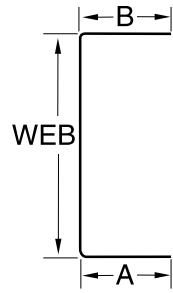
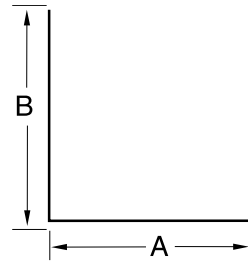


# SUB-STRUCTURAL STEEL

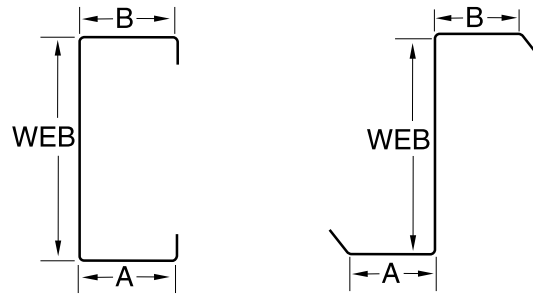
CHANNEL



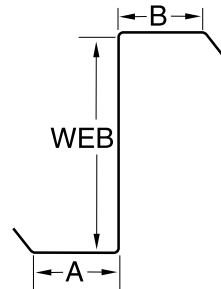
ANGLE



CEE & SYMMETRICAL ZEE

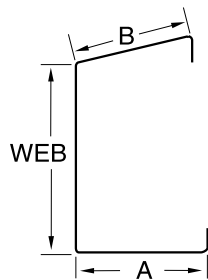


LGSI ZEE

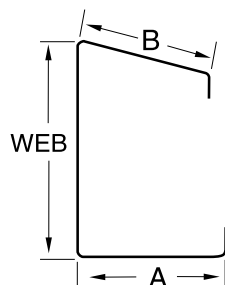


EAVE STRUT

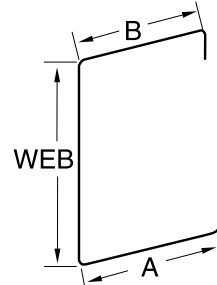
Single Slope Up



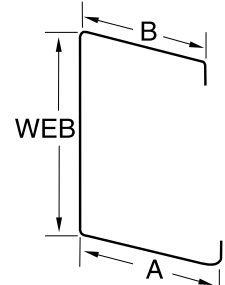
Single Slope Down



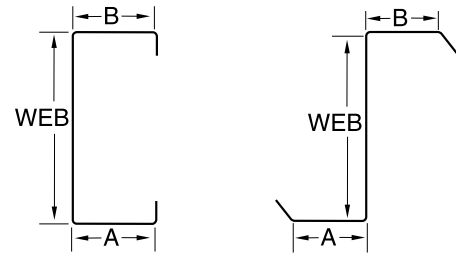
Double Slope Up



Double Slope Down



# STANDARD CEES & SYMMETRICAL ZEES



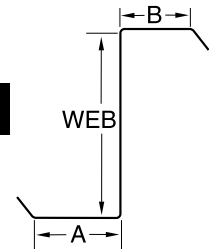
## Secondary Framing Members

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

# LGSI ZEES

## Secondary Framing Members

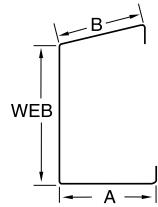
WEBxAxB	Gauge	Finish	Product Code
6x2 <sup>3</sup> / <sub>8</sub> x2 <sup>1</sup> / <sub>8</sub>	16	Red Oxide	Z62516R
6x2 <sup>3</sup> / <sub>8</sub> x2 <sup>1</sup> / <sub>8</sub>	14	Red Oxide	Z62514R
8x2 <sup>3</sup> / <sub>8</sub> x2 <sup>1</sup> / <sub>8</sub>	16	Red Oxide/Galvanized	Z82516R/Z82516Z
8x2 <sup>3</sup> / <sub>8</sub> x2 <sup>1</sup> / <sub>8</sub>	14	Red Oxide/Galvanized	Z82514R/Z82514Z
8x2 <sup>3</sup> / <sub>8</sub> x2 <sup>1</sup> / <sub>8</sub>	12	Red Oxide/Galvanized	Z82512R/Z82512Z
8x3 <sup>3</sup> / <sub>8</sub> x3 <sup>1</sup> / <sub>8</sub>	16	Red Oxide	Z83516R
8x3 <sup>3</sup> / <sub>8</sub> x3 <sup>1</sup> / <sub>8</sub>	14	Red Oxide	Z83514R
8x3 <sup>3</sup> / <sub>8</sub> x3 <sup>1</sup> / <sub>8</sub>	12	Red Oxide/Galvanized	Z83512R/Z83512Z
10x2 <sup>3</sup> / <sub>8</sub> x2 <sup>1</sup> / <sub>8</sub>	16	Red Oxide	Z102516R
