

Light Gauge Product Guide

HELPFUL INFORMATION ON PANELS, TRIMS, GUTTERS AND ACCESSORIES



**CENTRAL
STATES**

MANUFACTURING, INC.
METAL BUILDING COMPONENTS
WWW.CENTRALSTATESMFG.COM



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

OUR MISSION

Central States Mfg., 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.



Lowell, AR
800-356-2733

Michigan City, IN
800-638-2565

Cedar Hill, TX
800-210-8305

Jasper, AL
866-270-6608

Mount Airy, NC
877-813-2111

INDEX

Information in the catalog may vary by plant location.
Please call your salesperson to verify product availability.

I. Panels	
1. Care & Handling	2.0
2. Profiles & Load Tables	5.0
II. Trims.....	7.0
III. Gutters.....	14.0
IV. Accessories	16.0
V. Sliding Doors	20.0
VI. Warranties	24.0

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.

Delivery

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

Storage and Handling

Galvalume and galvanized 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/galvanized 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.

Failure to follow these steps may result in wet storage stains and premature rusting.

The manufacturer's warranty will be void at this time, and the manufacturer will not be responsible.

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 in the job site, 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.

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.

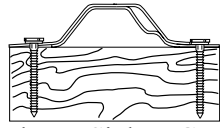
Drilling

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

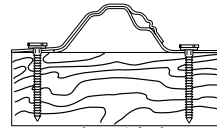
Installation

Follow instructions for UL580 Class 90.

Panels should be installed with the sidelap facing away from the prevailing wind. It is extremely important that the first panel attached be perfectly square, as this will affect the squareness of the entire building. When installing panels, the siphon groove should be on the underlap panel.



Panel-Loc Siphon Groove

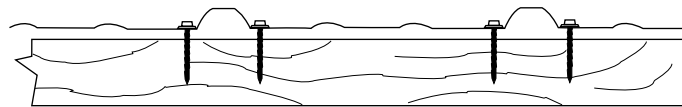


Panel-Loc Plus Siphon Groove

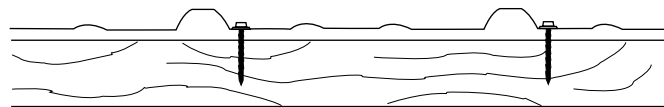
It is important that the siphon groove not be "clogged" with butyl tape or fastener.

Screws may be placed either in the rib or the flat for both roof and wall panels.

Using SCREWS



For eaves, ridges, and endlaps



For all intermediate purlins

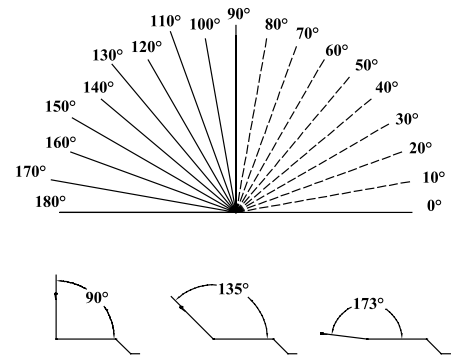
Lap and stitch screws also available.

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

**Degrees of bend
Transition Trims**



Specify Degrees when ordering
Contact Salesperson for assistance
with pitch change trims.

SINGLE SLOPE PITCHES ONLY

(FASCIA, EAVE, ENDWALL, GUTTER)

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

Revised November 2010

Square Conversions

For 26ga and 29ga low rib 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", there will only be 36" of coverage per panel. Squares are figured based on actual width. One square is equal to a panel 31.579 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.

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

Example Number of panels = 12 $\frac{38" \times 144" \times 12}{14,400}$ equals 4.62 squares of metal
 Panel width = 38"
 Panel length = 144"
 Square inches = 14,400

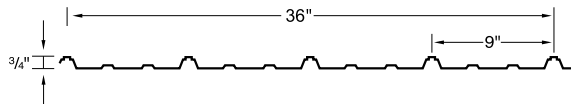
length in feet multiplied by # of pieces divided by 31.579

Example Number of panels = 12 $\frac{12' \times 12}{31.579}$ equals 4.62 squares of metal
 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"

Panel -Loc Plus



Panel-Loc Plus is available in 29ga and 26ga painted Galvalume, bare galvanized, and bare Galvalume. Central States uses the CentralGuard™ paint system on all Prime painted metals. The paint has a 40 year limited warranty, and Galvalume substrate has a 20 year limited warranty. Kynar 500®/Hylar 5000® system also available – contact sales rep for details. 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 and galvanized 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.

Central States' 29ga and 26ga steel are manufactured to meet ASTM A792 specifications for Galvalume and ASTM A653 for galvanized with a minimum yield of 80,000 PSI. Panel-Loc Plus also has UL2218/Class 4 impact resistance rating and UL790 fire resistance.

The minimum roof slope for the 3/4" Panel-Loc Plus is 3:12. The minimum pitch, along with Panel-Loc Plus' siphon groove, will allow for sufficient drainage of water. For added protection, a sealant tape can be used on the laps of the panel.

SECTION PROPERTIES: 36" WIDE, CENTRAL STATES MFG. PANEL-LOC PLUS

Gauge	Thickness (inches)	Weight (psf)	Yield Stress (ksi)	Top in Compression (Positive Bending)			Bottom in Compression (Negative Bending)		
				Ixx	Sxx	Ma	Ixx	Sxx	Ma
				in ⁴ /ft	in ³ /ft	in.kips/ft	in ⁴ /ft	in ³ /ft	in.kips/ft
26	0.0185	0.866	80.0	0.0133	0.0220	0.7913	0.0093	0.0198	0.7123
29	0.0150	0.704	80.0	0.0110	0.0181	0.6493	0.0073	0.0160	0.5760

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 AND WIND LOADS

SINGLE SPAN CONDITION

Span (feet)	29 Gauge & 80 ksi				26 Gauge & 80 ksi			
	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)
2	108.2	108.2	90.1	127.7	131.9	131.9	109.3	157.9
2.5	69.3	61.5	46.2	81.7	84.4	74.6	55.9	101.1
3	48.1	35.6	26.7	56.7	58.6	43.2	32.4	70.2
3.5	35.3	22.4	16.8	41.7	43.1	27.2	20.4	51.6
4	27.1	15.0	11.3	31.9	33.0	18.2	13.7	39.5
4.5	21.4	10.6	7.9	25.2	26.1	12.8	9.6	31.2
5	17.3	7.7	5.8	20.4	21.1	9.3	7.0	25.3
6	12.0	4.5	3.3	14.2	14.7	5.4	4.0	17.5

TWO SPAN CONDITION

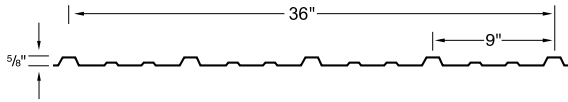
Span (feet)	29 Gauge & 80 ksi				26 Gauge & 80 ksi			
	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)
2	96.0	96.0	96.0	143.9	118.7	118.7	118.7	175.4
2.5	61.4	61.4	60.1	92.1	76.0	76.0	72.8	112.3
3	42.7	42.7	34.8	64.0	52.8	52.8	42.2	78.0
3.5	31.3	29.2	21.9	47.0	38.8	35.4	26.5	57.3
4	24.0	19.6	14.7	36.0	29.7	23.7	17.8	43.9
4.5	19.0	13.7	10.3	28.4	23.5	16.7	12.5	34.6
5	15.4	10.0	7.5	23.0	19.0	12.1	9.1	28.1
6	10.7	5.8	4.3	16.0	13.2	7.0	5.3	19.5

THREE OR MORE SPAN CONDITION

Span (feet)	29 Gauge & 80 ksi				26 Gauge & 80 ksi			
	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)
2	112.1	112.1	112.1	168.1	138.7	138.7	138.7	204.9
2.5	71.8	71.8	71.8	107.6	88.8	88.8	88.8	131.1
3	49.8	49.8	49.8	74.7	61.6	61.6	61.1	91.1
3.5	36.6	36.6	31.7	54.9	45.3	45.3	38.5	66.9
4	28.0	28.0	21.3	42.0	34.7	34.4	25.8	51.2
4.5	22.2	19.9	14.9	33.2	27.4	24.1	18.1	40.5
5	17.9	14.5	10.9	26.9	22.2	17.6	13.2	32.8
6	12.5	8.4	6.3	18.7	15.4	10.2	7.6	22.8

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%.

