



Steel Members Brochure

Red Iron



C-Channel Brochure

Red Iron

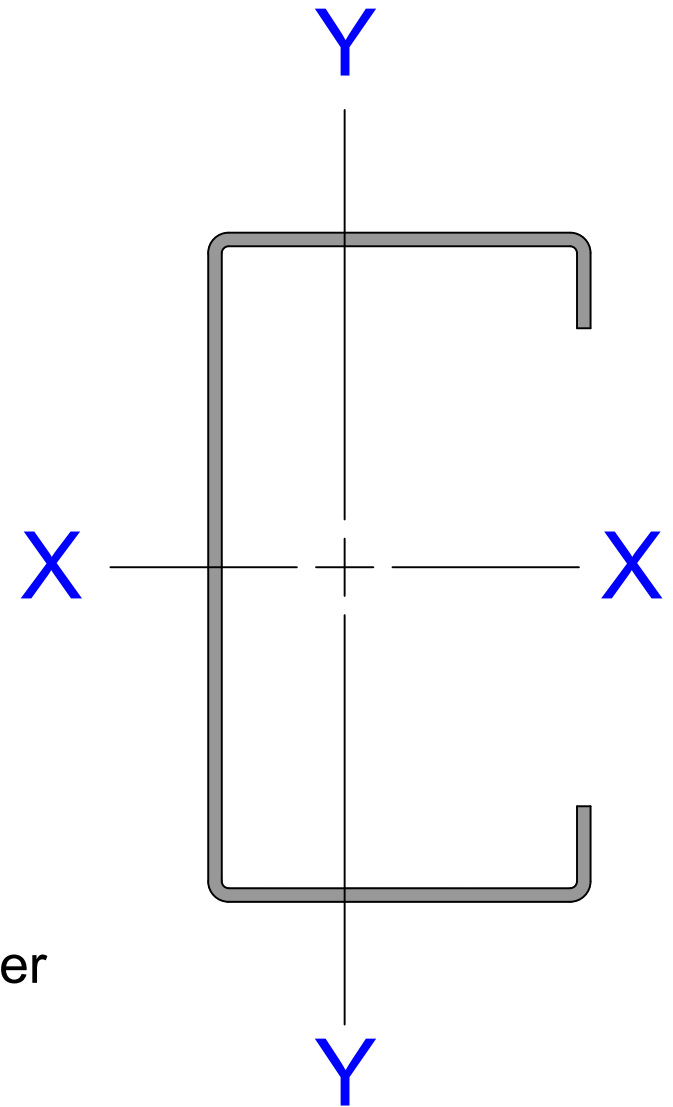
Quick Reference

Gross Properties

- I Moment of inertia of cross section about X,Y
- S Section modulus about X,Y
- r Radius of gyration of cross section about X,Y

Effective Properties

- J Torsional Constant
- C_w Warping Constant
- X_o Shear Center Location
- R_o Polar Radius of Gyration about the shear center
- β Monosymmetry Constant



Information

Members

The members represented in this publication are typically produced in G60, grade 50 cold formed steel. G90 is available upon request but may require longer lead times.

Documentation

This document is subject to change without notice. Please contact B&M Metals to make sure that you have the latest edition of this document.

Service Holes

Service holes in studs can be punched upon request. In the event that spacing for the service holes is not specified, they will be punched on 3 foot centers. Please contact B&M Metals for custom hole spacing or more details.

Red Iron Disclaimer

Use with product tables, details, and preliminary estimating only

1. Scope / Intended Use

- Reference use only. This brochure is a general product reference for preliminary review, estimating, and coordination. It is not a sealed design package.
- Engineer verification required. All spans, reactions, member adequacy, deflection, stability, bracing, connections, anchorage, and foundation requirements shall be verified by a licensed Professional Engineer in the project jurisdiction.
- Project-specific conditions govern. Final member selection depends on actual loads, unbraced length, end conditions, diaphragm action, serviceability limits, and governing code requirements.

2. Design / Fabrication

- Codes and standards. Verify design using the governing code and applicable standards, including current editions of AISC 360, ASCE/SEI 7, and MBMA references where applicable.
- Material and availability. Dimensions, grades, coatings, lengths, hole patterns, finishes, tolerances, and availability may vary by mill, supplier, and production schedule. Specifications are subject to change without notice.
- Fabrication and field changes. Shop drawings, weld procedures, bolt selection, detailing, substitutions, and field modifications must be reviewed and approved by the Engineer of Record before use.

3. Liability / Revision Control

- No warranty of fitness for design. Listed members and properties are provided without guarantee that they satisfy a specific building, loading case, or code condition.
- Tolerance / liability limitation. Sweep, camber, twist, finish variation, and minor dimensional variation may occur within accepted manufacturing tolerances.
- Confirm latest revision. Verify the latest brochure revision and current project criteria before ordering, engineering, or installation. Contact B&M Metals for updated data or project-specific support.

Suggested Reference Standards

- AISC 360-22 - Structural steel design
- ASCE/SEI 7-22 - Design loads
- MBMA Metal Building Systems Manual - 2024
- Applicable ASTM material specs per project documents

Other Notes

- Member weights and section properties are nominal unless noted otherwise.
- Connection details shown elsewhere are conceptual unless sealed by the Engineer of Record.
- Do not scale drawings. Use written dimensions only.
- Contact B&M Metals for updated data, custom members, or project support.

Steel Members Documentation

Hole Punching



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 350S162
Depth: 3.5"
Flange: 1.625"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16,14,12

Name Breakdown

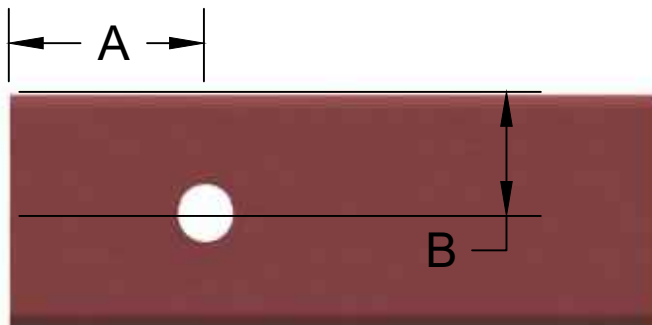
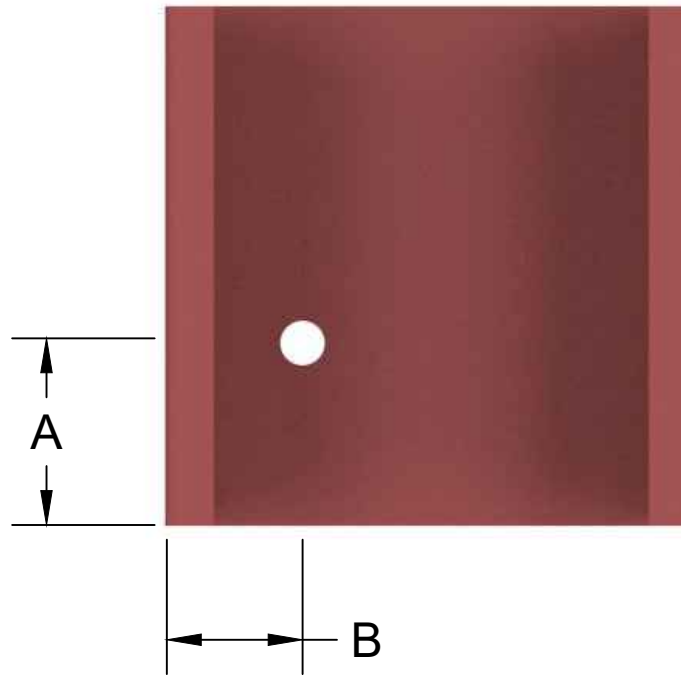
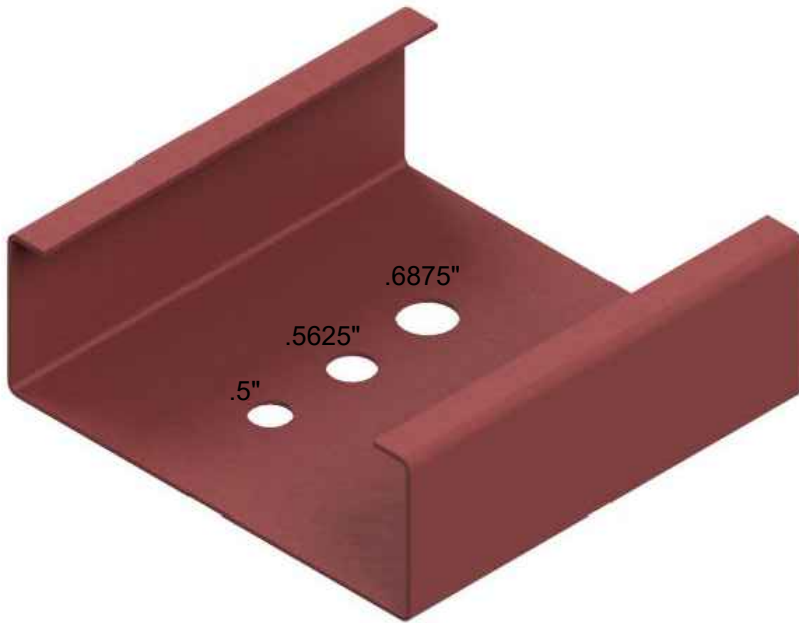
1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- Fl = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)

| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |



* A - Specify Dimension
* B - Specify Dimension

Custom Studs and Track



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Murrayville GA, 30564
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Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|--------------|
| Name: | DepthSFlange |
| Depth: | 3.5" - 14" |
| Flange: | 1.5" - 4" |
| Lip: | .5" - .75" |
| Lengths: | 6' - 60' |
| Gauges: | 16,14,12 |

Name Breakdown

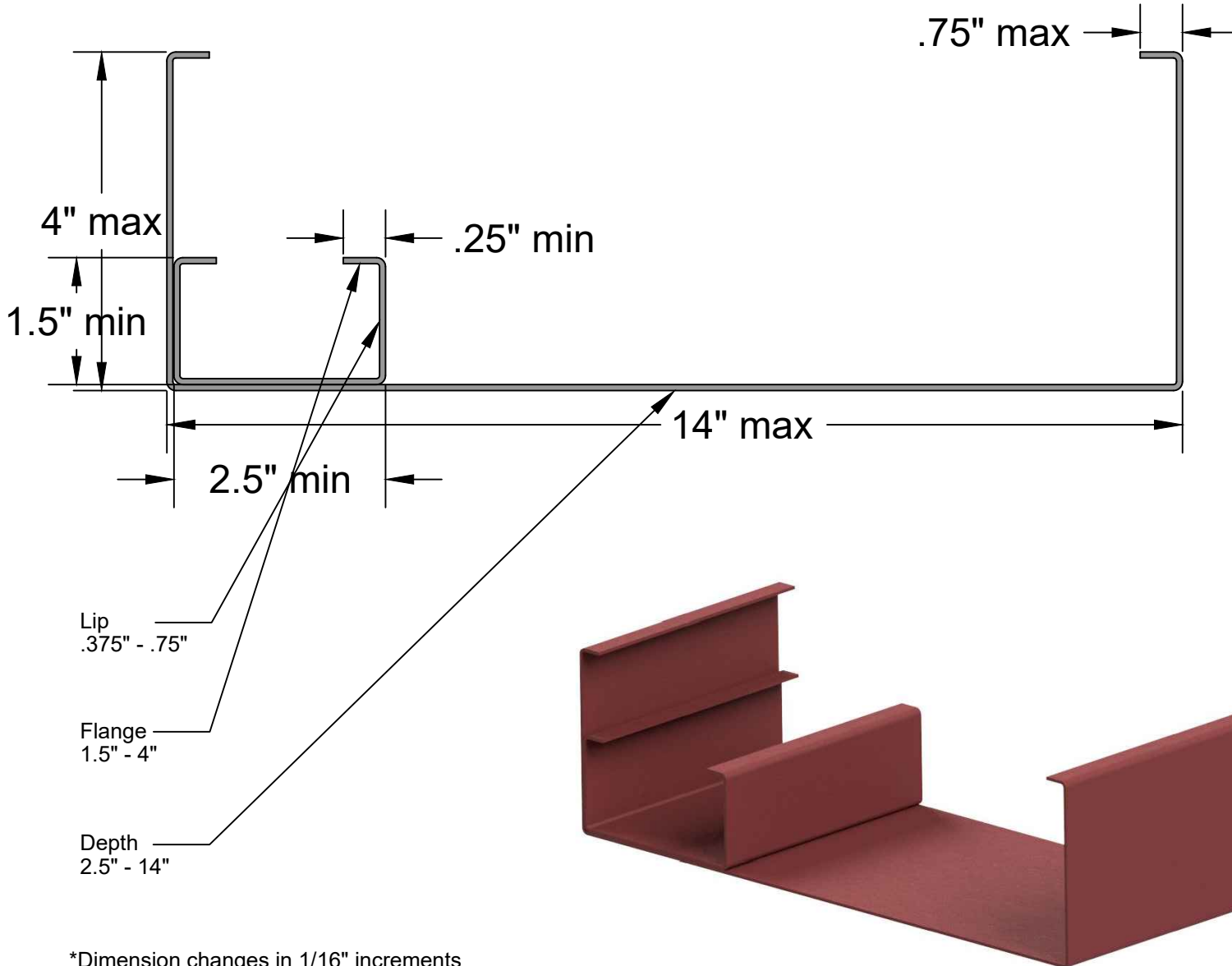
1050L162 - 43

| | | | |
|-----------------|------------|---------------|----------------|
| Depth in Inches | Member Key | Flange Height | Mill Thickness |
| 1050 = 10.50" | | 162 = 1.625" | |

Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- Fl** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

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| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |



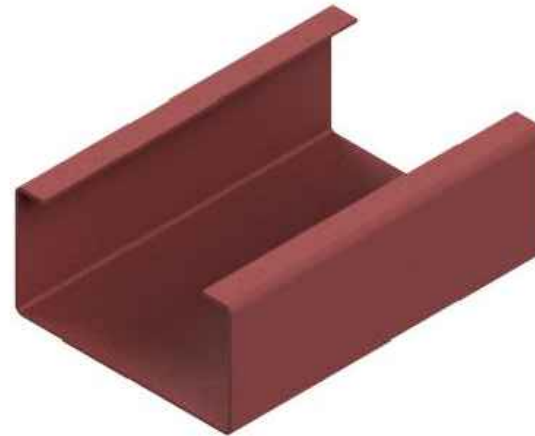
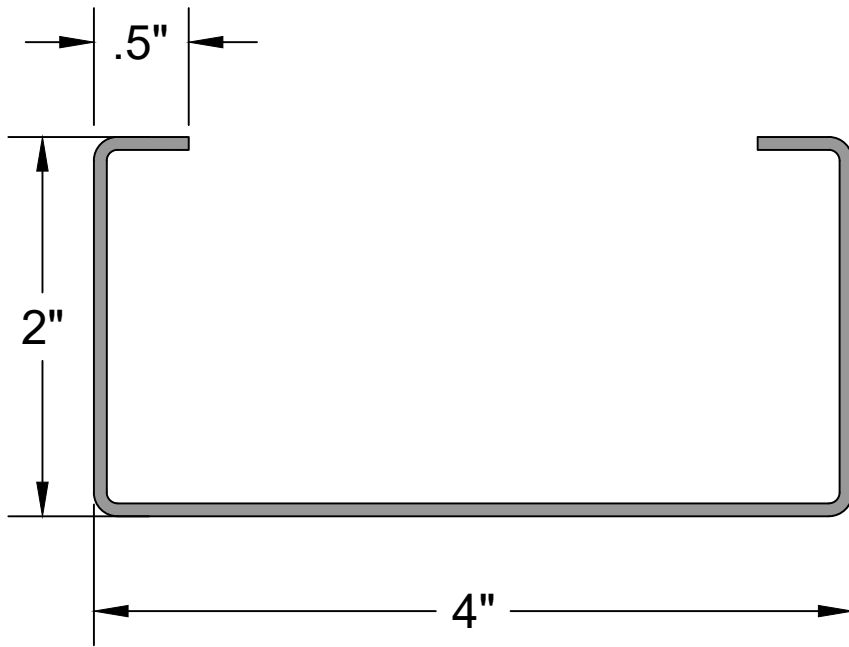
*Dimension changes in 1/16" increments

