# M-Loc ${ }^{\text {m }}$ Product Guide 

HELPFUL INFORMATION ON PANELS, TRIMS, GUTTERS AND ACCESSORIES


# We promise to improve your business by accurately providing quality products right when you need them. Every time. 

Visit our website for more product information, testing, energy ratings, warranties, photo gallery, roofing visualizer, and more.

Information in this catalog may vary by plant location.
Please call your salesperson to verify product availability.
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[^0] 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.

M-Loc is available in 26 ga. painted and bare Galvalume ${ }^{\oplus}$. Prime panels come with CentralGuard ${ }^{\oplus}$ protection that includes superior dent resistance, a lifetime limited paint warranty, and a 20-year substrate warranty. Bare (non-painted) panels from Central States have an acrylic coating which eliminates using oils during manufacturing, and eliminates fingerprinting and foot marking during installation. Bare, unpainted Galvalume is not warranted for uniformity in appearance, whether it be color, sheen, or spangle. If the project requires a uniform appearance, please choose a painted product.

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

The recommended minimum roof slope for the $13 / 16^{\prime \prime} \mathrm{M}$-Loc is a $1: 12$ pitch. This will allow for sufficient drainage of water. For added protection, a sealant tape can be used on the laps of the panel.


## PANEL CODES

PANEL PROFILE
M-Loc ${ }^{\text {TM }}$
M-Loc ${ }^{\text {TM }}$

TYPE
Prime SMP
Thrifty SMP

## CODE

ML6(color)
MN6(color)TH

## WARRANTIES



## WARRANTIES

Warranties are available in paper format and downloadable from our website. After the job is complete, fill out a warranty with your contractor/installer details and the Central States order number. Give the warranty to the building owner to keep for their records. Optional warranty registration is available online.

Learn more at centralstatesco.com/warranties

## SECTION PROPERTIES

36" WIDE, M-LOC™ PANEL

| Gauge | Thickness (inches) | Weight (psf) | Yield Stress (ksi) | Top in Compression (Positive Bending) |  |  | Bottom in Compression (Negative Bending) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Ixx | Sxx | Ma | \|xx | Sxx | Ma |
|  |  |  |  | in4/ft | in3/ft | in.kips/ft | in4/ft | in3/ft | in.kips/ft |
| 26 | 0.0185 | 0.874 | 80.0 | 0.0250 | 0.0441 | 1.5857 | 0.0170 | 0.0379 | 1.3617 |

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

|  |  | 26 Gauge \& 80 ksi |  |
| :---: | :---: | :---: | :---: |
| Span (feet) | $\mathrm{LL}(\mathrm{S})(\mathrm{psf})$ | $\mathrm{LL}(\mathrm{D}) \mathrm{L} / 180(\mathrm{psf})$ | $\mathrm{LL}(\mathrm{D}) \mathrm{L} / 240(\mathrm{psf})$ |
| 3 | 117.5 | 80.9 | 60.7 |
| 3.5 | 86.3 | 51.0 | 38.2 |
| 4 | 66.1 | 34.1 | 25.6 |
| 4.5 | 52.2 | 24.0 | 18.0 |
| 5 | 42.3 | 17.5 | 7.1 |
| 6 | 34.9 | 13.1 | 7.6 |
| 7 | 29.4 | 10.1 | 9.5 |
| 8 | 21.6 | 6.4 | 7.9 |

## TWO SPAN CONDITION

|  | 26 Gauge \& 80 ksi |  |  |
| :---: | :---: | :---: | :---: |
| Span (feet) | $\mathrm{LL}(\mathrm{S})(\mathrm{psf})$ | $\mathrm{LL}(\mathrm{D}) \mathrm{L} / 180(\mathrm{psf})$ | $\mathrm{LL}(\mathrm{D}) \mathrm{L} / 240(\mathrm{psf})$ |
| 3 | 100.9 | 100.9 | 79.0 |
| 3.5 | 74.1 | 66.4 | 49.8 |
| 4 | 56.7 | 44.5 | 33.3 |
| 4.5 | 44.8 | 31.2 | 23.4 |
| 5 | 36.3 | 22.8 | 17.1 |
| 6 | 30.0 | 17.1 | 12.8 |
| 7 | 25.2 | 13.2 | 97.9 |
| 8 | 18.5 | 8.3 | 9.9 |
|  | 6.9 | 46.2 |  |

