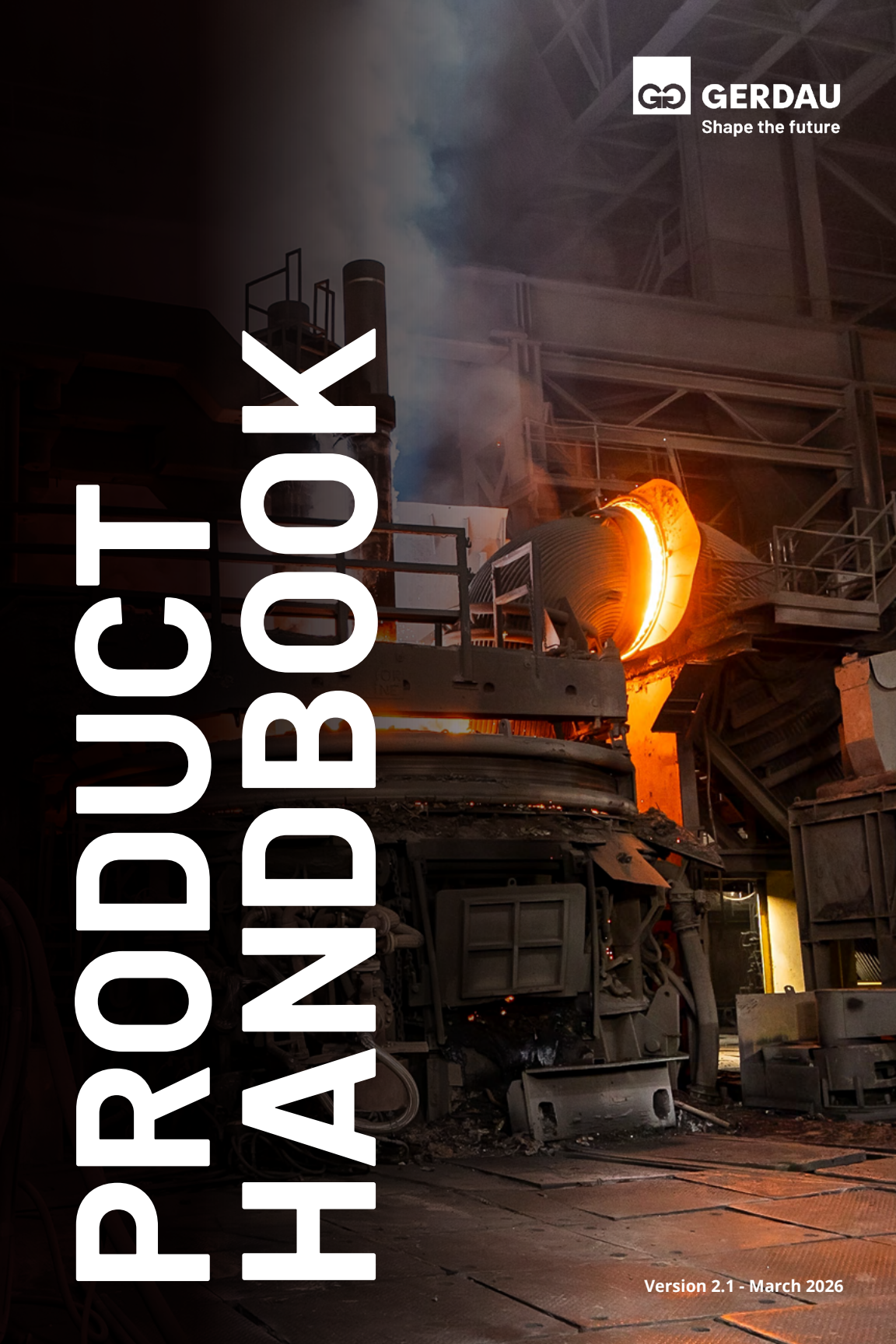
GERDAU
Shape the future

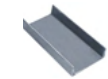
PRODUCT HANDBOOK



Version 2.1 - March 2026

CONTENT

GERDAU LONG STEEL NORTH AMERICA
U.S. & CANADIAN MILL PRODUCTS

	 SQUARES	 ROUNDS	 ANGLES	 UNEQUAL ANGLES	 FLATS	 CHANNELS	 MC CHANNELS
Cambridge, ON	3/8 - 1 1/2	1/2 - 1 1/4	3/4 - 2	2 x 1 1/2	3/4 - 4	1 - 2 1/2	
Cartersville, GA			4 - 8	6x3 1/2 - 8x6	5 - 14	6 - 12	3 1/4 - 13
Charlotte, NC	1/2 - 1	1/2 - 1 1/4	1 - 2	2x1 1/2	3/4 - 2 1/2	2 x 1	
Jackson, TN	1 1/2 - 2	1 3/8 - 2 1/2	1 1/2 - 4*	3x2 - 5x3 1/2	2 - 6	3 - 6	
Selkirk, MB	2	3/4 - 5 1/8			2 - 16		
Midlothian, TX		5/8 - 3 9/16				6 - 15	18
Petersburg, VA							18
Whitby, ON			2 - 8	2 1/2x2 - 7x4	5 - 10	3 - 12	3
Wilton, IA	1 1/16 - 2 1/2	1 1/4 - 1 3/4	1 1/4 - 3	2 1/2 x 2	1 - 6		

	 WF BEAMS	 M BEAMS	 S BEAMS	 H PILING	 SHEET PILING	 REBAR
Cambridge, ON						10M - 25M #3 - #4
Cartersville, GA	4 - 14	5, 10, 12	5			
Charlotte, NC						#4 - #11
Jackson, TN						#4 - #18*
Selkirk, MB			2 3/8 - 4			
Midlothian, TX	4 - 24	4 - 12.5	3 - 12	8 - 10	PS 27.5, 31	#3 - #18
Petersburg, VA	8 - 36			10 - 16	PZC 12 - 41	
Whitby, ON						15M - 35M #4 - #11
Wilton, IA						#4 - #5

*Jackson 1 1/2 angle, and #4/#5 rebar are still under final commissioning steps.

Updated: 12-25

ABOUT US

Gerdau is a global leader in sustainable steel. Each year we produce millions of tons of long steel and special steel and we're one of the largest recyclers in the Americas. From solar farms to data centers, Gerdau partners with some of the largest companies in North America to shape a better future for all.

GERDAU STRUCTURAL STEEL HAS THE LOWEST EMBODIED CARBON IN NORTH AMERICA

Carbon emissions in steel are quantified as the product's global warming potential (GWP)*, expressed in carbon dioxide equivalent units (MT CO2e per 1 metric ton unfabricated steel) and found in documents called Environmental Product Declarations (EPDs) published by each producing mill. Publicly available, third-party verified EPD data shows that Gerdau's three structural mills produce beams with the lowest embodied carbon among U.S. mills.

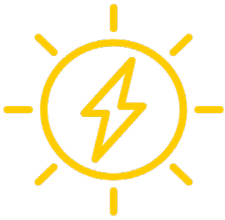
RANKING	DOMESTIC MILL	GWP (CRADLE TO MILL GATE) MT TON CO_2 EQ / TON STEEL	EXCESS EMISSIONS VS BEST-IN-CLASS
1	Gerdau Petersburg	0.527	-
2	Gerdau Cartersville	0.686	+ 30.1%
3	Gerdau Midlothian	0.713	+ 35.3%
4	Competitor Mill 1	0.742	+ 40.8%
5	Competitor Mill 2	0.816	+ 54.8%
6	Competitor Mill 3	1.60	+ 203.6%

Excluding EPDs that use renewable energy credits or solely include low emission product lines.
Data in the table is based on mill average EPDs.

Updated: 12-25

GERDAU STEEL IS SUSTAINABLE STEEL

Gerdau has made a commitment to a sustainability agenda, effectively connecting the steel production business with the purpose of empowering people who build the future, leaving a positive legacy for society.

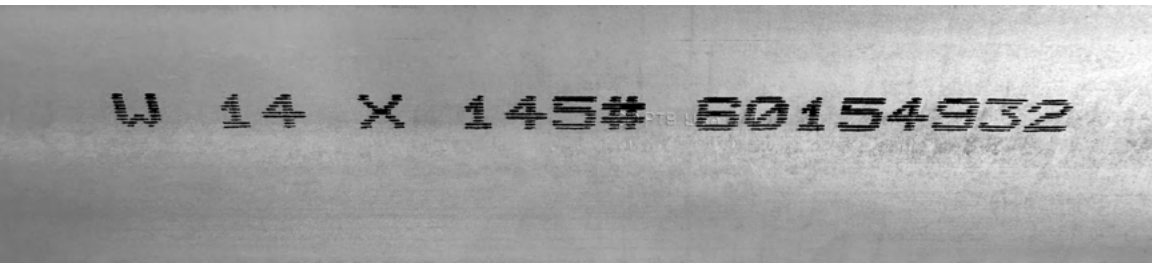


- Our steel is amongst the cleanest in the world
- 100% of the steel we produce in North America is melted in an **electric arc furnace**
- Our new 80-megawatt solar farm in TX can power 14,000 households
- Our steel has greater than 96% recycled content
- 98% of the water and 93% of co-products are reused globally
- Supplying partner to the largest Wind Farm in U.S. history

(800) 237-0230
sales@gerdau.com
www.gerdau.com

HOW TO READ A MILL TAG

Structural sections are stenciled as per ASTM A6.

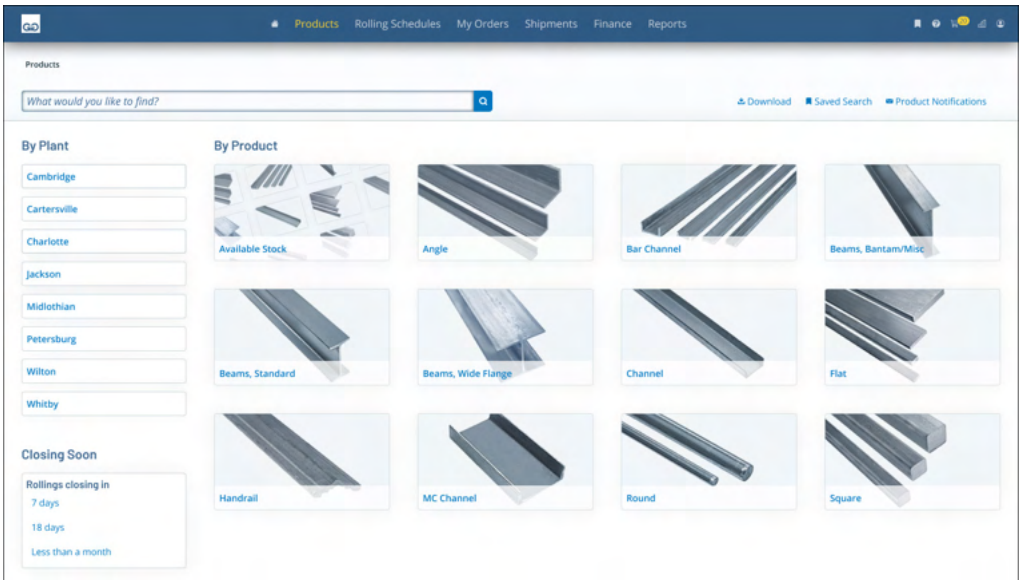


*Tag format will vary by mill or product.

Updated: 12-25

eGERDAU

ONLINE SELF SERVE ECOMMERCE PORTAL



- View your Open Orders
- Build your own shipments
- Search Past Shipments and download Documents IE BOL, MTR's & Invoices
- Download Rolling Schedules
- Download Price Sheets Delivered & FOB Mill

GERDAU EDI

Functionality designed to automate communication and increase ease of doing business with Gerdau EDI.