Panel -Loc



Panel-Loc is available in 29ga and 26ga painted Galvalume, bare galvanized, and bare Galvalume. Central States uses the CentralGuard™ paint system on all Prime painted metals. The paint has a 40 year limited warranty, and Galvalume substrate has a 20 year limited warranty. 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 and galvanized 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.

Central States' 29ga and 26ga steel are manufactured to meet ASTM A792 specifications for Galvalume and ASTM A653 for galvanized with a minimum yield of 80,000 PSI. Panel-Loc also has UL2218/Class 4 impact resistance rating and UL790 fire resistance.

The minimum roof slope for the 5/8" Panel-Loc is 3:12. The minimum pitch, along with Panel-Loc's siphon groove, will allow for sufficient drainage of water. For added protection, a sealant tape can be used on the laps of the panel.

SECTION PROPERTIES: 36" WIDE, CENTRAL STATES MFG. PANEL-LOC

Gauge	Thickness (inches)	Weight (psf)	Yield Stress (ksi)	Top in Compression (Positive Bending)			Bottom in Compression (Negative Bending)		
				Ixx	Sxx	Ma	Ixx	Sxx	Ma
				in ⁴ /ft	in ³ /ft	in.kips/ft	in ⁴ /ft	in ³ /ft	in.kips/ft
26	0.0185	0.860	80.0	0.0097	0.0198	0.7097	0.0070	0.0189	0.677
29	0.0150	0.698	80.0	0.0073	0.0152	0.5460	0.0053	0.0152	0.5477

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 AND WIND LOADS

SINGLE SPAN CONDITION

Span (feet)	29 Gauge & 80 ksi				26 Gauge & 80 ksi			
	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)
2	91.0	80.1	60.1	121.4	118.3	105.6	79.2	150.2
2.5	58.2	41.0	30.8	77.7	75.7	54.1	40.6	96.1
3	40.4	23.7	17.8	54.0	52.6	31.3	23.5	66.8
3.5	29.7	15.0	11.2	39.6	38.6	19.7	14.8	49.1
4	22.8	10.0	7.5	30.3	29.6	13.2	9.9	37.6
4.5	18.0	7.0	5.3	24.0	23.4	9.3	7.0	29.7
5	14.6	5.1	3.8	19.4	18.9	6.8	5.1	24.0
6	10.1	3.0	2.2	13.5	13.1	3.9	2.9	16.7

TWO SPAN CONDITION

Span (feet)	29 Gauge & 80 ksi				26 Gauge & 80 ksi			
	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)
2	91.3	91.3	78.2	121.0	112.9	112.9	103.1	157.3
2.5	58.4	53.4	40.1	77.5	72.3	70.4	52.8	100.7
3	40.6	30.9	23.2	53.8	50.2	40.7	30.6	69.9
3.5	29.8	19.5	14.6	39.5	36.9	25.7	19.2	51.4
4	22.8	13.0	9.8	30.3	28.2	17.2	12.9	39.3
4.5	18.0	9.2	6.9	23.9	22.3	12.1	9.1	31.1
5	14.6	6.7	5.0	19.4	18.1	8.8	6.6	25.2
6	10.1	3.9	2.9	13.4	12.5	5.1	3.8	17.5

THREE OR MORE SPAN CONDITION

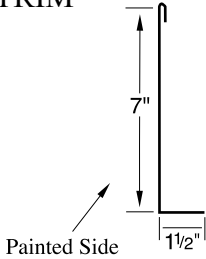
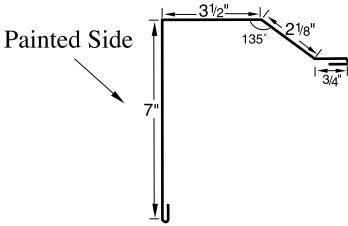
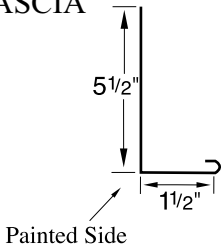
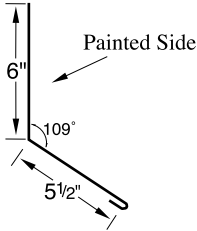
Span (feet)	29 Gauge & 80 ksi				26 Gauge & 80 ksi			
	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)	LL (S)(psf)	LL (D) L/180(psf)	LL (D) L/240(psf)	WL(psf)
2	106.6	106.6	106.6	141.1	131.9	131.9	131.9	183.8
2.5	68.2	68.2	58.1	90.5	84.4	84.4	76.5	117.6
3	47.4	44.8	33.6	62.8	58.6	58.6	44.3	81.7
3.5	34.8	28.2	21.2	46.2	43.1	37.2	27.9	60.0
4	26.7	18.9	14.2	35.3	33.0	24.9	18.7	45.9
4.5	21.1	13.3	10.0	27.9	26.1	17.5	13.1	36.3
5	17.1	9.7	7.3	22.6	21.1	12.8	9.6	29.4
6	11.8	5.6	4.2	15.7	14.7	7.4	5.5	20.4

6.0

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%.

Revised November 2010

MICHIGAN CITY REGIONAL TRIMS

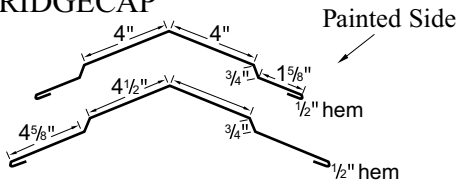
	Part Number	Length
<p>POST TRIM</p> 	SA(color)7	10'2"
<p>TRACK DOOR JAMB</p> 	TDJT10(color) TDJT16(color)	10'2" 16'2"
<p>SOFFIT FASCIA</p> 	SAF(color)512	10'2"
<p>ENDWALL FLASHING</p> 	EFF(color)	10'2"

TRIMS

Part Number

Length

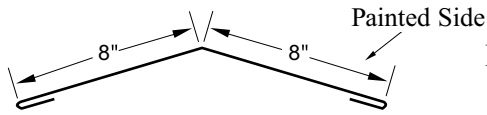
RIDGECAP



RCP(color)
RC2(color)

10'6" Recommended 6:12 or less
10'2" Recommended 7:12
or greater

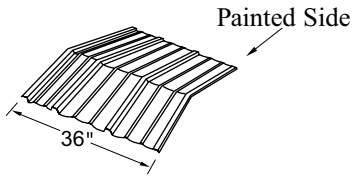
RESIDENTIAL RIDGE CAP



RRCP

10'2"

FORMED RIDGECAP

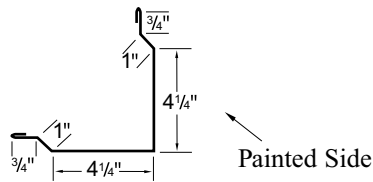


FRCP(color) Panel Loc
FRCP(color)+ Panel Loc Plus

3'

