



Hat Channel Brochure Galvanized

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.

Steel Members 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

1/2" Hat Channel



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

Member specs and limits

Name: 100F050
Width: 2.5"
Height: .5"
Web: .25"
Lengths: 6" - 50"
Gauges: 20, 18, 16

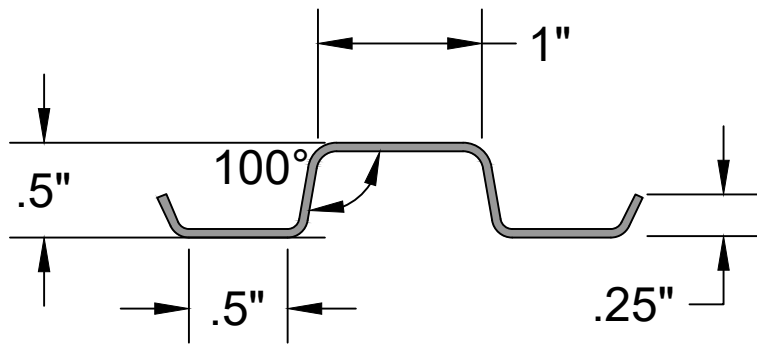
Name Breakdown

1050L162 - 43

Width in Inches: 1050 = 10.50"
Member Key: L
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	Gauge	Fy (ksi)	Area (in ²)	Weight (lbs/ft)	Gross Properties					Effective Properties			Coil
					I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	M _d (ft-lb)	M _{da} (ft-lb)	Flat Width
100F050-33	20	50	.1055	.358	.00392	.01625	.19278	.03777	.59821	.00392	NA	NA	3.25
100F050-43	18	50	.1347	.468	.00480	.01979	.18877	.04668	.58857	.04668	NA	NA	3.25
100F050-54	16	50	.1623	.552	.00544	.02221	.18314	.05393	.57635	.00544	NA	NA	3.25
											Nominal	3.25	

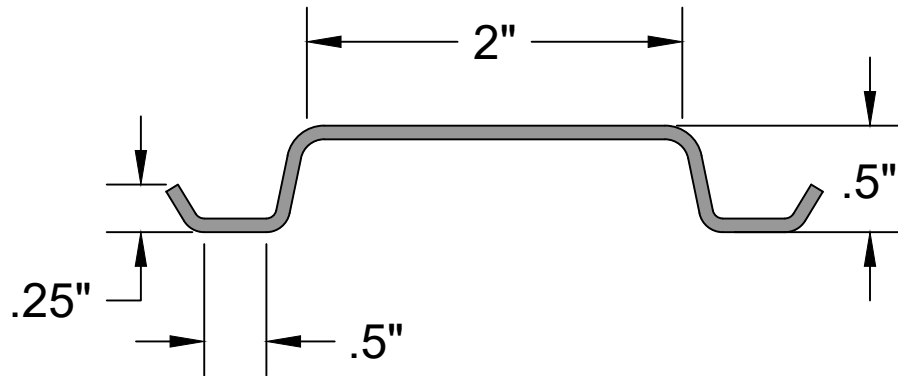
Mill - Gauge	Bend Radius
25 mill = 24 gauge	.0764
30 mill = 22 gauge	.0796
33 mill = 20 gauge	.0764
43 mill = 18 gauge	.0712
54 mill = 16 gauge	.0849
68 mill = 14 gauge	.1069
97 mill = 12 gauge	.1325

100F050

*All calculations based on unpunched stud
** Full Sectional properties available upon request

Steel Members Documentation

1/2" Hat Channel

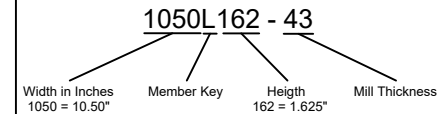


6195 Hwy 52 East
Murrayville GA, 30564
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Office: (706) 864-6068
Fax: (706) 864-2147