* All members shown in 14 gauge to show detail

CUSTOM_C_CHANNEL

Steel Members Documentation

4" x 2" Cee

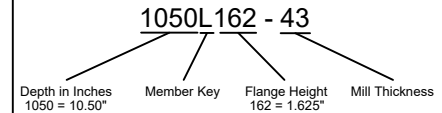


6195 Hwy 52 East
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Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 400S200
Depth: 4"
Flange: 2"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown



Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- Fl = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)

* All members shown in 14 gauge to show detail

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|----------------------|-------|-------|-------|-------|
| | | | | | | lx | Sx | rx | ly | Sy | ry | J | Cw | Xo | Ro | β |
| 400S200-54 | 16 | 50 | 0.500 | 1.702 | 8.77 | 1.026 | 0.513 | 1.432 | 0.212 | 0.156 | 0.651 | 0.00054 | 0.476 | 1.211 | 1.985 | 0.628 |
| 400S200-68 | 14 | 50 | 0.627 | 2.135 | 8.71 | 1.276 | 0.638 | 1.426 | 0.262 | 0.192 | 0.646 | 0.00108 | 0.584 | 1.199 | 1.972 | 0.630 |
| 400S200-97 | 12 | 50 | 0.852 | 2.899 | 8.60 | 1.705 | 0.853 | 1.415 | 0.347 | 0.253 | 0.639 | 0.00278 | 0.761 | 1.177 | 1.948 | 0.635 |

Mill - Gauge Bend Radius

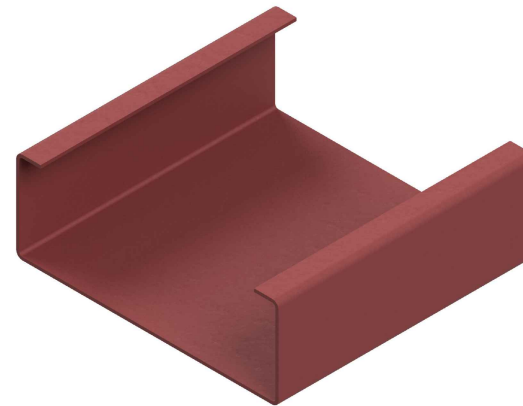
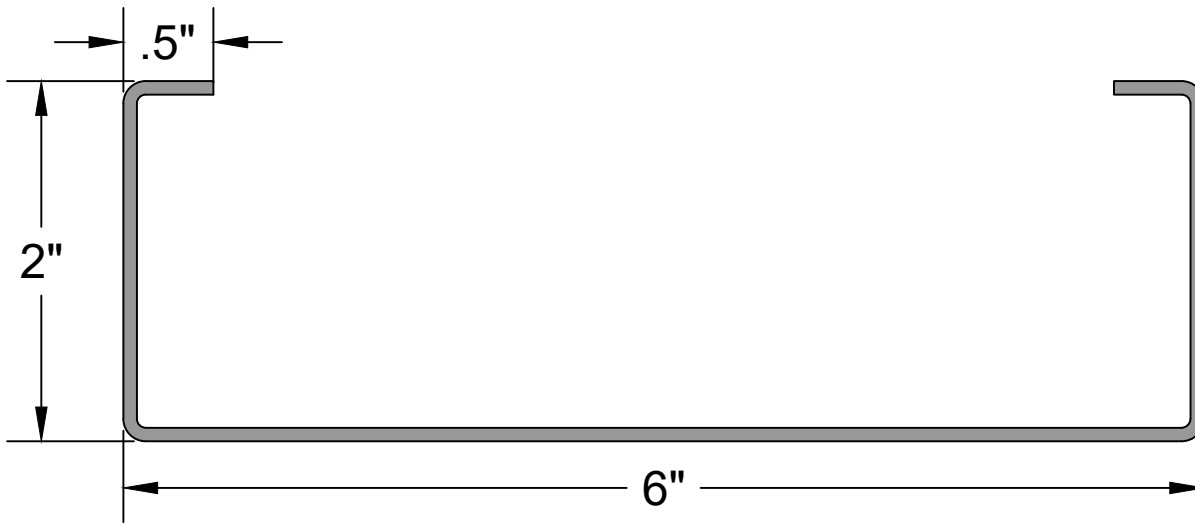
| | |
|--------------------|-------|
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| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

400S200

Steel Members Documentation

6" x 2" Cee



6195 Hwy 52 East
Murrayville GA, 30564
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Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 600S200
Depth: 6"
Flange: 2"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

S = Stud (C Shaped)
L = Lintel (L Shaped)
T = Track (U Shaped)
W = I-Beam (I Shaped)
E = Eave Strut (C Shaped)
D = Double Eave Strut
A = Angle (2 Legs, 1 Angle)
F = Hat (Top Hat Shaped)
B = Box (Rectangle Shaped)
FI = Strap/Flat (Flat Shaped)
Z = Zee (Z Shaped)

* All members shown in 14 gauge to show detail

| Member Name | Gross Properties (x) | | | | | Gross Properties (y) | | | Torsional Properties | | | | | | | |
|-------------|----------------------|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|---------|-------|-------|-------|-------|
| | G | ksi | Area | Weight | Width | lx | Sx | rx | ly | Sy | ry | J | Cw | Xo | Ro | β |
| 600S200-54 | 16 | 50 | 1.050 | 3.573 | 10.60 | 3.951 | 1.317 | 1.940 | 0.410 | 0.275 | 0.625 | 0.00343 | 1.996 | 1.162 | 2.346 | 0.755 |
| 600S200-68 | 14 | 50 | 0.771 | 2.625 | 10.71 | 2.944 | 0.981 | 1.954 | 0.309 | 0.209 | 0.633 | 0.00133 | 1.524 | 1.183 | 2.370 | 0.751 |
| 600S200-97 | 12 | 50 | 1.050 | 3.573 | 10.60 | 3.951 | 1.317 | 1.940 | 0.410 | 0.275 | 0.625 | 0.00343 | 1.996 | 1.162 | 2.346 | 0.755 |

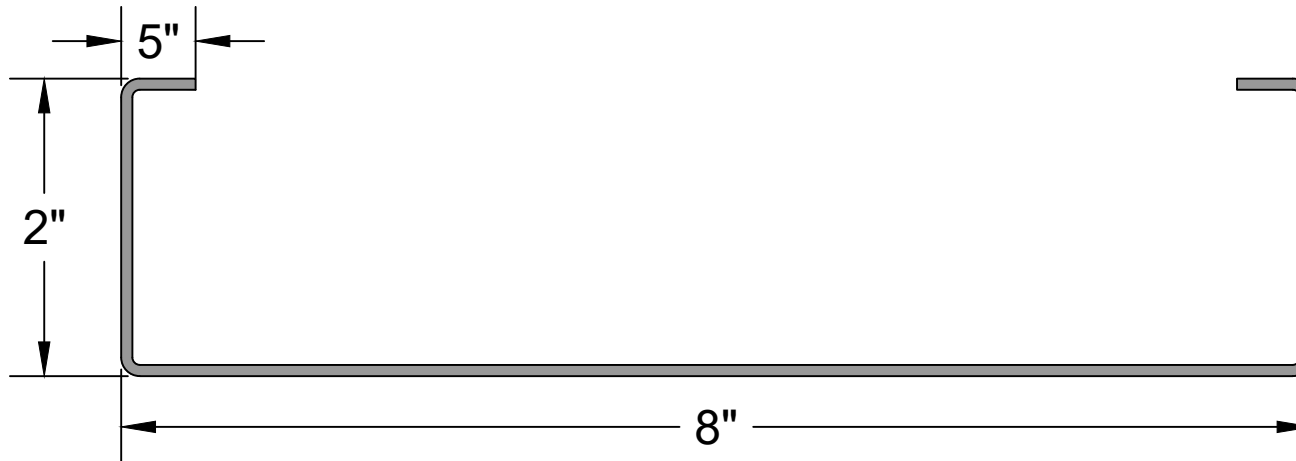
| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

600S200

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

8" x 2" Stud



6195 Hwy 52 East
Murrayville GA, 30564
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Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 800S200
Depth: 8"
Flange: 2"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- FI** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

* All members shown in 14 gauge to show detail

| Member Name | Gross Properties (x) | | | | | Gross Properties (y) | | | | | | Torsional Properties | | | | |
|-------------|----------------------|-----|-------|--------|-------|----------------------|-------|-------|-------|-------|-------|----------------------|-------|-------|-------|-------|
| | G | ksi | Area | Weight | Width | lx | Sx | rx | ly | Sy | ry | J | Cw | Xo | Ro | β |
| 800S200-54 | 16 | 50 | 0.728 | 2.478 | 12.77 | 4.250 | 1.062 | 2.416 | 0.276 | 0.177 | 0.616 | 0.00079 | 2.435 | 1.186 | 2.761 | 0.815 |
| 800S200-68 | 14 | 50 | 0.915 | 3.115 | 12.71 | 5.302 | 1.326 | 2.407 | 0.342 | 0.219 | 0.611 | 0.00158 | 3.000 | 1.175 | 2.747 | 0.817 |
| 800S200-97 | 12 | 50 | 1.248 | 4.246 | 12.60 | 7.129 | 1.782 | 2.390 | 0.453 | 0.288 | 0.602 | 0.00408 | 3.941 | 1.154 | 2.722 | 0.820 |

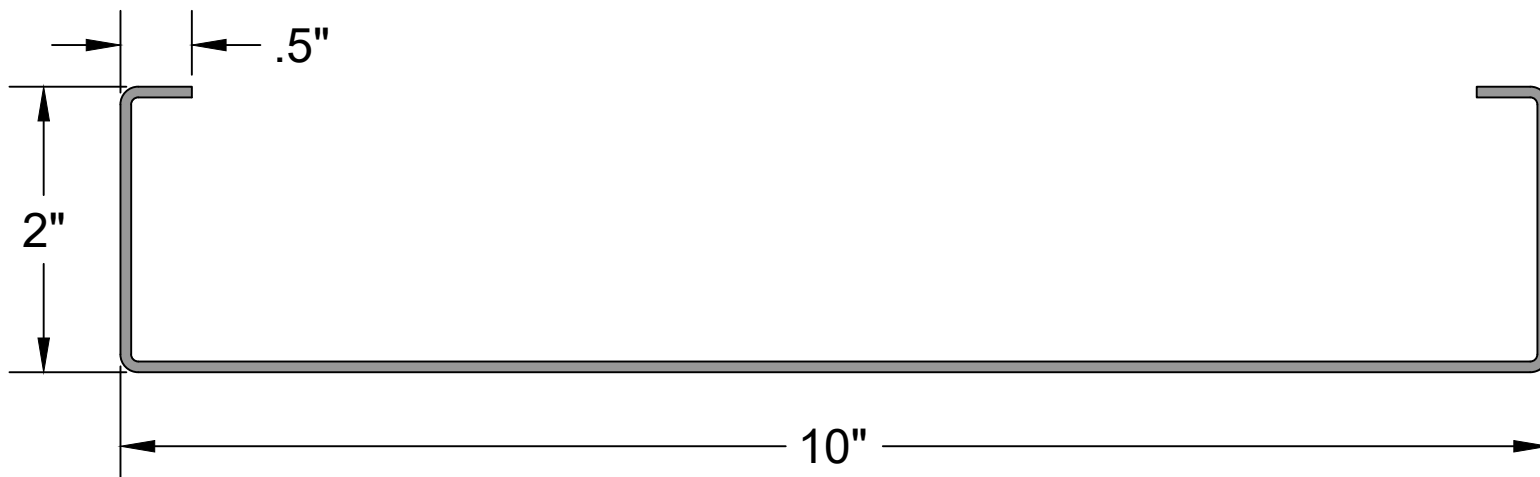
| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

800S200

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

10" x 2" Stud



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 1000S200
Depth: 10"
Flange: 2"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

S = Stud (C Shaped)
L = Lintel (L Shaped)
T = Track (U Shaped)
W = I-Beam (I Shaped)
E = Eave Strut (C Shaped)
D = Double Eave Strut
A = Angle (2 Legs, 1 Angle)
F = Hat (Top Hat Shaped)
B = Box (Rectangle Shaped)
Fl = Strap/Flat (Flat Shaped)
Z = Zee (Z Shaped)

* All members shown in 14 gauge to show detail

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | | | |
|-------------|----|-----|-------|--------|-------|----------------------|----------------|----------------|----------------------|----------------|----------------|----------------------|----------------|----------------|----------------|-------|
| | | | | | | I _x | S _x | r _x | I _y | S _y | r _y | J | C _w | X _o | R _o | β |
| 1000S200-54 | 16 | 50 | 0.842 | 2.866 | 14.77 | 6.687 | 1.337 | 2.818 | 0.295 | 0.183 | 0.592 | 0.00091 | 4.101 | 1.181 | 3.113 | 0.856 |
| 1000S200-68 | 14 | 50 | 1.059 | 3.605 | 14.71 | 8.349 | 1.670 | 2.807 | 0.366 | 0.225 | 0.587 | 0.00183 | 5.055 | 1.170 | 3.098 | 0.857 |
| 1000S200-97 | 12 | 50 | 1.446 | 4.920 | 14.60 | 11.24 | 2.247 | 2.788 | 0.484 | 0.296 | 0.578 | 0.00472 | 6.651 | 1.150 | 3.071 | 0.860 |

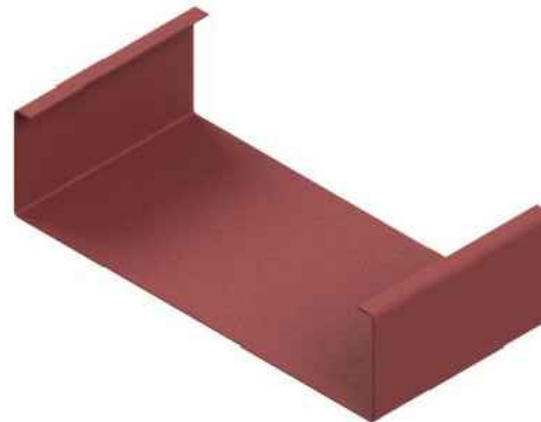
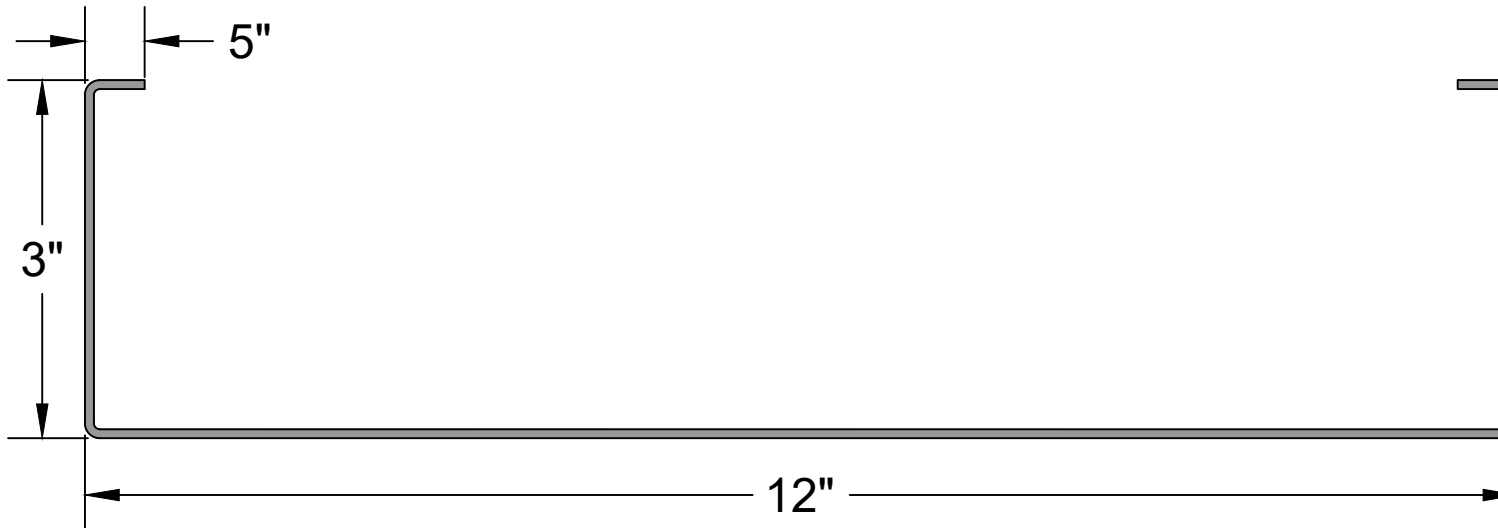
| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