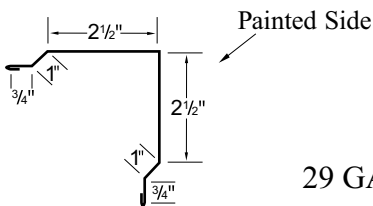
Specify pitch up to 4:12

RAKE & CORNER



COR(color)10 10'0"
COR(color)12 12'0"
COR(color)14 14'0"
COR(color)16 16'0"
COR(color)18 18'0"
COR(color)20 20'0"

MINI CORNER

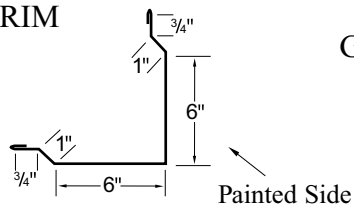


MCRN(color)10 10'2"
MCRN(color)12 12'2"
MCRN(color)14 14'2"
MCRN(color)16 16'2"

29 GAUGE LONG TRIM (Available in Michigan City plant only.)

MCRN9(color)12 12'2"
MCRN9(color)14 14'2"
MCRN9(color)16 16'2"

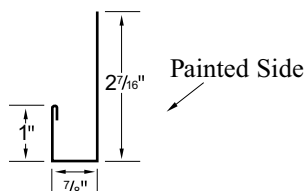
GABLE TRIM



GT6(color)

10'2"

J-TRIM



JT(color)

10'2"

TRIMS

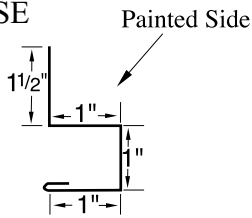
	Part Number	Length
RAT GUARD 	RG(color) RG1(color)	10'2" 10'2"
VALLEY 	VT1(color)	10'2"
GAMBREL TRIM Upper 	GTU(color)	10'2" specify pitch
GAMBREL TRIM Lower 	GTL(color)	10'2" specify pitch
SINGLE ANGLE 	1.5 x 1.5 SA(color)112 2 x 2 SA(color)2X2 3 x 3 SA(color)3X3	10'2" 10'2" 10'2"
INSIDE ANGLE 	1.5 x 1.5 IA(color)112 2 x 2 IA(color)2X2 3 x 3 IA(color)3X3	10'2" 10'2" 10'2"
POST TRIM 	1.5 x 3.5 SA(color)312 1.5 x 5.5 SA(color)512 1.5 x 7.5 SA(color)712	10'2" 10'2" 10'2"
UNIVERSAL SIDEWALL 	SF1(color)	10'2"
UNIVERSAL ENDWALL 	EF(color)	10'2" specify pitch

TRIMS

Part Number

Length

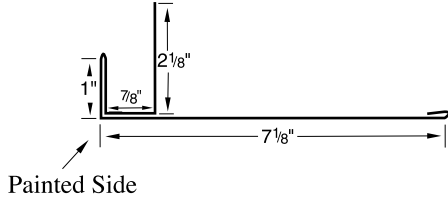
SQUARE BASE



SBA(color)

10'2"

OVERHEAD DOOR JAMB



OHDJ(color)

10'2"

OHDJ12(color)

12'2"

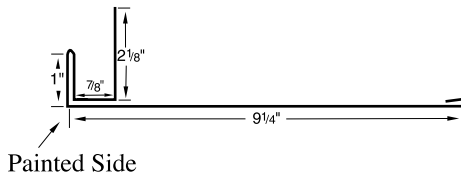
OHDJ14(color)

14'2"

OHDJ16(color)

16'2"

OVERHEAD DOOR JAMB 9 1/4"



OHDJ9(color)

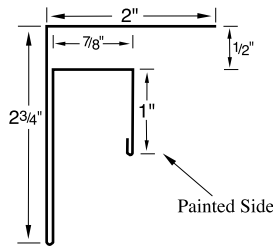
10'2"

OHDJ916(color)

16'2"*

*Offered out of Michigan city location. Longer lead times may apply.

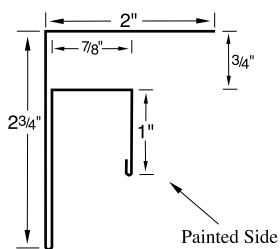
SOFFIT F&J



SFJ(color)

10'2"

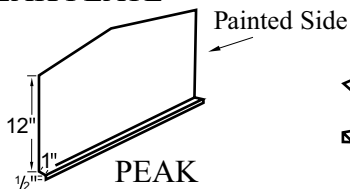
PANEL LOC PLUS F&J



PFJ(color)

10'2"

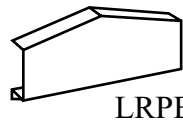
PEAK PLATE



PEAK(color)

3'

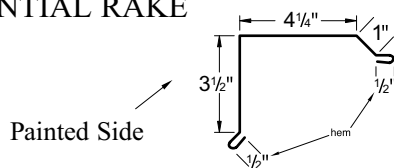
LRPBOXF



LRPBOXF

Standard 4:12

RESIDENTIAL RAKE



RRT(color)

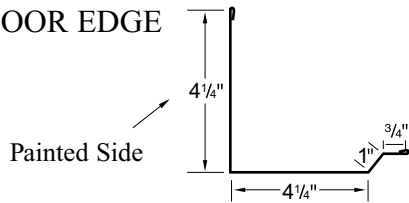
10'2"

TRIMS

Part Number

Length

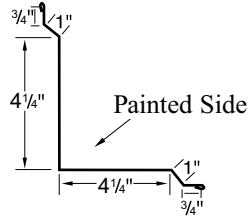
DOOR EDGE



DJ10(color)

10'2"

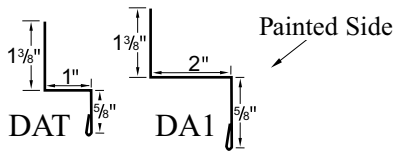
INSIDE CORNER



IC1(color)

10'2"

DOUBLE ANGLE



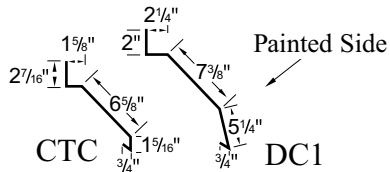
DAT(color)

10'2"

DA1(color)

10'2"

ROUND TRACK COVER



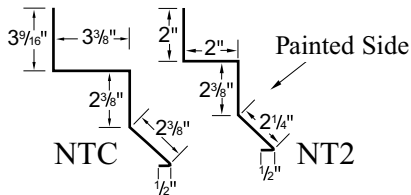
CTC(color)

10'2"

DC1(color)

10'2"

SQUARE TRACK COVER



NTC(color)*

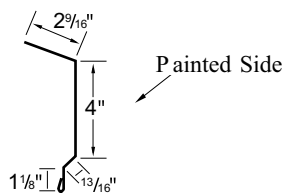
10'2"

NT2(color)*

10'2"

*hardware not available

FASCIA

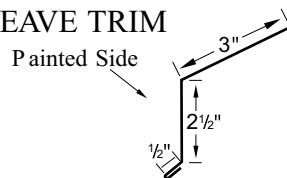


FT(color)

10'2"

specify pitch

RESIDENTIAL EAVE TRIM

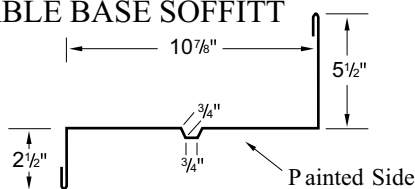


RET(color)

10'2"

specify pitch

GABLE BASE SOFFITT



GB1(color)