## THREE OR MORE SPAN CONDITION

|  |  | 26 Gauge \& 80 ksi |  |
| :---: | :---: | :---: | :---: |
| Span (feet) | $\mathrm{LL}(\mathrm{S})(\mathrm{psf})$ | $\mathrm{LL}(\mathrm{D}) \mathrm{L} / 180(\mathrm{psf})$ | $\mathrm{LL}(\mathrm{D}) \mathrm{L} / 240(\mathrm{psf})$ |
| 3 | 117.8 | 117.8 | 114.5 |
| 3.5 | 86.6 | 86.6 | 72.1 |
| 4 | 66.3 | 64.4 | 48.3 |
| 4.5 | 52.4 | 45.3 | 33.9 |
| 5 | 42.4 | 33.0 | 24.7 |
| 6 | 35.1 | 24.8 | 182.5 |
| 7 | 29.5 | 19.1 | 102.1 |
| 8 | 21.6 | 12.0 | 9.7 |
|  | 9.0 | 65.7 |  |

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 $\mathrm{L} / 180$ or $\mathrm{L} / 240$. WL is allowable wind load and has been increased by $33.33 \%$.

## FASTENER SPACING

Fastener pattern at panel termination (Eave, endlap, valley, ridge, high eave)


Fastener pattern at interior of panel


## CARE AND HANDLING

## DELIVERY

Deliveries will be made using a 65' tractor/trailer weighing approximately $80,000 \mathrm{lbs}$. 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 equipment available to unload the truck. Moffett deliveries require at least one person to assist with unloading.

## STAGE

Galvalume ${ }^{\oplus}$ steel panels 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 panels are subject to stain when water sits upon, or becomes trapped between the sheets. If the Galvalume ${ }^{\ominus}$ panels 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.

## CARE AND HANDLING

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

$$
\begin{gathered}
\text { Shavings created by } \\
\text { saw cutting or drilling } \\
\text { may cause the panel to rust } \\
\text { and will void warranties in } \\
\text { affected areas. }
\end{gathered}
$$

## CONVERTING PITCH TO DEGREE

Use these charts to calculate degrees when designing custom trim. Please specify pitch when ordering.


SINGLE SLOPE PITCHES
Fascia, Eave, Endwall, Tie-In, Gutter

DOUBLE SLOPE PITCHES
Hip, Valley

RIDGE CAP

| $1: 12$ <br> PITCH | $2: 12$ <br> PITCH | $3: 12$ <br> PITCH | $4: 12$ <br> PITCH | $5: 12$ <br> PITCH | $6: 12$ <br> PITCH | $7: 12$ <br> PITCH | $8: 12$ <br> PITCH | $9: 12$ <br> PITCH | $10: 12$ <br> PITCH | $11: 12$ <br> PITCH | $12: 12$ <br> PITCH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $94^{\circ}$ | $99^{\circ}$ | $104^{\circ}$ | $108^{\circ}$ | $112^{\circ}$ | $116^{\circ}$ | $120^{\circ}$ | $123^{\circ}$ | $126^{\circ}$ | $129^{\circ}$ | $132^{\circ}$ | $135^{\circ}$ |
| $173^{\circ}$ | $167^{\circ}$ | $160^{\circ}$ | $154^{\circ}$ | $148^{\circ}$ | $143^{\circ}$ | $138^{\circ}$ | $134^{\circ}$ | $130^{\circ}$ | $126^{\circ}$ | $123^{\circ}$ | $120^{\circ}$ |
| $170^{\circ}$ | $161^{\circ}$ | $152^{\circ}$ | $143^{\circ}$ | $135^{\circ}$ | $127^{\circ}$ | $120^{\circ}$ | $113^{\circ}$ | $106^{\circ}$ | $100^{\circ}$ | $95^{\circ}$ | $90^{\circ}$ |



## SQUARE CONVERSIONS

For 26 ga. panels there are 2 formulas; one for panels measured in inches and one for panels measured in feet. While the actual panel width is $38.5^{\prime \prime}$, 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 $=12$
$\frac{38.5^{\prime \prime} \times 144^{\prime \prime} \times 12}{14,400}$ equals 4.62 squares of metal

EXAMPLE 2:
length in feet multiplied by \# of pieces divided by 31.169
Number of panels $=12$
$12 \times 12$
equals 4.62 squares of metal
Panel width $=38.5^{\prime \prime}$
31.169

Panel length $=144^{\prime \prime}$
Square inches $=14,400$

## COMMON RAFTER LENGTHS (PEAKTO 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' ${ }^{\prime \prime}$ | 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' ${ }^{\prime \prime}$ | 12' 4-3/8" | 12' 7-3/4" | $13{ }^{\prime} 0$ | 13' ${ }^{\prime \prime}$ |
| 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' $2-1 / 4{ }^{\prime \prime}$ |
| 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' ${ }^{\prime \prime}$ | 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" | $34^{\prime} 1 / 8{ }^{\prime \prime}$ | 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" | $38^{\prime} 1 / 4{ }^{\prime \prime}$ |
| 35 | 35' 1-1/2" | 35' 5-7/8" | 36' 7/8" | 36' 10-5/8" | 37'11" | 39' 1-5/8" |