EDI (Electronic Data Interchange) allows customers to electronically exchange data with Gerdau, regardless of the computer software either organization utilizes.

WHAT ARE THE BENEFITS OF EDI?

- Save time by cutting down on manual entry
- Reduce the risk for errors
- Increase processing speeds
- Improve efficiency and savings

WHAT TRANSACTIONS CAN BE AUTOMATED THROUGH EDI?

Shipments

EDI Advanced Shipment Notice - ASN (EDI 856 / 857)

- This transaction allows Gerdau to electronically send the Bill of Lading (BOL).
- Data grouping of sent shipment data is dynamic based upon customer requirements:
  - ASNs can be sent by delivery or by overall shipment.
  - Data organization within the ASN can vary by customer: PO, Bundle, Heat, etc.

steelXML Advanced Shipment Notice

- steelXML ASN is a combination of the ASN and MTR outputs.
- Data grouping is by shipment line and includes chemistries, mechanical and Charpy tests.
- Customers receive as an email attachment using the AISC steelXML ASN format.

Purchase Orders

EDI PO Request (EDI 850)

- This transaction allows customers to electronically send Purchase Orders to Gerdau.
- Supported sales orders include:
  - Stock Order
  - Direct Ship

EDI PO Acknowledgement (EDI 855)

- This transaction allows Gerdau to electronically send sales order status.
- Customers can receive EDI PO Acks for a variety of business events:
  - EDI PO Acks upon creation of all new orders (both VMI and non-VMI).
  - EDI PO Acks both upon order creation and changes

Reports

EDI Material Test Report (EDI 863)

- This transaction allows Gerdau to electronically send the Material Test Report (MTR).
  - Allows customization of test results: chemistries, mechanical results, Jominy, Charpy tests, etc.

EDI Material Test Report (PDF)

- This transaction allows Gerdau to electronically send the normal MTR PDF file to customers.
- Optionally, a conversion to TIF image format is available.

EDI Inventory Reports (EDI 846)

- This transaction allows Gerdau to electronically send Inventory Reports.
- Inventory Reports include future v Week Dates.
- Inventory AFS can also be sent via API.

Invoicing

EDI Invoice (EDI 810)

- This transaction allows Gerdau to electronically send Invoices.

Other Transactions

EDI VMI Forecast (EDI 852)

- This transaction allows customers to participate in our Vender Managed Inventory program.
- Gerdau develops the required data points to be included in the 852 file while onboarding the customer.
- Customers may utilize all of the EDI transactions in congruence with the VMI program.

How can you implement EDI?

The first step is getting both trading partners to agree on and adhere to a set of standards for EDI transactions. Utilizing Gerdau's established standards allows for faster development time. Our technical team will work closely with your company to ensure implementation goes smoothly.


MERCHANT


GERDAU
Shape Channel
6 X 0.2#
Grade GGMULTI
Length 50 FT 00 IN
Weight 9,840 LBS
Batch (PCS): 632231770(24)
3643020
GERDAU
Shape Channel
6 X 0.2#
Grade GGMULTI
Length 50 FT 00 IN
Weight 9,840 LBS
Batch (PCS): 632231770(24)
3643019
GERDAU
Shape Channel
6 X 0.2#
Grade GGMULTI
Length 50 FT 00 IN
Weight 9,840 LBS
Batch (PCS): 632231770(24)
3643014
GERDAU
Shape Channel
6 X 0.2#
Grade GGMULTI
Length 50 FT 00 IN
Weight 9,840 LBS
Batch (PCS): 632231770(24)
3643008
GERDAU
Shape Channel
6 X 0.2#
Grade GGMULTI
Length 50 FT 00 IN
Weight 9,840 LBS
Batch (PCS): 632231770(24)
3643007

GERDAU MERCHANT PRODUCTS IN USE

GORDIE HOWE BRIDGE

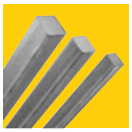
Between Windsor, ON and Detroit, MI

The Gordie Howe Bridge is a 2,000 m bridge 80 ft in the air connecting the USA and Canada over the Detroit River. The project started in 2018 and is expected to be completed in 2026.

This major infrastructure project had a Buy Canadian/Buy American steel requirement, which Gerdau was able to service while offering shorter delivery lead times due to the proximity of our Whitby, ON mill. Gerdau's extensive range of angle sizes and low carbon/ton emissions also allowed the customer to meet specific project targets and provided an overall cleaner steel solution.

GGMULTI

THE SMART CHOICE FOR RELIABLE CONSISTENCY IN A MULTI-GRADE PRODUCT



GGMULTI Benefits

- Satisfy 11 different grades
- Reduce inventory by combining several grades into one
- Achieve real time savings for purchasing and warehousing
- Narrow chemistry specifications
- Improve weldability
- Improve fabrication processes for shearing, punching, and bending

GGMULTI PRODUCTS	
PRODUCT	RANGE
Angles	3/4" and greater
Channels	3" and greater
MC Channels	3" and greater
Flats	3/16" and greater
Rounds	3/4" - 2½"
Squares	1/2" - 1½"

IMPROVE PRODUCT PERFORMANCE WITH GGMULTI

GGMULTI products have lower carbon levels, help improve weldability, and provide a safeguard against the possibility of weld cracking (as compared to A529-50 grade). GGMULTI products (angles, channels, and flats) are designed to have a consistent minimum yield strength of 50 ksi and this single grade covers the following eleven distinct grades.

	A36	A529-50	A572-50	A709-36	A709-50	A992*	AASHTO M270-36	AASHTO M270-50	CSA 44W	CSA 50W	ASME SA 36
A36	X			X			X			X	
A529-50		X									
A572-50			X		X			X			
A709-36	X			X			X			X	
A709-50			X		X			X			
A992*						X*			X	X	
AASHTO M270-36	X			X			X			X	
AASHTO M270-50			X		X			X			
CSA 44W						X			X		
CSA 50W						X				X	
ASME SA 36	X			X			X				X
GGMULTI	**X**	**X**	**X**	**X**	**X**	**X***	**X**	**X**	**X**	**X**	**X**

*Channel Sections Only

Updated: 09-25

MERCHANT PRODUCTS AND BUNDLES

ANGLES - CARTERSVILLE, GA

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE	
		20'	40'
L 5x5x5/16	10.3	24	23
L 5x5x3/8	12.3	20	20
L 5x5x7/16	14.3	17	17
L 5x5x1/2	16.2	15	15
L 5x5x5/8	20.0	12	12
L 5x5x3/4	23.6	9	9
L 6x3 1/2x1/2	15.3	15	15
L 6x3 1/2x3/8	11.7	20	20
L 6x3 1/2x5/16	9.8	23	23
L 6x4x5/16	10.3	23	23
L 6x4x3/8	12.3	18	18
L 6x4x7/16	14.3	23	15
L 6x4x1/2	16.2	15	15
L 6x4x5/8	20.0	15	10
L 6x4x3/4	23.6	12	9
L 6x6x5/16	10.3	18	18
L 6x6x3/8	14.9	17	15
L 6x6x7/16	17.2	12	12
L 6x6x1/2	19.6	12	12
L 6x6x3/4	28.7	8	8
L 6x6x7/8	33.1	8	6
L 6x6x1	37.4	6	6
L 8x4x1/2	19.6	12	12
L 8x4x5/8	24.2	17	9
L 8x4x3/4	28.7	8	8
L 8x4x1	37.4	12	6
L 8x6x7/16	20.2	18	12
L 8x6x1/2	23.0	18	9
L 8x6x5/8	28.5	17	8
L 8x6x3/4	33.8	9	6
L 8x6x1	44.2	5	5
L 8x8x1/2	26.4	18	9
L 8x8x5/8	32.7	15	6
L 8x8x3/4	38.9	12	6
L 8x8x7/8	45.0	5	5
L 8x8x1	51.0	9	3

ANGLES – JACKSON, TN

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE	
		20'	40'
L 2x2x1/8	1.7	147	147
L 2x2x3/16	2.4	97	98
L 2x2x1/4	3.2	77	76
L 2x2x5/16	3.9	62	62
L 2x2x3/8	4.7	49	49
L 2 1/2x2 1/2x3/16	3.1	80	80
L 2 1/2x2 1/2x1/4	4.1	60	60
L 2 1/2x2 1/2x5/16	5.0	45	45
L 2 1/2x2 1/2x3/8	5.3	40	40
L 3x2x3/16	3.1	80	80
L 3x2x1/4	4.1	60	60
L 3x2x5/16	5.0	45	45
L 3x2x3/8	5.9	40	40
L 3x2 1/2x1/4	4.1	55	55
L 3x2 1/2x5/16	5.6	40	40
L 3x2 1/2x3/8	6.6	35	35
L 3 1/2x2 1/2x1/2	8.5	25	25
L 3 1/2x2 1/2x1/4	4.9	50	50
L 3 1/2x2 1/2x3/8	7.2	30	30
L 3 1/2x2 1/2x5/16	6.1	40	40
L 3x3x3/16	3.1	65	65
L 3x3x1/4	4.9	50	50
L 3x3x5/16	5.0	40	40
L 3x3x3/8	7.2	30	30
L 3x3x1/2	9.4	25	25
L 3 1/2x3x1/4	5.4	45	45
L 3 1/2x3x5/16	6.6	35	35
L 3 1/2x3x3/8	7.9	30	30

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE	
		20'	40'
L 3 1/2x3x1/2	10.2	20	20
L 3 1/2x3 1/2x1/4	5.8	42	42
L 3 1/2x3 1/2x5/16	7.2	33	33
L 3 1/2x3 1/2x3/8	8.5	28	28
L 3 1/2x3 1/2x1/2	11.1	22	22
L 4x3x1/4	5.8	42	42
L 4x3x5/16	7.2	33	33
L 4x3x3/8	8.5	28	28
L 4x3x1/2	11.1	22	22
L 4x3 1/2x1/4	6.2	39	39
L 4x3 1/2x5/16	7.7	30	30
L 4x3 1/2x3/8	9.1	25	25
L 4x3 1/2x1/2	11.9	19	19
L 4x4x1/4	6.6	36	36
L 4x4x5/16	8.2	27	27
L 4x4x3/8	8.5	25	25
L 4x4x1/2	12.8	19	19
L 4x4x5/8	15.7	13	13
L 4x4x3/4	18.5	13	13
L 5x3x1/4	6.6	30	30
L 5x3x5/16	8.2	27	27
L 5x3x3/8	9.8	25	25
L 5x3x1/2	12.8	19	19
L 5x3 1/2x1/4	7.0	30	30
L 5x3 1/2x5/16	8.7	27	27
L 5x3 1/2x3/8	10.4	22	22
L 5x3 1/2x1/2	13.6	16	16

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

Updated: 12-25

ANGLES – WILTON, IA

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE	
		20'	40'
L 1 1/4x1 1/4x1/8	1.0	248	240
L 1 1/4x1 1/4x3/16	1.5	165	165
L 1 1/4x1 1/4x1/4	1.9	128	120
L 1 1/2x1 1/2x1/8	1.2	202	195
L 1 1/2x1 1/2x3/16	1.8	137	137
L 1 1/2x1 1/2x1/4	2.3	104	104
L 1 3/4x1 3/4x1/8	1.4	176	176
L 1 3/4x1 3/4x3/16	2.1	116	116
L 1 3/4x1 3/4x1/4	2.8	88	88
L 2x2x1/8	1.7	153	144
L 2x2x3/16	2.4	104	99
L 2x2x1/4	3.2	77	77
L 2x2x3/8	4.7	54	54
L 2 1/2x2x1/4	3.2	70	67
L 2 1/2x2x5/16	4.5	56	56
L 2 1/2x2x3/8	4.7	46	46
L 2 1/2x2 1/2x3/16	3.1	81	77
L 2 1/2x2 1/2x1/4	4.1	60	58
L 2 1/2x2 1/2x5/16	5.3	49	49
L 2 1/2x2 1/2x3/8	5.3	42	42
L 3x3x3/16	3.7	68	65
L 3x3x1/4	4.9	50	48
L 3x3x5/16	6.1	40	40
L 3x3x3/8	7.2	35	33

