fumes, chemically aggressive environment, foreign substances in the atmosphere, standing water or direct salt spray.
  - k) Damage due to green, wet or treated lumber.
- The warranty applies to panels installed in the continental United States, Alaska, and Canada.
- cSM extends this warranty solely to the buyer. This warranty is not transferable and non-assignable. Further, it is applicable only to the original owner of any structure where the material is installed.



CORPORATE OFFICE
302 JANE PLACE - LOWELL, AR 72745
800-356-2733

## Congratulations.

You are now covered by one of the best limited paint warranties in the business. Please fill this out for your records and keep it for your files.

	Central States Order Number* or Project Number		
Contractor/Installer Name		Date	
Owner's Name			
Structure's Address			
City		State	

\*Order Number can be found on the Material Package label and the Order Verification paperwork

E PRIMEWARRANTY131126



www. Central States Mfg. com