1000S200

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

12" x 3" Stud

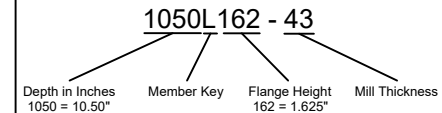


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Member specs and limits

Name: 1200S300
Depth: 12"
Flange: 3"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown



Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- Fl = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)

* All members shown in 14 gauge to show detail

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|----------------------|-------|-------|-------|-------|
| | | | | | | lx | Sx | rx | ly | Sy | ry | J | Cw | Xo | Ro | β |
| 1200S300-54 | 16 | 50 | 1.070 | 3.641 | 18.77 | 13.74 | 2.290 | 3.584 | 0.802 | 0.336 | 0.866 | 0.0012 | 19.09 | 1.692 | 4.056 | 0.826 |
| 1200S300-68 | 14 | 50 | 1.347 | 4.585 | 18.71 | 17.21 | 2.868 | 3.574 | 0.997 | 0.416 | 0.860 | 0.0023 | 23.71 | 1.680 | 4.042 | 0.827 |
| 1200S300-97 | 12 | 50 | 1.842 | 6.268 | 18.60 | 23.29 | 3.881 | 3.556 | 1.332 | 0.554 | 0.851 | 0.0060 | 31.64 | 1.660 | 4.015 | 0.829 |

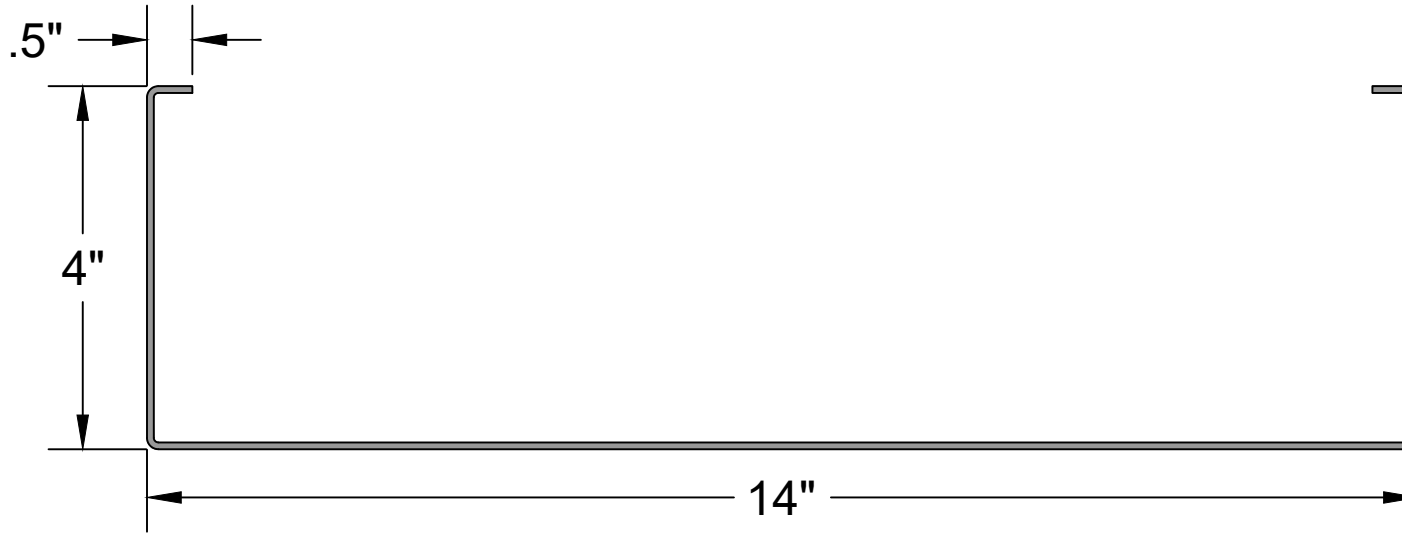
| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

1200S300

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

14" x 4" Stud



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 1400S400
Depth: 14"
Flange: 4"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- Fl = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)

* All members shown in 14 gauge to show detail

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|----------------------|-------|-------|-------|-------|
| | | | | | | lx | Sx | rx | ly | Sy | ry | J | Cw | Xo | Ro | β |
| 1400S400-54 | 16 | 50 | 1.298 | 4.417 | 22.77 | 24.30 | 3.471 | 4.326 | 1.663 | 0.528 | 1.132 | 0.0014 | 59.79 | 2.197 | 4.982 | 0.806 |
| 1400S400-68 | 14 | 50 | 1.635 | 5.565 | 22.71 | 30.48 | 4.354 | 4.317 | 2.074 | 0.657 | 1.126 | 0.0028 | 74.57 | 2.185 | 4.968 | 0.806 |
| 1400S400-97 | 12 | 50 | 2.238 | 7.616 | 22.60 | 41.38 | 5.911 | 4.300 | 2.786 | 0.879 | 1.116 | 0.0073 | 100.2 | 2.165 | 4.942 | 0.808 |

| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

1400S400

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request



Receiver Channel Brochure

Red Iron

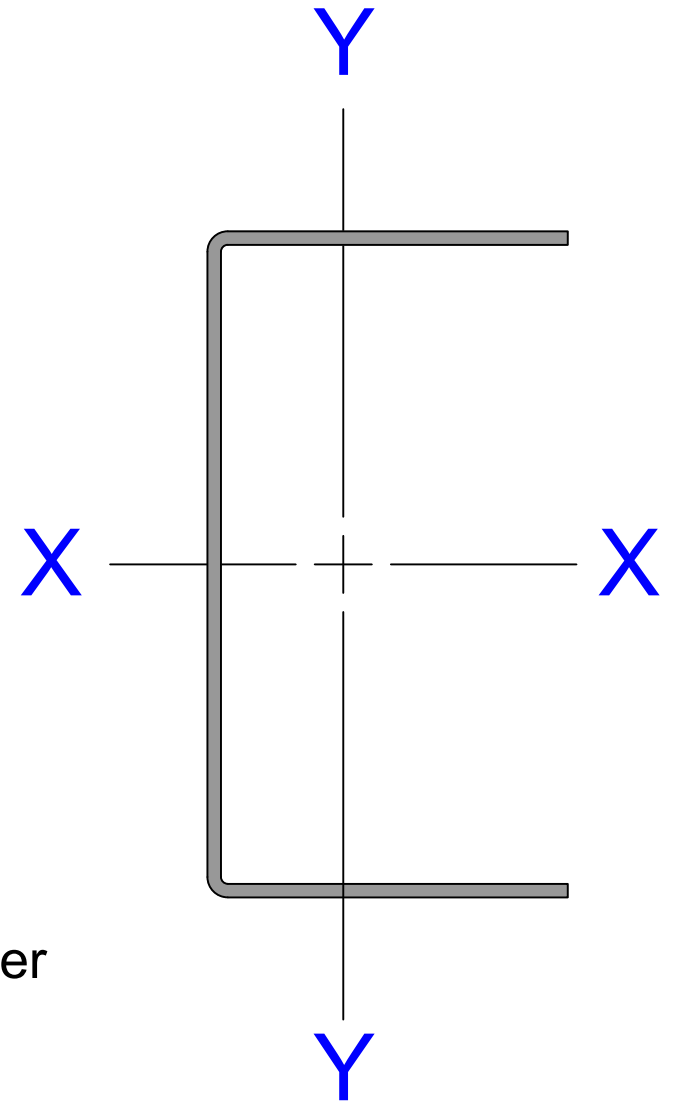
Quick Reference

Gross Properties

- I Moment of inertia of cross section about X,Y
- S Section modulus about X,Y
- r Radius of gyration of cross section about X,Y

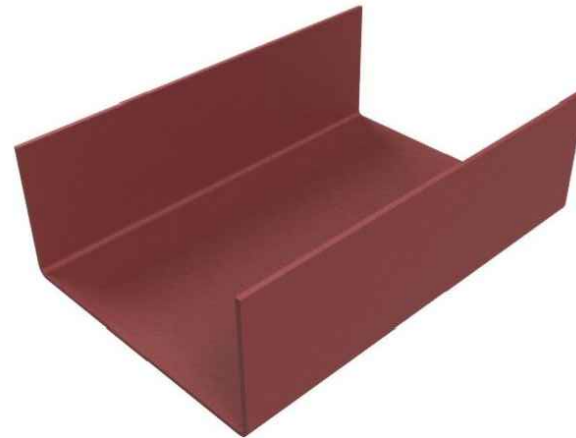
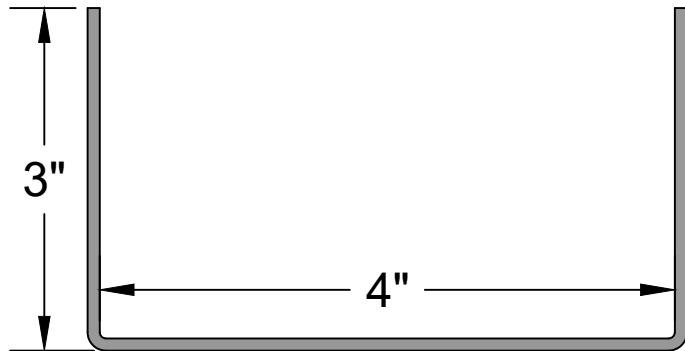
Effective Properties

- J Torsional Constant
- C_w Warping Constant
- X_o Shear Center Location
- R_o Polar Radius of Gyration about the shear center
- β Monosymmetry Constant



Steel Members Documentation

4" Receiver Channel



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 400T300`
Depth: 4"
Flange: 3"
Lip: 0"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50`
Member Key: L
Flange Height: 162 = 1.625`
Mill Thickness: 43

Member Key

S = Stud (C Shaped)
L = Lintel (L Shaped)
T = Track (U Shaped)
W = I-Beam (I Shaped)
E = Eave Strut (C Shaped)
D = Double Eave Strut
A = Angle (2 Legs, 1 Angle)
F = Hat (Top Hat Shaped)
B = Box (Rectangle Shaped)
Fl = Strap/Flat (Flat Shaped)
Z = Zee (Z Shaped)

Mill - Gauge Bend Radius

25 mill = 24 gauge .0764
30 mill = 22 gauge .0796
33 mill = 20 gauge .0764
43 mill = 18 gauge .0712
54 mill = 16 gauge .0849
68 mill = 14 gauge .1069
97 mill = 12 gauge .1325

* All members shown in 14 gauge to show detail

| Member Name | Gross Properties (x) | | | | | Gross Properties (y) | | | Torsional Properties | | | | | | | |
|-------------|----------------------|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|---------|-------|-------|-------|-------|
| | G | ksi | Area | Weight | Width | Ix | Sx | rx | Iy | Sy | ry | J | Cw | Xo | Ro | β |
| 400T200-54 | 16 | 50 | 0.443 | 1.508 | 7.77 | 0.848 | 0.424 | 1.383 | 0.098 | 0.064 | 0.470 | 0.00048 | 0.476 | 0.957 | 1.747 | 0.700 |
| 400T200-68 | 14 | 50 | 0.555 | 1.890 | 7.71 | 1.050 | 0.525 | 1.375 | 0.119 | 0.077 | 0.462 | 0.00096 | 0.584 | 0.946 | 1.732 | 0.702 |
| 400T200-97 | 12 | 50 | 0.753 | 2.562 | 7.60 | 1.393 | 0.696 | 1.360 | 0.150 | 0.097 | 0.447 | 0.00246 | 0.761 | 0.926 | 1.705 | 0.705 |

400T300

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

6" Receiver Channel



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 600T300
Depth: 6"
Flange: 3"
Lip: 0"
Lengths: 6' - 60'
Gauges: 16, 14, 12

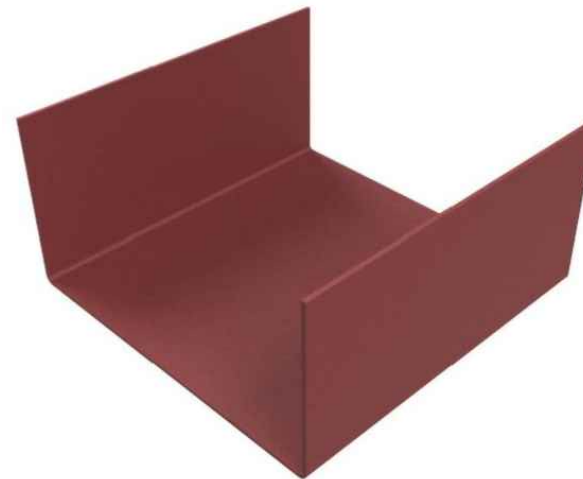
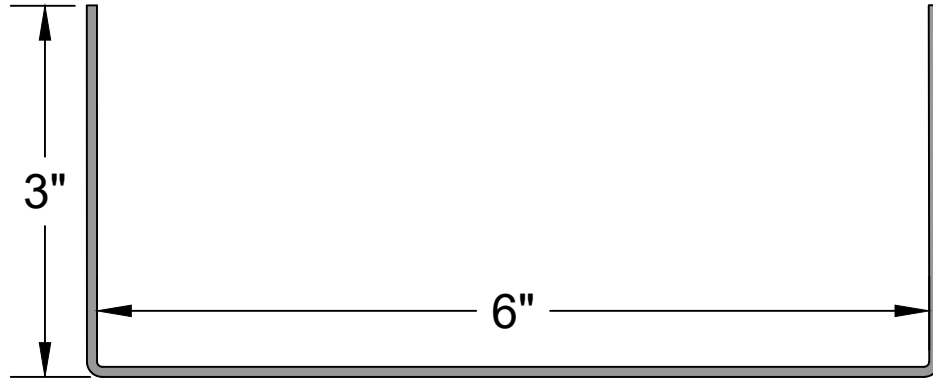
Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- Fl = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)