CENTRAL STATES MANUFACTURING, INC.
Effective 05/2021. Information subject to change

## HOW TO ORDER TRIM

## STEP 1:

In CentralLink ${ }^{\text {TM }}$, start by entering the Item ID.
Item ID is made of the TRIM CODE, a GAUGE CODE, and a COLOR CODE.
The TRIM CODE can be found with each drawing next to the trim's name. The GAUGE CODE and COLOR CODES are found below.

UNIVERSAL RIDGE CAP
TRIM CODE $\rightarrow \mathbf{U N}-$ - Girth $24^{\prime \prime}$


EXAMPLE: Universal Ridge Cap, 26 gauge, Rustic
Enter Item ID


STEP 2:
Then type the number of pieces you need


| Feet | Inches |
| :---: | :--- |
| 12 | 2 | along with the length in feet and inches.

## GAUGE CODES

| GAUGE | CODE |
| :--- | :---: |
| 26 | 6 |
| 29 | 9 |

## COLOR CODES

| SMP | PANEL <br> GAUGE | TRIM <br> GAUGE | CODE |
| :--- | :--- | :--- | :--- |
| Alamo |  | 29 | AW |
| Black |  | 29 | BK |
| Brilliant | 26 | $29 / 26$ | BI |
| Brown | 26 | $29 / 26$ | BR |
| Burgundy | 26 | $29 / 26$ | BG |
| Burnished Slate | 26 | $29 / 26$ | BS |
| Charcoal | 26 | $29 / 26$ | CH |
| Colony | 26 | 26 | CG |
| Copper Metallic** | 26 | $29 / 26$ | CM |
| Crimson | 26 | $29 / 26$ | CR |
| Desert | 26 | 26 | DS |
| Forest |  | $29 / 26$ | DG |
| Fern | 26 | 26 | FN |
| Gallery | 26 | $29 / 26$ | GB |
| Galvalume | 26 | $29 / 26$ | GL |
| Galvanized |  | 29 | ZN |
| Gray | 26 | $29 / 26$ | GA |
| Hawaiian | 26 | 26 | HB |
| Hunter | 26 | $29 / 26$ | GR |
| Ivory |  | 29 | IV |
| Light Stone | 26 | $29 / 26$ | LS |
| Ocean |  | 29 | OB |
| Pewter |  | 29 | PG |
| Polar | 26 | 26 | PW |
| Rustic | 26 | $29 / 26$ | RR |
| Tan | 26 | $29 / 26$ | TN |
| Taupe |  | $29 / 26$ | TA |

## ROOF TRIMS

Unless otherwise noted all angles are $90^{\circ}$ or $45^{\circ}$. See page 10 for gauge and color codes.

RIDGE CAP - Specitypitch.


## RAKE/GABLE

residential rake
RRT - Girth $10.75^{\prime \prime}$


RAKE
MLRA - Girth 20.75"


BOX RAKE
MLBRT - Girth 20.75"


RAKE \& CORNER
COR - Girth $13^{\prime \prime}$


RAKE PEAK BOX
MLPBOXF - ${ }^{2} 6^{\prime \prime}$


Specifypitch.
BOX RAKE PEAK BOX MLPBBF - ${ }^{\prime}$


Specify pitch.

GABLE
GT6 - Girth 16.5"


RAKE END CAP
REND - Left hand shown.


BOX RAKE END CAP
BREND - Left hand shown.

house rake
MLHR-Girth $12^{\prime \prime}$


## ROOF TRIMS

Unless otherwise noted all angles are $90^{\circ}$ or $45^{\circ}$. See page 10 for gauge and color codes.

## EAVE

Specify pitch.

RESIDENTIAL EAVE
RET - Girth $6.5^{\prime \prime}$


HIGH-SIDE EAVE
HI - Girth 20.75"


FASCIA
FT - Girth 9"



GABLE BASE SOFFIT
GB1 - Girth 20.25"

$90^{\circ}$ pitch if not specified.

RESIDENTIAL DRIP EDGE
RDC - Girth 9.5"


## VALLEY

- Specify pitch.


Intended for valley lengths less than 30'. Additional pallet charge will apply.

EXTENDED VALLEY
EVA - Girth 41.5"


Intended for valley lengths greater than 30.' Additional pallet charge will apply.