10x2 <sup>3</sup> / <sub>8</sub> x2 <sup>1</sup> / <sub>8</sub>	14	Red Oxide	Z102514R
10x2 <sup>3</sup> / <sub>8</sub> x2 <sup>1</sup> / <sub>8</sub>	12	Red Oxide/Galvanized	Z102512R/Z102512Z
10x2 <sup>7</sup> / <sub>8</sub> x2 <sup>5</sup> / <sub>8</sub>	14	Red Oxide	Z10314R
10x2 <sup>7</sup> / <sub>8</sub> x2 <sup>5</sup> / <sub>8</sub>	12	Red Oxide	Z10312R
12x2 <sup>3</sup> / <sub>8</sub> x2 <sup>1</sup> / <sub>8</sub>	14	Red Oxide	Z122514R
12x2 <sup>3</sup> / <sub>8</sub> x2 <sup>1</sup> / <sub>8</sub>	12	Red Oxide	Z122512R
12x3 <sup>3</sup> / <sub>8</sub> x3 <sup>1</sup> / <sub>8</sub>	14	Red Oxide	Z123514R
12x3 <sup>3</sup> / <sub>8</sub> x3 <sup>1</sup> / <sub>8</sub>	12	Red Oxide/Galvanized	Z123512R/Z123512Z
12x3 <sup>3</sup> / <sub>8</sub> x3 <sup>5</sup> / <sub>8</sub>	16	Red Oxide	Z12416R



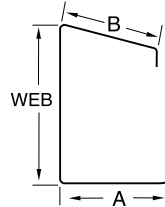
Members can be manufactured to the nearest 1/8" in length from 6'0" to 45'0".  
For lengths under 6'0" or over 45'0", please call your sales rep. For load tables, contact sales rep.

# EAVE STRUTS

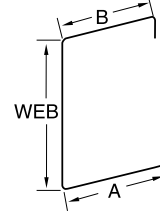
Single Slope Up



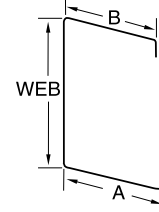
Single Slope Down



Double Slope Up



Double Slope Down



## Secondary Framing Members

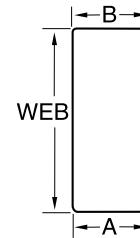
WEBxAxB	Gauge	Finish	Product Code
6x4x3	16	Red Oxide	E64316LR/E64316HR
6x4x3	14	Red Oxide	E64314LR/E64314HR
6x4x3	12	Red Oxide	E64312LR/E64312HR
8x4x3	14	Red Oxide/Galvanized	E84314LR or HR/E84314LZ or HZ
8x4x3	12	Red Oxide/Galvanized	E84312LR or HR/E84312LZ or HZ
8x5x3	12	Red Oxide	E85312LR/E85312HR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

Please specify pitch and slope when ordering.