* All members shown in 14 gauge to show detail

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|----------------------|-------|-------|-------|-------|
| | | | | | | lx | Sx | rx | ly | Sy | ry | J | Cw | Xo | Ro | β |
| 600T200-54 | 16 | 50 | 0.557 | 1.896 | 9.77 | 1.927 | 0.642 | 1.860 | 0.118 | 0.073 | 0.461 | 0.00060 | 1.239 | 0.957 | 2.142 | 0.800 |
| 600T200-68 | 14 | 50 | 0.699 | 2.380 | 9.71 | 2.392 | 0.797 | 1.850 | 0.143 | 0.088 | 0.453 | 0.00121 | 1.524 | 0.946 | 2.126 | 0.802 |
| 600T200-97 | 12 | 50 | 0.951 | 3.236 | 9.60 | 3.189 | 1.063 | 1.831 | 0.182 | 0.111 | 0.438 | 0.00311 | 1.996 | 0.926 | 2.098 | 0.805 |

Mill - Gauge Bend Radius

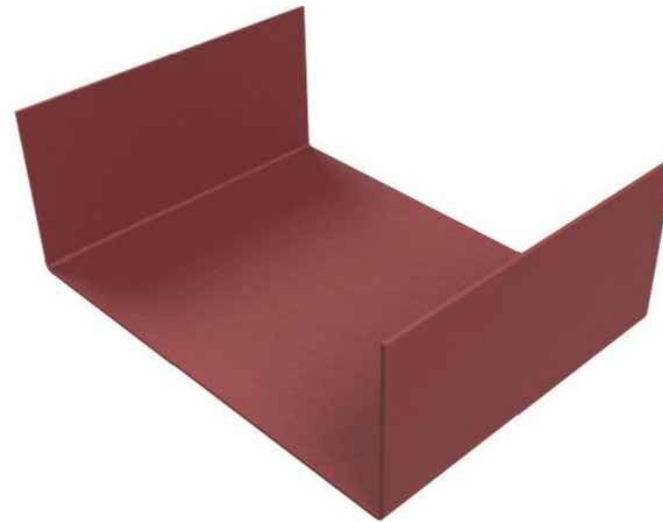
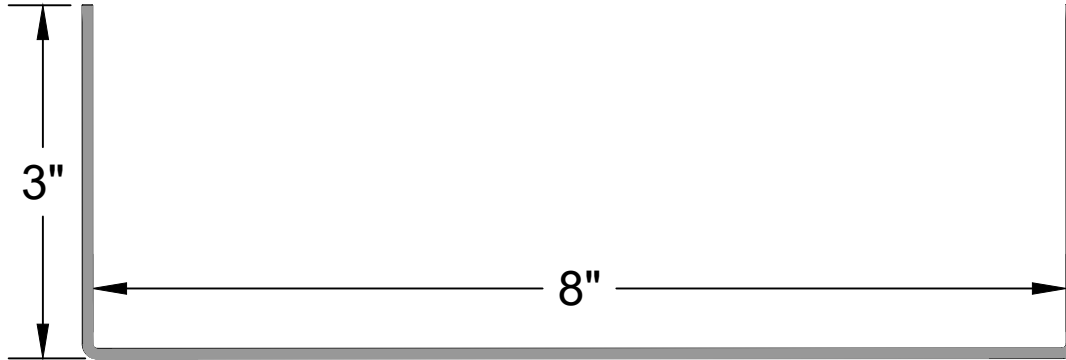
| | |
|--------------------|-------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

600T300

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

8" Receiver Channel



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 800T300
Depth: 8.187"
Flange: 3"
Lip: 0"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

S = Stud (C Shaped)
L = Lintel (L Shaped)
T = Track (U Shaped)
W = I-Beam (I Shaped)
E = Eave Strut (C Shaped)
D = Double Eave Strut
A = Angle (2 Legs, 1 Angle)
F = Hat (Top Hat Shaped)
B = Box (Rectangle Shaped)
Fl = Strap/Flat (Flat Shaped)
Z = Zee (Z Shaped)

Mill - Gauge Bend Radius

25 mill = 24 gauge .0764
30 mill = 22 gauge .0796
33 mill = 20 gauge .0764
43 mill = 18 gauge .0712
54 mill = 16 gauge .0849
68 mill = 14 gauge .1069
97 mill = 12 gauge .1325

* All members shown in 14 gauge to show detail

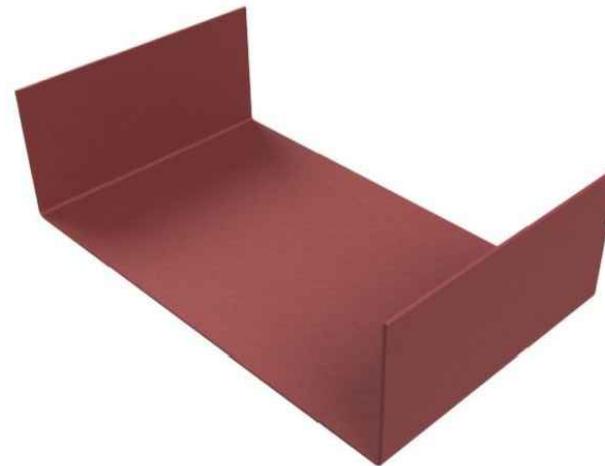
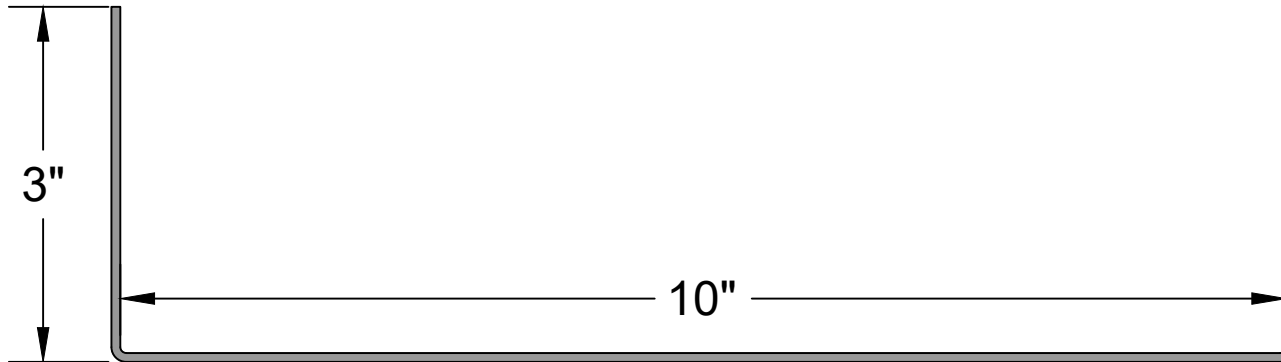
| Member Name | Gross Properties (x) | | | | | Gross Properties (y) | | | Torsional Properties | | | | | | | |
|-------------|----------------------|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|---------|-------|-------|-------|-------|
| | G | ksi | Area | Weight | Width | Ix | Sx | rx | Iy | Sy | ry | J | Cw | Xo | Ro | β |
| 800T200-54 | 16 | 50 | 0.671 | 2.284 | 11.77 | 3.442 | 0.860 | 2.265 | 0.131 | 0.078 | 0.443 | 0.00073 | 2.435 | 0.957 | 2.498 | 0.853 |
| 800T200-68 | 14 | 50 | 0.843 | 2.870 | 11.71 | 4.280 | 1.070 | 2.253 | 0.159 | 0.094 | 0.435 | 0.00146 | 3.000 | 0.946 | 2.482 | 0.855 |
| 800T200-97 | 12 | 50 | 1.149 | 3.910 | 11.60 | 5.717 | 1.429 | 2.231 | 0.203 | 0.119 | 0.420 | 0.00375 | 3.941 | 0.926 | 2.452 | 0.857 |

800T300

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

10" Receiver Channel



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 1000T300
Depth: 10"
Flange: 3"
Lip: 0"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- Fl** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

Mill - Gauge Bend Radius

25 mill = 24 gauge .0764
30 mill = 22 gauge .0796
33 mill = 20 gauge .0764
43 mill = 18 gauge .0712
54 mill = 16 gauge .0849
68 mill = 14 gauge .1069
97 mill = 12 gauge .1325

* All members shown in 14 gauge to show detail

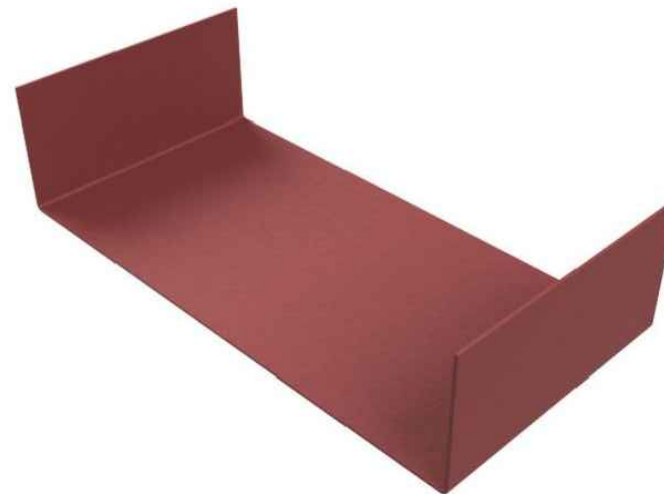
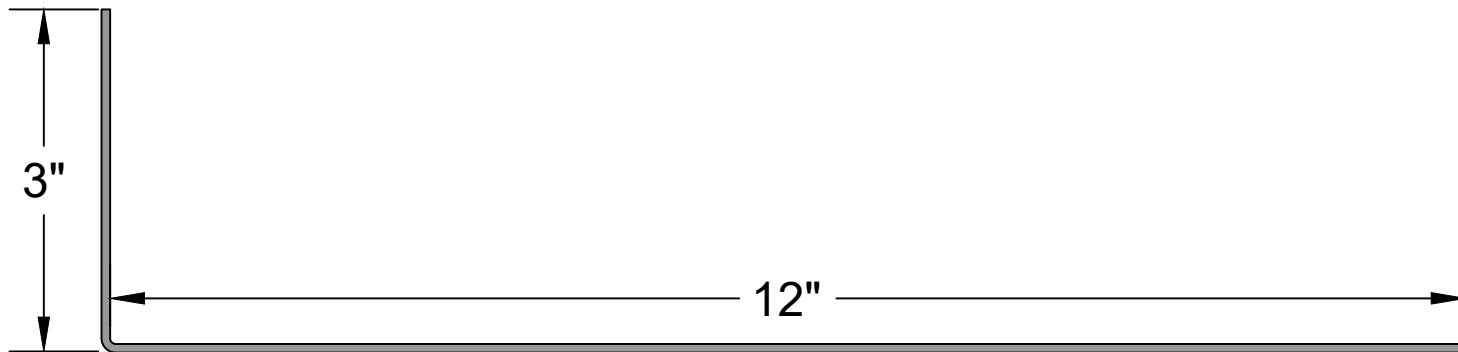
| Member Name | Gross Properties (x) | | | | | Gross Properties (y) | | | Torsional Properties | | | | | | | |
|-------------|----------------------|-----|-------|--------|-------|----------------------|----------------|----------------|----------------------|----------------|----------------|---------|----------------|----------------|----------------|-------|
| | G | ksi | Area | Weight | Width | I _x | S _x | r _x | I _y | S _y | r _y | J | C _w | X _o | R _o | β |
| 1000T300-54 | 16 | 50 | 0.785 | 2.672 | 13.77 | 5.393 | 1.079 | 2.621 | 0.141 | 0.081 | 0.424 | 0.00085 | 4.101 | 0.957 | 2.822 | 0.885 |
| 1000T300-68 | 14 | 50 | 0.987 | 3.360 | 13.71 | 6.712 | 1.342 | 2.607 | 0.171 | 0.098 | 0.416 | 0.00171 | 5.055 | 0.946 | 2.805 | 0.886 |
| 1000T300-97 | 12 | 50 | 1.347 | 4.583 | 13.60 | 8.980 | 1.796 | 2.582 | 0.218 | 0.124 | 0.402 | 0.00440 | 6.651 | 0.926 | 2.772 | 0.889 |

1000T300

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

12" Receiver Channel



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 1200T300
Depth: 12"
Flange: 3"
Lip: 0"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- Fl = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)

Mill - Gauge Bend Radius

| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

* All members shown in 14 gauge to show detail

| Member Name | Gross Properties (x) | | | | | Gross Properties (y) | | | Torsional Properties | | | | | | | |
|-------------|----------------------|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|---------|-------|-------|-------|-------|
| | G | ksi | Area | Weight | Width | Ix | Sx | rx | Iy | Sy | ry | J | Cw | Xo | Ro | β |
| 1200T300-54 | 16 | 50 | 1.013 | 3.447 | 17.77 | 11.85 | 1.974 | 3.420 | 0.466 | 0.185 | 0.679 | 0.00110 | 19.09 | 1.457 | 3.779 | 0.851 |
| 1200T300-68 | 14 | 50 | 1.275 | 4.340 | 17.71 | 14.81 | 2.468 | 3.408 | 0.574 | 0.227 | 0.671 | 0.00220 | 23.71 | 1.446 | 3.762 | 0.852 |
| 1200T300-97 | 12 | 50 | 1.743 | 5.931 | 17.60 | 19.99 | 3.331 | 3.386 | 0.752 | 0.296 | 0.657 | 0.00569 | 31.64 | 1.426 | 3.733 | 0.854 |

1200T300

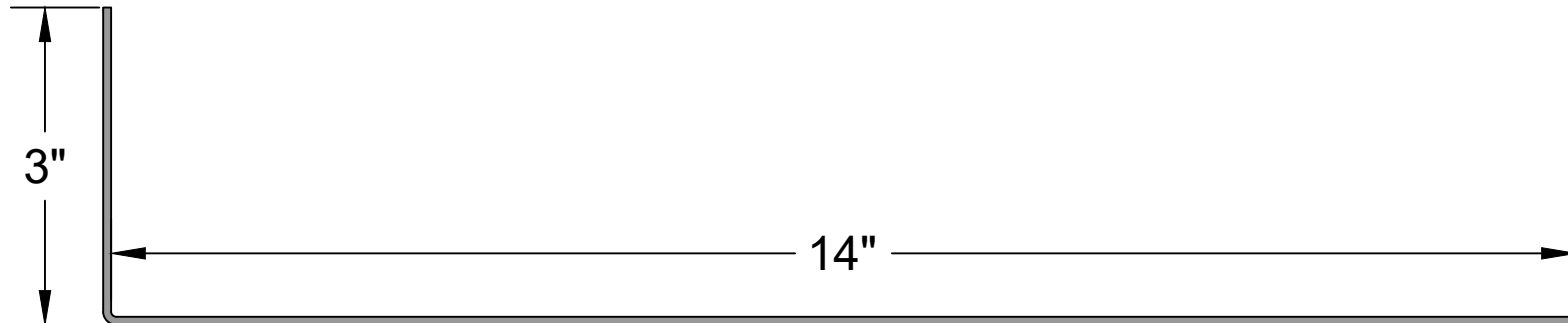
*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

14" Receiver Channel



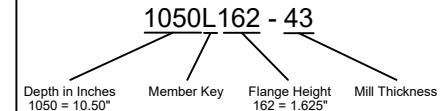
6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147



Member specs and limits

Name: 1400T300
Depth: 14"
Flange: 3"
Lip: 0"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown



Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- Fl = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)