TRANSITION TRIMS
-Specify pitch

TRANSITION


ENDWALL
EW - Girth 10.25"


TRANSITION
GTL2 - Girth 14.5"


UNIVERSAL SIDEWALL
SF1- Girth $9.25^{\prime \prime}$


HIGH SIDE PARAPET
HSP - Girth 10.5"


FLAT SHEET
FS9-29 gauge. Girth 43"
FS6-26 gauge. Girth $41.5625^{\prime \prime}$


10 sheets or fewer will be packaged in a roll. Additional pallet charge on orders of 10 or more.

## WALL TRIMS

Unless otherwise noted all angles are $90^{\circ}$ or $45^{\circ}$. See page 10 for gauge and color codes.


ANGLE TRIMS

INSIDE ANGLE
IA2X2 - Girth $5^{\prime \prime}$
IA3X3 - Girth 7"
IA4X4 - Girth 9"


POST TRIM
SA312 - Girth 5.5"
SA512 - Girth 7.5"
SA7 - Girth 9 "
SA712 - Girth 9.5"

OUTSIDE ANGLE
SA2X2 - Girth $5^{\prime \prime}$
SA3X3 - Girth $7{ }^{7}$
SA4X4 - Girth 9"



WIDE DOUBLE ANGLE
DA2 - Girth 4.5"


Use with wainscot
Use with wainscot.

FRAMED OPENING TRIMS

HEAD TRIM
MLHE - Girth


JAMB
MLJA - Girth 5"


JAMB HEADER
JH - Girth $13^{\prime \prime}$


DOOR EDGE
DJ10 - Girth 11.25"


## GUTTERS



Unless otherwise noted all angles are $90^{\circ}$ or $45^{\circ}$. See page 10 for gauge and color codes.

## SCULPTURED GUTTERS

HANG-ON 0-4:12 PITCH
MLGU - Girth 21.50"


EAVE 0-4:12 PITCH
MLSGU - Girth 24.25"


HANG-ON 5:12 PITCH
MLGU5-Girth 22.9375"


EAVE 5:12 PITCH
MLSGU5- Girth 26.1875"


HANG-ON 6:12 PITCH
MLGU6-Girth 23.1875"


EAVE 6:12 PITCH
MLSGU6 - Girth 26.4375"


OUTSIDE CORNER BOX OCB - specify pitch.


Use with sculptured gutters.
INSIDE CORNER BOX
ICB - Girth 25.6875"


Use with sculptured gutters.

BOX GUTTERS

- Dimension "A" will change depending on chosen pitch.

| HANG-ON |  |  | PART\# | PITCH | GIRTH | DIM. "A" | BOX EA |  |  |  | PART\# | PITCH | GIRTH | DIM. "A" |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | MLBHG1 | 1:12 | 18.0625" | 4.8125" |  |  |  | 4" | MLBEG1 | 1:12 | 21.3125" | $4.8125^{\prime \prime}$ |
|  |  |  | MLBHG2 | 2:12 | 18.5625" | $5.3125^{\prime \prime}$ | $\underline{1-1}$ |  |  |  | MLBEG2 | 2:12 | 21.8125" | $5.3125^{\prime \prime}$ |
|  |  |  | MLBHG3 | 3:12 | 19" | 5.75" |  |  |  |  | MLBEG3 | 3:12 | 22.25 | 5.75 |
| $\xrightarrow{\text { PAINT }}$ (41/4 | 41/4" | "A" | MLBHG4 | 4:12 | 19.5" | $6.25{ }^{\prime \prime}$ | $\xrightarrow{\text { PAINT }}$ |  |  |  | MLBEG4 | 4:12 | 22.75 " | 6.25 " |
|  |  |  | MLBHG5 | 5:12 | 19.9375" | 6.6875" |  |  |  |  | MLBEG5 | 5:12 | 23.1875" | 6.6875" |
|  | 51/4" |  | MLBHG6 | 6:12 | 20.4375" | 7.1875" |  |  |  |  | MLBEG6 | 6:12 | 23.6875" | 7.1875" |

## DOWNSPOUTS

DOWNSPOUT- Length 16 "
DS - straight
DK - with kickout


DOWNSPOUT ELBOW
DSE45
DSE90

DOWNSPOUT STRAP
DSS


GUTTER STRAP
MLGS96


DOWNSPOUT OUTLET DSOUTLET


Specify pitch. 1/2"turndowns.
SCULPTURED GUTTER END CAP
MLGEN - specifypitch and left or right.


DOWNSPOUT CONNECTOR DSLVE


BOX GUTTER END CAP BGEN - specify pitch.


Left or right as you are on the ground looking at the gutter expanse from the eave.