# CHANNELS

## Secondary Framing Members

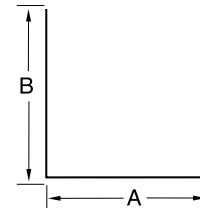
WEBxAxB	Gauge	Finish	Product Code
4.25x2.35x2.35	16	Red Oxide/Galvanized	U4216R
4.25x2.85x2.85	16	Red Oxide/Galvanized	U42516R/ U42516R
4.25x2.85x2.85	14	Red Oxide	U42514R
6.25x2.85x2.85	16	Red Oxide/Galvanized	U62516R/ U62516Z
6.25x2.85x2.85	14	Red Oxide	U62514R
8.25x2.85x2.85	16	Red Oxide/Galvanized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



# ANGLE

## Secondary Framing Members

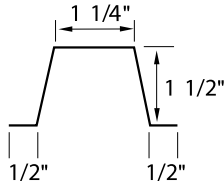
AxB	Gauge	Finish	Product Code
2.5x2.5	14	Red Oxide	B2514R
3x3	14	Red Oxide	B314R
3x3	16	Red Oxide	B316R
4x2	16	Red Oxide/Galvanized	B4216R/B4216Z
4x2	14	Red Oxide	B4214R
4x3	16	Red Oxide	B4316R



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

# Hat Channel

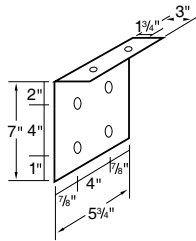
Gauge	Finish	Length	Product Code
16	Red Oxide	20'0"	HATR



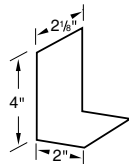
*Available from Lowell only.*

# Purlin Clips

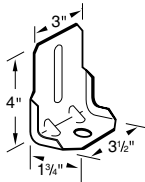
Gauge	Finish	Product Code
10	Red Oxide	GIRTCLIP



16	Red Oxide	MINICLIP
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14	Galvanized	BASECLIP
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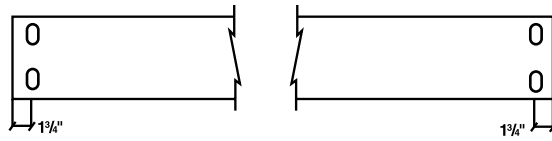
Members can be manufactured to the nearest 1/8" in length from 6'0" to 45'0".  
For lengths under 6'0" or over 45'0", please call your sales rep. For load tables, contact sales rep.

# Punch Patterns

Call your salesperson for pricing and availability on Special Punching

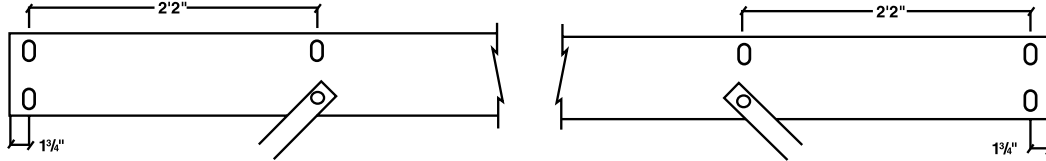
## STANDARD PUNCH PATTERNS CEES & ZEES

CODE:PPEP  
END PUNCH



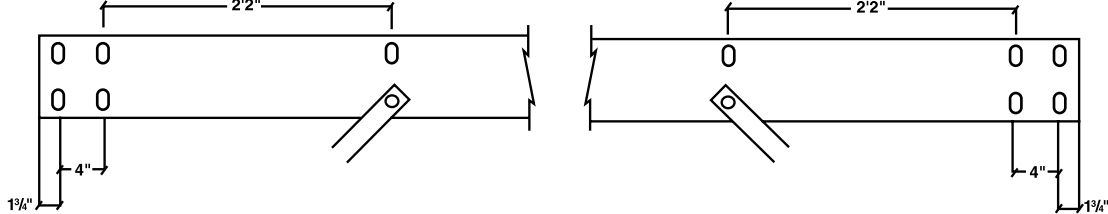
Minimum Part Length 5' total, 2'6" one end