* All members shown in 14 gauge to show detail

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|----------------------|-------|-------|-------|-------|
| | | | | | | lx | Sx | rx | ly | Sy | ry | J | Cw | Xo | Ro | β |
| 1400T300-54 | 16 | 50 | 1.127 | 3.835 | 19.77 | 16.15 | 2.307 | 3.785 | 0.490 | 0.191 | 0.659 | 0.00122 | 27.35 | 1.457 | 4.109 | 0.874 |
| 1400T300-68 | 14 | 50 | 1.419 | 4.830 | 19.71 | 20.19 | 2.885 | 3.772 | 0.603 | 0.234 | 0.652 | 0.00245 | 33.99 | 1.446 | 4.092 | 0.875 |
| 1400T300-97 | 12 | 50 | 1.941 | 6.605 | 19.60 | 27.27 | 3.896 | 3.748 | 0.790 | 0.306 | 0.638 | 0.00634 | 45.38 | 1.426 | 4.061 | 0.877 |

| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

1400T300

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

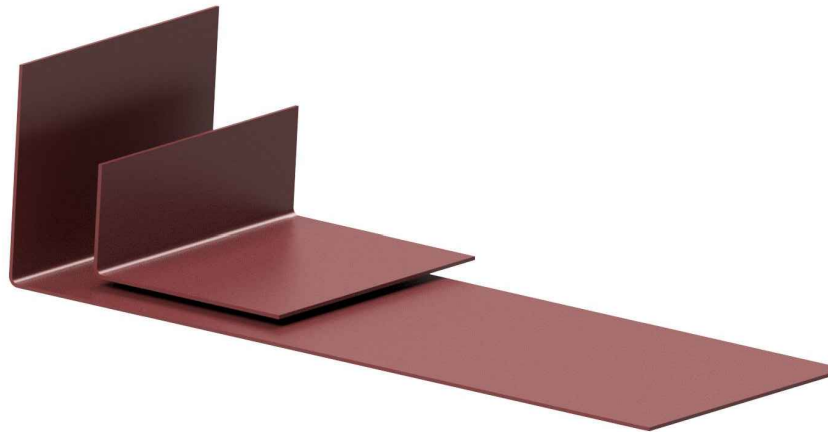
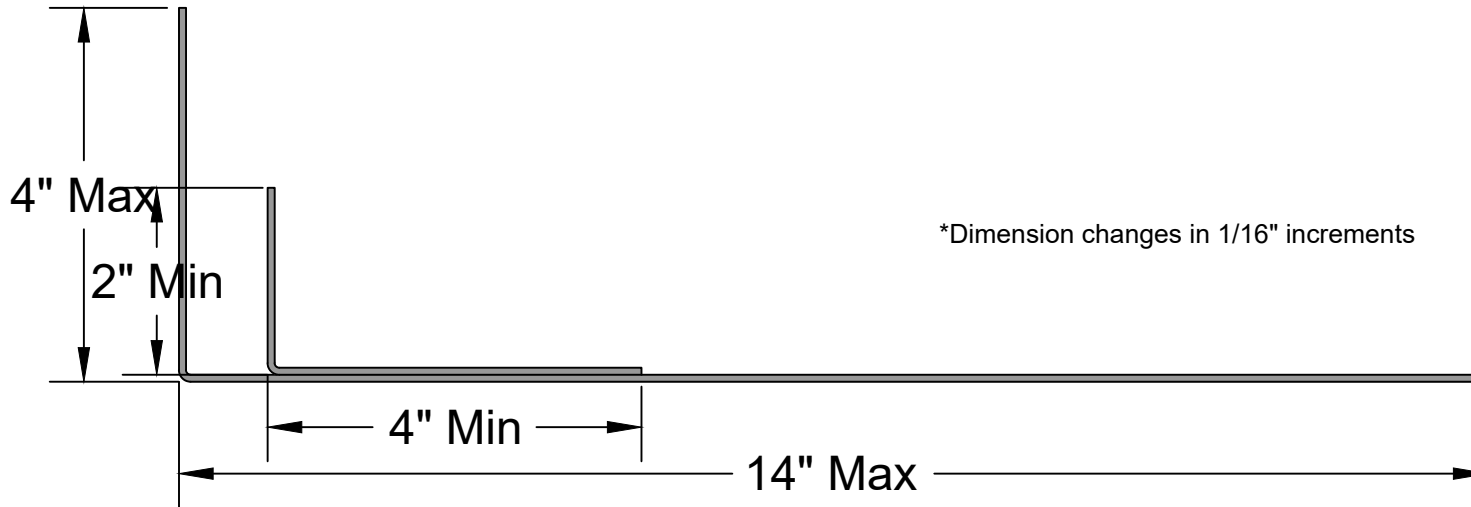


Angle Brochure

Red Iron

Steel Members Documentation

Custom Angle



* All members shown in 14 gauge to show detail



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|----------------------|
| Name: | DepthAFlange |
| Depth: | 4" - 14" |
| Flange: | 2" - 4" |
| Lip: | NA |
| Lengths: | 6' - 60' |
| Gauges: | 24,22,20,18,16,14,12 |

Name Breakdown

1050L162 - 43

| | | | |
|----------------------------------|-----------------|-------------------------------|----------------------|
| Depth in Inches 1050 = 10.50" | Member Key L | Flange Height 162 = 1.625" | Mill Thickness 43 |
|----------------------------------|-----------------|-------------------------------|----------------------|

Member Key

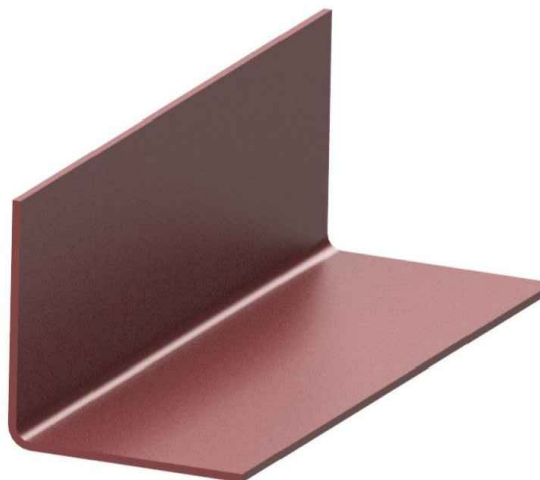
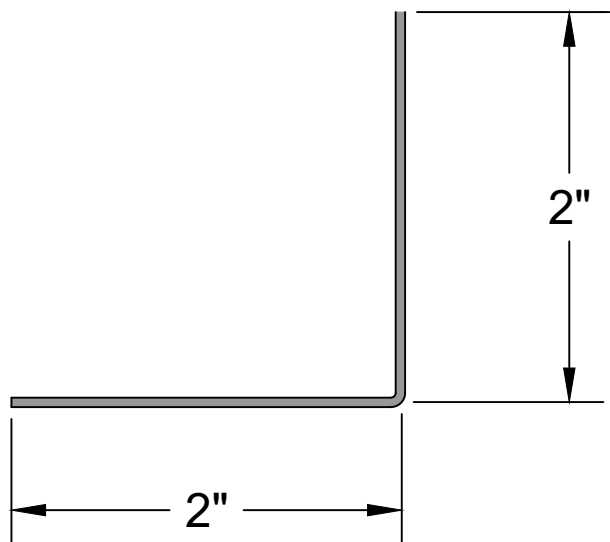
- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- Fl** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

CUSTOM_ANGLE

Steel Members Documentation

2" X 2" Angle - Red Iron



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|----------------------|
| Name: | 200A200 |
| Depth: | 2" |
| Flange: | 2" |
| Lip: | 0" |
| Lengths: | 6' - 60' |
| Gauges: | 24,22,20,18,16,14,12 |

Name Breakdown

1050L162 - 43

| | | | |
|----------------------------------|-----------------|-------------------------------|----------------------|
| Depth in Inches 1050 = 10.50" | Member Key L | Flange Height 162 = 1.625" | Mill Thickness 43 |
|----------------------------------|-----------------|-------------------------------|----------------------|

Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- Fl** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

Mill - Gauge Bend Radius

| | |
|--------------------|-------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

* All members shown in 14 gauge to show detail

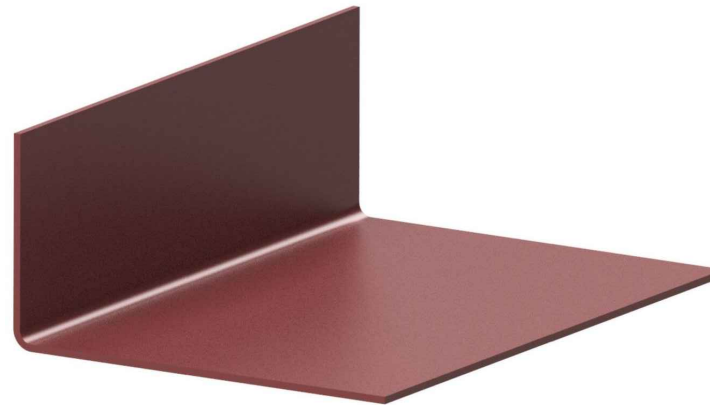
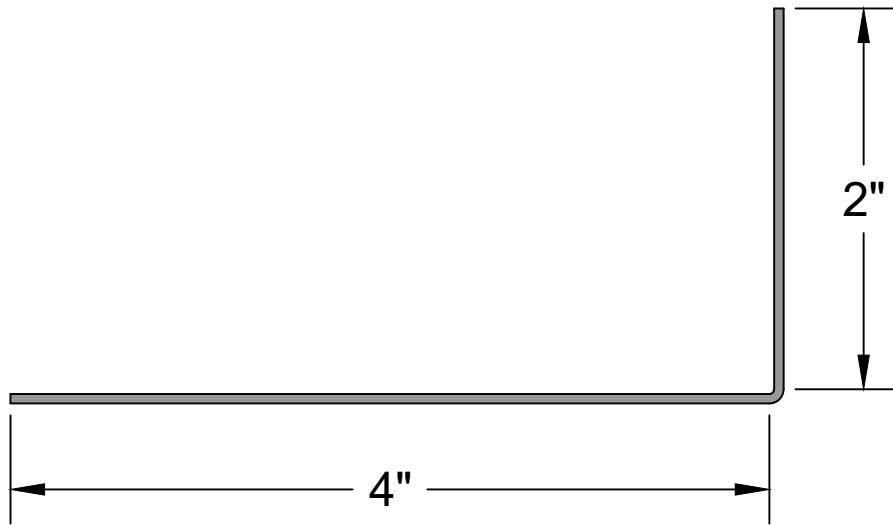
| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|
| | | | | | | lx | Sx | rx | ly | Sy | ry |
| 200A200-54 | 16 | 50 | 0.225 | 0.763 | 4 | 0.066 | 0.541 | 0.045 | 0.066 | 0.541 | 0.045 |
| 200A200-68 | 14 | 50 | 0.283 | 0.960 | 4 | 0.083 | 0.541 | 0.057 | 0.083 | 0.541 | 0.057 |
| 200A200-97 | 12 | 50 | 0.386 | 1.312 | 4 | 0.113 | 0.541 | 0.078 | 0.113 | 0.541 | 0.078 |

200A200

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

4" X 2" Angle - Red Iron

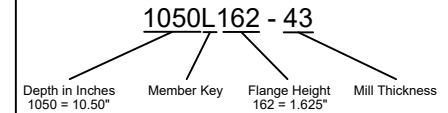


6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|----------------------|
| Name: | 400A200 |
| Depth: | 4" |
| Flange: | 2" |
| Lip: | 0" |
| Lengths: | 6' - 60' |
| Gauges: | 24,22,20,18,16,14,12 |

Name Breakdown



Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- Fl** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

Mill - Gauge Bend Radius

| | |
|--------------------|-------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

* All members shown in 14 gauge to show detail

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|
| | | | | | | Ix | Sx | rx | Iy | Sy | ry |
| 400A200-54 | 16 | 50 | 0.339 | 1.150 | 6 | 0.316 | 0.966 | 0.218 | 0.439 | 1.139 | 0.302 |
| 400A200-68 | 14 | 50 | 0.427 | 1.449 | 6 | 0.399 | 0.967 | 0.275 | 0.554 | 1.139 | 0.381 |
| 400A200-97 | 12 | 50 | 0.584 | 1.984 | 6 | 0.549 | 0.969 | 0.378 | 0.758 | 1.139 | 0.522 |

400A200

*All calculations should be verified by licensed Engineer

** Full Sectional properties available upon request

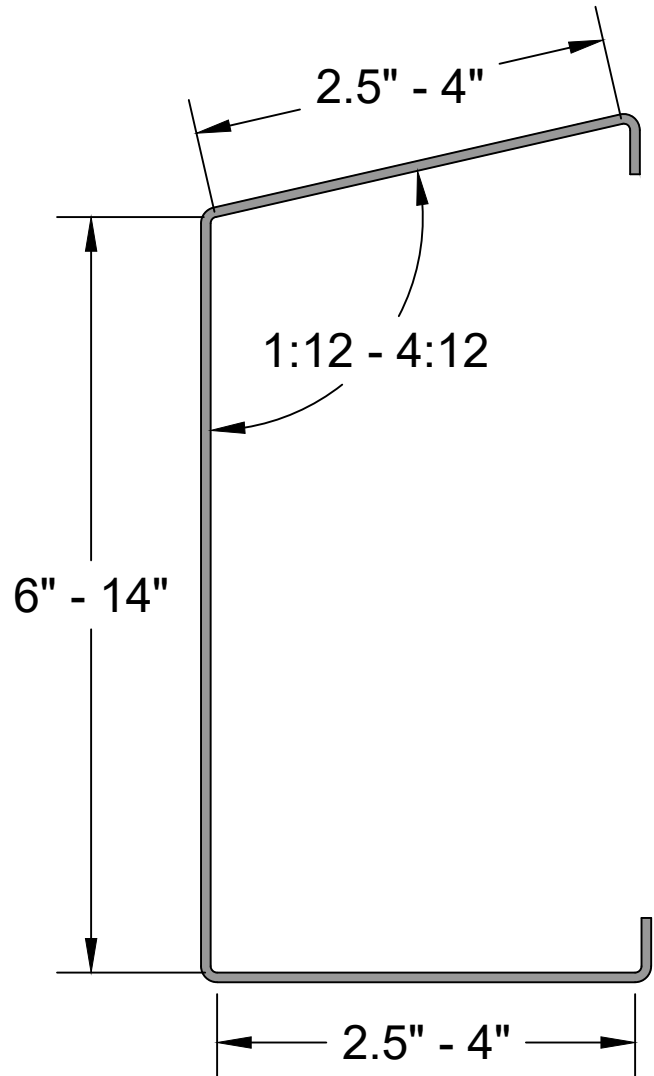


Eave Strut Brochure

Red Iron

Steel Members Documentation

Custom Eave Strut



* Angle of Eave Strut needs to be specified.
Example has a $\frac{3}{12}$ pitch.