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

ANGLES - CHARLOTTE, NC

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE	
		20'	40'
L 1x1x1/8	0.8	298	298
L 1x1x3/16	1.2	204	204
L 1x1x1/4	1.5	162	162
L 1 1/4x1 1/4x1/8	1.0	234	234
L 1 1/4x1 1/4x3/16	1.5	156	156
L 1 1/4x1 1/4x1/4	1.9	124	124
L 1 1/2x1 1/2x1/8	1.2	193	193
L 1 1/2x1 1/2x3/16	1.8	132	132
L 1 1/2x1 1/2x1/4	2.3	99	99
L 1 3/4x1 3/4x3/16	2.1	112	112
L 1 3/4x1 3/4x1/4	2.8	84	84
L 2x1 1/2x1/8	1.4	70	70
L 2x1 1/2x3/16	2.1	70	70
L 2x1 1/2x1/4	2.8	55	55
L 2x2x1/8	1.7	145	145
L 2x2x3/16	2.4	95	95
L 2x2x1/4	3.2	72	72

ANGLES - CAMBRIDGE, ON

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE	
		20'	40'
L 3/4x3/4x1/8	0.6	413	
L 1x1x1/8	0.8	314	323
L 1x1x3/16	1.2	219	219
L 1x1x1/4	1.5	171	178
L 1 1/4x1 1/4x1/8	1.0	248	255
L 1 1/4x1 1/4x3/16	1.5	173	173
L 1 1/4x1 1/4x1/4	1.9	135	135
L 1 1/2x1 1/2x1/8	1.2	201	208
L 1 1/2x1 1/2x3/16	1.8	143	143
L 1 1/2x1 1/2x1/4	2.3	111	111
L 1 3/4x1 3/4x3/16	2.1	120	121
L 1 3/4x1 3/4x1/4	2.8	94	88
L 2x1 1/2x1/8	1.4	173	148
L 2x1 1/2x3/16	2.1	112	104
L 2x1 1/2x1/4	2.8	95	86
L 2x2x1/8	1.7	152	v52
L 2x2x3/16	2.4	103	104
L 2x2x1/4	3.2	81	81
L 2x2x5/16	3.9	81	81

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

ANGLES – WHITBY, ON

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE	
		20'	40'
L 2x2x1/8	1.7	180	153
L 2x2x3/16	2.4	126	98
L 2x2x1/4	3.2	81	81
L 2x2x5/16	3.9	80	62
L 2x2x3/8	4.7	54	54
L 2 1/2x2x3/16	2.8	112	91
L 2 1/2x2x1/4	3.6	84	70
L 2 1/2x2x3/8	5.3	56	49
L 2 1/2x2 1/2x3/16	3.1	97	83
L 2 1/2x2 1/2x1/4	4.1	77	63
L 2 1/2x2 1/2x5/16	5.0	63	49
L 2 1/2x2 1/2x3/8	5.9	49	42
L 2 1/2x2 1/2x1/2	7.7	35	28
L 3x2x3/16	3.1	80	80
L 3x2x1/4	4.1	75	60
L 3x2x5/16	5.0	60	50
L 3x2x3/8	5.9	50	40
L 3x2x1/2	7.7	25	25
L 3x2 1/2x1/4	4.5	70	55
L 3x2 1/2x5/16	5.6	55	40
L 3x2 1/2x3/8	6.6	35	35
L 3x3x3/16	3.7	85	70
L 3x3x1/4	4.9	65	50
L 3x3x5/16	6.1	50	40
L 3x3x3/8	7.2	40	35
L 3x3x1/2	9.4	30	25
L 3 1/2x2 1/2x1/4	4.9	65	50
L 3 1/2x2 1/2x5/16	6.1	40	40
L 3 1/2x2 1/2x3/8	7.2	40	35
L 3 1/2x2 1/2x1/2	9.4	25	25
L 3 1/2x3 1/2x1/4	5.8	56	45
L 3 1/2x3 1/2x5/16	7.2	46	36
L 3 1/2x3 1/2x3/8	8.5	37	29
L 3 1/2x3 1/2x1/2	11.1	29	23
L 4x3x1/4	5.8	56	45
L 4x3x5/16	7.2	45	36
L 4x3x3/8	8.5	37	29
L 4x3x1/2	11.1	29	23
L 4x4x1/4	6.6	48	37

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE	
		40'	60'
L 4x4x5/16	8.2	37	29
L 4x4x3/8	9.8	33	25
L 4x4x1/2	12.8	25	20
L 4x4x5/8	15.7	20	15
L 4x4x3/4	18.5	17	13
L 5x3x1/4	6.6	48	37
L 5x3x5/16	8.2	37	29
L 5x3x3/8	9.8	33	25
L 5x3x1/2	12.8	25	20
L 5x3 1/2x1/4	7.0	46	37
L 5x3 1/2x5/16	8.7	37	30
L 5x3 1/2x3/8	10.4	31	25
L 5x3 1/2x1/2	13.6	23	18
L 5x5x5/16	10.3	31	25
L 5x5x3/8	12.3	26	21
L 5x5x1/2	16.2	20	16
L 5x5x5/8	20.0	13	13
L 5x5x3/4	23.6	11	11
L 6x3 1/2x5/16	9.8	33	25
L 6x3 1/2x3/8	11.7	27	21
L 6x3 1/2x1/2	15.3	15	15
L 6x4x5/16	10.3	31	25
L 6x4x3/8	12.3	26	21
L 6x4x1/2	16.2	20	16
L 6x4x5/8	20.0	13	13
L 6x4x3/4	23.6	11	11
L 6x6x3/8	14.9	21	17
L 6x6x1/2	19.6	17	13
L 6x6x5/8	24.2	13	10
L 6x6x3/4	28.7	11	9
L 7x4x3/8	13.6	23	19
L 7x4x1/2	17.9	18	14
L 7x4x5/8	22.1	11	11
L 7x4x3/4	26.2	12	10
L 8x8x1/2	26.4	11	9
L 8x8x5/8	32.7	6	6
L 8x8x3/4	38.9	6	6
L 8x8x1	51.0	5	5

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

Updated: 09-25

CHANNELS - MIDLOTHIAN, TX

MATERIAL DESCRIPTION	PCS / BUNDLE	
	20'	40'
C 6x8.2	24	24
C 6x10.5	18	18
C 8x11.5	16	16
C 8x13.75	12	12
C 8x18.75	8	8
C 10x15.3	12	12
C 10x20	8	8
C 10x30	8	8
C 12x20.7	8	8
C 12x25	8	8
C 12x30	8	8
C 15x33.9	6	6
C 15x40	6	6
C 15x50	4	4

CHANNELS - CARTERSVILLE, GA

MATERIAL DESCRIPTION	PCS / BUNDLE	
	20'	40'
C 6x8.2	30	30
C 6x10.5	24	21
C 6x13	18	18
C 7x9.8	24	24
C 7x12.25	20	20
C 7x14.75	16	16
C 8x11.5	20	20
C 8x13.75	16	16
C 8x18.75	12	12
C 9x15	16	16
C 9x20	24	12
C 10x15.3	16	16
C 10x20	12	12
C 10x25	8	8
C 10x30	8	8
C 12x20.7	12	12
C 12x25	10	10
C 12x30	8	8

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

CHANNELS - JACKSON, TN

MATERIAL DESCRIPTION	PCS / BUNDLE	
	20'	40'
C 3x3.5	64	64
C 3x4.1	56	56
C 3x5	48	48
C 3x6	40	40
C 4x4.5	48	48
C 4x5.4	42	42
C 4x6.25	36	36
C 5x5.4	28	28
C 5x6.7	28	28
C 5x9	20	20
C 6x8.2	24	24
C 6x10.5	16	16

CHANNELS - WHITBY, ON

MATERIAL DESCRIPTION	PCS / BUNDLE	
	20'	40'
C 3x3.5	48	48
C 3x4.1	48	48
C 3x5	48	48
C 3x6	48	40
C 4x4.5	36	36
C 4x5.4	36	36
C 4x6.25	36	36
C 4x7.25	30	30
C 5x6.7	48	32
C 5x9	32	24
C 6x8.2	42	30
C 6x10.5	30	24
C 6x13	24	18
C 7x9.8	30	24
C 7x14.75	18	12
C 8x11.5	28	20
C 8x13.75	24	16
C 8x18.75	16	12
C 9x13.4	24	16
C 9x15	20	16
C 9x20	20	12
C 10x15.3	20	16
C 10x20	16	12
C 10x25	12	8
C 10x30	8	8
C 12x20.7	12	12
C 12x25	12	10

MISCELLANEOUS CHANNELS - WHITBY, ON

MATERIAL DESCRIPTION	PCS / BUNDLE	
	20'	40'
MC 3x7.1	40	24

MISCELLANEOUS CHANNELS - MIDLOTHIAN, TX

MATERIAL DESCRIPTION	PCS / BUNDLE	
	20'	40'
MC 18x42.7	4	4
MC 18x45.8	4	4

MATERIAL DESCRIPTION	PCS / BUNDLE	
	20'	40'
MC 18x51.9	4	4
MC 18x58	4	4

MISCELLANEOUS CHANNELS - CARTERSVILLE, GA

MATERIAL DESCRIPTION	PCS / BUNDLE	
	20'	40'
MC 4x13.8	18	18
MC 6x12	18	18
MC 6x15.1	15	15
MC 6x15.3	15	15
MC 6x16.3	15	15
MC 6x18	12	12
MC 7x19.1	12	12
MC 7x22.7	10	10
MC 8x8.5	24	24
MC 8x18.7	12	12
MC 8x20	12	12
MC 8x21.4	10	10
MC 8x22.8	10	10
MC 9x23.9	8	8
MC 9x25.4	8	8
MC 10x8.4	28	28
MC 10x25	10	8
MC 10x28.5	8	8
MC 10x33.6	7	7
MC 10x41.1	6	6
MC 12x10.6	24	20
MC 12x14.3	16	16
MC 12x31	8	8
MC 12x35	6	6
MC 12x40	6	6
MC 12x45	5	5
MC 12x50	4	4
MC 13x31.8	7	7
MC 13x35	6	6
MC 13x40	6	6
MC 13x50	4	4

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

Updated: 09-25

FLATS - CARTERSVILLE, GA

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE 20'
F 1/4x6 1/2	5.5	40
F 1/4x7	6.0	37
F 1/4x8	6.8	33
F 1/4x9	7.7	28
F 1/4x10	8.5	26
F 1/4x12	10.2	22
F 5/16x7	7.4	30
F 5/16x8	8.5	26
F 3/8x6 1/2	8.3	30
F 3/8x7	8.9	25
F 3/8x8	10.2	22
F 3/8x9	11.5	19
F 3/8x10	12.8	17
F 3/8x11	14.0	16
F 3/8x12	15.3	14
F 1/2x6 1/2	11.1	20
F 1/2x7	11.9	18
F 1/2x8	13.6	16
F 1/2x9	15.3	14
F 1/2x10	17.0	13
F 1/2x11	18.7	12
F 1/2x12	20.4	11
F 1/2x14	23.8	9
F 5/8x7	14.9	15
F 5/8x8	17.0	13
F 5/8x9	21.3	11