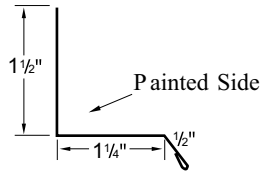
10'2"

TRIMS

Part Number

Length

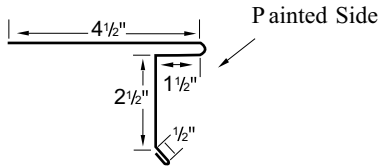
WINDOW DRIP CAP



WC(color)

10'2"

DRIP EDGE

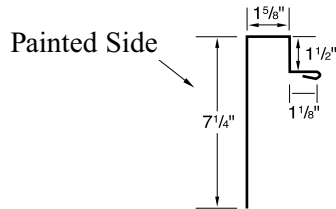


RDC(color)

10'2"

Default is 90°
as shown
Specify pitch
6:12 or less

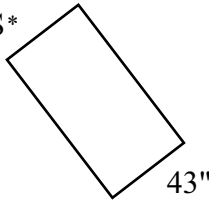
DOOR POST TRIM



DJ8(color)

10'2"

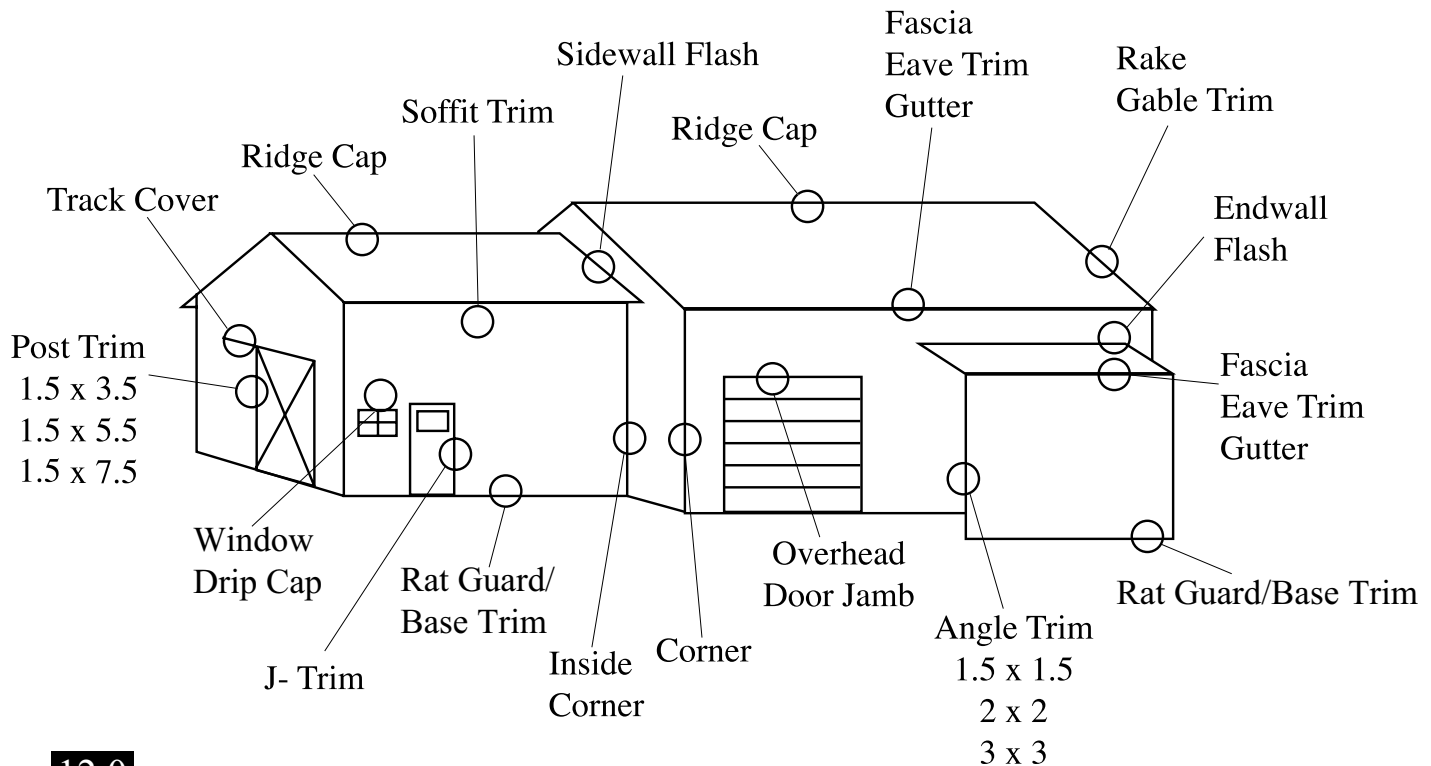
FLAT SHEETS*



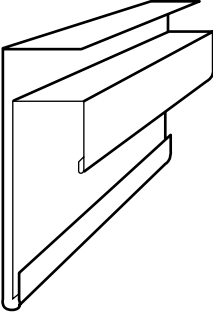
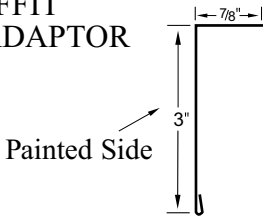
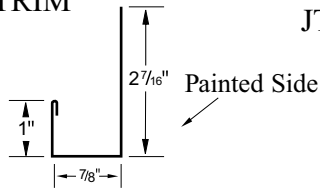
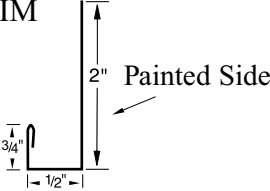
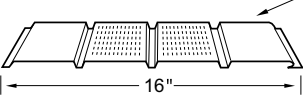
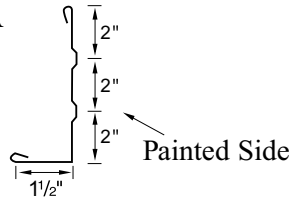
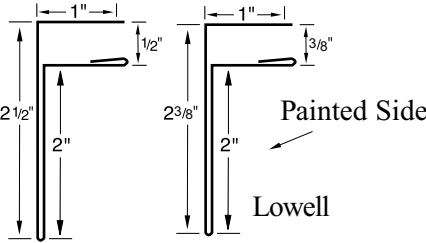
(color)CQ

10'2"

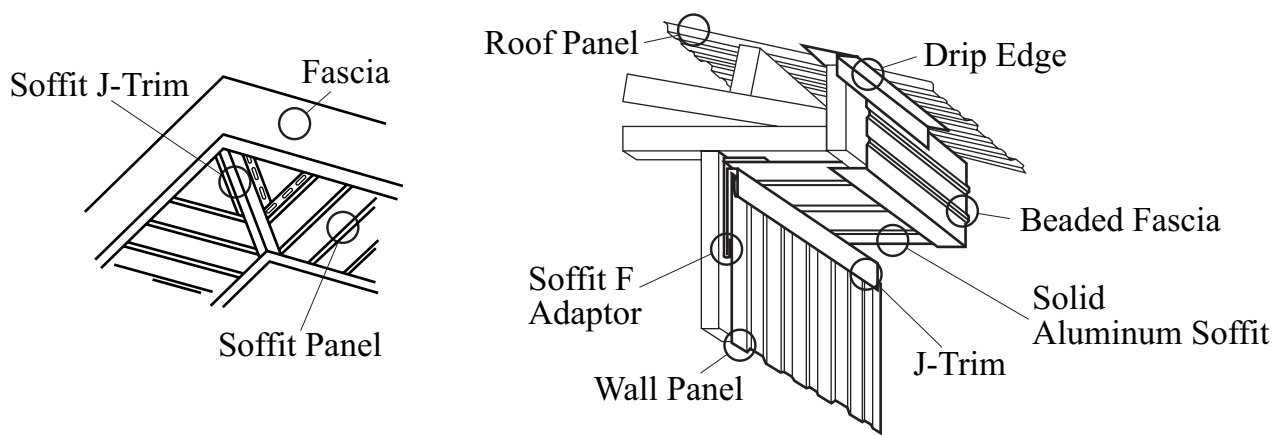
*There will be an additional
pallet charge for flat sheets



SOFFIT

	Part Number	Length
F&J ASSEMBLY (SFA & JT) 	SOFFIT F ADAPTOR 	SFA 10'2"
	J-TRIM 	JT(color) 10'2"
SOFFIT J-TRIM 	SJT(color) 10'2"	
ALUMINUM SOFFIT Vented (VS) or Solid (SS) 	VS(color)12 SS(color)12	12'2" 12'2"
BEADED FASCIA 	BFT(color) 10'2"	
F CHANNEL * 	FC(color) 10'2"	

*Varies by plant location; please call your salesperson to verify availability.



