

# R-Loc™

## Product Guide

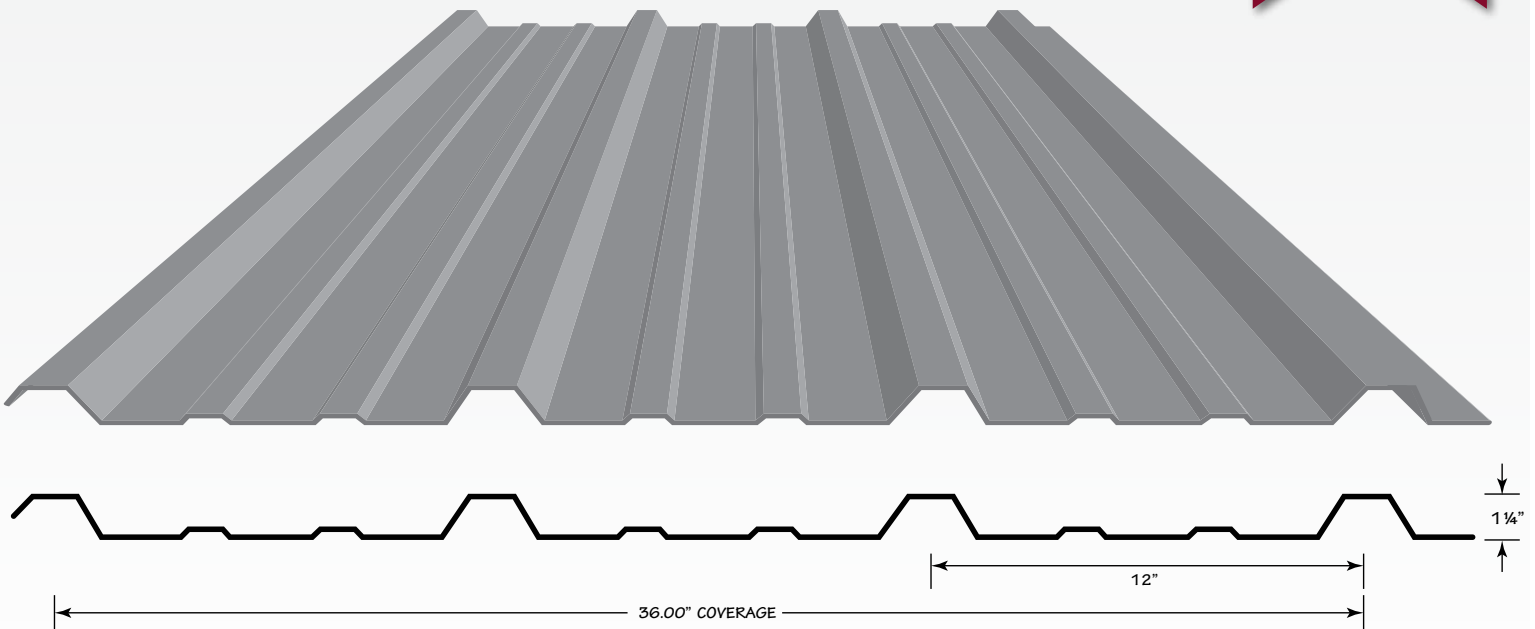
HELPFUL INFORMATION ON PANELS, TRIMS, GUTTERS AND ACCESSORIES

1988-2013



YEARS

of helping you  
grow your business



**CENTRAL  
STATES**  
MANUFACTURING, INC.

METAL BUILDING COMPONENTS



# OUR MISSION

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

Central States Mfg., Inc. is an employee-owned company that is committed to excellence in the manufacturing and 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.

We appreciate our customers. **We are devoted to exceeding your expectations in the areas of value, customer service and quick response.** It is our promise to maintain total honesty and integrity with every person our lives may touch.



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*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.

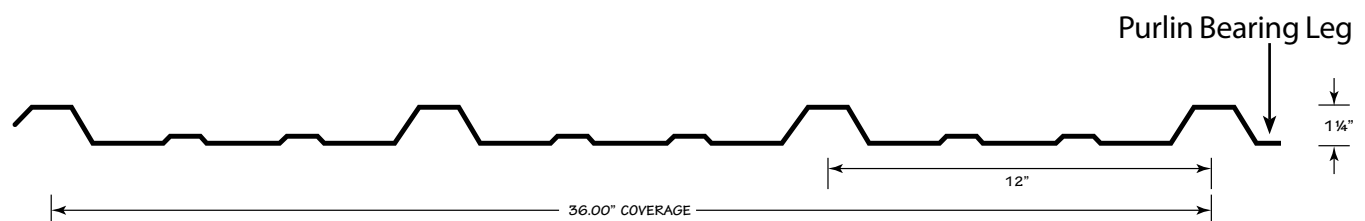
Information contained in this booklet was in effect at the time of publication and is subject to change without notice.

# R-LOC™ PRODUCT INFORMATION

R-Loc™ is available in 26ga painted and bare galvalume. Central States uses the CentralGuard™ paint system on all Prime painted metals. Prime painted panels have a 40-year limited warranty and a 20-year galvalume substrate warranty. Bare (non-painted) metals from Central States will have an acrylic coating and a 25-year limited warranty. 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 also eliminates fingerprinting and foot marking during installation. Kynar500®/Hylar 5000® paint system also available.

Central States' 26ga steel is manufactured to meet ASTM A792 specifications for galvalume with a minimum yield of 80,000 PSI. The R-Loc™ panel also has UL580, Class 90 with proper installation, UL2218/Class 4 impact resistance ratings and UL790 fire resistance.

The recommended minimum roof slope for the 1 1/4" R-Loc™ is a 1/2:12 pitch. This will allow for sufficient drainage of water. For added protection, a sealant tape can be used on the laps of the panel.



# DELIVERY

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Deliveries will be made using a 65' tractor/trailer weighing approximately 80,000 lbs. It is imperative that all delivery locations be accessible by a vehicle of this size. Our drivers have the authority to refuse delivery to any location they see as unsafe or inaccessible. The customer is responsible

for any charges incurred if truck is detained for any reason. The customer is responsible for unloading all trucks. Any damage that occurs at this point is the customer's responsibility. There must be either equipment or at least 3 people to unload truck.

# CARE AND HANDLING

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## **STAGE**

Galvalume steel sheets have a good service life when exposed to normal weather conditions however, to protect the appearance of panels and trims from damage, there are a few simple precautions that can be taken. The steel sheets are subject to stain when water sits upon, or becomes trapped between the sheets. If the galvalume sheets are to be stored for any period of time, they should be stored only in a dry place, preferably under a roof. Stand panels on end and fan them out at the bottom to provide air circulation and moisture run off. If space does not allow this, the panels should be separated, blocked off of the floor at least 12 inches to allow air flow, and stored at an incline to encourage drainage. The panels should then be covered, yet still have good air flow through the sheets to prevent condensation. Do not use a plastic cover, as this may cause the panels to sweat or condensation to occur.

## **STORAGE**

Failure to follow these steps may result in wet storage stains and premature rusting. The manufacturers warranty will be void at this time, and the manufacturer will not be responsible.

## **Handling**

When unloading panels, extreme caution must be employed. Care needs to be used when unloading panels with a forklift. Panel edges and underside paint may become damaged if the forklift driver does not use caution. Once at the jobsite, care must be taken in order to protect the painted surface. When unbundling the panels, never drag them across the surface of one another. This may cause scratches across the underneath panels. It is recommended that the panels be "rolled" off the top of the bundle to prevent scratching. Never lift panels by the ends, instead lift the panels longitudinally and carry vertically.

Panel edges are very sharp, therefore, safety equipment should be worn by all workers handling the material.

# CARE AND HANDLING

## CUTTING

A portable field shear is the ideal method for cutting panels. Nibblers or a power shear may also be used. Although we do not recommend it, if you decide to cut with a saw, it is very important that the panels be turned upside down during cutting so that hot shavings do not come in contact with the painted surface. Make sure all adjacent panels are covered so that shavings are not imbedded in these panels. If metal shavings become imbedded in the paint surface, they will quickly rust. To avoid this, panels should be thoroughly wiped of all filings on both sides of the panel. Failure to comply with the recommended cutting procedures releases the manufacturer of any responsibility.