## ACCESSORIES

## FASTENERS

Fastener color availability may vary by location, contact your sales consultant for details. Order fasteners in increments of 250 pieces.

| TYPE | PART \# | LENGTH | DIAMETER | HEAD | COLOR | \#BAG |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| METAL/METAL | 114(color)MM | $11 / 4 "$ | \#12 | 5/16" Hex | all | 250 |
| METAL/METAL | 2ZMM | $2{ }^{\prime \prime}$ | \#12 | 5/16" Hex | galvanized | 250 |
| METAL/METAL LAP | 78(color)LAP | 7/8" | \#14 | 5/16" Hex | all | 250 |
| ZAC METAL/METAL | $114 Z A C M M$ | $11 / 4^{\prime \prime}$ | \#12 | 5/16" Hex | galvanized | 250 |
| ZAC METAL/METAL LAP | 78ZACLAP | 7/8" | \#14 | 5/16" Hex | galvanized | 250 |

## 


White Fiberglass
MLSKYW12 - Length 12'.

Skylight Sealant - Clear MRS10SKY-10.3 oz. tube
Approved for skylight use


## $\rightarrow$ Skylight Washer - White <br> 118 WASHER - $1 /{ }^{\prime \prime}$ outside diameter, $1 / 4$ " inside diameter

RCPCW10 - White Polycarbonate
Length $10^{\prime} 6$ "'. Width $25^{\prime \prime}$ "

Skylight Trim
MLSK - Girth 5".

## DOORS \& FRAMING PACKAGE



DOOR SET - with steel jamb, knob sold separately.
3068DR $-38^{\prime \prime} \times 813 / 6^{\prime \prime}$
4068DR $-50 " \times 813 / 16^{\prime \prime}$

DOOR LEAF - Steel door leaf only.
3070DOOR - $3 \times 7^{1}$
3070DOORW/LITE 4070DOOR - $4^{\prime} \times 7^{\prime}$

DOOR KNOB
KNOB

- Longer lead times may apply.


FRAMING PACKAGE - White.
4X3070JAMB - 4.25 " $\times 3070$
4X4070JAMB - 4.25 " $\times 4070$
6X3070JAMB - $6.25 " \times 3070$
6X4070JAMB - 6.25 " $\times 4070$
8X3070JAMB - 8.25 " $\times 3070$
8X4070JAMB - $8.25^{\prime \prime} \times 4070$
8X6070JAMB - 8.25 " $\times 6070$


## ACCESSORIES



SEALANT

|  | PART\# <br> GEO(color) | SIZE | COLOR |
| :--- | :--- | :--- | :--- |
| 10.3 oz. tube | clear, gray, white |  |  |
| MRS10(color) | 10.3 oz. tube | call for colors |  |
| MRS10CLEAR | 10.3 oz. tube | clear |  |

## CLOSURES

OUTSIDE CLOSURE
MLCLOUT - No Glue. MLCLOUTGLUE - With Glue.


Length - 3'. 100 per box.
GRAYFLEX
GRAYFLEX-6 - 24 -rolls per box.
For use with hips and valleys.

INSIDE CLOSURE
MLCLIN - No Glue.
MLCLINGLUE - With Glue.


Length - 3! 100 per box.
UNIVERSAL POLYFOAM
POLYG - With Glue. 10-rolls per box.


Length 25'. Width 1 1/2". Thickness 1 1/2".

CLOSUREVENT
MLCLV


Closure is $11 / 8^{\prime \prime}$ tall and may require longer screws for installation. Item may vary from sample shown.

Length - 3'. 25 rolls per box
FLEXOVENT
FLEXOVENT - (2) 10 ' rolls per box.


Length 10'. Width 3". Thickness $11 / 2^{\prime \prime}$.

## MASTER PIPE FLASHING

Square - Max temperature $250^{\circ}$.



MPF6 - Pipe size $4.75^{\prime \prime}$ to $10^{\prime \prime}$
MPF8 - Pipe size $6.75^{\prime \prime}$ to $13.5^{\prime \prime}$

Silicone- Orange, high temp max $500^{\circ}$.
4SMPF - Pipe size 2.75 "to 7 "
6SMPF - Pipe size $4.75^{\prime \prime}$ to $10^{\prime \prime}$
8SMPF - Pipe size $6.75^{\prime \prime}$ to $13.5^{\prime \prime}$

Square with zipper-Max temperature $250^{\circ}$.


## SECONDARY FRAMING

Members can be manufactured to the nearest $1 / 8^{\prime \prime}$ in length from $6^{\prime} 0$ " to $45^{\prime} 0$ ". For lengths under $6^{\prime} 0$ " or over $45^{\prime} 0$ ", call your sales consultant.