Member specs and limits

Name:	200F050
Width	3.5"
Height:	.5"
Web:	.25"
Lengths:	6" - 50'
Gauges:	20,18,16

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	Gauge	Fy (ksi)	Area (in ²)	Weight (lbs/ft)	Gross Properties					Effective Properties			Coil
					I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	M _d (ft-lb)	M _{da} (ft-lb)	Flat Width
200F050-33	20	50	.1055	.428	.00392	.01625	.19278	.03777	.59821	.00392	NA	NA	4.25
200F050-43	18	50	.1347	.528	.00480	.01979	.18877	.04668	.58857	.04668	NA	NA	4.25
200F050-54	16	50	.1623	.622	.00544	.02221	.18314	.05393	.57635	.00544	NA	NA	4.25
											Nominal	4.25	

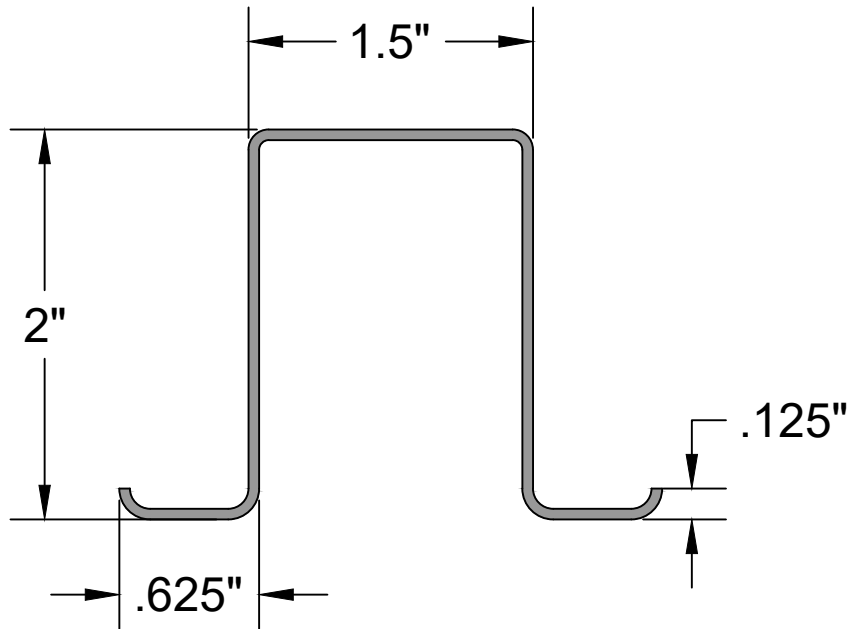
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43 mill = 18 gauge	.0712
54 mill = 16 gauge	.0849
68 mill = 14 gauge	.1069
97 mill = 12 gauge	.1325

200F050

*All calculations based on unpunched stud
** Full Sectional properties available upon request

Steel Members Documentation

2" Hat Channel

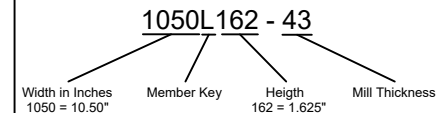


6195 Hwy 52 East
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Office: (706) 864-6068
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Member specs and limits

Name:	150F200
Width:	2.75"
Height:	2"
Web:	.5"
Lengths:	6' - 60'
Gauges:	26, 24, 22, 20, 18, 16

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)