GUTTERS

(Gutters not available in Gold, Bare Metal, Hawaiian Blue or Polar White)

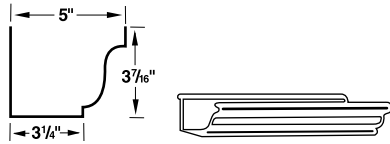
Part Number

Length

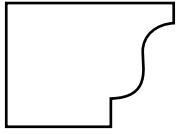
GUTTER

K5G206(color)

20'6"



GUTTER END CAP



Left hand shown

K5GECR(color)

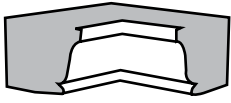
K5GECL(color)

Right

Left

Specify right or left hand

CORNER BOXES



Inside



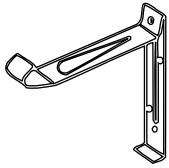
Outside

K5GISQCR Inside

K5GOSQCR Outside

White Only

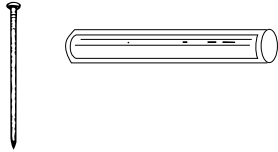
CONCEALED FASCIA BRACKET



K5GCFZ

sold separately or
Qty: 100 per box

SPIKES & FERRULES



K5GS8

8" Spike

sold separately or
Qty: 50 lbs. per box

K5GF5

5" Ferrule

sold separately or
Qty: 500 per box

DOWNPOUT



3" x 2"

K5GDS10(color)

10'0"

sold separately or
Qty: 15 per box

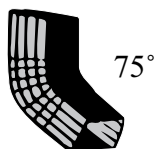
DOWNPOUT STRAP



K5GSCB(color)

sold separately or
Qty: 100 per box

DOWNPOUT ELBOW



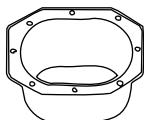
75°

K5GEA(color)

sold separately or
Qty: 20 per box

OVAL OUTLET

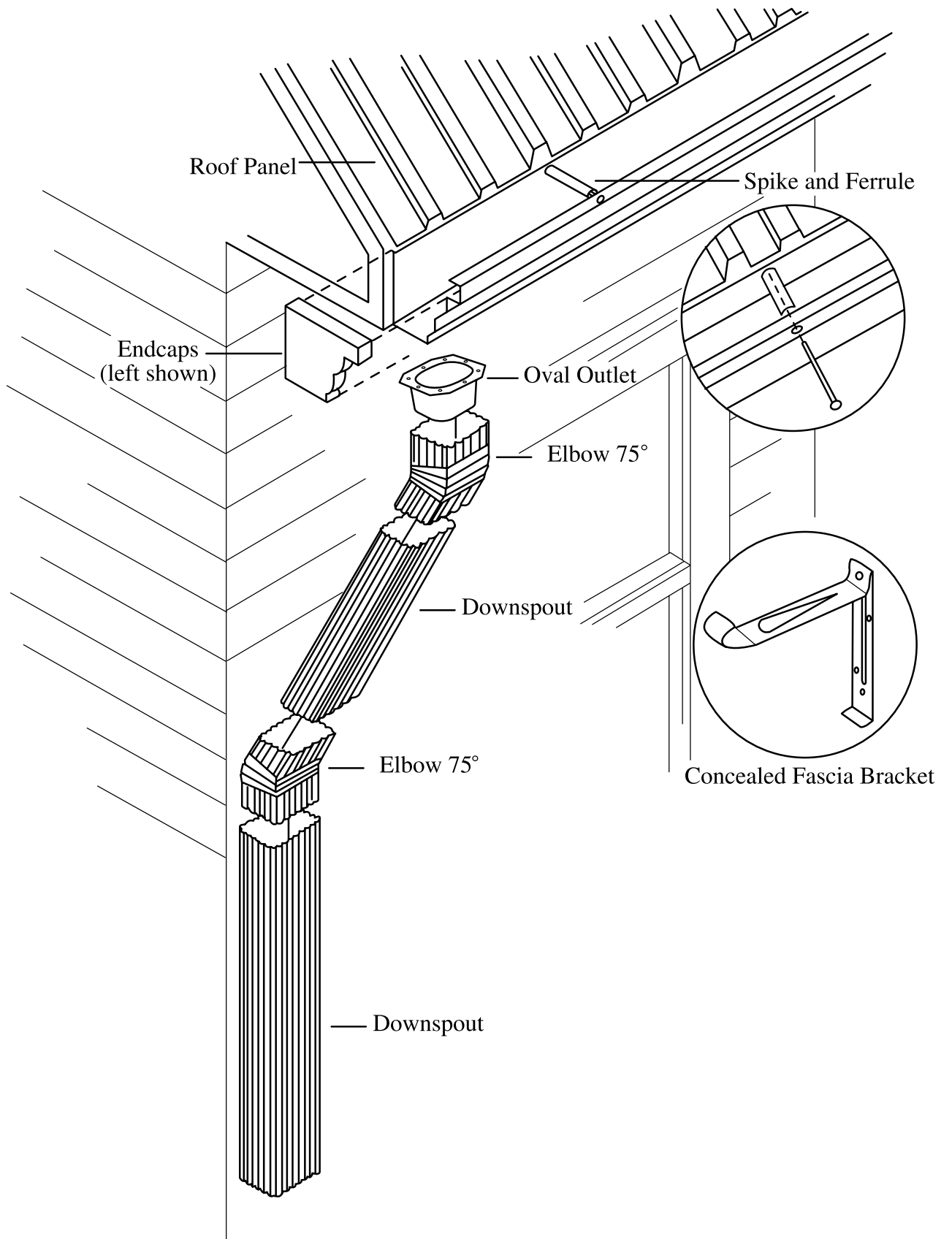
w/ Flange



K5GOOFZ

sold separately or
Qty: 20 per box

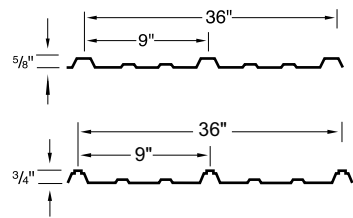
K5 Gutter



ACCESSORIES

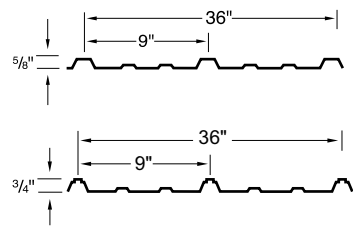
	Part Number	Color	Length	SqFt Weight
--	-------------	-------	--------	-------------

FIBERGLASS SKYLIGHTS



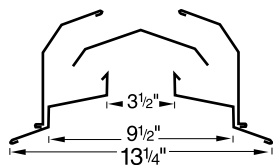
SKY8 (+)	White	8'	5oz
SKY10 (+)	White	10'	5oz
SKY12 (+)	White	12'	5oz

POLYCARBONATE SKYLIGHTS



SKYPCW8 (+)*	SKYPCC8 + (Panel Loc Plus Only)
SKYPCW10 (+)*	SKYPCC10 + (Panel Loc Plus Only)
SKYPCW12(+)*	SKYPCC12 + (Panel Loc Plus Only)

CONTINUOUS RIDGE VENT



RLW	White	10'
-----	-------	-----

CLOSURE VENT

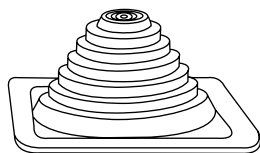
Closure is 1 3/8" tall, may require longer screw for installation.