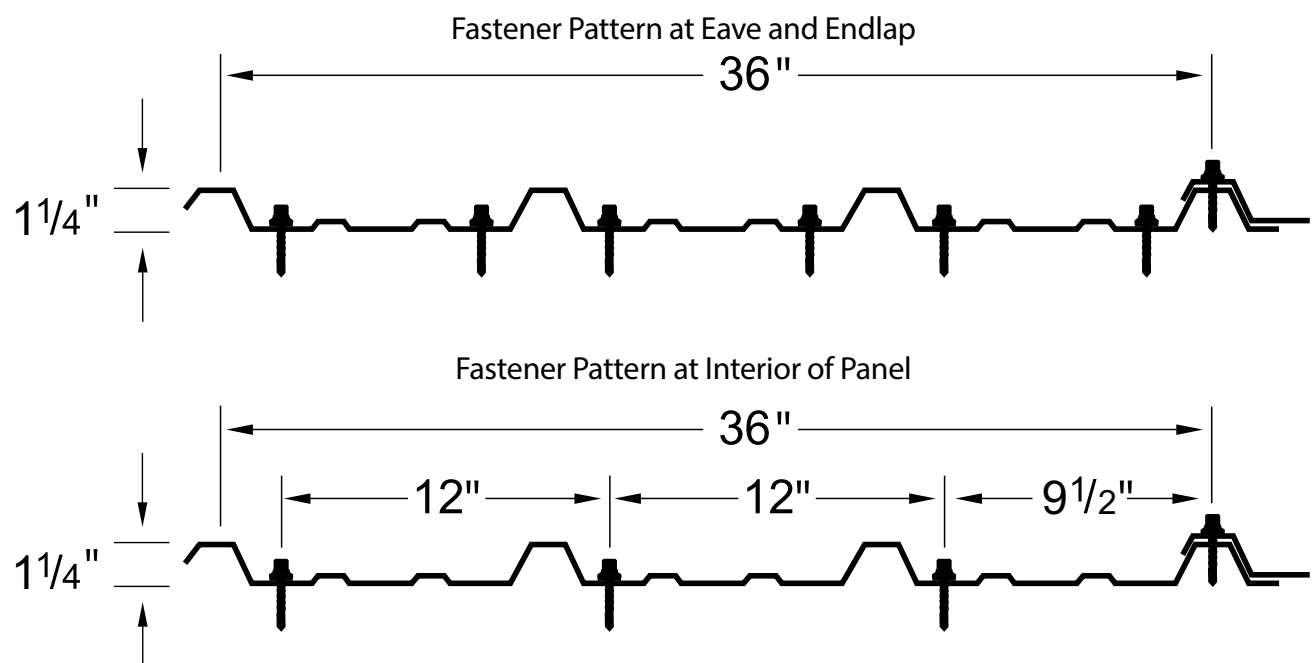
## DRILLING

Panels should not be drilled while stacked. This will cause shavings that will become imbedded in the paint surface.

## INSTALLATION

Follow instructions for UL580 Class 90.

# FASTENER SPACING



# CONVERSION CHARTS

## DECIMAL EQUIVALENTS

1/64	0.0156	17/64	0.2656	33/64	0.5156	49/64	0.7656
1/32	0.0313	9/32	0.2813	17/32	0.5313	25/32	0.7813
3/64	0.0469	19/64	0.2969	35/64	0.5469	51/64	0.7969
1/16	0.0625	5/16	0.3125	9/16	0.5625	13/16	0.8125
5/64	0.0781	21/64	0.3281	37/64	0.5781	53/64	0.8281
3/32	0.0938	11/32	0.3438	19/32	0.5938	27/32	0.8438
7/64	0.1094	23/64	0.3594	39/64	0.6094	55/64	0.8594
1/8	0.1250	3/8	0.3750	5/8	0.6250	7/8	0.8750
9/64	0.1406	25/64	0.3906	41/64	0.6406	57/64	0.8906
5/32	0.1563	13/32	0.4063	21/32	0.6563	29/32	0.9063
11/64	0.1719	27/64	0.4219	43/64	0.6719	59/64	0.9219
3/16	0.1875	7/16	0.4375	11/16	0.6875	15/16	0.9375
13/64	0.2031	29/64	0.4531	45/64	0.7031	61/64	0.9531
7/32	0.2188	15/32	0.4688	23/32	0.7188	31/32	0.9688
15/64	0.2344	31/64	0.4844	47/64	0.7344	63/64	0.9844
1/4	0.2500	1/2	0.5000	3/4	0.7500	1	1.0000

## SINGLE SLOPE PITCHES ONLY (FASCIA, EAVE, ENDWALL, GUTTER)

½:12 PITCH	=	92.39 DEGREES
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

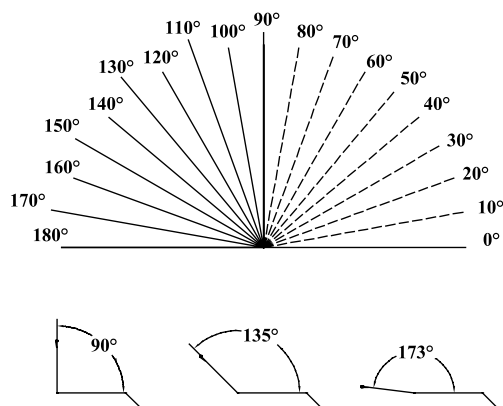
## DOUBLE SLOPE PITCHES ONLY (HIP, VALLEY)

½:12 PITCH	=	176.60 DEGREES
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)

½:12 PITCH	=	175.23 DEGREES
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

## Degrees of bend Transition Trims



Effective date July 28, 2005  
Subject to change without notice

Specify Degrees when ordering

# SQUARE CONVERSIONS

For 26ga panels there are 2 formulas; one for panels measured in inches and one for panels measured in feet. While the actual panel width is 38.5", there will only be 36" of coverage per panel. Squares are figured based on actual width. One square is equal to a panel 31.169 feet long. One square of metal will give you approximately 94.5 square feet of coverage. One square is equal to 14,400 square inches.

## EXAMPLE 1:

**38.5 (or width in inches) multiplied by length in inches  
multiplied by # of pieces divided by 14,400**

Number of panels = 12       $\frac{38.5" \times 144" \times 12}{14,400}$  equals 4.62 squares of metal  
Panel width = 38.5"  
Panel length = 144"  
Square inches = 14,400

## EXAMPLE 2:

**length in feet multiplied by # of pieces  
divided by 31.169**

Number of panels = 12       $\frac{12 \times 12}{31.169}$  equals 4.62 squares of metal  
Panel width = 38.5"  
Panel length = 12'  
Square inches = 14,400

## 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"

# SECTION PROPERTIES

## 36" WIDE, CSMI R-LOC™ PANEL

Gauge	Thickness (inches)	Weight (psf)	Yield Stress (ksi)	Top in Compression (Positive Bending)			Bottom in Compression (Negative Bending)		
				Ixx	Sxx	Ma	Ixx	Sxx	Ma
				in4/ft	in3/ft	in.kips/ft	in4/ft	in3/ft	in.kips/ft
26	0.0185	0.881	80.0	0.0400	0.0406	1.4590	0.0373	0.0497	1.7847

Section properties and allowables are calculated in accordance with 1996 AISI Specifications and 1999 AISI Supplement No. 1. I +/- is for deflection determination. S +/- is for bending determination. Ma is allowable bending moment. All values are for one foot of panel width. These loads are for panel strength. Frames, purlins, fasteners and all supports must be designed to resist all loads imposed on the panel. Allowable outward loads based on stress have been increased by 33.33% for wind uplift. Allowable loads for deflection are based on deflection limitation of span/180 or span/240. For roof panels, self weight of the panel has to be deducted from the allowable inward load to arrive at the actual "live load" carrying capacity of the panel. Minimum bearing length must be checked. Minimum deliverable bare steel thickness should not be less than 0.95 of design thickness.

## THEORETICAL ALLOWABLE LIVE & WIND LOADS

### SINGLE SPAN CONDITION

Span (feet)	26 Gauge & 80 ksi			
	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)
3	108.1	108.1	97.1	175.8
3.5	79.4	79.4	61.2	129.2
4	60.8	54.6	41.0	98.9
4.5	48.0	38.4	28.8	78.1
5	38.9	28.0	21.0	63.3
6	27.0	16.2	12.1	44.0
7	19.9	10.2	7.6	32.3
8	15.2	6.8	5.1	24.7

### TWO SPAN CONDITION

Span (feet)	26 Gauge & 80 ksi			
	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)
3	132.2	132.2	126.5	143.7
3.5	97.1	97.1	79.6	105.6
4	74.4	71.1	53.3	80.9
4.5	58.8	50.0	37.5	63.9
5	47.6	36.4	27.3	51.7
6	33.0	21.1	15.8	35.9
7	24.3	13.3	10.0	26.4
8	18.6	8.9	6.7	20.2

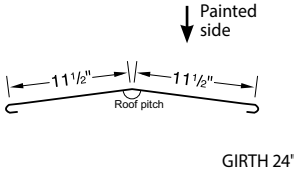
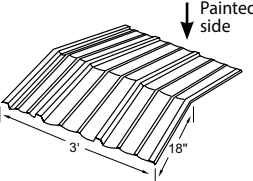
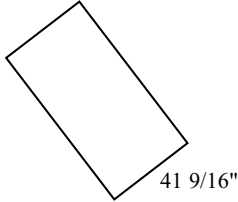
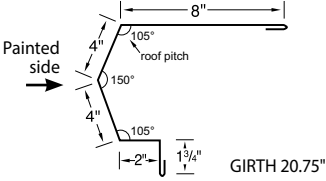
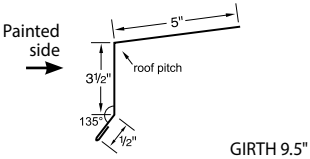
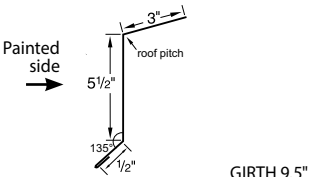
### THREE OR MORE SPAN CONDITION

Span (feet)	26 Gauge & 80 ksi			
	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)
3	154.4	154.4	154.4	167.9
3.5	113.5	113.5	113.5	123.4
4	86.9	86.9	77.3	94.5
4.5	68.6	68.6	54.3	74.6
5	55.6	52.8	39.6	60.5
6	38.6	30.5	22.9	42.0
7	28.4	19.2	14.4	30.8
8	21.7	12.9	9.7	23.6

Theoretical allowable loads are based on uniform span lengths. LL (S) is allowable live load based on stress limitation. LL (D) is allowable live load based on deflection limitation of L/180 or L/240. WL is allowable wind load and has been increased by 33.33%.