* All members shown in 14 gauge to show detail

CUSTOM_EAVE_STRUT

6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|--------------|
| Name: | DepthEFlange |
| Depth: | 6" - 14" |
| Flange: | 2.5" - 4" |
| Lip: | .5" |
| Lengths: | 6' - 60' |
| Gauges: | 16,14,12 |

Name Breakdown

1050L162 - 43

| | | | |
|----------------------------------|-----------------|-------------------------------|----------------------|
| Depth in Inches 1050 = 10.50" | Member Key L | Flange Height 162 = 1.625" | Mill Thickness 43 |
|----------------------------------|-----------------|-------------------------------|----------------------|

Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- FI = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)

| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

Steel Members Documentation

6" x 3.5" Eave Strut Single Slope



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|------------|
| Name: | 600E350 |
| Depth: | 6" |
| Flange: | 3.5" |
| Lip: | .5" |
| Lengths: | 6' - 60' |
| Gauges: | 16, 14, 12 |

Name Breakdown

1050L162 - 43

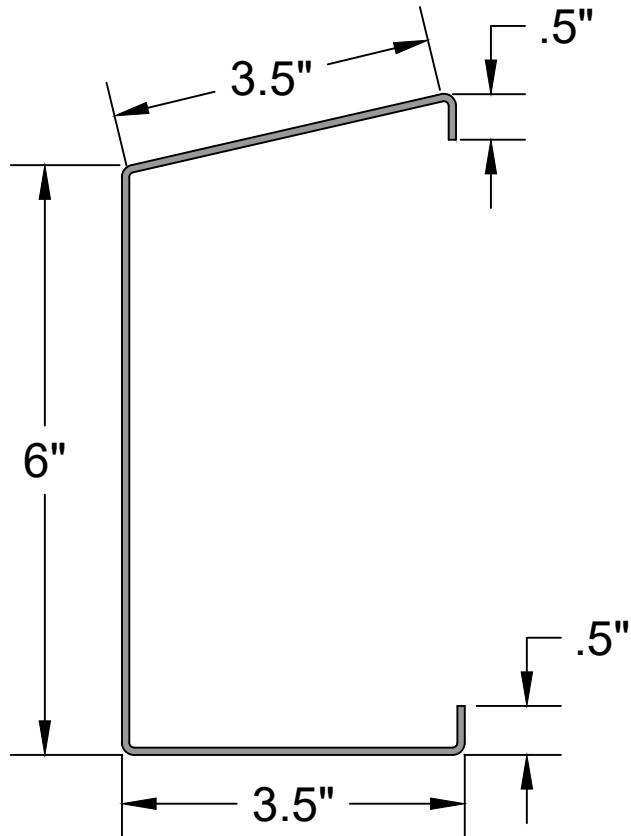
| | | | |
|-----------------|------------|---------------|----------------|
| Depth in Inches | Member Key | Flange Height | Mill Thickness |
| 1050 = 10.50" | L | 162 = 1.625" | .43 |

Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- Fl** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

| Mill - Gauge | Bend Radius |
|--------------|-------------|
|--------------|-------------|

| | |
|--------------------|-------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |



* Angle of Eave Strut needs to be specified.
Example has a $\frac{3}{12}$ pitch.



600E350

Steel Members Documentation

10" x 3.5" Eave Strut Single Slope



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|------------|
| Name: | 1000E350 |
| Depth: | 10" |
| Flange: | 3.5" |
| Lip: | .5" |
| Lengths: | 6' - 60' |
| Gauges: | 16, 14, 12 |

Name Breakdown

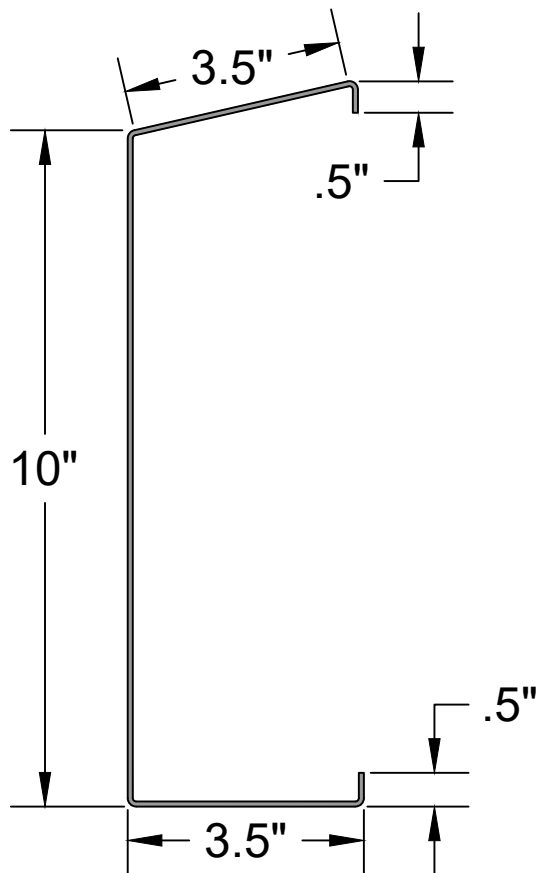
1050L162 - 43

| | | | |
|----------------------------------|-----------------|-------------------------------|----------------------|
| Depth in Inches 1050 = 10.50" | Member Key L | Flange Height 162 = 1.625" | Mill Thickness 43 |
|----------------------------------|-----------------|-------------------------------|----------------------|

Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- Fl** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |



*Angle of Eave Strut needs to be specified.
Example has a $\frac{3}{12}$ pitch.



1000E350

Steel Members Documentation

12" x 3.5" Eave Strut Single Slope



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|------------|
| Name: | 1200E350 |
| Depth: | 12" |
| Flange: | 3.5" |
| Lip: | .5" |
| Lengths: | 6' - 60' |
| Gauges: | 16, 14, 12 |

Name Breakdown

1050L162 - 43

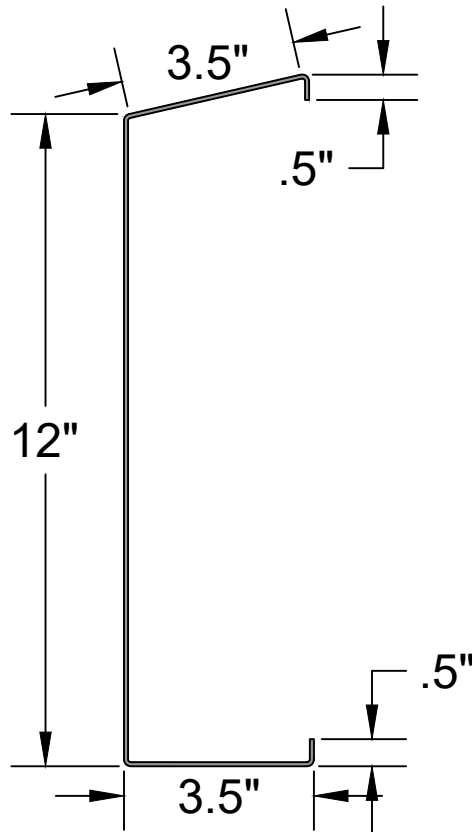
| | | | |
|----------------------------------|-----------------|-------------------------------|----------------------|
| Depth in Inches 1050 = 10.50" | Member Key L | Flange Height 162 = 1.625" | Mill Thickness 43 |
|----------------------------------|-----------------|-------------------------------|----------------------|

Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- FI** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

Mill - Gauge Bend Radius

| | |
|--------------------|-------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |



*Angle of Eave Strut needs to be specified.
Example has a $\frac{3}{12}$ pitch.



1200E350

Steel Members Documentation

6" x 3.5" Eave Strut Double Slope



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|------------|
| Name: | 600DE350 |
| Depth: | 6" |
| Flange: | 3.5" |
| Lip: | .5" |
| Lengths: | 6' - 60' |
| Gauges: | 16, 14, 12 |

Name Breakdown

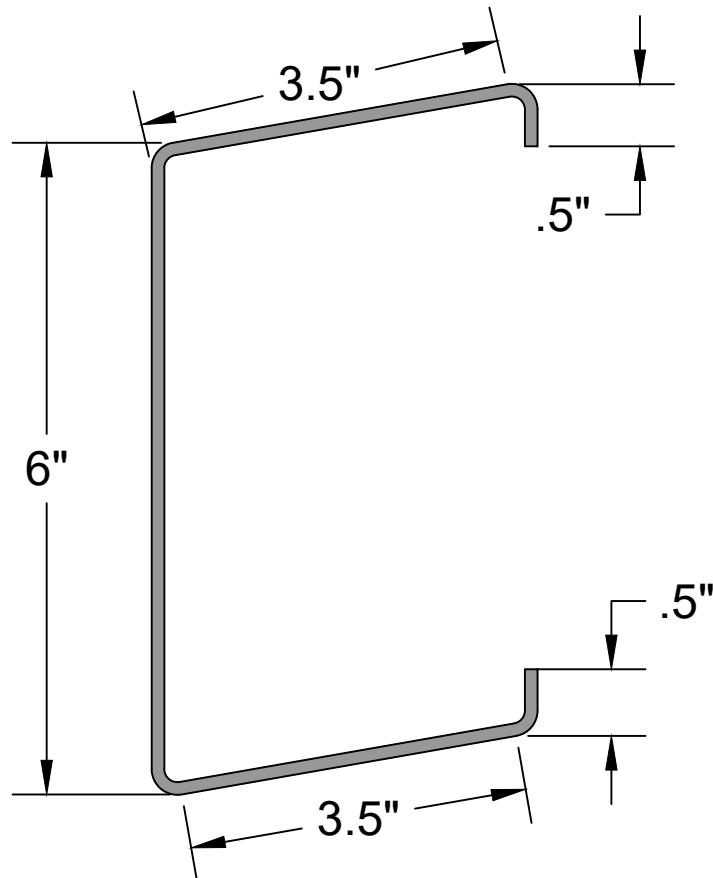
| | | | |
|----------------------------------|-----------------|-------------------------------|----------------------|
| 1050L162 - 43 | | | |
| Depth in Inches 1050 = 10.50" | Member Key L | Flange Height 162 = 1.625" | Mill Thickness 43 |

Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- Fl = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)

Mill - Gauge Bend Radius

| | |
|--------------------|-------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |



*Angle of Eave Strut needs to be specified.
Example has a $\frac{3}{12}$ pitch.



600DE350

Steel Members Documentation

8" x 3.5" Eave Strut Double Slope



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|------------|
| Name: | 800DE350 |
| Depth: | 8" |
| Flange: | 3.5" |
| Lip: | .5" |
| Lengths: | 6' - 60' |
| Gauges: | 16, 14, 12 |

Name Breakdown

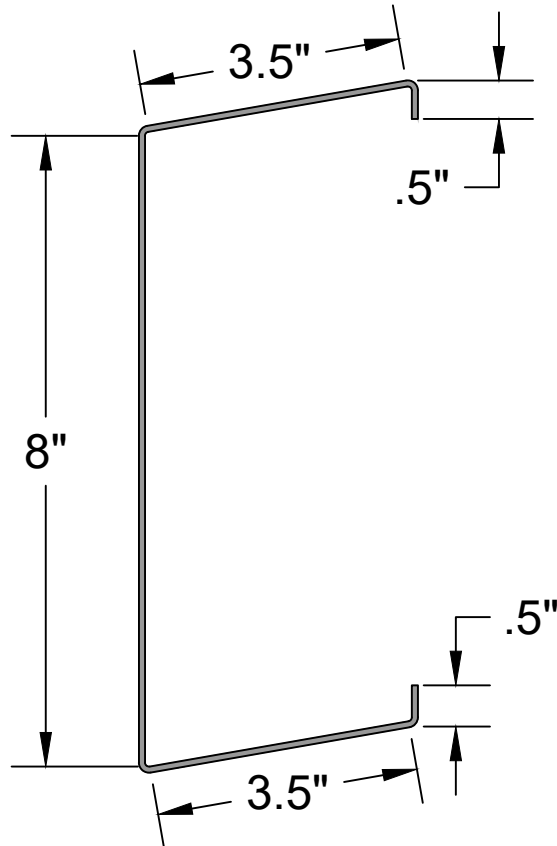
| | | | |
|----------------------------------|------------|-------------------------------|----------------|
| 1050L162 - 43 | | | |
| Depth in Inches 1050 = 10.50" | Member Key | Flange Height 162 = 1.625" | Mill Thickness |

Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- FI = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)

Mill - Gauge Bend Radius

| | |
|--------------------|-------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |



*Angle of Eave Strut needs to be specified.
Example has a $\frac{3}{12}$ pitch.



800DE350

Steel Members Documentation

10" x 3.5" Eave Strut Double Slope



6195 Hwy 52 East
 Murrayville GA, 30564
www.BMMetals.com
 Office: (706) 864-6068
 Fax: (706) 864-2147

Member specs and limits

| | |
|----------|------------|
| Name: | 1000DE350 |
| Depth: | 10" |
| Flange: | 3.5" |
| Lip: | .5" |
| Lengths: | 6' - 60' |
| Gauges: | 16, 14, 12 |

Name Breakdown

1050L162 - 43

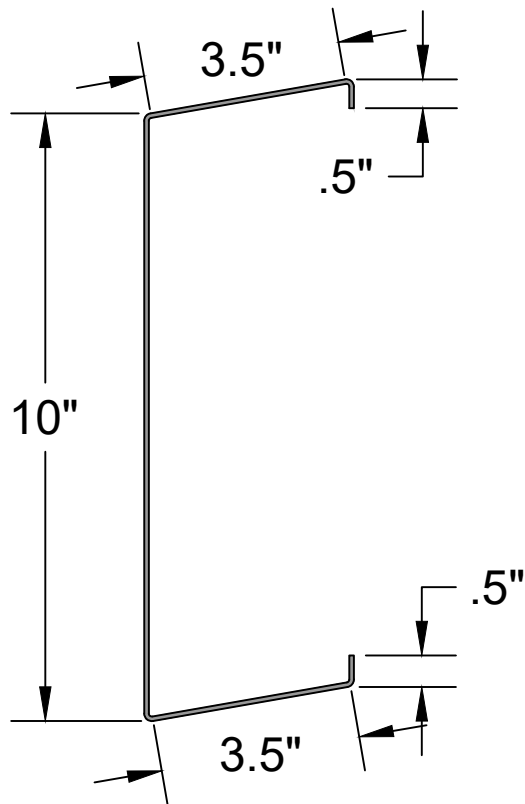
| | | | |
|----------------------------------|------------|-------------------------------|----------------|
| Depth in Inches 1050 = 10.50" | Member Key | Flange Height 162 = 1.625" | Mill Thickness |
|----------------------------------|------------|-------------------------------|----------------|

Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- Fl** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

| Mill - Gauge | Bend Radius |
|--------------|-------------|
|--------------|-------------|

| | |
|--------------------|-------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |



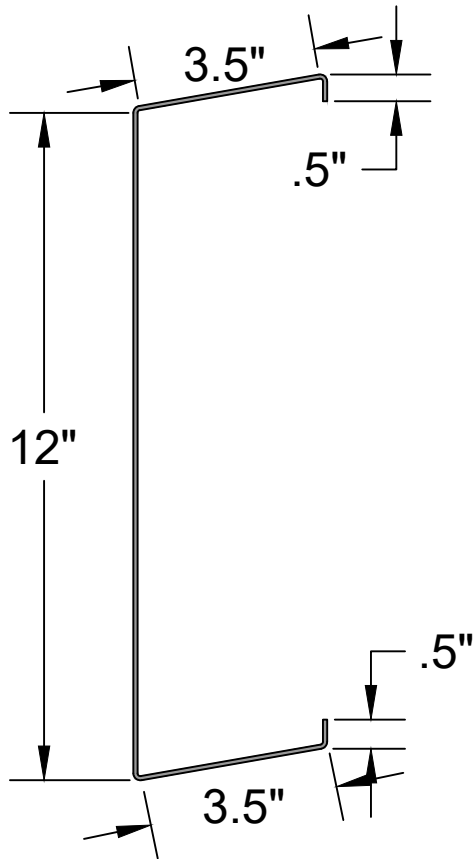
*Angle of Eave Strut needs to be specified.
 Example has a $\frac{3}{12}$ pitch.



1000DE350

Steel Members Documentation

12" x 3.5" Eave Strut Double Slope



*Angle of Eave Strut needs to be specified.
Example has a $\frac{3}{12}$ pitch.