* All members shown in 14 gauge to show detail

Member	Gauge	Fy (ksi)	Area (in ²)	Weight (lbs/ft)	Gross Properties					Effective Properties			Coil
					I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	M _d (ft-lb)	M _{da} (ft-lb)	Flat Width
150F200-18	26	50	.0732	.442	.02171	.02531	.6112	.05162	.9621	.00911	NA	NA	6.75"
150F200-25	24	50	.1130	.552	.04062	.04822	.5994	.10362	.9573	.01011	NA	NA	6.75"
150F200-30	22	50	.1691	.663	.05998	.07120	.5955	.15334	.9522	.02043	NA	NA	6.75"
150F200-33	20	50	.2059	.840	.07239	.08594	.5930	.18535	.9488	.03051	NA	NA	6.75"
150F200-43	18	50	.2664	1.06	.09235	.10964	.5887	.23704	.9431	.05667	NA	NA	6.75"
150F200-54	16	50	.3299	1.26	.11211	.13301	.5829	.28951	.9367	.07509	NA	NA	6.75"
											Nominal	6.75"	

*All calculations based on unpunched stud

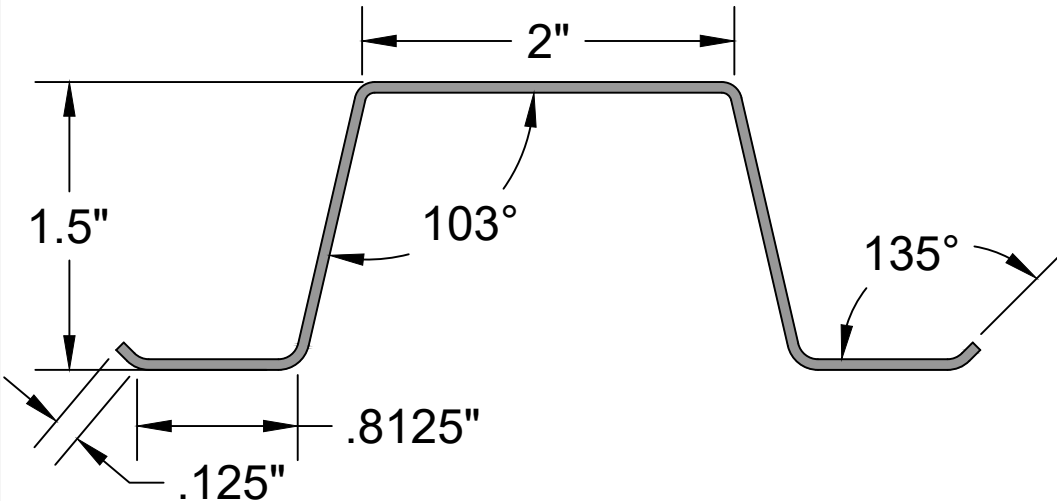
** Full Sectional properties available upon request

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

150F200

Steel Members Documentation

1 1/2" Hat Channel

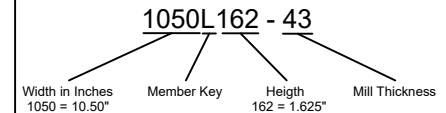


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Office: (706) 864-6068
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Member specs and limits

Name:	200F150
Width	3.75"
Height:	1.5"
Web:	.5"
Lengths:	6' - 60'
Gauges:	26,24,22,20

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
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- B** = Box (Rectangle Shaped)
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* All members shown in 14 gauge to show detail

Member	Gauge	Fy (ksi)	Area (in ²)	Weight (lbs/ft)	Gross Properties					Effective Properties			Coil
					I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	M _d (ft-lb)	M _{da} (ft-lb)	Flat Width
200F150-18	26	50	.1273	.478	.07697	.07546	.7776	.14977	1.0846	.0176	NA	NA	6.75"
200F150-25	24	50	.1760	.637	.10567	.10385	.7747	.20568	1.0808	.0334	NA	NA	6.75"
200F150-30	22	50	.1990	.765	.11911	.12124	.7735	.23172	1.0789	.0429	NA	NA	6.75"
200F150-33	20	50	.2426	.967	.14420	.14175	.7711	.28050	1.0753	.0676	NA	NA	6.75"
											Nominal	6.75"	

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
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97 mill = 12 gauge	.1325

200F150

*All calculations based on unpunched stud

** Full Sectional properties available upon request