Central States has met the requirements to earn the accreditation for Cold-Formed Steel Structural and non-Structural Components Not Requiring Welding

For more information, go to www.iasonline.org.

ACCREDITED
Manufacturers of Cold
Formed Stee Components
ANGLE
CHANNEL
CEE
LGSI ZEE
ZEE






EAVE STRUTS

* Specify pitch and slope when ordering.

For low pitch (up to 4:12) add a "L" to the end of the code. For high pitch (5:12 and above) add a "H" to the end of the code.


Single Slope Up


Single Slope Down


Double Slope Up


Double Slope Down

HAT CHANNEL


## PURLIN CLIPS



MINI CLIP
MINICLIP- 16 gauge.


BASE CLIP
BASECLIP- 14 gauge.


| TYPE | Ax B | GAUGE | ITEM CODE RED OXIDE | ITEM CODE GALVANIZED | TYPE | WEBxAxB | GAUGE | ITEM CODE RED OXIDE | ITEM CODE GALVANIZED |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Angle | $2.5 \times 2.5$ | 14 | B2514R |  | LGSI ZEE | $6 \times 23 / 8 \times 2 \frac{18}{8}$ | 16 | Z62516R | Z62516Z |
| Angle | $3 \times 3$ | 16 | B316R | B316Z | LGSI ZEE | $6 \times 23 / 8 \times 21 / 8$ | 14 | Z62514R | Z62514Z |
| Angle | $3 \times 3$ | 14 | B314R | B314Z | LGSI ZEE | $8 \times 23 / 8 \times 21 / 8$ | 16 | Z82516R | Z82516Z |
| Angle | $4 \times 2$ | 16 | B4216R | B4216Z | LGSI ZEE | $8 \times 21 / 8 \times 21 / 8$ | 14 | Z82514R | Z82514Z |
| Angle | $4 \times 2$ | 14 | B4214R | B4214Z | LGSI ZEE | $8 \times 23 / 8 \times 21 / 8$ | 12 | Z82512R | Z82512Z |
| Angle | $4 \times 3$ | 16 | B4316R |  | LGSI ZEE | $8 \times 33 / 8 \times 318$ | 16 | Z83516R | Z83516Z |
| TYPE | WEBxAxB | GAUGE | RED OXIDE | GALVANIZED | LGSI ZEE | $8 \times 33 / 8 \times 31 / 8$ | 14 | Z83514R | Z83514Z |
| Channel | $4.25 \times 2.35 \times 2.35$ | 16 | U4216R | U4216Z | LGSI ZEE | $8 \times 33 / 8 \times 31 / 8$ | 12 | Z83512R | Z83512Z |
| Channel | $4.25 \times 2.85 \times 2.85$ | 16 | U42516R | U42516Z | LGSI ZEE | $10 \times 23 / 8 \times 21 / 8$ | 16 | Z102516R | Z102516Z |
| Channel | $4.25 \times 2.85 \times 2.85$ | 14 | U42514R | U42514Z | LGSI ZEE | $10 \times 23 / 8 \times 21 / 8$ | 14 | Z102514R | Z102514Z |
| Channel | $4.25 \times 2.85 \times 2.85$ | 12 | U42512R | U42512Z | LGSI ZEE | $10 \times 23 / 8 \times 21 / 8$ | 12 | Z102512R | Z102512Z |
| Channel | $6.25 \times 2.85 \times 2.85$ | 16 | U62516R | U62516Z | LGSI ZEE | $10 \times 27 / 8 \times 25 / 8$ | 14 | Z10314R | Z10314Z |
| Channel | $6.25 \times 2.85 \times 2.85$ | 14 | U62514R | U62514Z | LGSI ZEE | $10 \times 27 / 8 \times 25 / 8$ | 12 | Z10312R |  |
| Channel | $8.25 \times 2.85 \times 2.85$ | 16 | U82516R | U82516Z | LGSI ZEE | $12 \times 23 / 8 \times 21 / 8$ | 14 | Z122514R | Z122514Z |
| Channel | $8.25 \times 2.85 \times 2.85$ | 14 | U82514R | U82514Z | LGSI ZEE | $12 \times 23 / 8 \times 21 / 8$ | 12 | Z122512R | Z122512Z |
| Channel | $8.25 \times 2.85 \times 2.85$ | 12 | U82512R | U82512Z | LGSI ZEE | $12 \times 33 / 8 \times 31 / 8$ | 14 | Z123514R | Z123514Z |
|  |  |  |  |  | LGSI ZEE | $12 \times 33 / 8 \times 31 / 8$ | 12 | Z123512R | Z123512Z |
| TYPE | WEB $\times$ Ax ${ }^{\text {a }}$ | GAUGE | RED OXIDE | GALVANIZED | LGSI ZEE | $12 \times 33 / 8 \times 35 / 8$ | 16 | Z12416R | Z12416Z |
| Eave Strut | $6 \times 4 \times 3$ | 16 | E64316R* | E64316Z* |  |  |  |  |  |
| Eave Strut | $6 \times 4 \times 3$ | 14 | E64314R* | E64314Z* | TYPE | WEBxAxB | GAUGE | RED OXIDE | GALVANIZED |
| Eave Strut | $6 \times 4 \times 3$ | 12 | E64312R* | E64312Z* | ZEE | $4 \times 2 \times 2$ | 16 | Z4216R | Z4216Z |
| Eave Strut | $8 \times 4 \times 3$ | 14 | E84314R* | E84314Z* | ZEE | $4 \times 2.5 \times 2.5$ | 16 | Z42516R | Z42516Z |