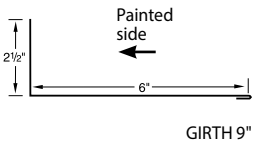
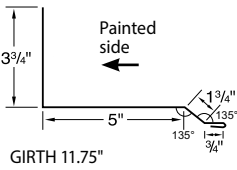
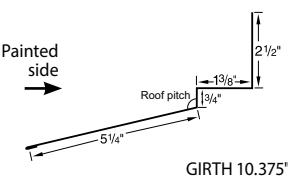
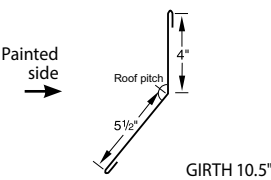
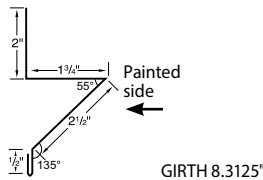
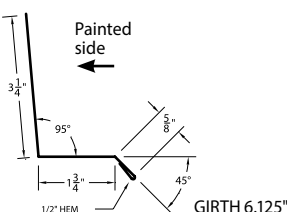
# R-LOC™ TRIMS

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.

	PART #	LENGTH	NOTES
<b>UNIVERSAL RIDGE CAP</b> 	UN102(color)	10'2"	
	UN122(color)	12'2"	specify pitch
	UN142(color)	14'2"	
	UN162(color)	16'2"	additional pallet charge will apply
	UN182(color)	18'2"	
	UN204(color)	20'4"	
<b>FORMED RIDGE CAP</b> 	FRC36(color)	3'0"	specify pitch up to 6:12
<b>FLAT SHEETS</b> 	FS102(color)	10'2"	
	FS122(color)	12'2"	
	FS142(color)	14'2"	additional pallet charge will apply
	FS162(color)	16'2"	
	FS182(color)	18'2"	
	FS204(color)	20'4"	
<b>HI-SIDE EAVE TRIM</b> 	HI102(color)	10'2"	
	HI122(color)	12'2"	
	HI142(color)	14'2"	specify pitch
	HI162(color)	16'2"	
	HI182(color)	18'2"	
	HI204(color)	20'4"	
<b>SHORT EAVE TRIM</b> 	SEA102(color)	10'2"	
	SEA122(color)	12'2"	
	SEA142(color)	14'2"	specify pitch
	SEA162(color)	16'2"	
	SEA182(color)	18'2"	
	SEA204(color)	20'4"	
<b>LONG EAVE TRIM</b> 	LEA102(color)	10'2"	
	LEA122(color)	12'2"	
	LEA142(color)	14'2"	specify pitch
	LEA162(color)	16'2"	
	LEA182(color)	18'2"	
	LEA204(color)	20'4"	

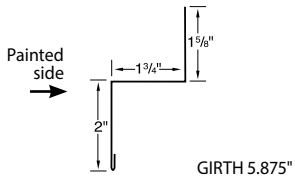
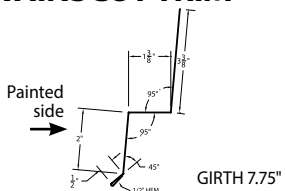
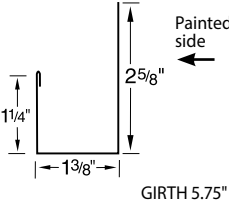
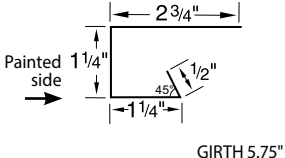
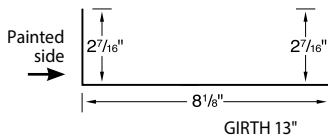
# R-LOC™ TRIMS

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.

	PART #	LENGTH	NOTES
<b>SEAWALL TRIM</b> 	SI102(color)	10'2"	specify degree of bend
	SI122(color)	12'2"	
	SI142(color)	14'2"	
	SI162(color)	16'2"	
	SI182(color)	18'2"	
	SI204(color)	20'4"	
<b>TRANSITION TRIM</b> 	TR102(color)	10'2"	
	TR122(color)	12'2"	
	TR142(color)	14'2"	
	TR162(color)	16'2"	
	TR182(color)	18'2"	
	TR204(color)	20'4"	
<b>TIE IN TRIM</b> 	TI102(color)	10'2"	specify pitch
	TI122(color)	12'2"	
	TI142(color)	14'2"	
	TI162(color)	16'2"	
	TI182(color)	18'2"	
	TI204(color)	20'4"	
<b>HIGH SIDE PARAPET TRIM</b> 	HSP102(color)	10'2"	specify pitch
	HSP122(color)	12'2"	
	HSP142(color)	14'2"	
	HSP162(color)	16'2"	
	HSP182(color)	18'2"	
	HSP204(color)	20'4"	
<b>COMMERCIAL RAT GUARD</b> 	RG102(color)	10'2"	
	RG122(color)	12'2"	
	RG142(color)	14'2"	
	RG162(color)	16'2"	
	RG182(color)	18'2"	
	RG204(color)	20'4"	
<b>BASE TRIM</b> 	BA102(color)	10'2"	
	BA122(color)	12'2"	
	BA142(color)	14'2"	
	BA162(color)	16'2"	
	BA182(color)	18'2"	
	BA204(color)	20'4"	

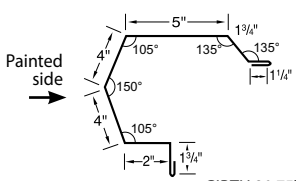
# R-LOC™ TRIMS

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.

	PART #	LENGTH	NOTES
<b>ZEE TRIM</b> 	ZE102(color)	10'2"	
	ZE122(color)	12'2"	
	ZE142(color)	14'2"	
	ZE162(color)	16'2"	
	ZE182(color)	18'2"	
	ZE204(color)	20'4"	
<b>WAINSCOT TRIM</b> 	WA102(color)	10'2"	
	WA122(color)	12'2"	
	WA142(color)	14'2"	
	WA162(color)	16'2"	
	WA182(color)	18'2"	
	WA204(color)	20'4"	
<b>HEAD TRIM</b> 	HE036(color)	3'6"	
	HE063(color)	6'3"	
	HE073(color)	7'3"	
	HE083(color)	8'3"	
	HE102(color)	10'2"	
	HE103(color)	10'3"	
	HE123(color)	12'3"	
	HE143(color)	14'3"	
	HE163(color)	16'3"	
	HE183(color)	18'3"	
	HE204(color)	20'4"	
<b>JAMB TRIM</b> 	JA072(color)	7'2"	
	JA102(color)	10'2"	
	JA122(color)	12'2"	
	JA142(color)	14'2"	
	JA162(color)	16'2"	
	JA182(color)	18'2"	
	JA202(color)	20'4"	
<b>JAMB HEADER</b> 	JH102(color)	10'2"	
	JH122(color)	12'2"	
	JH142(color)	14'2"	
	JH162(color)	16'2"	
	JH182(color)	18'2"	
	JH204(color)	20'4"	

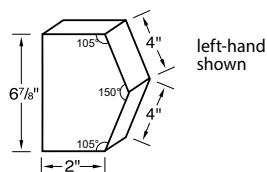
# R-LOC™ TRIMS

Orders for trims other than 10'2" in length must be in 9:00 am the day of your cutoff.  
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	PART #	LENGTH	NOTES
<b>RAKE TRIM</b> 	RA102(color)	10'2"	use PBOXF below for correct peak box
	RA122(color)	12'2"	
	RA142(color)	14'2"	
	RA162(color)	16'2"	
	RA182(color)	18'2"	
	RA204(color)	20'4"	

## RAKE TRIM END CAP

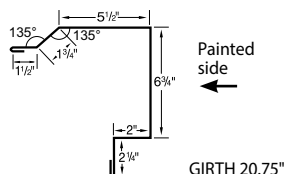
REND(color)



## BOX RAKE TRIM

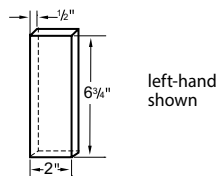
BRT102(color)	10'2"
BRT122(color)	12'2"
BRT142(color)	14'2"
BRT162(color)	16'2"
BRT182(color)	18'2"
BRT204(color)	20'4"

use PBBF below for correct peak box



## BOX RAKE TRIM END CAP

BREND(color)