CLV+ (Panel Loc Plus)	3'	Available at Jasper, Cedar Hill and Michigan City
CLV+M (Panel Loc Plus) (Marco)	3'	Available at Lowell

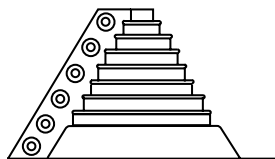
Item may vary from sample shown. Contact sales rep for more information Qty: 50 per box

MASTER PIPE FLASHING



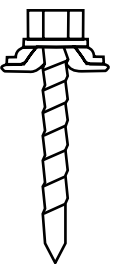
Part Number	Size	
MPF	1/4" to 4"	
MPF2	1 1/4" to 3"	
MPF4	3" to 6"	
MPF6	5" to 9"	
MPF7	6" to 11"	Maximum temperature
MPF8	7" to 13"	250 degrees
4SMPF*	3" to 6"	
6SMPF*	5" to 9"	
8SMPF*	7" to 13"	Maximum temperature
10SMPF*	13" to 26"	500 degrees

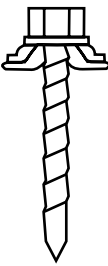
MASTER PIPE FLASHING WITH ZIPPER





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

ACCESSORIES

	Part Number	Length	Color	# per Bag	# per Box
METAL/WOOD SCREWS #10					
 1/4" head	1(color)MW	1"	All	250pc	3000pc
	1 1/2(color)MW	1 1/2"	All	250pc	2500pc
	2(color)MW	2"	All	250pc	2000pc
	2 1/2(color)MW	2 1/2"	All except gold	250pc	1500pc
	3(color)MW	3"	All except gold	250pc	1000pc
Per bag or per box quantities only Minimum quantity 1 bag					

	Part Number	Length	Color	# per Bag	# per Box
STITCH SCREWS					
 1/4" head	34(color)ST	3/4"	All	250pc	3000pc
Per bag or per box quantities only Minimum quantity 1 bag					

METAL/ METAL SCREW #12					
 5/16" head	34(color)MM	3/4"	All	250pc	2500pc
	114(color)MM	1 1/4"	All	250pc	2500pc
	112(color)MM	1 1/2"	White, Brilliant, Stone, Bare, Green	250pc	2500pc
Per bag or per box quantities only Minimum quantity 1 bag					

LAP SCREWS					
 5/16" head	78(color)LAP	7/8"	All	250pc	2500pc
Per bag or per box quantities only Minimum quantity 1 bag					

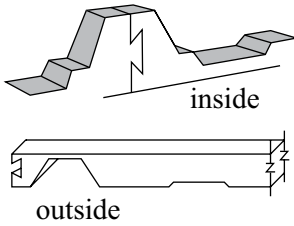
ACCESSORIES

Part Number

Length

CLOSURES

(INSIDE or OUTSIDE)



CLOUT	Panel Loc outside (no adhesive)	3'
CLOUT+	Panel Loc Plus outside(no adhesive)	3'
CLIN	Panel Loc inside (no adhesive)	3'
CLIN+	Panel Loc Plus inside (no adhesive)	3'
CLOUTWGLUE	Panel Loc outside (with adhesive)	3'
CLOUT+GLUE	Panel Loc Plus outside (with adhesive)	3'
CLINWGLUE	Panel Loc inside (with adhesive)	3'
CLIN+GLUE	Panel Loc Plus inside (with adhesive)	3'

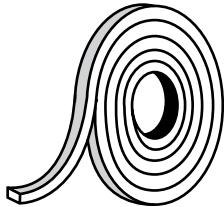
100 per box

Part Number

Length

Size

UNIVERSAL POLYFOAM



POLY	25'	1"x1 1/2"
		20 rolls per bag

Part Number

Length

Width

Thickness

GRAYFLEX Joint Seal Tape



GRAYFLEX-6	20'	1"	1" **
			10 rolls per box
			**Expanded size

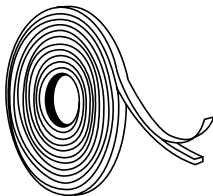
Part Number

Length

Width

Thickness

BUTYL TAPE



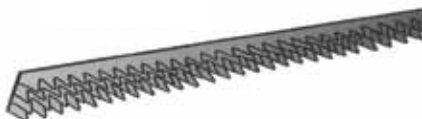
BT	40'	1/4"	3/16"
BTR	40'	7/8"	3/16"

BT 20 rolls per box
BTR 10 rolls per box

Part Number

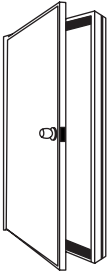
Length

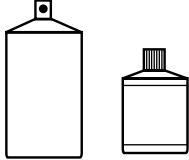
VERSAVENT

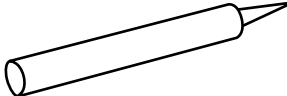


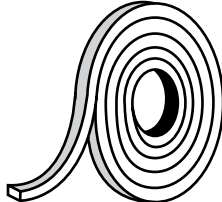
VERSA	10'
-------	-----


ACCESSORIES

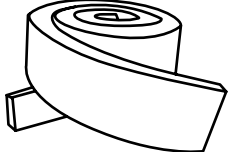
	Part Number	Size	Overall Dimension
DOORS with lock set 	DR (99 Series)*	3068	37 9/16" x 81 13/16"
	DR4 (99 Series)*	4068	49 9/16" x 81 13/16"
	66DR (66 Series)*	3068	37 1/4" x 81 1/4"
	88DR (88 Series)*	3068	40" x 81 13/16"

TOUCH UP PAINT 	4(color)SP 4ZZSP 12PURSP	0.6oz bottle with brush 4.5oz spray can (backer paint) 12oz spray can (purlin paint)
--	--------------------------------	--

GEOCEL-TRIPOLYMER SEALANT 	GEO(color)*	10.6 oz. tube	clear, gray, white
		Qty: 24 per box	
	Part Number	Size	

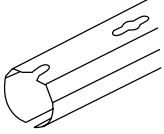
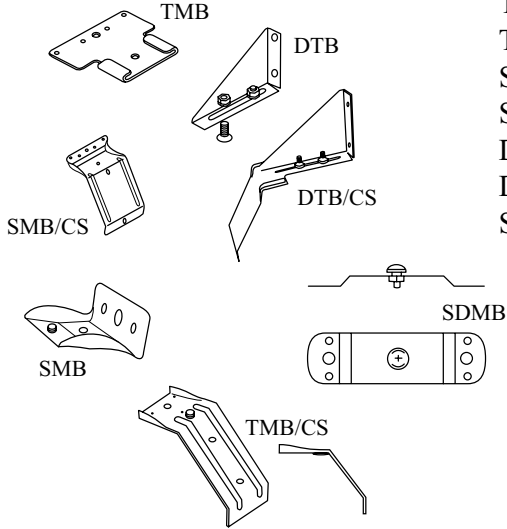
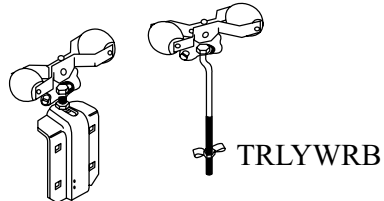
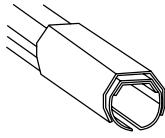
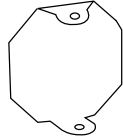

RETRO-EASE 	RETROEASE	300ft. roll
--	-----------	-------------

WINDOWS 	slider w/ screen non-insulated	WD3X3* WD3X2*	3x3 3x2	
	Part Number	Length	Width	Thickness

FLEXOVENT 	FLEXOVENT	10'	3"	1 1/2"
		Qty: 2 10' rolls per box		

* Longer lead times in Michigan City. Contact sales person for details.