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|------------|
| Name: | 1200DE350 |
| Depth: | 12" |
| Flange: | 3.5" |
| Lip: | .5" |
| Lengths: | 6' - 60' |
| Gauges: | 16, 14, 12 |

Name Breakdown

| | | | |
|----------------------------------|------------|-------------------------------|----------------|
| 1050L162 - 43 | | | |
| Depth in Inches 1050 = 10.50" | Member Key | Flange Height 162 = 1.625" | Mill Thickness |

Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- Fl** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

1200DE350

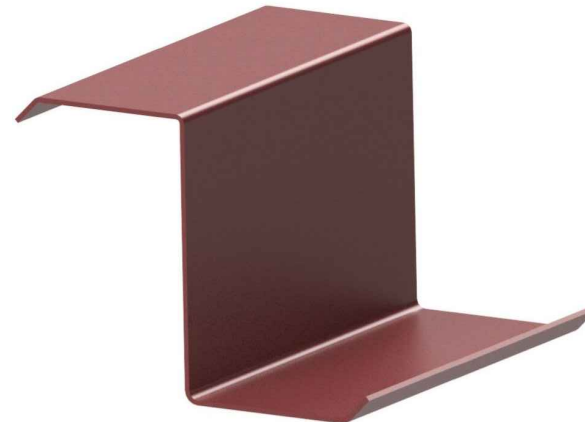
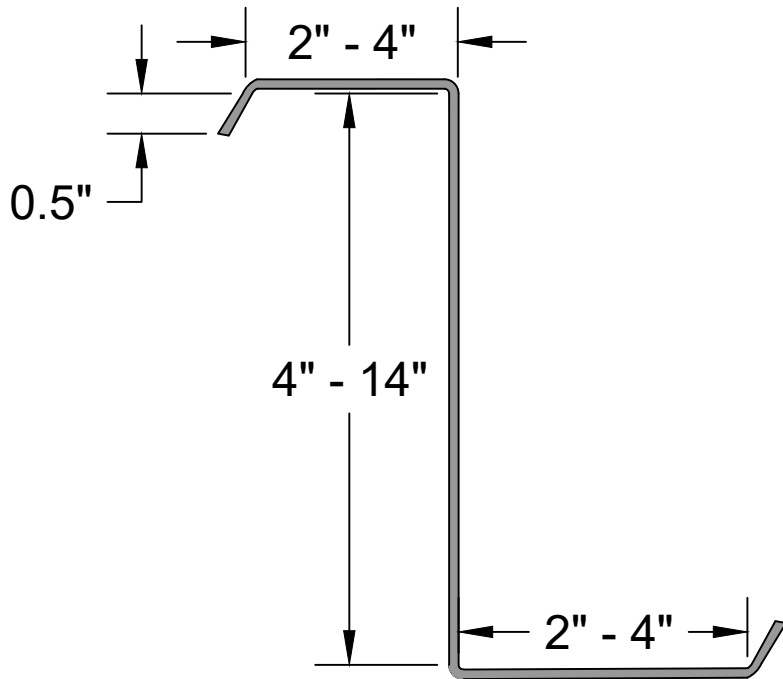


Z Purlin Brochure

Red Iron

Steel Members Documentation

Custom Z's



* All members shown in 14 gauge to show detail

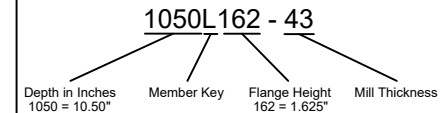


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 Murrayville GA, 30564
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 Office: (706) 864-6068
 Fax: (706) 864-2147

Member specs and limits

| | |
|----------|--------------|
| Name: | DepthZFlange |
| Depth: | 4" - 14" |
| Flange: | 2" - 4" |
| Lip: | .5" |
| Lengths: | 6' - 60' |
| Gauges: | 16, 14, 12 |

Name Breakdown



Member Key

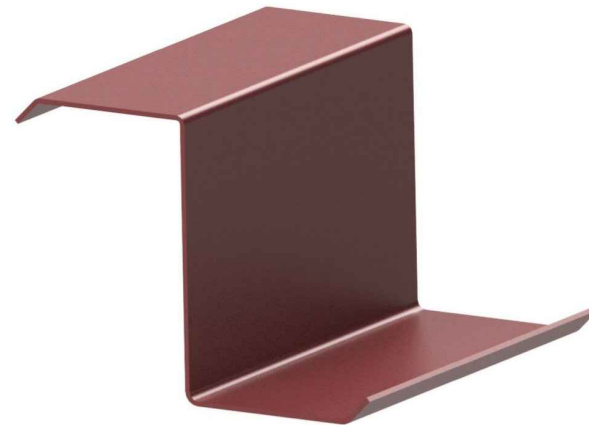
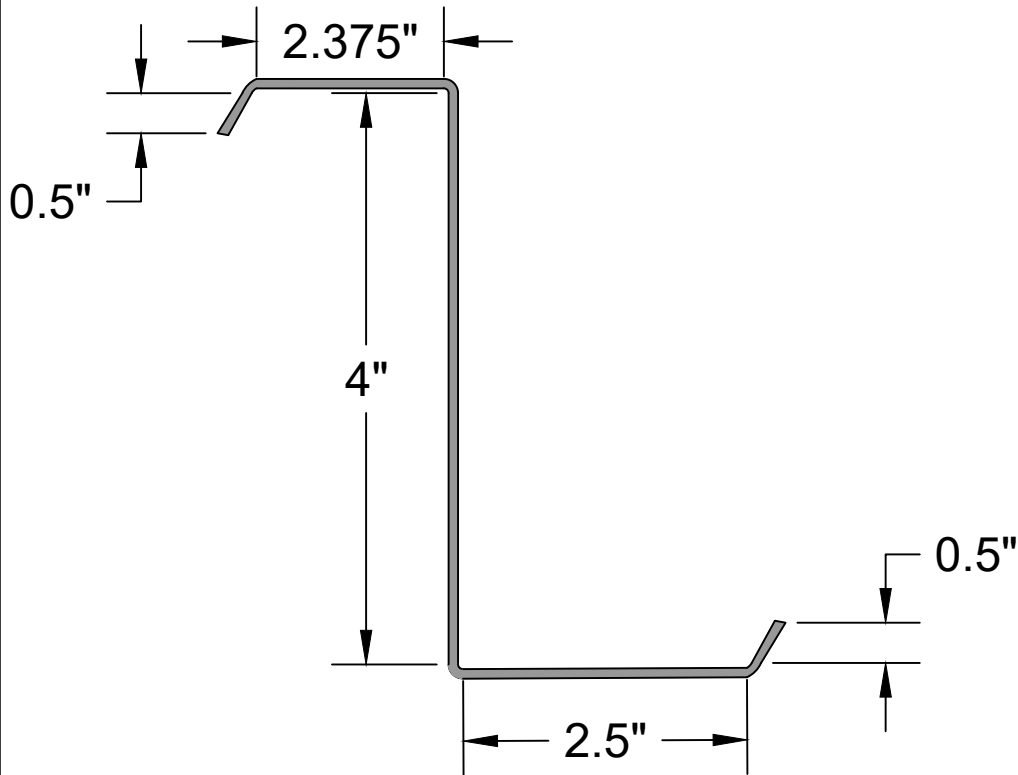
- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- Fl** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

CUSTOM_Z_PURLIN

Steel Members Documentation

4" x 2 1/2" Zee

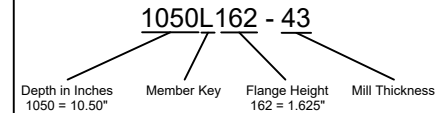


6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 400Z250
Depth: 4"
Flange: 2.5"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown



Member Key

- S = Stud (C Shaped)
- L = Lintel (L Shaped)
- T = Track (U Shaped)
- W = I-Beam (I Shaped)
- E = Eave Strut (C Shaped)
- D = Double Eave Strut
- A = Angle (2 Legs, 1 Angle)
- F = Hat (Top Hat Shaped)
- B = Box (Rectangle Shaped)
- Fl = Strap/Flat (Flat Shaped)
- Z = Zee (Z Shaped)

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|----------------------|-------|-------|
| | | | | | | lx | Sx | rx | ly | Sy | ry | J | Cw | Ro |
| 400Z250-54 | 16 | 50 | 0.598 | 2.035 | 5.06 | 1.699 | 0.850 | 1.686 | 1.028 | 0.406 | 1.311 | 0.00071 | 4.114 | 2.136 |
| 400Z250-68 | 14 | 50 | 0.747 | 2.542 | 5.07 | 2.123 | 1.061 | 1.686 | 1.295 | 0.510 | 1.317 | 0.00139 | 5.179 | 2.139 |
| 400Z250-97 | 12 | 50 | 1.046 | 3.559 | 5.10 | 2.973 | 1.486 | 1.686 | 1.842 | 0.720 | 1.327 | 0.00382 | 7.366 | 2.145 |

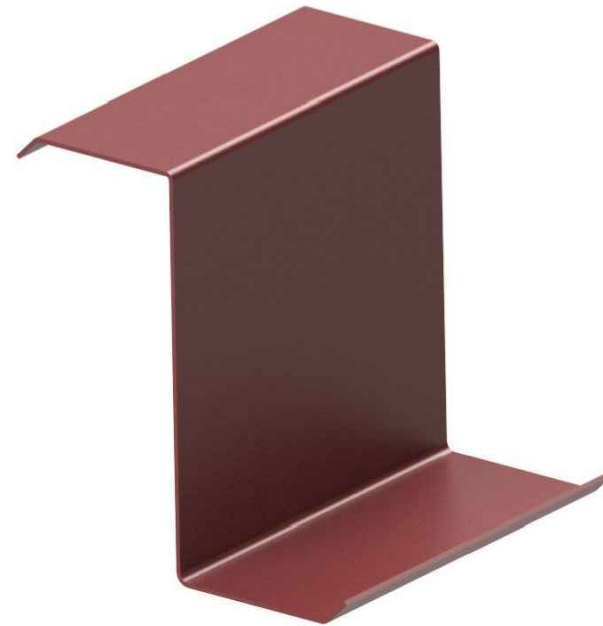
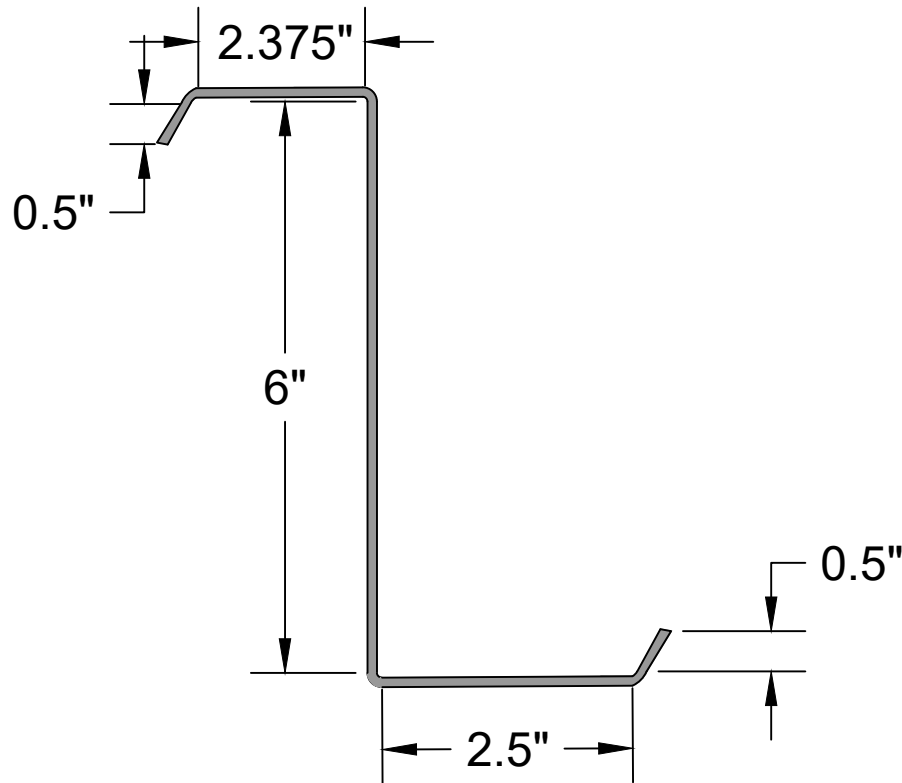
| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

400Z250

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

6" x 2 1/2" Zee

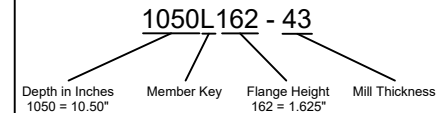


6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

| | |
|----------|------------|
| Name: | 600Z250 |
| Depth: | 6" |
| Flange: | 2.5" |
| Lip: | .5" |
| Lengths: | 6' - 60' |
| Gauges: | 16, 14, 12 |

Name Breakdown



Member Key

- S** = Stud (C Shaped)
- L** = Lintel (L Shaped)
- T** = Track (U Shaped)
- W** = I-Beam (I Shaped)
- E** = Eave Strut (C Shaped)
- D** = Double Eave Strut
- A** = Angle (2 Legs, 1 Angle)
- F** = Hat (Top Hat Shaped)
- B** = Box (Rectangle Shaped)
- FI** = Strap/Flat (Flat Shaped)
- Z** = Zee (Z Shaped)

| Member Name | Gross Properties (x) | | | | | Gross Properties (y) | | | Torsional Properties | | | | | |
|-------------|----------------------|-----|-------|--------|-------|----------------------|----------------|----------------|----------------------|----------------|----------------|---------|----------------|----------------|
| | G | ksi | Area | Weight | Width | I _x | S _x | r _x | I _y | S _y | r _y | J | C _w | R _o |
| 600Z250-54 | 16 | 50 | 0.718 | 2.442 | 5.060 | 4.221 | 1.407 | 2.425 | 1.029 | 0.406 | 1.197 | 0.00086 | 9.256 | 2.705 |
| 600Z250-68 | 14 | 50 | 0.896 | 3.050 | 5.075 | 5.273 | 1.758 | 2.425 | 1.295 | 0.510 | 1.202 | 0.00167 | 11.65 | 2.707 |
| 600Z250-97 | 12 | 50 | 1.255 | 4.271 | 5.105 | 7.384 | 2.461 | 2.425 | 1.842 | 0.720 | 1.211 | 0.00458 | 16.58 | 2.711 |

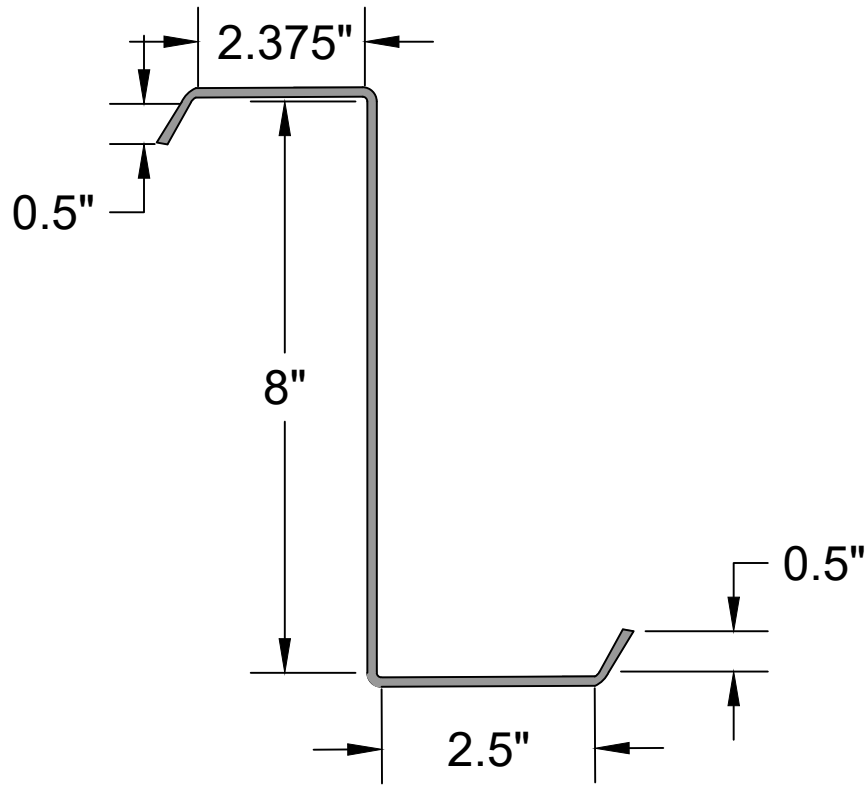
| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