CODE:PPSS  
SIMPLE SPAN PUNCH



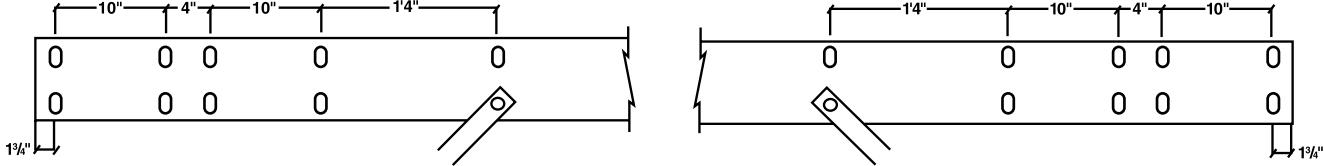
Minimum Part Length 5'6" total, 2'8" one end

CODE:PPSL  
SHORT LAP PUNCH

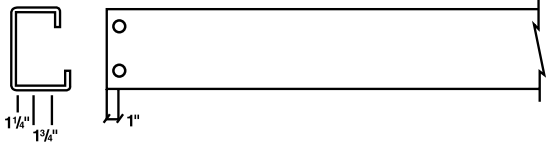


Minimum Part Length 7' total, 3'6" one end

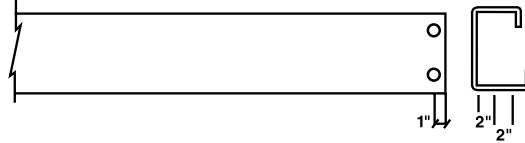
CODE:PPLL  
LONG LAP PUNCH



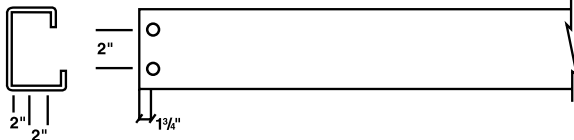
CODE: ES4  
EAVE STRUT FOR 4" LEG



CODE: ES5  
EAVE STRUT FOR 5" LEG

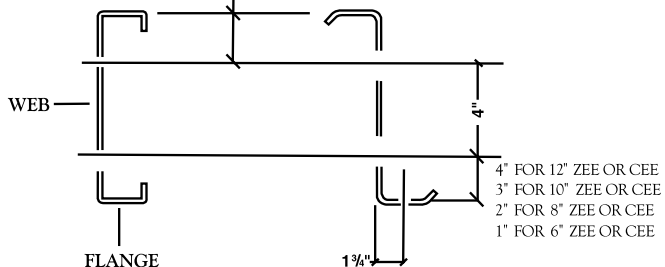


CODE: ES134  
EAVE STRUT FOR 5" LEG



**NOTE: Minimum part length to be punched: 3'**

- 4" FOR 12" ZEE OR CEE
- 3" FOR 10" ZEE OR CEE
- 2" FOR 8" ZEE OR CEE
- 1" FOR 6" ZEE OR CEE

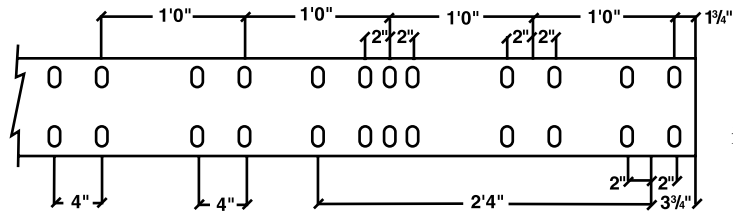


CSMI standard hole sizes are 5/8" round and 5/8"x3/4" slot in Lowell and Cedar Hill. Standard hole size in Jasper is 5/8"x3/4" slot. Holes are punched to accommodate 1/2" diameter bolts. 5/16" angle punch offered in Lowell and Jasper.