| Eave Strut | $8 \times 4 \times 3$ | 12 | E84312R* | E84312Z* | ZEE | $4 \times 2.5 \times 2.5$ | 14 | Z42514R | Z42514Z |
| Eave Strut | $8 \times 5 \times 3$ | 14 | E85314R* | E85314Z* | ZEE | $4 \times 2.5 \times 2.5$ | 12 | Z42512R | Z42512Z |
| Eave Strut | $8 \times 5 \times 3$ | 12 | E85312R* | E85312Z* | ZEE | $4 \times 3.5 \times 3.5$ | 16 | Z43516R | Z43516Z |
| Eave Strut | $8 \times 5 \times 5$ | 14 | E85514R* |  | ZEE | $4 \times 3.5 \times 3.5$ | 14 | Z43514R | Z43514Z |
| Eave Strut | $10 \times 5 \times 3$ | 14 | E105314R* |  | ZEE | $6 \times 2.5 \times 2.5$ | 16 | Z62516R | Z62516Z |
| *For low pitch For high pitch | 10 to 4:12) add a "l"to the 5:12 and above) add a "H" | nd of the to the end | de. fthe code. |  | ZEE | $6 \times 2.5 \times 2.5$ | 14 | Z62514R | Z62514Z |
| TYPE | WEB $\times$ A $\times$ B | GAUG | RED OXIDE | GALVANIZED | ZEE | $8 \times 2.5 \times 2.5$ $8 \times 2.5 \times 2.5$ | 16 | Z82516R | Z82516Z |
| CEE | $4 \times 2 \times 2$ | 16 | C4216R | C4216Z | ZEE | $8 \times 2.5 \times 2.5$ | 12 | Z82512R | Z82512Z |
| CEE | $4 \times 2.5 \times 2.5$ | 16 | C42516R | C42516Z | ZEE | $8 \times 3.5 \times 3.5$ | 16 | Z83516R | Z83516Z |
| CEE | $4 \times 2.5 \times 2.5$ | 14 | C42514R | C42514Z | ZEE | $8 \times 3.5 \times 3.5$ | 14 | Z83514R | Z83514Z |
| CEE | $4 \times 2.5 \times 2.5$ | 12 | C42512R | C42512Z | ZEE | $8 \times 3.5 \times 3.5$ | 12 | Z83512R | Z83512Z |
| CEE | $4 \times 3.5 \times 3.5$ | 16 | C43516R | C43516Z | ZEE | $9 \times 3 \times 3$ | 14 | Z9314R | Z9314Z |
| CEE | $4 \times 3.5 \times 3.5$ | 14 | C43514R | C43514Z | ZEE | $9 \times 3 \times 3$ | 12 | Z9312R | Z9312Z |
| CEE | $6 \times 2.5 \times 2.5$ | 16 | C62516R | C62516Z | ZEE | $10 \times 2.5 \times 2.5$ | 16 | Z102516R | Z102516Z |
| CEE | $6 \times 2.5 \times 2.5$ | 14 | C62514R | C62514Z | ZEE | $10 \times 2.5 \times 2.5$ | 14 | Z102514R | Z102514Z |
| CEE | $8 \times 2.5 \times 2.5$ | 16 | C82516R | C82516Z | ZEE | $10 \times 2.5 \times 2.5$ | 12 | Z102512R | Z102512Z |
| CEE | $8 \times 2.5 \times 2.5$ | 14 | C82514R | C82514Z | ZEE | $10 \times 3.5 \times 3.5$ | 14 | Z103514R | Z103514Z |
| CEE | $8 \times 2.5 \times 2.5$ | 12 | C82512R | C82512Z | ZEE | $10 \times 3.5 \times 3.5$ | 12 | Z103512R | Z103512Z |
| CEE | $8 \times 3.5 \times 3.5$ | 16 | C83516R | C83516Z | ZEE | $12 \times 2.5 \times 2.5$ | 14 | Z122514R | Z122514Z |
| CEE | $8 \times 3.5 \times 3.5$ | 14 | C83514R | C83514Z | ZEE | $12 \times 2.5 \times 2.5$ | 12 | Z122512R | Z122512Z |
| CEE | $8 \times 3.5 \times 3.5$ | 12 | C83512R | C83512Z | ZEE | $12 \times 3.5 \times 3.5$ | 14 | Z123514R | Z123514Z |
| CEE | $9 \times 3 \times 3$ | 14 | C9314R | C9314Z | ZEE | $12 \times 3.5 \times 3.5$ | 12 | Z123512R | Z123512Z |
| CEE | $9 \times 3 \times 3$ | 12 | C9312R | C9312Z | ZEE | $12 \times 4 \times 4$ | 16 | Z12416R | Z12416Z |
| CEE | $10 \times 2.5 \times 2.5$ | 16 | C102516R | C102516Z |  |  |  |  |  |
| CEE | $10 \times 2.5 \times 2.5$ | 14 | C102514R | C102514Z |  |  |  |  |  |
| CEE | $10 \times 2.5 \times 2.5$ | 12 | C102512R | C102512Z |  |  |  |  |  |
| CEE | $10 \times 3.5 \times 3.5$ | 14 | C103514R | C103514Z |  |  |  |  |  |
| CEE | $10 \times 3.5 \times 3.5$ | 12 | C103512R | C103512Z |  |  |  |  |  |
| CEE | $12 \times 2.5 \times 2.5$ | 14 | C122514R | C122514Z |  |  |  |  |  |
| CEE | $12 \times 2.5 \times 2.5$ | 12 | C122512R | C122512Z |  |  |  |  |  |
| CEE | $12 \times 3.5 \times 3.5$ | 14 | C123514R | C123514Z |  |  |  |  |  |
| CEE | $12 \times 3.5 \times 3.5$ | 12 | C123512R | C123512Z |  |  |  |  |  |
| CEE | $12 \times 4 \times 4$ | 16 | C12416R | C12416Z |  |  |  |  |  |