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE 20'
F 5/8x10	21.3	10
F 5/8x11	23.4	10
F 5/8x12	25.5	8
F 5/8x14	29.8	7
F 3/4x7	17.9	12
F 3/4x8	20.4	11
F 3/4x9	23.0	9
F 3/4x10	25.5	8
F 3/4x11	28.1	8
F 3/4x12	30.6	7
F 3/4x14	35.7	6
F 7/8x8	23.8	9
F 1 1/8x8	30.6	7
F 1 1/4x8	34.0	6
F 1 1/2x5	25.5	8
F 1 1/2x8	40.8	5
F 1x7	23.8	9
F 1x8	27.2	8
F 1x9	30.6	7
F 1x10	34.0	6
F 1x11	37.4	6
F 1x12	40.8	5
F 1x14	47.6	5
F 2x7	47.6	5
F 2x8	54.4	4

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

Updated: 09-25

FLATS - CHARLOTTE, NC

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE 20'
F 1/4x1	0.9	276
F 1/4x1 1/4	1.1	229
F 1/4x1 1/2	1.3	184
F 1/4x1 3/4	1.7	161
F 1/4x2	1.7	144
F 1/4x2 1/4	1.9	125
F 1/4x2 1/2	2.1	110
F 5/16x1	1.1	216
F 5/16x1 1/2	1.6	152
F 5/16x2	2.1	120
F 3/8x3/4	1.0	180
F 3/8x1	1.3	180
F 3/8x1 1/2	1.9	120
F 3/8x1 3/4	2.2	105
F 3/8x2	2.6	90
F 3/8x2 1/4	2.9	85
F 1/2x3/4	1.3	132
F 1/2x1	1.7	132
F 1/2x1 1/4	2.1	110
F 1/2x1 1/2	2.6	88
F 1/2x1 3/4	3.0	77
F 1/2x2	3.4	66
F 1/2x2 1/4	3.8	65
F 1/2x2 1/2	4.3	55

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

Updated: 09-25

FLATS - JACKSON, TN

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE 20'
F 1/4x2	1.7	145
F 1/4x2 1/4	1.9	125
F 1/4x2 1/2	2.1	115
F 1/4x3	2.6	96
F 1/4x3 1/2	3.0	81
F 1/4x4	3.4	72
F 1/4x4 1/2	3.8	63
F 1/4x5	4.3	56
F 1/4x5 1/2	4.7	52
F 1/4x6	5.1	48
F 5/16x2	2.1	115
F 5/16x2 1/2	2.7	90
F 5/16x3	3.2	76
F 5/16x3 1/2	3.7	66
F 5/16x4	4.3	57
F 5/16x4 1/2	4.8	51
F 5/16x5	5.3	46
F 5/16x5 1/2	5.8	42
F 5/16x6	6.4	38
F 3/8x2	2.6	95
F 3/8x3	3.8	64
F 3/8x3 1/2	4.5	54
F 3/8x4	5.1	48
F 3/8x4 1/2	5.7	42
F 3/8x5	6.4	38
F 3/8x5 1/2	7.0	34
F 3/8x6	7.7	32
F 1/2x2	3.4	70
F 1/2x2 1/2	4.3	55
F 1/2x3	5.1	48
F 1/2x3 1/2	6.0	42
F 1/2x4	6.8	36
F 1/2x4 1/2	7.7	30
F 1/2x5	8.5	28
F 1/2x5 1/2	9.4	24

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE 20'
F 1/2x6	10.2	24
F 5/8x2	4.3	55
F 5/8x2 1/2	5.3	45
F 5/8x3	6.4	36
F 5/8x3 1/2	7.4	33
F 5/8x4	8.5	27
F 5/8x4 1/2	9.6	24
F 5/8x5	10.6	22
F 5/8x5 1/2	11.7	20
F 5/8x6	12.8	18
F 3/4x2	5.1	45
F 3/4x2 1/2	6.4	35
F 3/4x3	7.7	32
F 3/4x3 1/2	8.9	27
F 3/4x4	10.2	24
F 3/4x4 1/2	11.5	21
F 3/4x5	12.8	18
F 3/4x5 1/2	14.0	16
F 3/4x6	15.3	16
F 1 1/4x2 1/2	10.6	20
F 1 1/4x3	12.8	16
F 1 1/4x4	17.0	12
F 1 1/2x2 1/2	12.8	15
F 1 1/2x3	15.3	16
F 1 1/2x4	20.4	12
F 1x2	6.8	35
F 1x2 1/2	8.5	25
F 1x3	9.1	24
F 1x3 1/2	11.9	21
F 1x4	13.6	18
F 1x4 1/2	15.3	15
F 1x5	17.0	14
F 1x5 1/2	18.7	12
F 1x6	20.4	12

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

Updated: 09-25

FLATS – WILTON, IA

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE 20'
F 3/16x1 1/2	1.0	255
F 3/16x2	1.3	192
F 3/16x3	0.6	128
F 1/4x1	0.9	288
F 1/4x1 1/4	1.1	230
F 1/4x1 1/2	1.3	192
F 1/4x1 3/4	1.5	168
F 1/4x2	1.7	144
F 1/4x2 1/4	1.9	130
F 1/4x2 1/2	2.1	115
F 1/4x2 3/4	2.3	104
F 1/4x3	2.6	96
F 1/4x3 1/2	3.0	84
F 1/4x4	3.4	72
F 1/4x5	4.3	58
F 1/4x5.980	5.1	48
F 1/4x6	5.1	48
F 5/16x1 1/4	1.3	180
F 5/16x1 1/2	1.6	152
F 5/16x1 3/4	1.9	133
F 5/16x2	2.1	114
F 5/16x2 1/2	2.7	90
F 5/16x3	3.2	76
F 5/16x3 1/2	3.7	66
F 5/16x4	4.3	57
F 5/16x5	5.3	46
F 5/16x6	6.4	38
F 3/8x1	1.3	192
F 3/8x1 1/4	1.6	150
F 3/8x1 1/2	1.9	128
F 3/8x1 3/4	2.2	112
F 3/8x2	2.6	96
F 3/8x2 1/4	2.9	85
F 3/8x2 3/4	3.5	68
F 3/8x3	3.8	64
F 3/8x3 1/2	4.5	54
F 3/8x4	5.1	48
F 3/8x5	6.4	38
F 3/8x6	7.7	32
F 1/2x1	1.7	144
F 1/2x1 1/4	2.1	110
F 1/2x1 1/2	0.9	96
F 1/2x1 3/4	3.0	84
F 1/2x2	3.4	72

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE 20'
F 1/2x2 1/4	3.8	65
F 1/2x2 1/2	4.3	55
F 1/2x2 3/4	4.7	52
F 1/2x3	5.1	48
F 1/2x3 1/2	6.0	42
F 1/2x4	6.8	36
F 1/2x5	8.5	28
F 1/2x6	10.2	24
F 5/8x1	2.1	108
F 5/8x1 1/4	2.7	90
F 5/8x1 1/2	3.2	72
F 5/8x1 3/4	3.7	63
F 5/8x2	4.3	54
F 5/8x2 1/2	3.2	45
F 5/8x3	6.4	36
F 5/8x3 1/2	7.4	33
F 5/8x4	8.5	27
F 5/8x5	10.6	22
F 5/8x6	12.8	18
F 3/4x1	2.6	96
F 3/4x1 1/4	3.2	70
F 3/4x1 1/2	3.8	64
F 3/4x1 3/4	4.5	56
F 3/4x2	5.1	48
F 3/4x2 1/2	6.4	35
F 3/4x3	7.7	32
F 3/4x3 1/2	8.9	27
F 3/4x4	10.2	24
F 3/4x5	12.8	18
F 3/4x6	15.3	16
F 1 1/4x2	8.5	24
F 1 1/4x2 1/2	10.6	20
F 1 1/4x3	12.8	16
F 1 1/2x2	10.2	24
F 1x1 1/4	4.3	50
F 1x1 1/2	5.1	48
F 1x1 3/4	6.0	42
F 1x2	6.8	36
F 1x2 1/2	8.5	25
F 1x2 3/4	9.4	25
F 1x3	10.2	24
F 1x3 1/2	11.9	21
F 1x4	13.6	18
F 1x5	17.0	14
F 1x6	20.4	12

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

Updated: 09-25

FLATS - WHITBY, ON

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE 20'
F 3/8x5	6.4	45
F 3/8x6	7.7	39
F 3/8x7	8.9	36
F 3/8x8	10.2	30
F 3/8x10	12.8	24
F 1/2x5	8.5	36
F 1/2x6	10.2	30
F 1/2x7	11.9	27
F 1/2x8	40.8	22
F 1/2x10	17.0	18
F 5/8x5	10.6	30
F 5/8x7	14.9	21
F 5/8x8	17.0	18
F 5/8x10	21.3	22
F 3/4x5	12.8	24
F 3/4x6	15.3	18
F 3/4x7	17.9	18
F 3/4x8	20.4	14
F 3/4x10	25.5	18
F 1x5	17.0	15
F 1x6	20.4	15
F 1x7	23.8	12
F 1x8	27.2	10

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

Updated: 09-25

FLATS - CAMBRIDGE, ON

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE 20'
F 3/16x3/4	0.5	544
F 3/16x1	0.6	387
F 3/16x1 1/4	0.8	314
F 3/16x1 1/2	1.0	264
F 3/16x2	1.3	197
F 3/16x3	1.9	136
F 1/4x3/4	0.6	400
F 1/4x1	0.9	294
F 1/4x1 1/4	1.1	241
F 1/4x1 1/2	1.3	200
F 1/4x1 3/4	1.5	175
F 1/4x2	1.7	144
F 1/4x2 1/4	1.9	135
F 1/4x2 1/2	2.1	117
F 1/4x2 3/4	2.3	112
F 1/4x3	2.6	100
F 1/4x3 1/4	2.8	96
F 1/4x3 1/2	3.0	84
F 1/4x3 3/4	3.2	81
F 1/4x4	3.4	75
F 5/16x3/4	0.8	316
F 5/16x1	1.1	240
F 5/16x1 1/4	1.3	190
F 5/16x1 1/2	1.6	160
F 5/16x1 3/4	1.9	140
F 5/16x2	2.1	120
F 5/16x2 1/2	2.7	95
F 5/16x3	3.2	80
F 5/16x3 1/2	3.7	69
F 5/16x4	4.3	60
F 3/8x3/4	1.0	252
F 3/8x1	1.3	204
F 3/8x1 1/4	1.6	160
F 3/8x1 1/2	1.9	136
F 3/8x1 3/4	2.2	112
F 3/8x2	2.6	102
F 3/8x2 1/4	2.9	90
F 3/8x2 3/4	3.5	72
F 3/8x3	3.8	68
F 3/8x3 1/4	4.1	64
F 3/8x3 1/2	4.5	57
F 3/8x4	5.1	51
F 7/16x1 1/2	2.2	108
F 1/2x3/4	1.3	192

MATERIAL DESCRIPTION	WT / FT	PCS / BUNDLE 20'
F 1/2x1	1.7	144
F 1/2x1 1/4	2.1	120
F 1/2x1 1/2	2.6	96
F 1/2x1 3/4	3.0	84
F 1/2x2	3.4	72
F 1/2x2 1/4	3.8	65
F 1/2x2 1/2	2.6	60
F 1/2x2 3/4	4.7	56
F 1/2x3	5.1	48
F 1/2x3 1/2	6.0	42
F 1/2x3 3/4	6.4	39
F 1/2x4	6.8	36
F 5/8x1	2.1	120
F 5/8x1 1/4	2.7	100
F 5/8x1 1/2	3.2	80
F 5/8x1 3/4	3.7	69
F 5/8x2	4.3	60
F 5/8x2 1/2	5.3	50
F 5/8x2 3/4	5.8	44
F 5/8x3	6.4	39
F 5/8x3 1/2	7.4	34
F 5/8x4	8.5	30
F 3/4x1	2.6	96
F 3/4x1 1/4	3.2	80
F 3/4x1 1/2	3.8	64
F 3/4x1 3/4	4.5	57
F 3/4x2	5.1	48
F 3/4x2 1/4	5.7	45
F 3/4x2 1/2	6.4	38
F 3/4x2 3/4	7.0	36
F 3/4x3	7.7	33
F 3/4x3 1/4	8.3	30
F 7/8x1 1/2	4.5	56
F 7/8x2	6.0	42
F 7/8x3	8.9	28
F 1x1 1/4	4.3	60
F 1x1 1/2	5.1	48
F 1x1 3/4	6.0	42
F 1x2	6.8	36
F 1x2 1/2	8.5	30
F 1x2 3/4	9.4	28
F 1x3	10.2	24
F 1x3 1/4	11.1	23

Exact piece count is not guaranteed for merchant products and standard quantity tolerances apply.