## PEAK BOX

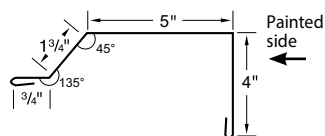
PBOXF(color)	2'6"	for Rake Trim
PBBF(color)	3'	for Box Rake Trim

specify pitch



## HOUSE RAKE TRIM

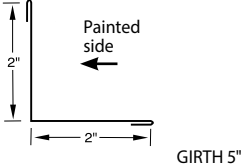
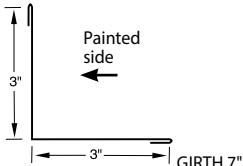
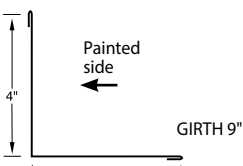
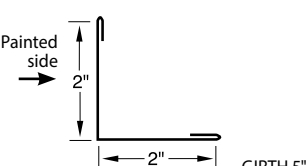
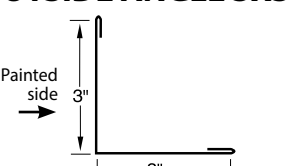
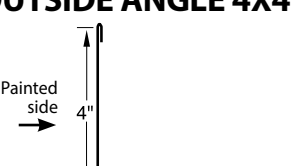
HRAR102(color)	10'2"
HRAR122(color)	12'2"
HRAR142(color)	14'2"
HRAR162(color)	16'2"
HRAR182(color)	18'2"
HRAR204(color)	20'4"



GIRTH 12.5"

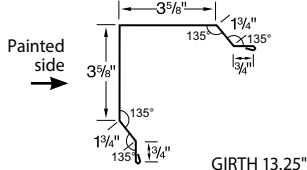
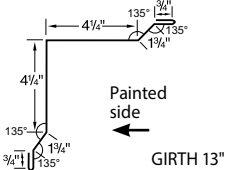
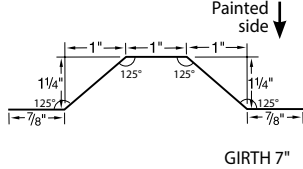
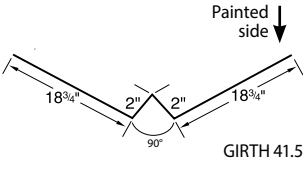
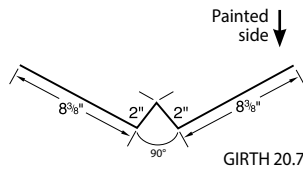
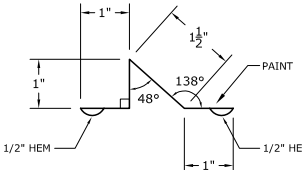
# R-LOC™ TRIMS

Orders for trims other than 10'2" in length must be in 9:00 am the day of your cutoff.  
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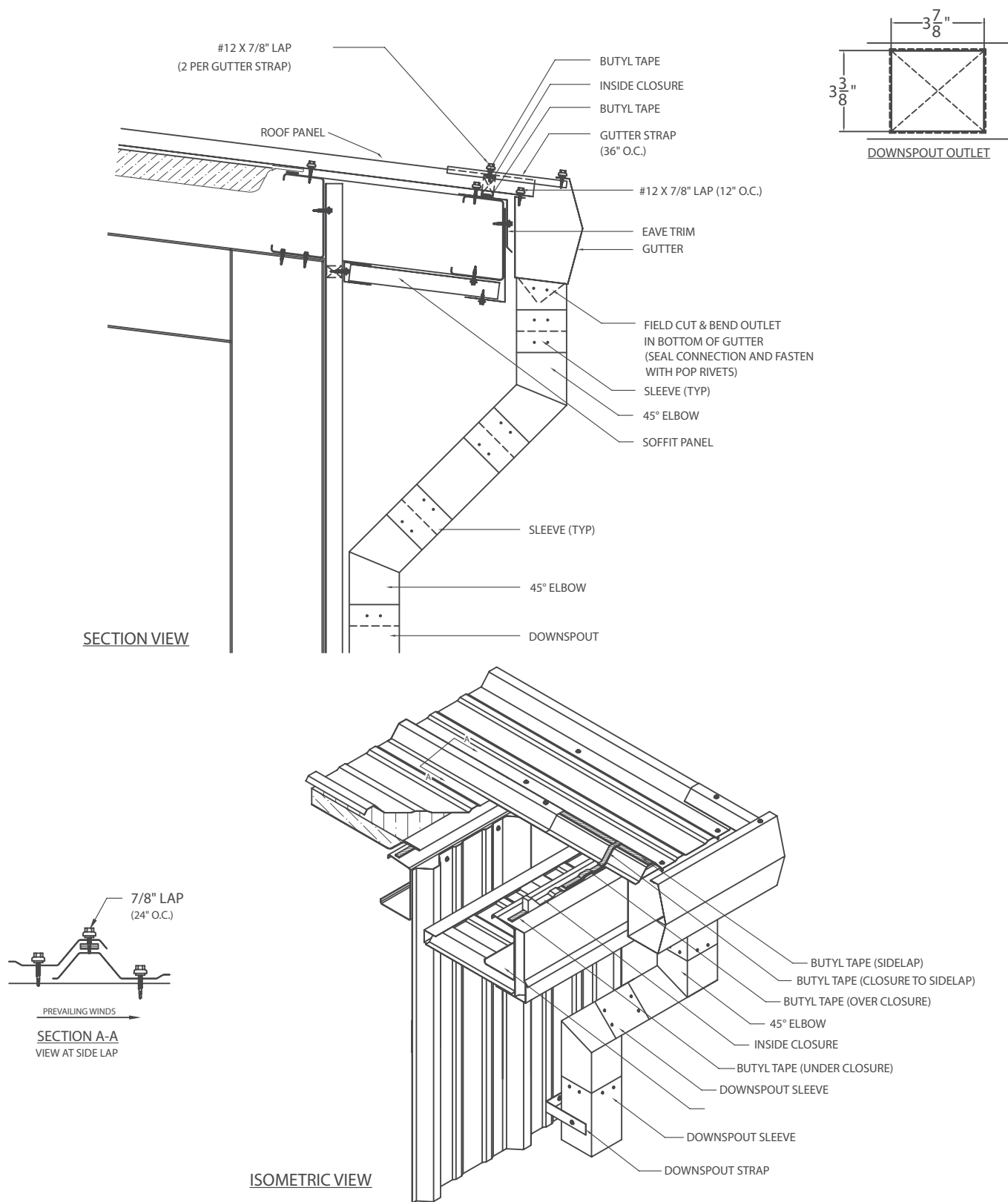
	PART #	LENGTH	NOTES
<b>INSIDE ANGLE 2X2</b> 	IA2102(color)	10'2"	
	IA2122(color)	12'2"	
	IA2142(color)	14'2"	
	IA2162(color)	16'2"	
	IA2182(color)	18'2"	
	IA2204(color)	20'4"	
<b>INSIDE ANGLE 3X3</b> 	IA3102(color)	10'2"	
	IA3122(color)	12'2"	
	IA3142(color)	14'2"	
	IA3162(color)	16'2"	
	IA3182(color)	18'2"	
	IA3204(color)	20'4"	
<b>INSIDE ANGLE 4X4</b> 	IA4102(color)	10'2"	
	IA4122(color)	12'2"	
	IA4142(color)	14'2"	
	IA4162(color)	16'2"	
	IA4182(color)	18'2"	
	IA4204(color)	20'4"	
<b>OUTSIDE ANGLE 2X2</b> 	OA2102(color)	10'2"	
	OA2122(color)	12'2"	
	OA2142(color)	14'2"	
	OA2162(color)	16'2"	
	OA2182(color)	18'2"	
	OA2204(color)	20'4"	
<b>OUTSIDE ANGLE 3X3</b> 	OA3102(color)	10'2"	
	OA3122(color)	12'2"	
	OA3142(color)	14'2"	
	OA3162(color)	16'2"	
	OA3182(color)	18'2"	
	OA3204(color)	20'4"	
<b>OUTSIDE ANGLE 4X4</b> 	OA4102(color)	10'2"	
	OA4122(color)	12'2"	
	OA4142(color)	14'2"	
	OA4162(color)	16'2"	
	OA4182(color)	18'2"	
	OA4204(color)	20'4"	

# R-LOC™ 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.

	PART #	LENGTH	NOTES
<b>OUTSIDE CORNER</b> 	OU102(color)	10'2"	
	OU122(color)	12'2"	
	OU142(color)	14'2"	
	OU162(color)	16'2"	
	OU182(color)	18'2"	
	OU204(color)	20'4"	
<b>INSIDE CORNER</b> 	IN102(color)	10'2"	
	IN122(color)	12'2"	
	IN142(color)	14'2"	
	IN162(color)	16'2"	
	IN182(color)	18'2"	
	IN204(color)	20'4"	
<b>SKYLIGHT TRIM</b> 	SK102(color)	10'2"	
	SK122(color)	12'2"	
	SK142(color)	14'2"	
	SK162(color)	16'2"	
	SK182(color)	18'2"	
	SK204(color)	20'4"	
<b>EXTENDED VALLEY</b> 	EVA102(color)	10'2"	intended for valley lengths of 30' or more
	EVA122(color)	12'2"	
	EVA142(color)	14'2"	specify pitch
	EVA162(color)	16'2"	
	EVA182(color)	18'2"	additional pallet charge will apply
	EVA204(color)	20'4"	
<b>COMMERCIAL VALLEY</b> 	VA102(color)	10'2"	intended for valley lengths less than 30'
	VA122(color)	12'2"	
	VA142(color)	14'2"	specify pitch
	VA162(color)	16'2"	
	VA182(color)	18'2"	additional pallet charge will apply
	VA204(color)	20'4"	
<b>SNOW GUARD</b> 	SG6(color)	10'2"	available in 10'2" only

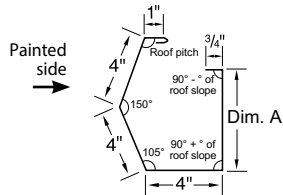
# GUTTERS



# GUTTERS

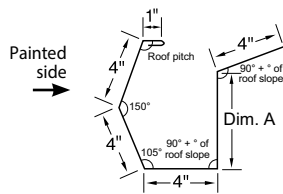
All angles are 90° or 45° unless otherwise noted.