# Punch Patterns

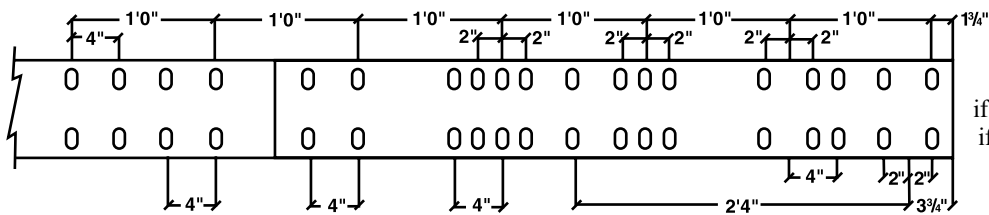
Capability varies by location; confirm with your sales person.

CODE: PPA  
PATTERN A - OPTIONAL WEB



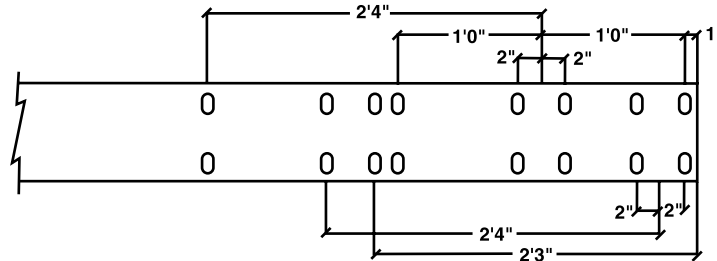
Minimum Part Length  
if Punched on Both Ends: 9'  
if Punched on One End: 4'6"

CODE: PPB  
PATTERN B - OPTIONAL WEB



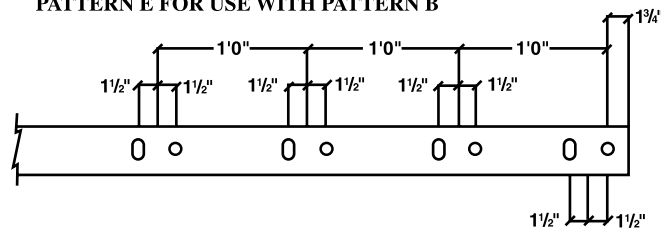
Minimum Part Length  
if Punched on Both Ends: 12'5"  
if Punched on One End: 6'2.5"

CODE: PPC  
PATTERN C - STANDARD WEB

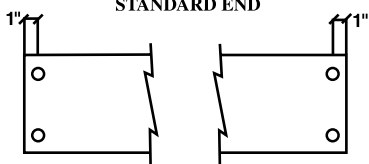


Minimum Part Length  
if Punched on Both Ends: 7'  
if Punched on One End: 3'6"

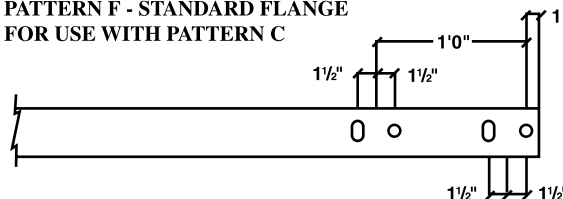
CODE: PPD & PPE  
PATTERNS D & E - OPTIONAL FLANGE  
PATTERN D FOR USE WITH PATTERN A  
PATTERN E FOR USE WITH PATTERN B



CODE: PPH  
PATTERN H  
STANDARD END



CODE: PPF  
PATTERN F - STANDARD FLANGE  
FOR USE WITH PATTERN C



**NOTE: Minimum  
part length to  
be punched: 3'**

Visit [www.loseke.com](http://www.loseke.com) for the Light Gauge Structural Steel framing system design handbook.