Updated: 09-25


STRUCTURAL

Photo credit GMF Steel Group

GERDAU STRUCTURAL PRODUCTS IN USE

TYNDALL AIR FORCE BASE

Panama City, Florida

The Tyndall Air Force Base is located southeast of Panama City, Florida. In 2018, the base sustained a direct hit from Hurricane Michael. Tyndall was rebuilt to include resilient construction design to withstand the impacts of inclement weather.

This project was particularly challenging given the long lead time between initial design and release to production. Gerdau stayed engaged with its customer for over 18 months working on this project until it was finally awarded the steel supply. This close collaboration between mill and fabricator from the early stages of the project allowed Gerdau's customer to navigate the uncertainties associated with long lead time projects.

STRUCTURAL STEEL PRODUCTS AND BUNDLES

WIDE FLANGE BEAMS: MIDLOTHIAN, TX & PETERSBURG, VA

SHAPE	MILL	PCS/ BUNDLE
W4x13	TX	15
W6x7	TX	21
W6x7.5	TX	21
W6x8.5	TX	24
W6x9	TX	24
W6x10.4	TX	24
W6x12	TX	18
W6x15	TX	12
W6x16	TX	12
W6x20	TX	9
W6x25	TX	9
W8x10	TX	21
W8x13	TX	15
W8x15	TX	12
W8x18	TX	12
W8x21	TX	10
W8x24	TX	8
W8x28	TX	6
W8x31, 35, 40	TX, VA*	6
W8x48, 58	TX, VA*	4
W8x67	TX, VA*	3
W10x12	TX	16
W10x15	TX	14
W10x17	TX	12
W10x19	TX	10
W10x22, 26	TX	8
W10x30	TX	6
W10x33, 39	TX, VA*	6
W10x45	TX, VA*	4
W10x49, 54, 60	TX, VA	4
W10x68, 77	TX, VA	3
W10x88	TX, VA	2

*Not currently produced in VA

SHAPE	MILL	PCS/ BUNDLE
W10x100, 112	TX, VA	2
W12x14	TX	16
W12x16	TX	14
W12x19	TX	12
W12x22	TX	10
W12x26, 30, 35	TX	6
W12x40, 45, 50	TX, VA*	4
W12x53, 58	TX, VA	4, 3
W12x65, 72	VA	4
W12x79, 87, 96	VA	2
W12x106, 120, 136, 152, 170, 190, 210	VA	1
W14x22, 26	TX	8
W14x30, 34, 38	TX	6
W14x43, 48, 53	TX, VA*	4
W14x61, 68, 74, 82	TX, VA	3
W14x90, 99, 109	VA	2
W14x120, 132	VA	1
W14x145, 159, 176, 193, 211, 233, 257	VA	1
W16x26, 31	TX, VA	6
W16x36, 40, 45	TX, VA	5
W16x50, 57	TX, VA	3
W16x67, 77	TX, VA	3
W16x89, 100	TX, VA	2
W18x35	TX, VA	6
W18x40, 46	TX, VA	5
W18x50, 55	TX, VA	4
W18x60, 65, 71	TX, VA	3
W18x76, 86, 97	VA	2
W18x106,119, 130, 143,158, 175,192, 211	VA	1
W21x44, 50, 57	TX, VA	4
W21x48, 55, 62	TX	4
W21x68, 73, 83	TX	3

WIDE FLANGE BEAMS: MIDLOTHIAN, TX & PETERSBURG, VA

SHAPE	MILL	PCS / BUNDLE
W21x93	TX	2
W21x101, 111, 122, 132, 147, 166, 182, 201	VA	1
W24x55, 62	TX, VA	4
W24x68, 76	TX, VA	3
W24x84, 94, 103	TX, VA	2
W24x104, 117, 131, 146, 162, 176, 192, 207	VA	1
W27x84, 94, 102, 114, 129	VA	1
W27x146, 161, 178, 194, 217, 235	VA	1
W30x90, 99, 108, 116, 124, 132, 148	VA	1
W33x118, 130, 141, 152, 169	VA	1
W36x135, 150, 160, 170, 182, 194, 210, 232, 256	VA	1

WIDE FLANGE BEAMS: CARTERSVILLE, GA

SHAPE	LENGTH (ft)	MILL	PCS / BUNDLE
W4x13	20, 40	GA	18
W4x13	25, 30, 35	GA	21
W4x13	45, 50	GA	15
W4x13	55	GA	13
W4x13	60	GA	12
W6x7	20 - 40, 50, 60	GA	21
W6x7	45, 55	GA	12
W6x8.5	20 - 55	GA	21
W6x8.5	35	GA	24
W6x8.5	60	GA	18
W6x9	20, 25	GA	27
W6x9	30, 35	GA	30
W6x9	40, 50	GA	21
W6x9	45	GA	24
W6x9	55, 60	GA	18
W6x12	20, 35	GA	21

WIDE FLANGE BEAMS: CARTERSVILLE, GA

SHAPE	LENGTH (ft)	MILL	PCS / BUNDLE
W6x12	25	GA	33
W6x12	30	GA	27
W6x12	40, 45	GA	18
W6x12	50	GA	16
W6x12	55	GA	14
W6x12	60	GA	12
W6x15	20, 30, 40	GA	15
W6x15	25, 45 - 55	GA	12
W6x15	60	GA	10
W6x15	65	GA	9
W6x16	20, 35, 40	GA	15
W6x16	30	GA	18
W6x16	45, 50	GA	12
W6x16	55, 60	GA	10
W6x20	20, 35, 40	GA	12
W6x20	25, 30	GA	15
W6x20	45, 50	GA	9
W6x20	55, 60	GA	8
W6x20	65	GA	6
W6x25	20, 25, 35	GA	9
W6x25	30	GA	12
W6x25	40	GA	10
W6x25	45, 50	GA	8
W6x25	60	GA	6
W8x10	20 - 45	GA	20
W8x10	50, 55	GA	18
W8x10	60	GA	16
W8x13	20, 40	GA	18
W8x13	25 - 35	GA	20
W8x13	45	GA	16
W8x13	50	GA	14
W8x13	55, 60	GA	10
W8x15	20, 40	GA	16

WIDE FLANGE BEAMS: CARTERSVILLE, GA

SHAPE	LENGTH (ft)	MILL	PCS / BUNDLE
W8x15	25, 30	GA	20
W8x15	35	GA	18
W8x15	45	GA	14
W8x15	50	GA	12
W8x15	55 - 65	GA	10
W8x18	20, 35	GA	14
W8x18	25, 50, 55	GA	10
W8x18	30	GA	16
W8x18	40, 45	GA	12
W8x18	50, 55	GA	10
W8x18	60, 65	GA	8
W8x21	20	GA	12
W8x21	25, 40, 45	GA	10
W8x21	30	GA	14
W8x21	50	GA	8
W8x21	55 - 65	GA	7
W8x24	20, 35, 40	GA	10
W8x24	25, 30	GA	12
W8x24	45, 50	GA	8
W8x24	55 - 65	GA	6
W8x28	20, 35, 40	GA	8
W8x28	25, 45 - 55	GA	6
W8x28	30	GA	10
W8x28	60, 65	GA	5
W8x31, 35, 40	20 - 65	GA	6
W8x48, 58	20 - 65	GA	4
W8x67	20 - 65	GA	3
W10x12	20, 30 - 40	GA	20
W10x12	45	GA	18
W10x12	25, 50	GA	16
W10x12	55, 60	GA	10
W10x15	20, 40	GA	16
W10x15	25, 30	GA	20

WIDE FLANGE BEAMS: CARTERSVILLE, GA

SHAPE	LENGTH (ft)	MILL	PCS / BUNDLE
W10x15	35	GA	18
W10x15	45	GA	14
W10x15	50	GA	12
W10x15	55, 60	GA	10
W10x17	20, 40	GA	14
W10x17	25, 30	GA	18
W10x17	35	GA	16
W10x17	45	GA	12
W10x17	50, 55	GA	10
W10x17	60, 65	GA	8
W10x19	20, 40	GA	12
W10x19	25, 45, 50	GA	10
W10x19	35	GA	14
W10x19	55, 60	GA	8
W10x22	20, 40, 45	GA	10
W10x22	25	GA	8
W10x22	30	GA	14
W10x22	35	GA	12
W10x22	50 - 60	GA	7
W10x22	65	GA	6
W10x26	20, 35	GA	10
W10x26	25, 30	GA	12
W10x26	40, 45	GA	8
W10x26	50	GA	7
W10x26	55, 60	GA	6
W10x26	65	GA	5
W10x30	20, 25, 35	GA	8
W10x30	30	GA	10
W10x30	40, 45	GA	7
W10x30	50, 55	GA	6
W10x30	60, 65	GA	5
W10x33, 39	20 - 65	GA	6
W10x45	20 - 65	GA	4

WIDE FLANGE BEAMS: CARTERSVILLE, GA

SHAPE	LENGTH (ft)	MILL	PCS / BUNDLE
W12x14	20	GA	18
W12x14	25, 45, 50	GA	14
W12x14	30, 35	GA	20
W12x14	40	GA	16
W12x14	55 - 65	GA	10
W12x16	20, 35	GA	16
W12x16	25, 45	GA	12
W12x16	30	GA	18
W12x16	40	GA	14
W12x16	50 - 60	GA	10
W12x19	20, 40	GA	12
W12x19	25, 45, 50	GA	10
W12x19	30	GA	16
W12x19	35	GA	14
W12x19	55 - 65	GA	8
W12x22	20, 40, 45	GA	10
W12x22	25, 50, 55	GA	8
W12x22	30	GA	14
W12x22	35	GA	12
W12x22	60	GA	7
W12x22	65	GA	6
W12x26	20, 25, 35	GA	10
W12x26	30	GA	12
W12x26	40, 45	GA	8
W12x26	50 - 60	GA	6
W12x26	65	GA	5
W12x30	20, 35, 40	GA	8
W12x30	25, 30	GA	10
W12x30	45 - 55	GA	6
W12x30	60, 65	GA	5
W12x35	20, 25, 40, 45	GA	6
W12x35	30, 35	GA	8
W12x35	50, 55	GA	5

WIDE FLANGE BEAMS: CARTERSVILLE, GA

SHAPE	LENGTH (ft)	MILL	PCS / BUNDLE
W12x35	60, 65	GA	4
W12x40, 45, 50	20 - 65	GA	4
W14x22	20 - 55	GA	8
W14x22	60	GA	7
W14x22	65	GA	6
W14x26	20 - 45	GA	8
W14x26	50	GA	7
W14x26	55, 60	GA	6
W14x26	65	GA	5
W14x30	20 - 55	GA	6
W14x30	60	GA	5
W14x34	20, 30 - 45	GA	6
W14x34	50, 55	GA	5
W14x34	60	GA	4
W14x38	20, 30 - 40	GA	6
W14x38	55, 60, 65	GA	4
W14x38	45, 50	GA	5
W14x43, 48, 53	20 - 30, 40 - 50, 60, 65	GA	4