## STANDARD GUTTER



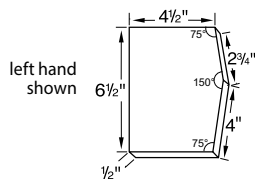
PART #	LENGTH	NOTES
GU102(color)	10'2"	"Dim. A" is 6.5" on 1:12-3:12 pitch and 6.88" on 4:12-6:12 pitch
GU122(color)	12'2"	
GU142(color)	14'2"	Girth 20.75" on 1:12-3:12 pitch Girth 21.13" on 4:12-6:12 pitch
GU162(color)	16'2"	
GU182(color)	18'2"	specify pitch 90°-° of roof slope
GU204(color)	20'4"	

## SCULPTURED GUTTER



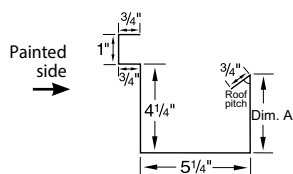
SGU102(color)	10'2"	"Dim. A" is 6.5" on 1:12-3:12 pitch and 7" on 4:12-6:12 pitch
SGU122(color)	12'2"	
SGU142(color)	14'2"	Girth 24" on 1:12-3:12 pitch Girth 24.5" on 4:12-6:12 pitch
SGU162(color)	16'2"	
SGU182(color)	18'2"	specify pitch
SGU204(color)	20'4"	

## GUTTER END CAP



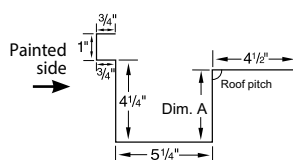
GEN(color)		specify pitch
		for standard or sculptured gutter

## BOX HANG-ON GUTTER



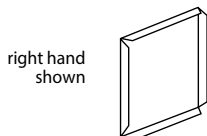
BHG102(color)	10'2"	"Dim. A" is 4" on 0:12-3:12 pitch and 4.375" on 4:12-6:12 pitch
BHG122(color)	12'2"	
BHG142(color)	14'2"	Girth 16.75" on 1:12-3:12 pitch Girth 17.125" on 4:12-6:12 pitch
BHG162(color)	16'2"	
BHG182(color)	18'2"	specify pitch
BHG204(color)	20'4"	

## BOX EAVE GUTTER



BEG102(color)	10'2"	"Dim. A" is 4" on 0:12-3:12 pitch and 4.375" on 4:12-6:12 pitch
BEG122(color)	12'2"	
BEG142(color)	14'2"	Girth 20.5" on 1:12-3:12 pitch Girth 20.875" on 4:12-6:12 pitch
BEG162(color)	16'2"	
BEG182(color)	18'2"	specify pitch
BEG204(color)	20'4"	

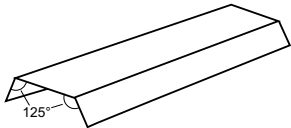
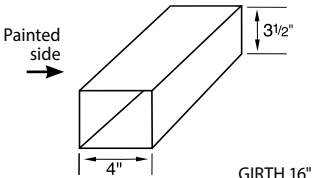
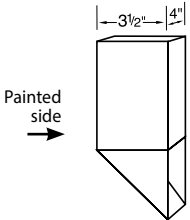
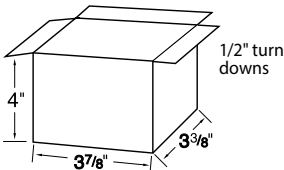
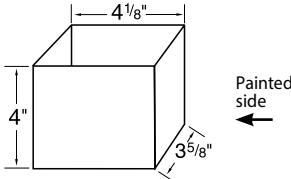
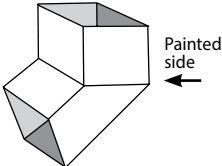
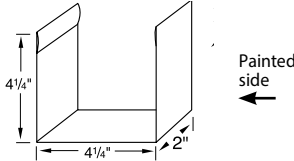
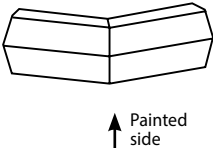
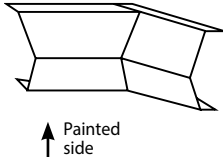
## BOX GUTTER END CAP



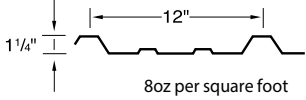
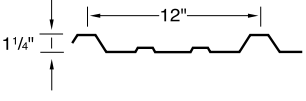
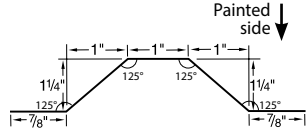
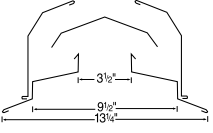

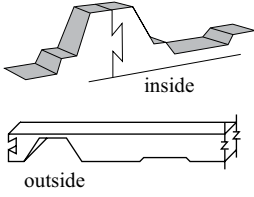
BGEND(color)		for Box Hang-On or Box Eave Gutter
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# GUTTERS

All angles are 90° or 45° unless otherwise noted.

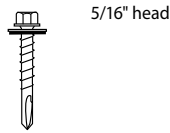
	PART #	LENGTH	NOTES
<b>GUTTER STRAP</b> 	GS9(color)	9"	
<b>DOWNSPOUT W/O KICKOUT</b> 	DS102(color) DS122(color) DS142(color) DS162(color) DS182(color) DS204(color)	10'2" 12'2" 14'2" 16'2" 18'2" 20'4"	
<b>DOWNSPOUT WITH KICKOUT</b> 	DK102(color) DK122(color) DK142(color) DK162(color) DK182(color) DK204(color)	10'2" 12'2" 14'2" 16'2" 18'2" 20'4"	
<b>DOWNSPOUT OUTLET</b> 	DSOUTLET(color)		
<b>DOWNSPOUT CONNECTOR</b> 	DSLVE(color)		
<b>DOWNSPOUT ELBOW</b> 	DSE45(color) DSE90(color)		
<b>DOWNSPOUT STRAP</b> 	DSS2(color)		
<b>OUTSIDE CORNER BOX</b> 	OCB(color)		
<b>INSIDE CORNER BOX</b> 	ICB(color)		

# ACCESSORIES

	PART #	COLOR	LENGTH
<b>FIBERGLASS SKYLIGHT</b>	SKY12R	White	12'
			
<b>POLYCARBONATE SKYLIGHT</b>	SKYPC(color)R12	White, Clear	12'
			
<b>SKYLIGHT TRIM</b>	SK102(color)	10'2"	
	SK122(color)	12'2"	
	SK142(color)	14'2"	
	SK162(color)	16'2"	
	SK182(color)	18'2"	
	SK204(color)	20'4"	
			
<b>CONTINUOUS RIDGE VENT</b>	RLW	White	10' *Constant open damper only
			
<b>CLOSURE VENT</b>	CLVRM(Marco)		3' *25 per box
			
<b>CLOSURES</b>	CLOUTR (R-loc outside no adhesive)	3'	
	CLINR (R-loc inside no adhesive)	3'	
	CLOUTRGLUE (R-loc outside with adhesive)	3'	
	CLINRGLUE (R-loc inside with adhesive)	3'	*100 per box
			

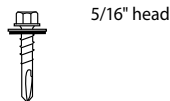
# ACCESSORIES

## METAL/ METAL SCREWS #12



PART #	COLOR	LENGTH	#PER BAG	#PER BOX
34(color)MM	all	3/4"	250	2500
114(color)MM	all	1 1/4"	250	2500
112(color)MM	White, Hunter, Brilliant, Stone, Bare	1 1/2"	250	2500
2ZMM	galvanized	2"	250	2000

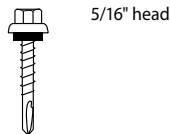
## LAP SCREWS #14



78(color)LAP	all	7/8"	250	2500
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\*order in increments of 250pc

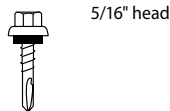
## ZAC SCREWS/ METAL/METAL SCREWS



114ZACMM	Bare	1 1/4"	250	2500
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\*order in increments of 250pc