SLIDING DOORS

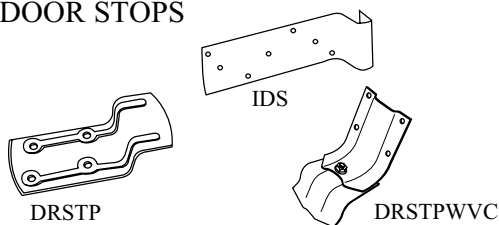
	Part Number	Length
SLOTTED TRACK		
	8STRK	8'
	10STRK	10'
	12STRK	12'
TRACK MOUNTING BRACKETS		
	TMB	Top Mount Bracket
	TMB/CS	Top Mount Bracket w/Cover Support
	SMB	Side Mount Bracket
	SMB/CS	Side Mount Bracket w/ Cover Support
	DTB	Double Track Bracket
	DTB/CS	Double Track Bracket w/Cover Support
	SDMB	Stud Mount Bracket
TROLLEYS		
	DSRLLRWRB	Plate Trolley w/ Roller Bearing (includes endcaps)
	TRLYWRB	9.5" Bolt w/ Roller Bearing
DSRLLRWRB		Qty: 2 per bag
SPLICE CLIP		
	SPLCLP	
TRACK END CAP		
	ENDCAP	
DOOR PULL		
White	DRPUL	Available in white only
		

NOTE: Illustrations may not match actual parts. Contact salesperson for details.

SLIDING DOORS

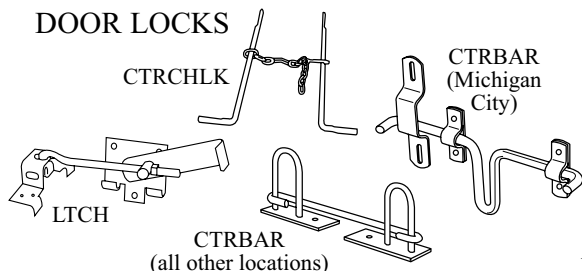
Part Number

DOOR STOPS



IDS	Inside Door Stop
DRSTP	Heavy Duty Stop
DRSTPWVC	Adjustable Stop

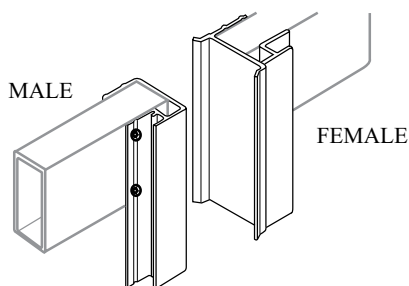
DOOR LOCKS



LTCH	Jamb Latch (Cam Latch)
CTRCHLK	Center Chain Lock
CTRBAR	Center Bar Lock

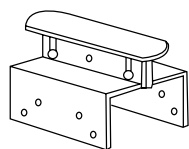
NOTE: Illustrations may not match actual parts. Contact salesperson for details.

ALUMINUM VERTICAL RAILS



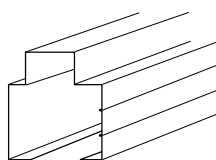
Part Number	Length
10VRTRL	10'AV Male
12VRTRL	12'AV Male
14VRTRL	14'AV Male
16VRTRL	16'AV Male
10VRTWH	10'HV Female
12VRTWH	12'HV Female
14VRTWH	14'HV Female
16VRTWH	16'HV Female

CENTER DOOR GUIDE *



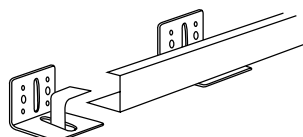
CGWHD

ALUMINUM BOTTOM RAIL FOR GUIDE*



Part Number	Length
8BRL	8'
10BRL	10'
12BRL	12'
14BRL	14'
16BRL	16'

BOTTOM GUIDE RAIL*

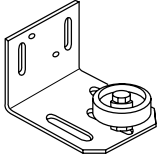


6BGRL	6'
8BGRL	8'
10BGRL	10'

*These 3 components are designed to go together as a guide system.