STANDARD BEAMS: CARTERSVILLE, GA

SHAPE	LENGTH (ft)	MILL	PCS / BUNDLE
S5x7.2	20, 40	GA	33
S5x10	20 - 40	GA	24
S5x10	45	GA	21
S5x10	50	GA	18
S5x10	60	GA	15

STANDARD BEAMS: MIDLOTHIAN, TX

SHAPE	MILL	PCS / BUNDLE
S3x5.7	TX	36
S3x7.5	TX	28
S4x7.7	TX	28
S4X9.25	TX	20
S4x9.5	TX	20
S5X10	TX	21
S6x12.5	TX	15
S6x17.25	TX	12
S8x18.4	TX	10
S8x23	TX	8
S10x25.4	TX	8
S10x35	TX	6
S12x31.8	TX	6

MISCELLANEOUS BEAMS: MIDLOTHIAN, TX

SHAPE	MILL	PCS / BUNDLE
M8x6.5	TX	24
M10x8	TX	18
M10x9	TX	16
M12x10.8	TX	12
M12x11.8	TX	12
M12.5x11.6	TX	12
M12.5x12.4	TX	12

W SHAPE CAPABILITY

AISC BLOCKS	BEAM SIZE BY BLOCK
W4x4	W4X13
W6x4	W6x4 W6x7 W6x7.5 W6x8.5 W6x9 W6x10.4 W6x12 W6x16
W6x6	W6X15 W6X20 W6X25
W8x4	W8X10 W8X13 W8X15
W8x5¼	W8X18 W8X21
W8x6½	W8X24 W8X28
W8x8	W8X31 W8X35 W8X40 W8X48 W8X58 W8X67
W10x4	W10X12 W10X15 W10X17 W10X19
W10x5¾	W10X22 W10X26 W10X30
W10x8	W10X33 W10X39 W10X45
W10x10	W10X49 W10X54 W10X60 W10X68 W10X77 W10X88 W10X100 W10X112
W12x4	W12X14 W12X16 W12X19 W12X22
W12x6½	W12X26 W12X30 W12X35
W12x8	W12X40 W12X45 W12X50
W12x10	W12X53 W12X58
W12x12	W12X65 W12X72 W12X79 W12X87 W12x96 W12X106 W12X120 W12X136 W12X152 W12X170 W12X190 W12X210
W14x5	W14X22 W14X26
W14x6¾	W14X30 W14X34 W14X38
W14x8	W14X43 W14X48 W14X53
W14x10	W14X61 W14X68 W14X74 W14X82
W14x14½	W14X90 W14X99 W14X109 W14X120 W14X132
W14x16	W14X145 W14X159 W14X176 W14X193 W14X211 W14X233 W14X257
W16x5½	W16X26 W16X31
W16x7	W16X36 W16X40 W16X45 W16X50 W16X57
W16x10¼	W16X67 W16X77 W16X89 W16X100
W18x6	W18X35 W18X40 W18X46
W18x7½	W18X50 W18X55 W18X60 W18X65 W18X71
W18x11	W18X76 W18X86 W18X97 W18X106 W18X119 W18X130 W18X143 W18X158 W18X175 W18X192 W18X211
W21x6½	W21X44 W21X50 W21X57
W21x8¼	W21X48 W21X55 W21X62 W21X68 W21X73 W21X83 W21X93
W21x12¼	W21X101 W21X111 W21X122 W21X132 W21X147 W21X166 W21X182 W21X201
W24x7	W24X55 W24X62
W24x9	W24X68 W24X76 W24X84 W24X94 W24X103
W24x12¾	W24X104 W24X117 W24X131 W24X146 W24X162 W24X176 W24X192 W24X207
W27x10	W27X84 W27X94 W27X102 W27X114 W27X129
W27x14	W27X146 W27X161 W27X178 W27X194 W27X217 W27X235
W30x10½	W30X90 W30X99 W30X108 W30X116 W30X124 W30X132 W30X148
W33x11½	W33X118 W33X130 W33X141 W33X152 W33X169
W36x12	W36X135 W36X150 W36X160 W36X170 W36X182 W36X194 W36X210 W36X232 W36X256

HIGH-STRENGTH GRADES AND SUSTAINABILITY

Grade 65 beams are becoming increasingly popular, but understanding about this product varies. Check out the most commonly asked questions our team receives below:

WHAT IS GRADE 65?

A high-strength, low-alloy steel designed for structural applications, with minimum yield strength of 65 ksi.

1. Addition of Alloys (A572-65)

Produced similarly to Grade 50 but using higher alloy content to increase strength.

PROS: Can be made in various sizes, from small to large, and is widely available.
CONS: Higher production cost, higher carbon equivalent.

2. Heat Treatment (A913)

Increase in strength is achieved by heat treating the steel directly at the rolling mill.

PROS: Reduced production costs and improved impact resistance (lower alloy).
CONS: Limited to thicker sections and fewer suppliers. Specialized welding procedure and maximum heating temperature that needs to be clearly communicated to the construction team.

CAN GRADE 65 LOWER THE EMISSIONS OF A PROJECT?

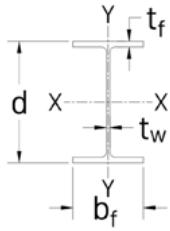
Some companies are designing with higher strength steel in effort to reduce building weight and lower the carbon footprint of the structures. Higher strength steel used in column sections and heavy girders typically result in weight reduction. **However, the weight reduction is often not sufficient to lower the carbon footprint of the structure.**

The example below demonstrates why.

Grade 65 Use in Column W14x176 (A913 or A572-65) replacing W14x233 (A992 or A572-50)

The use of the 176 lb/ft column in A913 represents a 23% reduction in the weight. However, that decrease is not enough to offset the difference between the GWP of Gerdau Petersburg and the GWP of the domestic producer of A913.

SHAPE	NOMINAL WEIGHT (LB/FT)	YIELD STRENGTH (KSI)	CRADLE TO GATE MILL PRODUCT	
			PLANT GWP (KG CO2/M TON)	GWP / SECTION (CO2E/FT)
W14x176	176	65 (A913)	816	0.065
W14x233	233	50 (A572-50)	527	0.056



d - Depth
t_w - Thickness of web
b_f - Width of flange

I - Moment of inertia
S - Elastic section modulus
r - Radius of gyration
Z - Plastic section modulus

WIDE FLANGE BEAM DIMENSIONS

	Shape		Area	WEB d	WEB t_w	FLANGE b_f	FLANGE t_w	AXIS X-X I_x	AXIS X-X S_x	AXIS X-X r_x	AXIS X-X Z_x	AXIS Y-Y I_y	AXIS Y-Y S_y	AXIS Y-Y r_y	AXIS Y-Y Z_y
	in. *(mm)*	lb/ft *(kg/m)*	$in.^2$ *(cm^2)*	in. *(mm)*	in. *(mm)*	in. *(mm)*	in. *(mm)*	$in.^4$ *($10^4 mm^4$)*	$in.^3$ *($10^3 mm^3$)*	$in.^3$ *(mm)*	in. *($10^3 mm^3$)*	$in.^4$ *($10^4 mm^4$)*	$in.^3$ *($10^3 mm^3$)*	$in.^3$ *(mm)*	in. *($10^3 mm^3$)*
W4X4	W4X	13	3.83	4.16	0.280	4.06	0.345	11.3	5.46	1.72	6.28	3.86	1.9	1.0	2.92
	W100X	*19.3*	*2,470*	*106*	*7.11*	*103*	*8.76*	*4.7*	*89.5*	*43.7*	*103*	*1.61*	*31.1*	*25.4*	*47.9*
W6X4		7	2.1	5.8	0.1	3.9	0.2	12.3	4.3	2.4	4.7	1.6	0.8	0.9	1.3
		10.4	*1335.5*	*147*	*3.4*	*99*	*4.1*	*5.1*	*69.6*	*62.0*	*77.5*	*0.7*	*13.4*	*22.3*	*20.6*
		7.5	2.3	5.8	0.2	3.9	0.2	13.7	4.7	2.4	5.3	1.8	0.9	0.9	1.4
		11.2	*1477.4*	*148*	*3.8*	*100*	*4.5*	*5.1*	*77.0*	*62.0*	*86.0*	*0.7*	*14.9*	*22.4*	*22.9*
		8.5	2.52	5.83	0.17	3.94	0.195	14.9	5.1	2.43	5.73	1.99	1.01	0.89	1.56
		13	*1,630*	*148*	*4.32*	*100*	*5.0*	*6.2*	*83.6*	*61.7*	*93.9*	*0.828*	*16.6*	*22.6*	*25.6*
		9	2.68	5.9	0.17	3.94	0.215	16.4	5.56	2.47	6.23	2.2	1.11	0.905	1.72
		13.5	*1,730*	*150*	*4.32*	*100*	*5.5*	*6.83*	*91.1*	*62.7*	*102*	*0.916*	*18.2*	*23*	*28.2*
		10.4	3.1	6.0	0.2	4.0	0.2	19.3	6.5	2.5	7.3	2.6	1.3	0.9	2.0
	W6X	*15.5*	*2,019*	*151*	*5.1*	*101*	*6.3*	*8.0*	*106.2*	*63.0*	*119.8*	*1.1*	*21.3*	*23.1*	*32.9*
	W150X	12	3.55	6.03	0.23	4	0.28	22.1	7.31	2.49	8.3	2.99	1.5	0.918	2.32
		18	*2,290*	*153*	*5.84*	*102*	*7.1*	*9.2*	*120*	*63.2*	*136*	*1.24*	*24.6*	*23.3*	*38.0*
		16	4.74	6.28	0.26	4.03	0.405	32.1	10.2	2.6	11.7	4.43	2.2	0.967	3.39
		24	*3,060*	*160*	*6.6*	*102*	*10.3*	*13.4*	*167*	*66*	*192*	*1.84*	*36.1*	*24.6*	*55.6*
W6X6		15	4.43	5.99	0.23	5.99	0.26	29.1	9.72	2.56	10.8	9.32	3.11	1.45	4.75
		22.5	*2,860*	*152*	*5.84*	*152*	*6.6*	*12.1*	*159*	*65*	*177*	*3.88*	*51*	*36.8*	*77.8*
		20	5.87	6.2	0.26	6.02	0.365	41.4	13.4	2.66	14.9	13.3	4.41	1.5	6.72
		29.8	*3,790*	*157*	*6.6*	*153*	*9.27*	*17.2*	*220*	*67.6*	*246*	*5.54*	*72.3*	*38.1*	*110*
		25	7.34	6.38	0.32	6.08	0.455	53.4	16.7	2.7	18.9	17.1	5.61	1.52	8.56
		37.1	*4,740*	*162*	*8.13*	*154*	*11.6*	*22.2*	*274*	*68.6*	*310*	*7.12*	*91.9*	*38.6*	*140*
W8X4		10	2.96	7.89	0.17	3.94	0.205	30.8	7.81	3.22	8.87	2.09	1.06	0.841	1.66
		15	*1,910*	*200*	*4.32*	*100*	*5.21*	*12.8*	*128*	*81.8*	*145*	*0.87*	*17.4*	*21.4*	*27.2*
	W8X	13	3.84	7.99	0.23	4	0.255	39.6	9.91	3.21	11.4	2.73	1.37	0.843	2.15
	W200X	*19.3*	*2,480*	*203*	*5.84*	*102*	*6.48*	*16.5*	*162*	*81.5*	*187*	*1.14*	*22.5*	*21.4*	*35.2*
		15	4.44	8.11	0.245	4.02	0.315	48	11.8	3.29	13.6	3.41	1.7	0.876	2.67
		22.5	*2,860*	*206*	*6.22*	*102*	*8*	*20*	*193*	*83.6*	*223*	*1.42*	*27.9*	*22.3*	*43.8*