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Effective 05/2021• Information subject to change

## STANDARD PUNCH PATTERNS

Punch capabilities vary by location. Call for pricing and availability on special punching.
Punches cannot be made on secondary framing members shorter than 3".
Holes are punched to accommodate 1/2" diameter bolts.

## Standard hole sizes:

| LOCATION | $5 / 16^{\prime \prime}$ ROUND | $5 / 8^{\prime \prime}$ ROUND | $5 / 8^{\prime \prime} \mathrm{X} 3 / 4^{\prime \prime}$ SLOT |
| :--- | :---: | :---: | :---: |
| Lowell | X | X | X |
| Jasper | X |  | X |
| Cedar Hill |  | X | X |
| Seguin | X | X |  |
| Claysburg |  | X | X |



## FLANGE PATTERNS

 Punches can be placed on either or both ends.
## EAVE STRUT FOR 4" LEG

ES4


PATTERN D-OPTIONAL FLANGE PPD

Use with web pattern $A$.


EAVE STRUT FOR 5" LEG

ES5


PATTERN E-OPTIONAL FLANGE PPE

EAVE STRUT FOR 5" LEG
ES134


PATTERN F - OPTIONAL FLANGE PPF


Use with web pattern $B$.


Use with web pattern C.

## STANDARD PUNCH PATTERNS

## WEB PATTERNS

## Punches can be placed on either or both ends.

END PUNCH
PPEP


PATTERN H STANDARD WEB END PPH


SIMPLE SPAN PUNCH
PPSS


LONG LAP PUNCH


Minimum part length $7^{\prime}$ total, $3^{\prime} 6^{\prime \prime}$ one end.

PATTERN A - STANDARD WEB - 9 ' Minimum length if punched on both ends; $4^{\prime} 6 "$ if punched on one end.
PPA


PATTERN B - STANDARD WEB - $12^{\prime} 5^{\prime \prime}$ Minimum length if punched on both ends; $6^{\prime} 2.5^{\prime \prime}$ if punched on one end.
PPB


PATTERN C - STANDARD WEB - $7^{\prime}$ Minimum length if punched on both ends; $3^{\prime} 6$ " if punched on one end.
PPC


NOTES
1


[^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.