SLIDING DOORS

HEAVY DUTY
STAY ROLLER⁺⁺



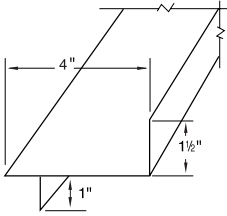
Part Number

STYRLLR

Part Number

Length

ALUMINUM BOTTOM RAIL
FOR STAYROLLER⁺⁺



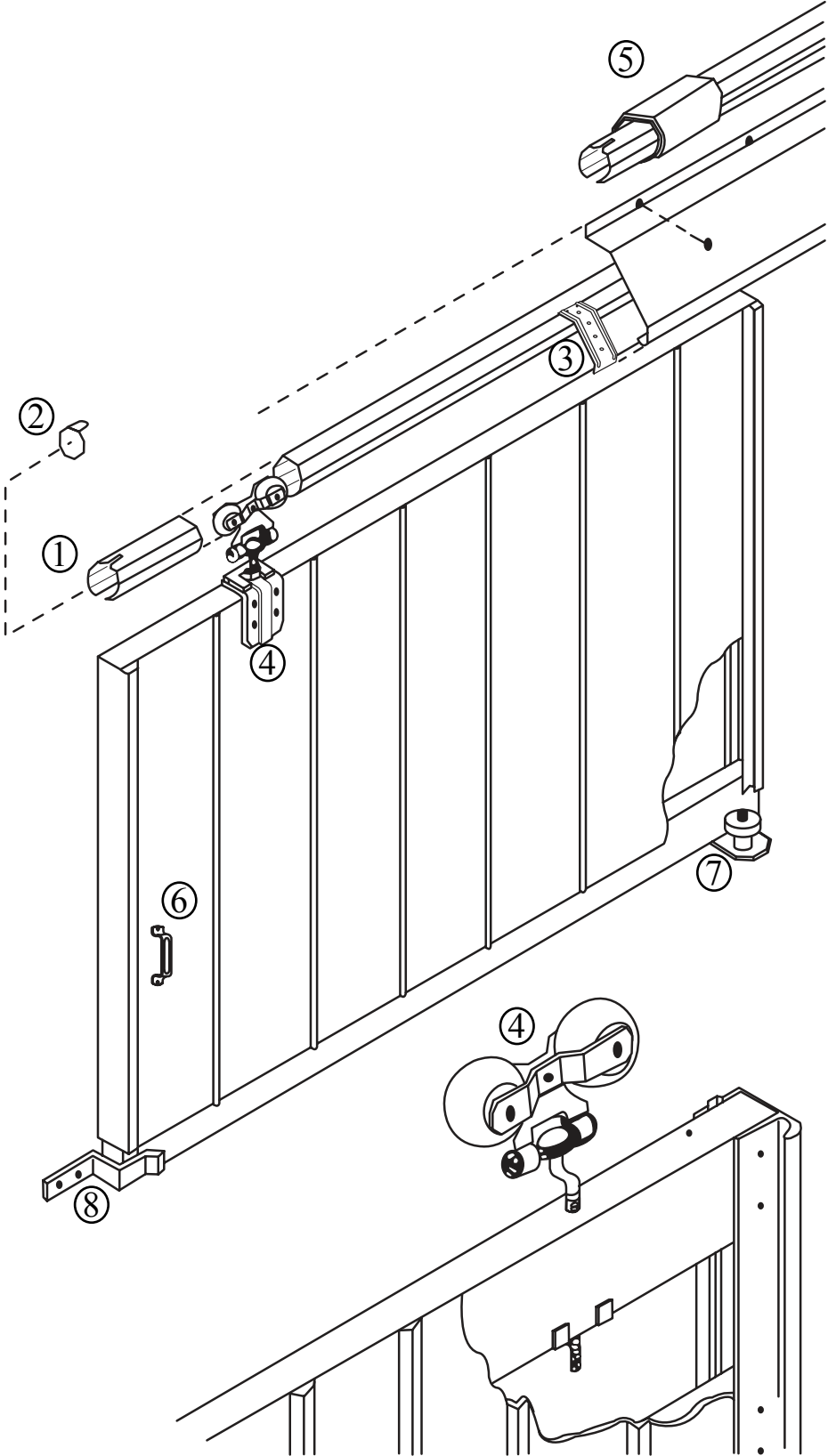
ABRL12

12'

⁺⁺ These 2 components are designed to go together as a guide system.

SLIDING DOORS

- 1) Slotted Track
- 2) End Cap
- 3) Track Mount Bracket for Track & Cover
- 4) Trolley
- 5) Splice Clip
- 6) Door Pull
- 7) Stay Roller
- 8) Door Stop



GALVALUME 20 YEAR WARRANTY

Central States Manufacturing (CSM) warrants that hot-dipped aluminum-zinc alloy coated Galvalume steel sheets sold as Panel-Loc, Panel-Loc Plus, M-Loc, Horizon-Loc, R-Loc, Central-Loc or Central Seam Plus, for use as steel building 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, ash or fumes.
- 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 to the panels caused directly or indirectly by panel contact with fasteners. The 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.

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.

302 Jane Place
Lowell, Arkansas 72745

2051 Tryon Road
Michigan City, Indiana 46360

660 Grigsby Way
Cedar Hill, Texas 75104

3402 Industrial Drive
Jasper, Alabama 35501

751 Piedmont Triad West Dr.
Mt. Airy, North Carolina 27030

PRIME 40 YEAR LIMITED 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:
 - a) 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.
 - c) 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.
 - e) 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.
 - j) 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.
- 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.

302 Jane Place
Lowell, Arkansas 72745

2051 Tryon Road
Michigan City, Indiana 46360

660 Grigsby Way
Cedar Hill, Texas 75104

3402 Industrial Drive
Jasper, Alabama 35501

751 Piedmont Triad West Dr.
Mt. Airy, North Carolina 27030

Effective April 1, 2006.

SELECT 40 YEAR LIMITED WARRANTY

LIMITED WARRANTY AND LIMITATION OF LIABILITY 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 SELECT MATERIAL ONLY. PRIME AND THRIFTY MATERIAL ARE COVERED BY SEPARATE WARRANTIES.

CSM is pleased to present you with our 40-year Select limited warranty.

For forty (40) years from the date of installation, the color coated finish WILL NOT crack, check or peel (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.**

SIDEWALL PANELS (for thirty (30) years from installation or thirty and one half (30-1/2) years from coating application)

- a) WILL NOT chalk in excess of ASTM-D-4214-98 method A D659 number nine (9) rating.
- b) WILL NOT change color more than five (5.0) Hunter ΔE units as determined by ASTM method 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.

ROOFING PANELS (for thirty (30) years from installation or thirty and one half (30-1/2) years from coating application)

- a) WILL NOT chalk in excess of ASTM D-4214-98 method A D659 number eight (8) rating.
- b) WILL NOT change color more than six (6.0) Hunter ΔE units as determined by ASTM method 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.

In case of a complaint, you will provide access to us and assist us as necessary in determining the exact cause of the failure. ASTM and NCCA testing procedures will be used.

If our Select coatings fail to comply with our limited warranty, we will pay for the labor and material reasonably necessary to repaint, repair or replace, at our option, the building part showing the failure. In order for the warranty to be effective, however, you must notify us in writing of the failure within thirty (30) days of the discovery of such problem and provide any documentation we may require. If we repaint, we will use normal painting practices using the same paint system or other suitable alternatives. This warranty also applies to the part we repaint, repair, or replace, but only for the unexpired portion of the warranty period applicable to the original part.

Our LIMITED WARRANTY DOES NOT APPLY to circumstances which we do not control, including:

- Acts of God, falling objects, explosions, fire or other such similar or dissimilar occurrences beyond CSM's control;
- Unusual harmful fumes, foreign substances in the atmosphere, standing water, or salt spray;
- Improper treatment of or defects in the metal or in the fabrication;
- Stored or installed in a way that allows for poor air circulation;
- Stored or installed in a way that allows for contact with animals or animal waste;
- Mishandled Products, e.g., ANY PRODUCT THAT HAS BEEN ABUSED, ALTERED, MODIFIED, USED IN A MANNER NOT ORIGINALLY INTENDED, OR STORED CONTRARY TO OUR INSTRUCTIONS. Including a) damage to the product occasioned by condensation attributable to improper packaging, handling, shipping, processing and/or installation; b) damage due to failure of the substrate.

This warranty will apply only to metal which is coated with Fluoropon and used on property located within the continental United States, Alaska, and Canada.

Some colors may not meet our high standards. The warranty applies only to colors that are on our approved color list. Metallics are not color measurable and are not applicable to section 1b.

For our warranty to apply, you must maintain certain records necessary to identify the Select panels involved in a complaint. You need to make them available to us for inspection and copying.

This is our only warranty concerning the Select products color coated finish. We have no other obligations concerning them. Please read and understand the following;

Except for this warranty, we make NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, WITH RESPECT TO OUR SELECT PRODUCTS COLOR COATED FINISH. IMPLIED WARRANTIES OR FITNESS AND MERCHANTABILITY ARE EXCLUDED. Further, we have no other liability with respect to our Select products color coated finish, whether based on warranty, negligence or any other legal theory. For example, we have no liability for consequential damages.

That is our complete warranty. It sets out all of our obligations regarding our Select product coil coatings. It is only for your benefit and is not assignable. Such things as your purchase order forms or our acceptance forms cannot change it. But it can be changed if CSM agrees in writing.

302 Jane Place
Lowell, Arkansas 72745

660 Grigsby Way
Cedar Hill, Texas 75104

2051 Tryon Road
Michigan City, Indiana 46360

3402 Industrial Drive
Jasper, Alabama 35501

751 Piedmont Triad West Dr.
Mt. Airy, North Carolina 27030



CENTRAL STATES

**MANUFACTURING, INC.
METAL BUILDING COMPONENTS
WWW.CENTRALSTATESMFG.COM**

302 Jane Place
Lowell, AR 72745
800-356-2733

2051 Tryon Road
Michigan City, IN 46360
800-638-2565

660 Grigsby Way
Cedar Hill, TX 75104
800-210-8305

3402 Industrial Drive
Jasper, AL 35501
866-270-6608

751 Piedmont Triad West Drive
Mount Airy, NC 27030
877-813-2111