	Shape		Area	WEB		FLANGE		AXIS X-X				AXIS Y-Y			
	in. *(mm)*	lb/ft *(kg/m)*	$in.^2$ *(cm^2)*	d in. (mm)	t_w in. *(mm)*	b_f in. *(mm)*	t_w in. *(mm)*	I_x $in.^4$ *($10^6 mm^4$)*	S_x $in.^3$ *($10^3 mm^3$)*	r_x in. *(mm)*	Z_x in. *($10^3 mm^3$)*	I_y $in.^4$ *($10^6 mm^4$)*	S_y $in.^3$ *($10^3 mm^3$)*	r_y in. *(mm)*	Z_y in. *($10^3 mm^3$)*
W8X5 1/4		18	5.26	8.14	0.23	5.25	0.33	61.9	15.2	3.43	17	7.97	3.04	1.23	4.66
		26.6	*3,390*	*207*	*5.84*	*133*	*8.38*	*25.8*	*249*	*87.1*	*279*	*3.32*	*49.8*	*31.2*	*76.4*
		21	6.16	8.28	0.25	5.27	0.4	75.3	18.2	3.49	20.4	9.77	3.71	1.26	5.69
		31.3	*3,970*	*210*	*6.35*	*134*	*10.2*	*31.3*	*298*	*88.6*	*334*	*4.07*	*60.8*	*32*	*93.2*
W8X6 1/2		24	7.08	7.93	0.245	6.5	0.4	82.7	20.9	3.42	23.1	18.3	5.63	1.61	8.57
		35.9	*4,570*	*201*	*6.22*	*165*	*10.2*	*34.4*	*342*	*86.9*	*379*	*7.62*	*92.3*	*40.9*	*140*
		28	8.25	8.06	0.285	6.54	0.465	98	24.3	3.45	27.2	21.7	6.63	1.62	10.1
		41.7	*5,320*	*205*	*7.24*	*166*	*11.8*	*40.8*	*398*	*87.6*	*446*	*9.03*	*109*	*41.1*	*166*
W8X8		31	9.13	8	0.285	8	0.435	110	27.5	3.47	30.4	37.1	9.27	2.02	14.1
	W8X *W200X*	*46.1*	*5,890*	*203*	*7.24*	*203*	*11*	*45.8*	*451*	*88.1*	*498*	*15.4*	*152*	*51.3*	*231*
		35	10.3	8.12	0.31	8.02	0.495	127	31.2	3.51	34.7	42.6	10.6	2.03	16.1
		52	*6,650*	*206*	*7.87*	*204*	*12.6*	*52.9*	*511*	*89.2*	*569*	*17.7*	*174*	*51.6*	*264*
		40	11.7	8.25	0.36	8.07	0.56	146	35.5	3.53	39.8	49.1	12.2	2.04	18.5
		59	*7,550*	*210*	*9.14*	*205*	*14.2*	*60.8*	*582*	*89.7*	*652*	*20.4*	*200*	*51.8*	*303*
		48	14.1	8.5	0.4	8.11	0.685	184	43.2	3.61	49	60.9	15	2.08	22.9
		71	*9,100*	*216*	*10.2*	*206*	*17.4*	*76.6*	*708*	*91.7*	*803*	*25.3*	*246*	*52.8*	*375*
		58	17.1	8.75	0.51	8.22	0.81	228	52	3.65	59.8	75.1	18.3	2.1	27.9
		86	*11,000*	*222*	*13*	*209*	*20.6*	*94.9*	*852*	*92.7*	*980*	*31.3*	*300*	*53.3*	*457*
		67	19.7	9	0.57	8.28	0.935	272	60.4	3.72	70.1	88.6	21.4	2.12	32.7
		100	*12,700*	*229*	*14.5*	*210*	*23.7*	*113*	*990*	*94.5*	*1,150*	*36.9*	*351*	*53.8*	*536*
W10X4		12	3.54	9.87	0.19	3.96	0.21	53.8	10.9	3.9	12.6	2.18	1.1	0.785	1.74
		17.9	*2,280*	*251*	*4.83*	*101*	*5.33*	*22.4*	*179*	*99.1*	*206*	*0.907*	*18*	*19.9*	*28.5*
		15	4.41	9.99	0.23	4	0.27	68.9	13.8	3.95	16	2.89	1.45	0.81	2.3
		22.3	*2,850*	*254*	*5.84*	*102*	*6.86*	*28.7*	*226*	*100*	*262*	*1.2*	*23.8*	*20.6*	*37.7*
		17	4.99	10.1	0.24	4.01	0.33	81.9	16.2	4.05	18.7	3.56	1.78	0.845	2.8
		25.3	*3,220*	*257*	*6.1*	*102*	*8.38*	*34.1*	*265*	*103*	*306*	*1.48*	*29.2*	*21.5*	*45.9*
		19	5.62	10.2	0.25	4.02	0.395	96.3	18.8	4.14	21.6	4.29	2.14	0.874	3.35
		28.4	*3,630*	*259*	*6.35*	*102*	*10*	*40.1*	*308*	*105*	*354*	*1.79*	*35.1*	*22.2*	*54.9*
W10X5¾		22	6.49	10.2	0.24	5.75	0.36	118	23.2	4.27	26	11.4	3.97	1.33	6.1
	W10 X *W250 X*	*32.7*	*4,190*	*259*	*6.1*	*146*	*9.14*	*49.1*	*380*	*108*	*426*	*4.75*	*65.1*	*33.8*	*100*
		26	7.61	10.3	0.26	5.77	0.44	144	27.9	4.35	31.3	14.1	4.89	1.36	7.5
		38.5	*4,910*	*262*	*6.6*	*147*	*11.2*	*59.9*	*457*	*110*	*513*	*5.87*	*80.1*	*34.5*	*123*
		30	8.84	10.5	0.3	5.81	0.51	170	32.4	4.38	36.6	16.7	5.75	1.37	8.84
		44.8	*5,700*	*267*	*7.62*	*148*	*13*	*70.8*	*531*	*111*	*600*	*6.95*	*94.2*	*34.8*	*145*
W10X8		33	9.71	9.73	0.29	7.96	0.435	171	35	4.19	38.8	36.6	9.2	1.94	14
		49.1	*6,260*	*247*	*7.37*	*202*	*11*	*71.2*	*574*	*106*	*636*	*15.2*	*151*	*49.3*	*229*
		39	11.5	9.92	0.315	7.99	0.53	209	42.1	4.27	46.8	45	11.3	1.98	17.2
		58	*7,420*	*252*	*8*	*203*	*13.5*	*87*	*690*	*108*	*767*	*18.7*	*185*	*50.3*	*282*
		45	13.3	10.1	0.35	8.02	0.62	248	49.1	4.32	54.9	53.4	13.3	2.01	20.3
		67	*8,580*	*257*	*8.89*	*204*	*15.7*	*103*	*805*	*110*	*900*	*22.2*	*218*	*51.1*	*333*

	Shape		Area	WEB		FLANGE		AXIS X-X				AXIS Y-Y			
	in. *(mm)*	lb/ft *(kg/m)*	$in.^2$ *(cm^2)*	d in. *(mm)*	t_w in. *(mm)*	b_f in. *(mm)*	t_w in. *(mm)*	I_x $in.^4$ *($10^6 mm^4$)*	S_x $in.^3$ *($10^3 mm^3$)*	r_x in. *(mm)*	Z_x $in.^3$ *($10^3 mm^3$)*	I_y $in.^4$ *($10^6 mm^4$)*	S_y $in.^3$ *($10^3 mm^3$)*	r_y in. *(mm)*	Z_y $in.^3$ *($10^3 mm^3$)*
W10X10	W10 X *W250 X*	49	14.4	10	0.34	10	0.56	272	54.6	4.35	60.4	93.4	18.7	2.54	28.3
		73	*9,290*	*254*	*8.64*	*254*	*14.2*	*113*	*895*	*110*	*990*	*38.9*	*306*	*64.5*	*464*
		54	15.8	10.1	0.37	10	0.615	303	60	4.37	66.6	103	20.6	2.56	31.3
		80	*10,200*	*257*	*9.4*	*254*	*15.6*	*126*	*983*	*111*	*1,090*	*42.9*	*338*	*65*	*513*
		60	17.7	10.2	0.42	10.1	0.68	341	66.7	4.39	74.6	116	23	2.57	35
		89	*11,400*	*259*	*10.7*	*257*	*17.3*	*142*	*1,090*	*112*	*1,220*	*48.3*	*377*	*65.3*	*574*
		68	19.9	10.4	0.47	10.1	0.77	394	75.7	4.44	85.3	134	26.4	2.59	40.1
		101	*12,800*	*264*	*11.9*	*257*	*19.6*	*164*	*1,240*	*113*	*1,400*	*55.8*	*433*	*65.8*	*657*
		77	22.7	10.6	0.53	10.2	0.87	455	85.9	4.49	97.6	154	30.1	2.6	45.9
		115	*14,600*	*269*	*13.5*	*259*	*22.1*	*189*	*1,410*	*114*	*1,600*	*64.1*	*493*	*66*	*752*
		88	26	10.8	0.605	10.3	0.99	534	98.5	4.54	113	179	34.8	2.63	53.1
		131	*16,800*	*274*	*15.4*	*262*	*25.1*	*222*	*1,610*	*115*	*1,850*	*74.5*	*570*	*66.8*	*870*
		100	29.3	11.1	0.68	10.3	1.12	623	112	4.6	130	207	40	2.65	61
		149	*18,900*	*282*	*17.3*	*262*	*28.4*	*259*	*1,840*	*117*	*2,130*	*86.2*	*655*	*67.3*	*1,000*
		112	32.9	11.4	0.755	10.4	1.25	716	126	4.66	147	236	45.3	2.68	69.2
		167	*21,200*	*290*	*19.2*	*264*	*31.8*	*298*	*2,060*	*118*	*2,410*	*98.2*	*742*	*68.1*	*1,130*
W12X4		14	4.16	11.9	0.2	3.97	0.225	88.6	14.9	4.62	17.4	2.36	1.19	0.753	1.9
		21	*2,680*	*302*	*5.08*	*101*	*5.72*	*36.9*	*244*	*117*	*285*	*0.982*	*19.5*	*19.1*	*31.1*
		16	4.71	12	0.22	3.99	0.265	103	17.1	4.67	20.1	2.82	1.41	0.773	2.26
		23.8	*3,040*	*305*	*5.59*	*101*	*6.73*	*42.9*	*280*	*119*	*329*	*1.17*	*23.1*	*19.6*	*37*
		19	5.57	12.2	0.235	4.01	0.35	130	21.3	4.82	24.7	3.76	1.88	0.822	2.98
		28.3	*3,590*	*310*	*5.97*	*102*	*8.89*	*54.1*	*349*	*122*	*405*	*1.57*	*30.8*	*20.9*	*48.8*
		22	6.48	12.3	0.26	4.03	0.425	156	25.4	4.91	29.3	4.66	2.31	0.848	3.66
		32.7	*4,180*	*312*	*6.6*	*102*	*10.8*	*64.9*	*416*	*125*	*480*	*1.94*	*37.9*	*21.5*	*60*
W12X6½		26	7.65	12.2	0.23	6.49	0.38	204	33.4	5.17	37.2	17.3	5.34	1.51	8.17
		38.7	*4,940*	*310*	*5.84*	*165*	*9.65*	*84.9*	*547*	*131*	*610*	*7.2*	*87.5*	*38.4*	*134*
		30	8.79	12.3	0.26	6.52	0.44	238	38.6	5.21	43.1	20.3	6.24	1.52	9.56
	W12 X *W310 X*	*44.5*	*5,670*	*312*	*6.6*	*166*	*11.2*	*99.1*	*633*	*132*	*706*	*8.45*	*102*	*38.6*	*157*
		35	10.3	12.5	0.3	6.56	0.52	285	45.6	5.25	51.2	24.5	7.47	1.54	11.5
		52	*6,650*	*318*	*7.62*	*167*	*13.2*	*119*	*747*	*133*	*839*	*10.2*	*122*	*39.1*	*188*
W12X8		40	11.7	11.9	0.295	8.01	0.515	307	51.5	5.13	57	44.1	11	1.94	16.8
		60	*7,550*	*302*	*7.49*	*203*	*13.1*	*128*	*844*	*130*	*934*	*18.4*	*180*	*49.3*	*275*
		45	13.1	12.1	0.335	8.05	0.575	348	57.7	5.15	64.2	50	12.4	1.95	19
		67	*8,450*	*307*	*8.51*	*204*	*14.6*	*145*	*946*	*131*	*1,050*	*20.8*	*203*	*49.5*	*311*
		50	14.6	12.2	0.37	8.08	0.64	391	64.2	5.18	71.9	56.3	13.9	1.96	21.3
		74	*9,420*	*310*	*9.4*	*205*	*16.3*	*163*	*1,050*	*132*	*1,180*	*23.4*	*228*	*49.8*	*349*
W12X10		53	15.6	12.1	0.345	10	0.575	425	70.6	5.23	77.9	95.8	19.2	2.48	29.1
		79	*10,100*	*307*	*8.76*	*254*	*14.6*	*177*	*1,160*	*133*	*1,280*	*39.9*	*315*	*63*	*477*
		58	17	12.2	0.36	10	0.64	475	78	5.28	86.4	107	21.4	2.51	32.5
		86	*11,000*	*310*	*9.14*	*254*	*16.3*	*198*	*1,280*	*134*	*1,420*	*44.5*	*351*	*63.8*	*533*