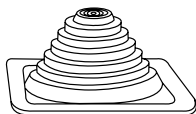
## ZAC SCREWS/ LAP SCREWS



78ZACLAP	Bare	7/8"	250	2500
----------	------	------	-----	------

\*order in increments of 250pc

## MASTER PIPE FLASHING



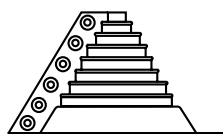
PART #	LENGTH	PART #	LENGTH
MPF	1/4" to 4"	3SMPF	1/4" to 4"
MPF2	1 1/4" to 3"	4SMPF	3" to 6"
MPF4	3" to 6"	6SMPF	5" to 9"
MPF5	4" to 7"	8SMPF	7" to 13"
MPF6	5" to 9"	10SMPF	13" to 26"
MPF7	6" to 11"		
MPF8	7" to 13"		
MPF9	10" to 18"		

MAXIMUM TEMPERATURE 500 DEGREES

MAXIMUM TEMPERATURE 250 DEGREES

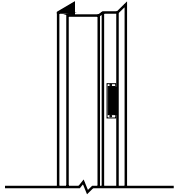
## MASTER PIPE FLASHING WITH ZIPPER

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



# ACCESSORIES

## FRAMING PACKAGE



PART #	SIZE	COLOR
4X3070JAMB	4.25" X 3070	White
4X4070JAMB	4.25" X 4070	White
6X3070JAMB	6.25" X 3070	White
6X4070JAMB	6.25" X 4070	White
8X3070JAMB	8.25" X 3070	White
8X4070JAMB	8.25" X 4070	White
8X6070JAMB	8.25" X 6070	White

Package includes: Jamb, headers, threshold, door lever with keyed lock, hinges, and weather strip kit.

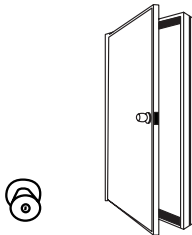
## DOOR LEAF



3070DOOR	3070	3' x 7'
3070DOORW/LITE (window)	3070	3' x 7'
4070DOOR	4070	4' x 7'

STEEL DOOR LEAF ONLY

## DOOR SET



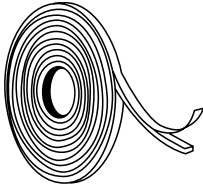
3068DR (Steel Jamb)	3068	39 13/16" x 80 5/8"
4068DR (Aluminum Jamb)	4068	49 13/16" x 80 5/8"

KNOB

KNOBS SOLD SEPARATELY

# ACCESSORIES

## BUTYL TAPE



PART #

LENGTH

WIDTH

THICKNESS

BT

40'

1/4"

3/16"

BTR

40"

7/8"

3/16"

40' per roll

BT 20 rolls per box;  
BTR 10 rolls per box;

## GRAYFLEX

JOINT  
SEAL  
TAPE



GRAYFLEX115

15'

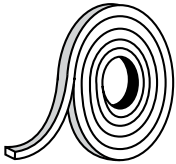
1"

1 1/2"

expanded size

24 rolls per box

## UNIVERSAL POLYFOAM



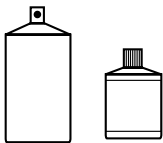
POLYG (with adhesive)

25'

1" x 1 1/2"

20 rolls per box

## TOUCH UP PAINT



PART #

SIZE

4(color)SP

0.6oz bottle with brush

12PURSP

12oz spray can (purlin paint)

## GEOCEL-TRIPOLYMER SEALANT



GEO(color)

10.3oz tube

clear, gray, white

MRS(color)

10.3oz tube

call for colors

MRSCLEAR

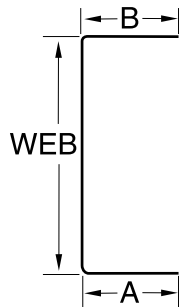
10.3oz tube

clear

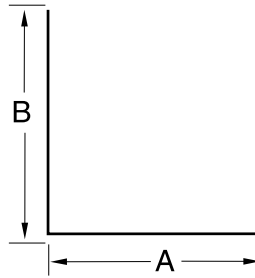
# SUB-STRUCTURAL STEEL

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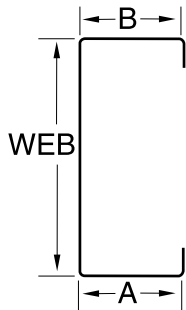
CHANNEL



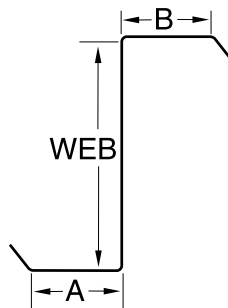
ANGLE



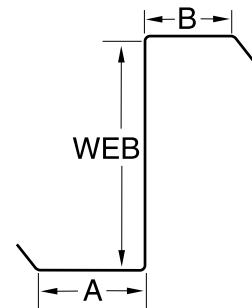
CEE



SYMMETRICAL ZEE

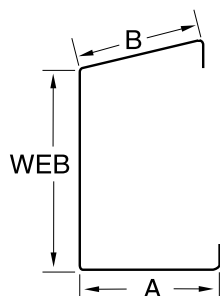


LGSI ZEE

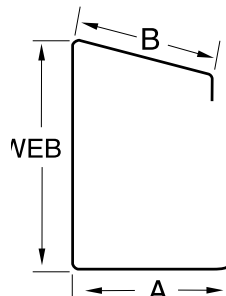


EAVE STRUT

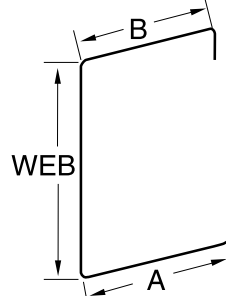
Single Slope Up



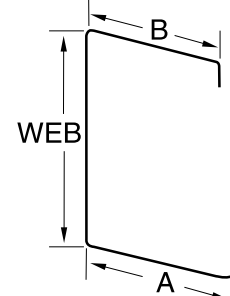
Single Slope Down



Double Slope Up



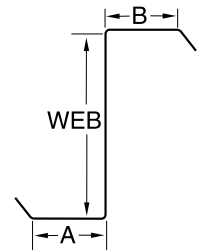
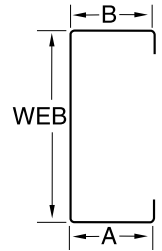
Double Slope Down



# SUB-STRUCTURAL STEEL

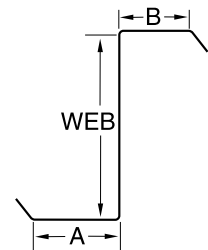
## STANDARD CEES & SYMMETRICAL ZEES - Secondary Framing Members

WEBxAXB	Gauge	Finish	CEE Product Code	ZEE Product Code
4x2x2	16	Red Oxide	C4216R	Z4216R
4x2.5x2.5	16	Red Oxide/Galvanized	C42516R/C42516Z	Z42516R/Z42516Z
4x2.5x2.5	14	Red Oxide	C42514R	Z42514R
4x3.5x3.5	14	Red Oxide	C43514R	Z43514R
	16	Red Oxide	C43516R	Z43516R
6x2.5x2.5				
6x2.5x2.5	16	Red Oxide	C62516R	Z62516R
	14	Red Oxide	C62514R	Z62514R
8x2.5x2.5				
8x2.5x2.5	16	Red Oxide/Galvanized	C82516R/C82516Z	Z82516R/Z82516Z
8x2.5x2.5	14	Red Oxide/Galvanized	C82514R/C82514Z	Z82514R/Z82514Z
	12	Red Oxide/Galvanized	C82512R/C82512Z	Z82512R/Z82512Z
8x3.5x3.5				
8x3.5x3.5	16	Red Oxide	C83516R	Z83516R
8x3.5x3.5	14	Red Oxide/Galvanized	C83514R/C83514Z	Z83514R/Z83514Z
	12	Red Oxide/Galvanized	C83512R/C83512Z	Z83512R/Z83512Z
9x.3x3				
9x3x3	14	Red Oxide	C9314R	Z9314R
	12	Red Oxide/Galvanized	C9312R/C9312Z	Z9312R/Z9312Z
10x2.5x2.5				
10x2.5x2.5	16	Red Oxide	C102516R	Z102516R
10x2.5x2.5	14	Red Oxide/Galvanized	C102514R/C102514Z	Z102514R/Z102514Z
	12	Red Oxide/Galvanized	C102512R/C102512Z	Z102512R/Z102512Z
10x3.5x3.5				
10x3.5x3.5	14	Red Oxide	C103514R	Z103514R
	12	Red Oxide	C103512R	Z103512R
12x2.5x2.5				
12x2.5x2.5	14	Red Oxide	C122514R	Z122514R
	12	Red Oxide	C122512R	Z122512R
12x3.5x3.5				
12x3.5x3.5	14	Red Oxide/Galvanized	C123514R/C123514Z	Z123514R/Z123514Z
12x4x4	12	Red Oxide/Galvanized	C123512R/C123512Z	Z123512R/Z123512Z
	16	Red Oxide	C12416R	Z12416R