600Z250

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

8" x 2 1/2" Zee



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 800Z250
Depth: 8"
Flange: 2.5"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

S = Stud (C Shaped)
L = Lintel (L Shaped)
T = Track (U Shaped)
W = I-Beam (I Shaped)
E = Eave Strut (C Shaped)
D = Double Eave Strut
A = Angle (2 Legs, 1 Angle)
F = Hat (Top Hat Shaped)
B = Box (Rectangle Shaped)
Fl = Strap/Flat (Flat Shaped)
Z = Zee (Z Shaped)

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|----------------------|-------|-------|
| | | | | | | lx | Sx | rx | ly | Sy | ry | J | Cw | Ro |
| 800Z250-54 | 16 | 50 | 0.837 | 2.849 | 5.060 | 8.178 | 2.044 | 3.125 | 1.029 | 0.406 | 1.108 | 0.00100 | 16.46 | 3.316 |
| 800Z250-68 | 14 | 50 | 1.046 | 3.559 | 5.075 | 10.22 | 2.554 | 3.125 | 1.295 | 0.510 | 1.113 | 0.00195 | 20.72 | 3.318 |
| 800Z250-97 | 12 | 50 | 1.464 | 4.983 | 5.105 | 14.30 | 3.576 | 3.125 | 1.842 | 0.721 | 1.122 | 0.00534 | 29.47 | 3.321 |

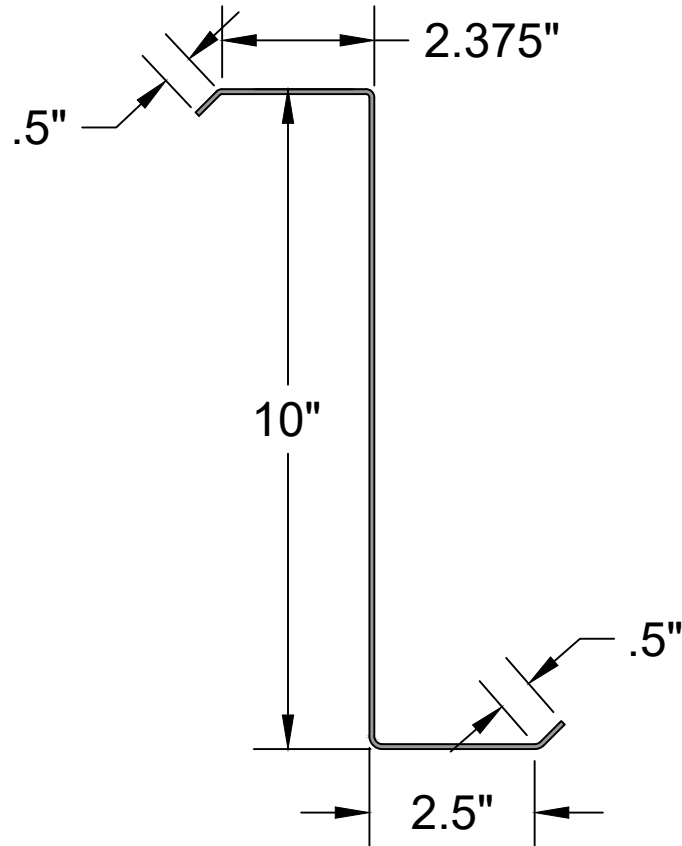
| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

800Z250

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

10" x 2 1/2" Zee



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 1000Z250
Depth: 10"
Flange: 2.5"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches
1050 = 10.50"
Member Key
162 = 1.625"
Flange Height
43 = 1.625"
Mill Thickness

Member Key

S = Stud (C Shaped)
L = Lintel (L Shaped)
T = Track (U Shaped)
W = I-Beam (I Shaped)
E = Eave Strut (C Shaped)
D = Double Eave Strut
A = Angle (2 Legs, 1 Angle)
F = Hat (Top Hat Shaped)
B = Box (Rectangle Shaped)
FI = Strap/Flat (Flat Shaped)
Z = Zee (Z Shaped)

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|----------------------|-------|-------|
| | | | | | | Ix | Sx | rx | Iy | Sy | ry | J | Cw | Ro |
| 1000Z250-54 | 16 | 50 | 0.957 | 3.256 | 5.060 | 13.81 | 2.762 | 3.799 | 1.029 | 0.406 | 1.037 | 0.00114 | 25.71 | 3.938 |
| 1000Z250-68 | 14 | 50 | 1.195 | 4.07 | 5.075 | 17.25 | 3.450 | 3.799 | 1.295 | 0.510 | 1.041 | 0.00222 | 32.37 | 3.939 |
| 1000Z250-97 | 12 | 50 | 1.674 | 5.695 | 5.105 | 24.15 | 4.831 | 3.799 | 1.842 | 0.721 | 1.049 | 0.00610 | 46.05 | 3.941 |

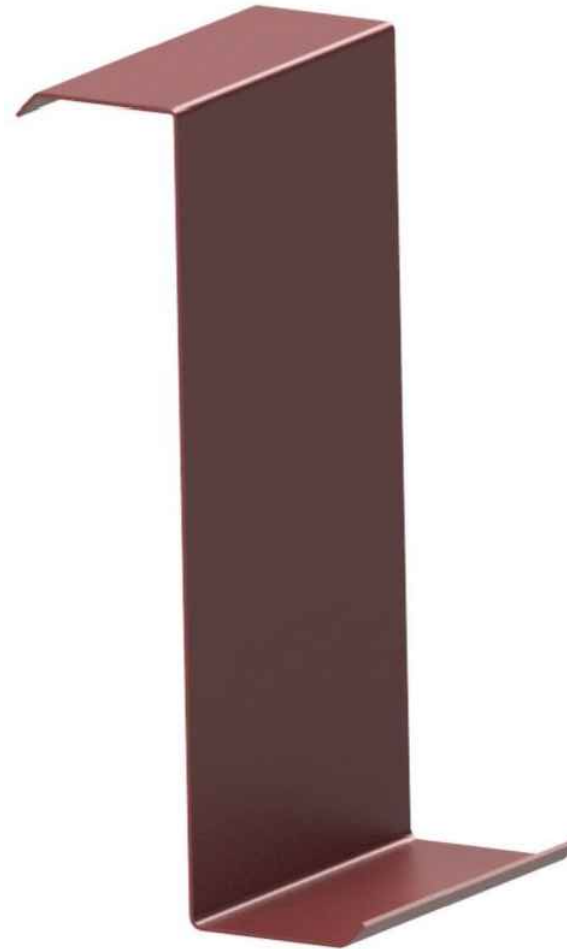
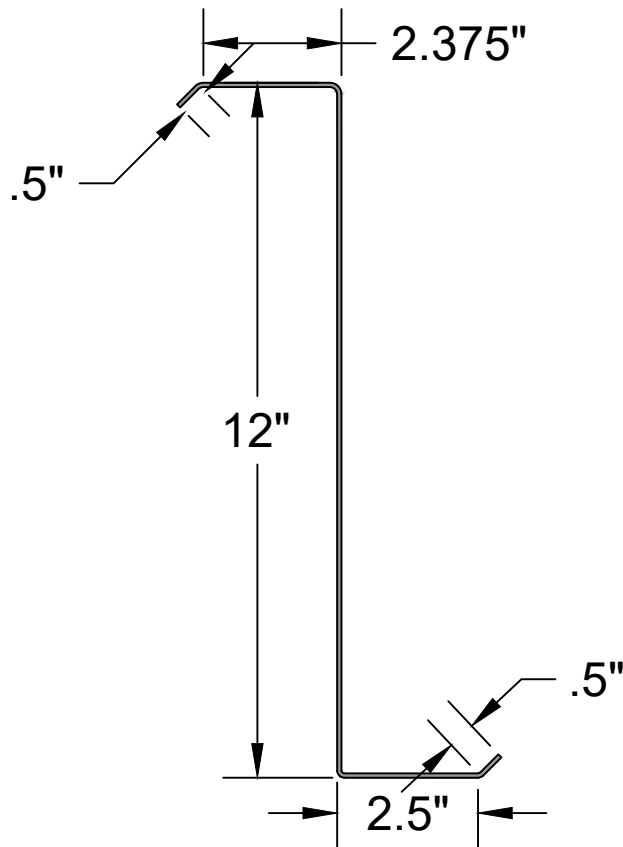
| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

1000Z250

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

12" x 2 1/2" Zee



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 1200Z250
Depth: 12"
Flange: 2.5"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

S = Stud (C Shaped)
L = Lintel (L Shaped)
T = Track (U Shaped)
W = I-Beam (I Shaped)
E = Eave Strut (C Shaped)
D = Double Eave Strut
A = Angle (2 Legs, 1 Angle)
F = Hat (Top Hat Shaped)
B = Box (Rectangle Shaped)
FI = Strap/Flat (Flat Shaped)
Z = Zee (Z Shaped)

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | |
|-------------|----|-----|-------|--------|-------|----------------------|-------|-------|----------------------|-------|-------|----------------------|-------|-------|
| | | | | | | Ix | Sx | rx | Iy | Sy | ry | J | Cw | Ro |
| 1200Z250-54 | 16 | 50 | 1.076 | 3.663 | 5.060 | 21.35 | 3.559 | 4.454 | 1.029 | 0.406 | 0.978 | 0.00128 | 37.03 | 4.560 |
| 1200Z250-68 | 14 | 50 | 1.345 | 4.575 | 5.075 | 26.67 | 4.446 | 4.454 | 1.295 | 0.510 | 0.981 | 0.00250 | 46.62 | 4.561 |
| 1200Z250-97 | 12 | 50 | 1.883 | 6.407 | 5.105 | 37.35 | 6.225 | 4.454 | 1.842 | 0.721 | 0.989 | 0.00687 | 66.32 | 4.563 |

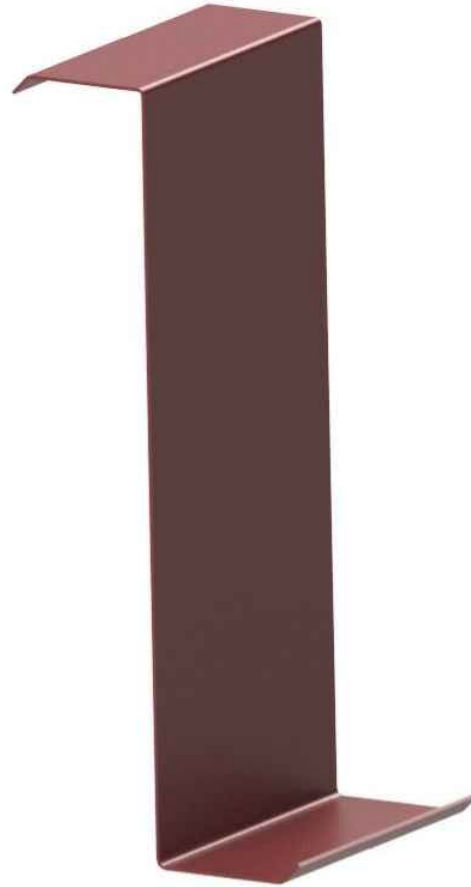
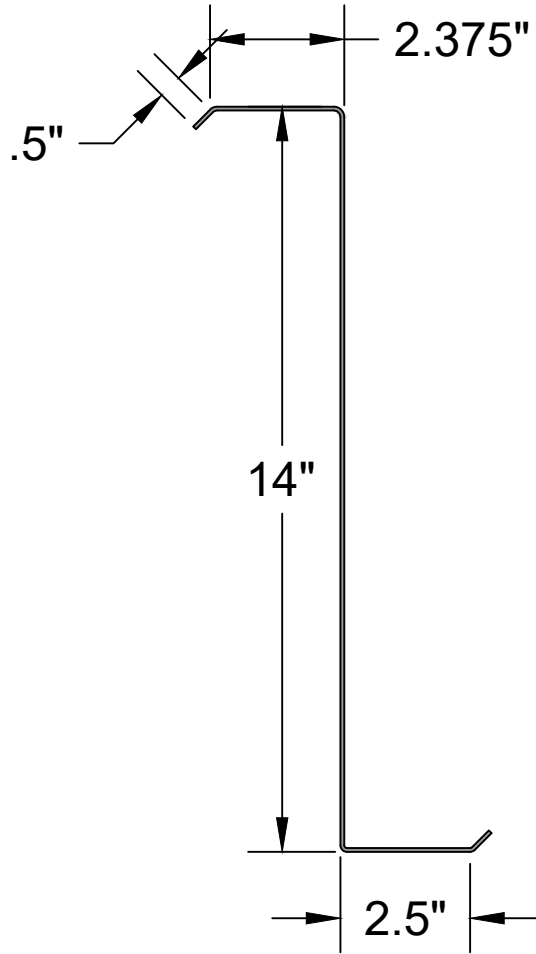
| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

1200Z250

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request

Steel Members Documentation

14" x 2 1/2" Zee



6195 Hwy 52 East
Murrayville GA, 30564
www.BMMetals.com
Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name: 1400Z250
Depth: 14"
Flange: 2.5"
Lip: .5"
Lengths: 6' - 60'
Gauges: 16, 14, 12

Name Breakdown

1050L162 - 43

Depth in Inches: 1050 = 10.50"
Member Key: L
Flange Height: 162 = 1.625"
Mill Thickness: 43

Member Key

S = Stud (C Shaped)
L = Lintel (L Shaped)
T = Track (U Shaped)
W = I-Beam (I Shaped)
E = Eave Strut (C Shaped)
D = Double Eave Strut
A = Angle (2 Legs, 1 Angle)
F = Hat (Top Hat Shaped)
B = Box (Rectangle Shaped)
Fl = Strap/Flat (Flat Shaped)
Z = Zee (Z Shaped)

| Member Name | G | ksi | Area | Weight | Width | Gross Properties (x) | | | Gross Properties (y) | | | Torsional Properties | | |
|-------------|----|-----|-------|--------|-------|----------------------|----------------|----------------|----------------------|----------------|----------------|----------------------|----------------|----------------|
| | | | | | | I _x | S _x | r _x | I _y | S _y | r _y | J | C _w | R _o |
| 1400Z250-54 | 16 | 50 | 1.196 | 4.070 | 5.060 | 31.05 | 4.436 | 5.095 | 1.029 | 0.406 | 0.927 | 0.00143 | 50.40 | 5.179 |
| 1400Z250-68 | 14 | 50 | 1.494 | 5.084 | 5.075 | 38.79 | 5.541 | 5.095 | 1.295 | 0.510 | 0.931 | 0.00278 | 63.46 | 5.180 |
| 1400Z250-97 | 12 | 50 | 2.092 | 7.119 | 5.105 | 54.31 | 7.759 | 5.095 | 1.843 | 0.721 | 0.939 | 0.00763 | 90.28 | 5.181 |

| Mill - Gauge | Bend Radius |
|--------------------|-------------|
| 25 mill = 24 gauge | .0764 |
| 30 mill = 22 gauge | .0796 |
| 33 mill = 20 gauge | .0764 |
| 43 mill = 18 gauge | .0712 |
| 54 mill = 16 gauge | .0849 |
| 68 mill = 14 gauge | .1069 |
| 97 mill = 12 gauge | .1325 |

1400Z250

*All calculations should be verified by licensed Engineer
** Full Sectional properties available upon request