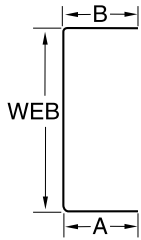
## LGSI ZEES - Secondary Framing Members

WEBxAXB	Gauge	Finish	Product Code
6x2 $\frac{3}{8}$ x2 $\frac{1}{2}$	16	Red Oxide	Z62516R
6x2 $\frac{3}{8}$ x2 $\frac{1}{2}$	14	Red Oxide	Z62514R
8x2 $\frac{3}{8}$ x2 $\frac{1}{2}$	16	Red Oxide/Galvanized	Z82516R/Z82516Z
8x2 $\frac{3}{8}$ x2 $\frac{1}{2}$	14	Red Oxide/Galvanized	Z82514R/Z82514Z
8x2 $\frac{3}{8}$ x2 $\frac{1}{2}$	12	Red Oxide/Galvanized	Z82512R/Z82512Z
8x3 $\frac{3}{8}$ x3 $\frac{1}{2}$	16	Red Oxide	Z83516R
8x3 $\frac{3}{8}$ x3 $\frac{1}{2}$	14	Red Oxide	Z83514R
8x3 $\frac{3}{8}$ x3 $\frac{1}{2}$	12	Red Oxide/Galvanized	Z83512R/Z83512Z
10x2 $\frac{3}{8}$ x2 $\frac{1}{2}$	16	Red Oxide	Z102516R
10x2 $\frac{3}{8}$ x2 $\frac{1}{2}$	14	Red Oxide	Z102514R
10x2 $\frac{3}{8}$ x2 $\frac{1}{2}$	12	Red Oxide/Galvanized	Z102512R/Z102512Z
10x2 $\frac{7}{8}$ x2 $\frac{5}{8}$	14	Red Oxide	Z10314R
10x2 $\frac{7}{8}$ x2 $\frac{5}{8}$	12	Red Oxide	Z10312R
12x2 $\frac{3}{8}$ x2 $\frac{1}{2}$	14	Red Oxide	Z122514R
12x2 $\frac{3}{8}$ x2 $\frac{1}{2}$	12	Red Oxide	Z122512R
12x3 $\frac{3}{8}$ x3 $\frac{1}{2}$	14	Red Oxide	Z123514R
12x3 $\frac{3}{8}$ x3 $\frac{1}{2}$	12	Red Oxide/Galvanized	Z123512R/Z123512Z
12x3 $\frac{3}{8}$ x3 $\frac{1}{2}$	16	Red Oxide	Z12416R



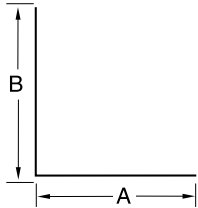
Members can be manufactured to the nearest 1/8" in length from 6'0" to 45'0". For lengths under 6'0" or over 45'0", please call your sales rep.

# SUB-STRUCTURAL STEEL



## CHANNELS - Secondary Framing Members

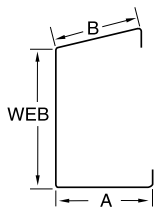
WEBxAxB	Gauge	Finish	Product Code
4.25x2.35x2.35	16	Red Oxide/Galvanized	U4216R
4.25x2.85x2.85	16	Red Oxide/Galvanized	U42516R/ U42516R
4.25x2.85x2.85	14	Red Oxide	U42514R
6.25x2.85x2.85	16	Red Oxide/Galvanized	U62516R/ U62516Z
6.25x2.85x2.85	14	Red Oxide	U62514R
8.25x2.85x2.85	16	Red Oxide/Galvanized	U82516R/U82516Z
8.25x2.85x2.85	14	Red Oxide/Galvanized	U82514R/U82514Z
8.25x2.85x2.85	12	Red Oxide/Galvanized	U82512R/U82512Z



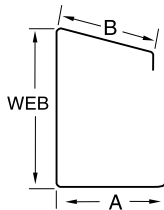
## ANGLE - Secondary Framing Members

AxB	Gauge	Finish	Product Code
2.5x2.5	14	Red Oxide	B2514R
3x3	14	Red Oxide	B314R
3x3	16	Red Oxide	B316R
4x2	16	Red Oxide/Galvanized	B4216R/B4216Z
4x2	14	Red Oxide	B4214R
4x3	16	Red Oxide	B4316R

Single Slope Up



Single Slope Down

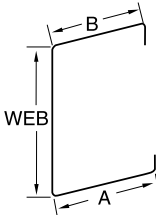


## EAVE STRUTS - Secondary Framing Members

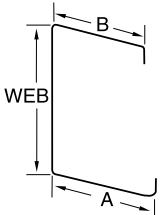
WEBxAxB	Gauge	Finish	Product Code
6x4x3	16	Red Oxide	E64316LR/E64316HR
6x4x3	14	Red Oxide	E64314LR/E64314HR
6x4x3	12	Red Oxide	E64312LR/E64312HR
8x4x3	14	Red Oxide/Galvanized	E84314LR or HR/E84314LZ or HZ
8x4x3	12	Red Oxide/Galvanized	E84312LR or HR/E84312LZ or HZ
8x5x3	12	Red Oxide	E85312LR/E85312HR
8x5x3	14	Red Oxide	E85314LR
8x5x5	14	Red Oxide	E85514LR
10x5x3	14	Red Oxide	E105314LR

Please specify pitch and slope when ordering.

Double Slope Up



Double Slope Down

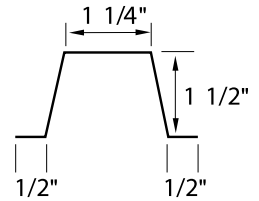


Members can be manufactured to the nearest 1/8" in length from 6'0" to 45'0". For lengths under 6'0" or over 45'0", please call your sales rep.

# SUB-STRUCTURAL STEEL

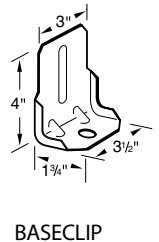
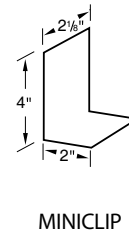
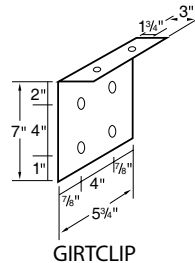
## HAT CHANNEL

Gauge	Finish	Length	Product Code
16	Red Oxide	20'0"	HATR
20	Galvanized	20'0"	HATZ



## PURLIN CLIPS

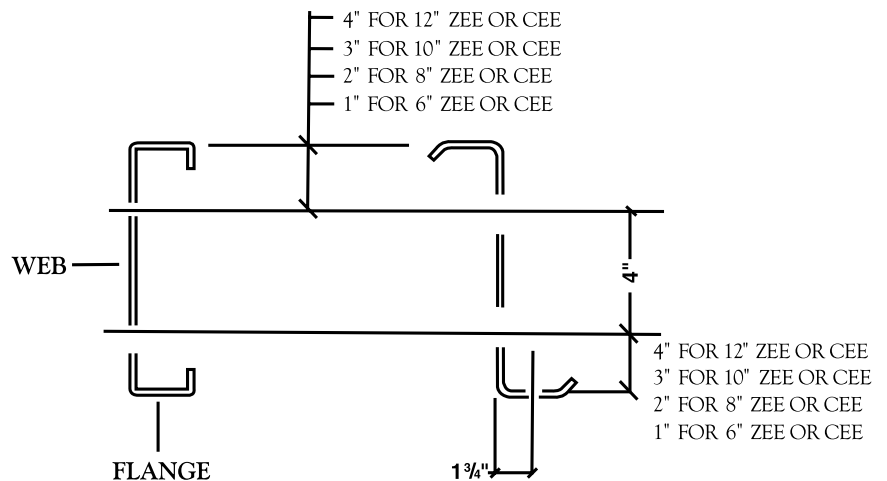
Gauge	Finish	Product Code
10	Red Oxide	GIRTCLIP
16	Red Oxide	MINICLIP
14	Galvanized	BASECLIP



Members can be manufactured to the nearest 1/8" in length from 6'0" to 45'0". For lengths under 6'0" or over 45'0", please call your sales rep.

## PUNCH PATTERNS

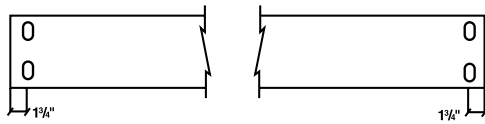
Capabilities vary by location. Call for pricing and availability on special punching. 3" Minimum part length to be punched. CSMI standard hole sizes are 5/8" round and 5/8"x 3/4" slot in Lowell and Cedar Hill. Standard hole size in Jasper is 5/8"x 3/4" slot. Holes are punched to accommodate 1/2" diameter bolts. 5/16" angle punch offered in Lowell and Jasper.



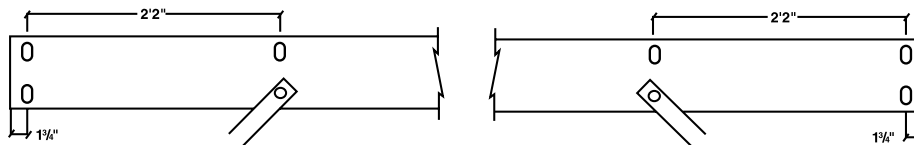
# SUB-STRUCTURAL STEEL

## STANDARD PUNCH PATTERNS CEES & ZEES

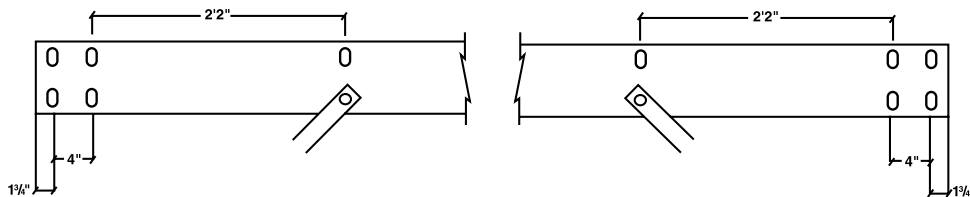
CODE: PPEP  
**END PUNCH**



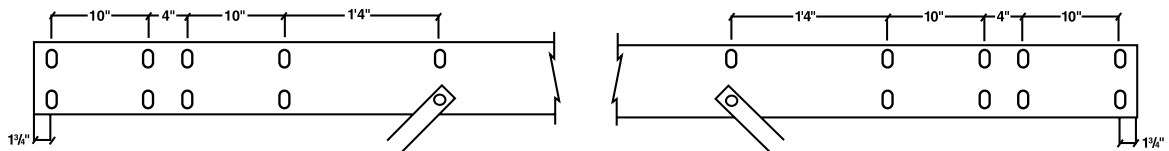
CODE: PPSS  
**SIMPLE SPAN PUNCH** - MINIMUM PART LENGTH 5' TOTAL, 2'6" ONE END



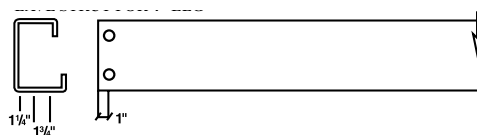
CODE: PPSL  
**SHORT LAP PUNCH** - MINIMUM PART LENGTH 5'6" TOTAL, 2'8" ONE END



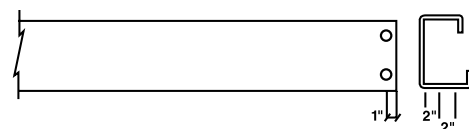
CODE: PPLL  
**LONG LAP PUNCH** - MINIMUM PART LENGTH 7' TOTAL, 3'6" ONE END



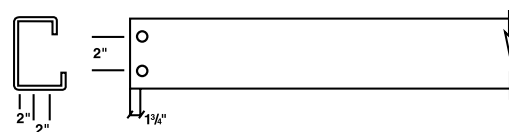
CODE: ES4  
**EAVE STRUT FOR 4" LEG**



CODE: ES5  
**EAVE STRUT FOR 5" LEG**



CODE: ES134  
**EAVE STRUT FOR 5" LEG**



29

# WARRANTIES

## PRIME 40 YEAR LIMITED PAINT WARRANTY

FOR CENTRAL STATES MANUFACTURING (CSM) PANEL-LOC, PANEL-LOC PLUS, R-LOC, HORIZON-LOC, M-LOC, CENTRAL-LOC AND CENTRAL SEAM PLUS STEEL ROOFING AND SIDING PANELS. THIS WARRANTY COVERS PRIME MATERIAL ONLY. 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	6	7

(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 PANEL-LOC, PANEL-LOC PLUS, R-LOC, HORIZON-LOC, M-LOC, CENTRAL-LOC AND CENTRAL SEAM PLUS 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.

3) 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.

4) 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.
- 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.
- 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.
- 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.
- Stored or installed in a way that allows for contact with animals or animal waste.
- Deterioration to the panels caused directly or indirectly by panel contact with fasteners. The selection of suitable fasteners rests solely with the buyer.
- Weather uniformity under non-uniform conditions.
- Unusual harmful fumes, chemically aggressive environment, foreign substances in the atmosphere, standing water or direct salt spray.
- Damage due to green, wet or treated lumber.

7) The warranty applies to panels installed in the continental United States, Alaska, and Canada.

8) 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.

# WARRANTIES

## PAINTED GALVALUME 20 YEAR® SUBSTRATE WARRANTY

Central States Manufacturing (CSM) warrants that steel sheets coated with hot-dipped aluminum-zinc alloy AZ50 or Galvalume® AZ50 and sold for use as painted steel roofing and siding panels, if erected in the United States, WILL NOT rupture, fail structurally or perforate within a period of twenty (20) years after shipment due to exposure to normal atmospheric corrosion.

This warranty DOES NOT APPLY to sheets exposed at any time to corrosive or aggressive atmospheric conditions, including but not limited to:

- Areas subject to salt water marine atmospheres or to constant spraying of either salt or fresh water.
- Areas subject to fallout or exposure to corrosive chemicals, fumes, ash, cement dust or animal waste.
- Areas subject to water run-off from lead or copper flashings or areas in metallic contact with lead or copper.
- Conditions/circumstances where corrosive fumes or condensates are generated or released inside the building.

This warranty DOES NOT APPLY in the event of:

- Mechanical, chemical or other damage sustained during shipment, storage, erection, or after erection.
- Failure to provide free drainage of water, including internal condensation from overlaps and all other surfaces of the sheets or panels.
- Failure to remove debris from overlaps and all other surfaces of the sheets or panels.
- Damage caused to the metallic coating by improper scouring or cleaning procedures.
- Deterioration of the panels caused by contact with green or wet lumber, or storage stain caused by water damage or condensation.
- Presence of damp insulation or other corrosive materials in contact with or close proximity to the panel.
- Deterioration to the panels caused directly or indirectly by panel contact with concrete, asphalt, gravel, dirt, mulch, or any corrosive material.
- Deterioration of the panels caused directly or indirectly by panel contact with fasteners. Selection of suitable long-lasting fasteners to be used with Galvalume roofing and siding panels rests solely with the Buyer.
- A degree of bending less than 2T for sheet gauges up to 0.030 in. and degree of bending less than 4T for sheet gauges 0.031 in. and thicker.
- Slopes of roof or sections of the roof flatter than 1/4:12.

This warranty shall be subject to the stipulations, limitations and conditions hereinafter set forth.

The remedy for any claims on steel roofing and siding panels shall be at the discretion of Central States Manufacturing and shall be limited to refinishing or replacing the defective panels.

CENTRAL STATES MANUFACTURING SHALL NOT BE LIABLE FOR ANY LOSSES, DAMAGES OR EXPENSES WHETHER DIRECT, INCIDENTAL OR CONSEQUENTIAL, CAUSED BY OR RESULTING FROM THE USE OF DEFECTIVE OR NON-CONFORMING STEEL ROOFING AND SIDING PANELS OR FOR ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. CENTRAL STATES MANUFACTURING'S TOTAL LIABILITY IS EXPRESSLY LIMITED TO THE PURCHASE PRICE OF THE STEEL ROOFING AND SIDING PANELS PROVIDED BY CENTRAL STATES MANUFACTURING.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply in your state. This warranty provides specific legal rights and other rights which vary from state to state that may apply.

Central States Manufacturing's liability for breach of this warranty shall be limited exclusively to the cost of either repairing non-conforming, rupturing, perforating or structurally failing panels, or at CSM's sole option, of furnishing FOB Buyer's plant sufficient sheet product to enable Buyer to fabricate replacement panels for the non-conforming, rupturing, perforating or structurally failing panels. CSM shall not in any event be liable for the cost of labor expended by others on any non-conforming, rupturing, perforating or structurally failing sheet or for any special, indirect, or consequential loss of profits or any other incidental, general, special or compensatory damages to anyone by reason of the fact that such panels shall have been non-conforming, rupturing, perforating, or structurally failing.

Claims under this warranty must be made in writing to Central States Manufacturing at the address set forth below within 30 days after discovery of the defect. CSM shall have an additional 30 days to inspect the steel roofing and siding panels before any further action shall be taken. Adequate identification of material involved in the claim, including date of installation, order number, invoice number and date of shipment must be established by the Buyer.

Buyer shall exercise diligence in inspection of sheets as received from CSM so as to mitigate repair or replacement. CSM extends this warranty solely to the original owner of any structure where the material is installed. This warranty is not transferable and non-assignable. CSM reserves the right to terminate this warranty at any time (except as to orders already accepted) upon the giving of written notice thereof.

The Law of the State of Arkansas shall govern the rights and duties of the parties under this agreement and jurisdiction and venue is fixed in Benton County, Arkansas.

CENTRAL STATES MANUFACTURING MAKES NO GUARANTEES, EITHER EXPRESSED OR IMPLIED BEYOND THE FACE HEREOF, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF FITNESS AND MERCHANTABILITY, AND SHALL HAVE NO OTHER LIABILITY WITH RESPECT THERETO.



**Lowell, AR**  
800-356-2733

**Michigan City, IN**  
800-638-2565

**Cedar Hill, TX**  
800-210-8305

**Mount Airy, NC**  
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**Jasper, AL**  
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**Hartford, SD**  
877-361-4763

[www.centralstatesmfg.com](http://www.centralstatesmfg.com)