	Shape		Area	WEB		FLANGE		AXIS X-X				AXIS Y-Y			
	in. *(mm)*	lb/ft *(kg/m)*	$in.^2$ *(cm^2)*	d *(mm)*	t_w *(mm)*	b_f *(mm)*	t_w *(mm)*	I_x *($10^4 mm^4$)*	S_x *($10^3 mm^3$)*	r_x *(mm)*	Z_x *($10^3 mm^3$)*	I_y *($10^6 mm^4$)*	S_y *($10^3 mm^3$)*	r_y *(mm)*	Z_y *($10^3 mm^3$)*
W12X12	*W310 X*	65	19.1	12.1	0.39	12	0.605	533	87.9	5.28	96.8	174	29.1	3.02	44.1
		97	*12,300*	*307*	*9.91*	*305*	*15.4*	*222*	*1,440*	*134*	*1,590*	*72.4*	*477*	*76.7*	*723*
		72	21.1	12.3	0.43	12	0.67	597	97.4	5.31	108	195	32.4	3.04	49.2
		107	*13,600*	*312*	*10.9*	*305*	*17*	*248*	*1,600*	*135*	*1,770*	*81.2*	*531*	*77.2*	*806*
		79	23.2	12.4	0.47	12.1	0.735	662	107	5.34	119	216	35.8	3.05	54.3
		117	*15,000*	*315*	*11.9*	*307*	*18.7*	*276*	*1,750*	*136*	*1,950*	*89.9*	*587*	*77.5*	*890*
		87	25.6	12.5	0.515	12.1	0.81	740	118	5.38	132	241	39.7	3.07	60.4
		129	*16,500*	*318*	*13.1*	*307*	*20.6*	*308*	*1,930*	*137*	*2,160*	*100*	*651*	*78*	*990*
		96	28.2	12.7	0.55	12.2	0.9	833	131	5.44	147	270	44.4	3.09	67.5
		143	*18,200*	*323*	*14*	*310*	*22.9*	*347*	*2,150*	*138*	*2,410*	*112*	*728*	*78.5*	*1,110*
		106	31.2	12.9	0.61	12.2	0.99	933	145	5.47	164	301	49.3	3.11	75.1
		158	*20,100*	*328*	*15.5*	*310*	*25.1*	*388*	*2,380*	*139*	*2,690*	*125*	*808*	*79*	*1,230*
		120	35.2	13.1	0.71	12.3	1.11	1,070	163	5.51	186	345	56	3.13	85.4
		179	*22,700*	*333*	*18*	*312*	*28.2*	*445*	*2,670*	*140*	*3,050*	*144*	*918*	*79.5*	*1,400*
		136	39.9	13.4	0.79	12.4	1.25	1,240	186	5.58	214	398	64.2	3.16	98
		202	*25,700*	*340*	*20.1*	*315*	*31.8*	*516*	*3,050*	*142*	*3,510*	*166*	*1,050*	*80.3*	*1,610*
		152	44.7	13.7	0.87	12.5	1.4	1,430	209	5.66	243	454	72.8	3.19	111
		226	*28,800*	*348*	*22.1*	*318*	*35.6*	*595*	*3,420*	*144*	*3,980*	*189*	*1,190*	*81*	*1,820*
		170	50	14	0.96	12.6	1.56	1,650	235	5.74	275	517	82.3	3.22	126
		253	*32,300*	*356*	*24.4*	*320*	*39.6*	*687*	*3,850*	*146*	*4,510*	*215*	*1,350*	*81.8*	*2,060*
		190	56	14.4	1.06	12.7	1.74	1,890	263	5.82	311	589	93	3.25	143
		283	*36,100*	*366*	*26.9*	*323*	*44.2*	*787*	*4,310*	*148*	*5,100*	*245*	*1,520*	*82.6*	*2,340*
		210	61.8	14.7	1.18	12.8	1.9	2,140	292	5.89	348	664	104	3.28	159
		313	*39,900*	*373*	*30*	*325*	*48.3*	*891*	*4,790*	*150*	*5,700*	*276*	*1,700*	*83.3*	*2,610*
W14X5	W14 x *W360 X*	22	6.49	13.7	0.23	5	0.335	199	29	5.54	33.2	7	2.8	1.04	4.39
		32.9	*4,190*	*348*	*5.84*	*127*	*8.51*	*82.8*	*475*	*141*	*544*	*2.91*	*45.9*	*26.4*	*71.9*
		26	7.69	13.9	0.255	5.03	0.42	245	35.3	5.65	40.2	8.91	3.55	1.08	5.54
		39	*4,960*	*353*	*6.48*	*128*	*10.7*	*102*	*578*	*144*	*659*	*3.71*	*58.2*	*27.4*	*90.8*
W14x6¾		30	8.85	13.8	0.27	6.73	0.385	291	42	5.73	47.3	19.6	5.82	1.49	8.99
		44	*5,710*	*351*	*6.86*	*171*	*9.78*	*121*	*688*	*146*	*775*	*8.16*	*95.4*	*37.8*	*147*
		34	10	14	0.285	6.75	0.455	340	48.6	5.83	54.6	23.3	6.91	1.53	10.6
		51	*6,450*	*356*	*7.24*	*171*	*11.6*	*142*	*796*	*148*	*895*	*9.7*	*113*	*38.9*	*174*
		38	11.2	14.1	0.31	6.77	0.515	385	54.6	5.87	61.5	26.7	7.88	1.55	12.1
		57.8	*7,230*	*358*	*7.87*	*172*	*13.1*	*160*	*895*	*149*	*1,010*	*11.1*	*129*	*39.4*	*198*
W14x8		43	12.6	13.7	0.305	8	0.53	428	62.6	5.82	69.6	45.2	11.3	1.89	17.3
		64	*8,130*	*348*	*7.75*	*203*	*13.5*	*178*	*1,030*	*148*	*1,140*	*18.8*	*185*	*48*	*283*
		48	14.1	13.8	0.34	8.03	0.595	484	70.2	5.85	78.4	51.4	12.8	1.91	19.6
		72	*9,100*	*351*	*8.64*	*204*	*15.1*	*201*	*1,150*	*149*	*1,280*	*21.4*	*210*	*48.5*	*321*
		53	15.6	13.9	0.37	8.06	0.66	541	77.8	5.89	87.1	57.7	14.3	1.92	22
		79	*10,100*	*353*	*9.4*	*205*	*16.8*	*225*	*1,270*	*150*	*1,430*	*24*	*234*	*48.8*	*361*

Shape		Area	WEB		FLANGE		AXIS X-X				AXIS Y-Y			
in. (mm)	lb/ft (kg/m)	$in.^2$ (cm^2)	d in. (mm)	t_w in. (mm)	b_f in. (mm)	t_w in. (mm)	I_x $in.^4$ ($10^6 mm^4$)	S_x $in.^3$ ($10^3 mm^3$)	r_x $in.^3$ (mm)	Z_x in. ($10^3 mm^3$)	I_y $in.^4$ ($10^6 mm^4$)	S_y $in.^3$ ($10^3 mm^3$)	r_y $in.^3$ (mm)	Z_y in. ($10^3 mm^3$)
W14X10	61	17.9	13.9	0.375	10	0.645	640	92.1	5.98	102	107	21.5	2.45	32.8
	91	*11,500*	*353*	*9.53*	*254*	*16.4*	*266*	*1,510*	*152*	*1,670*	*44.5*	*352*	*62.2*	*537*
	68	20	14	0.415	10	0.72	722	103	6.01	115	121	24.2	2.46	36.9
	101	*12,900*	*356*	*10.5*	*254*	*18.3*	*301*	*1,690*	*153*	*1,880*	*50.4*	*397*	*62.5*	*605*
	74	21.8	14.2	0.45	10.1	0.785	795	112	6.04	126	134	26.6	2.48	40.5
	110	*14,100*	*361*	*11.4*	*257*	*19.9*	*331*	*1,840*	*153*	*2,060*	*55.8*	*436*	*63*	*664*
	82	24	14.3	0.51	10.1	0.855	881	123	6.05	139	148	29.3	2.48	44.8
	122	*15,500*	*363*	*13*	*257*	*21.7*	*367*	*2,020*	*154*	*2,280*	*61.6*	*480*	*63*	*734*
W14X14½	90	26.5	14	0.44	14.5	0.71	999	143	6.14	157	362	49.9	3.7	75.6
	134	*17,100*	*356*	*11.2*	*368*	*18*	*416*	*2,340*	*156*	*2,570*	*151*	*818*	*94*	*1,240*
	99	29.1	14.2	0.485	14.6	0.78	1,110	157	6.17	173	402	55.2	3.71	83.6
	147	*18,800*	*361*	*12.3*	*371*	*19.8*	*462*	*2,570*	*157*	*2,830*	*167*	*905*	*94.2*	*1,370*
	109	32	14.3	0.525	14.6	0.86	1,240	173	6.22	192	447	61.2	3.73	92.7
	162	*20,600*	*363*	*13.3*	*371*	*21.8*	*516*	*2,830*	*158*	*3,150*	*186*	*1,000*	*94.7*	*1,520*
W14 x *W360 X*	120	35.3	14.5	0.59	14.7	0.94	1,380	190	6.24	212	495	67.5	3.74	102
	179	*22,800*	*368*	*15*	*373*	*23.9*	*574*	*3,110*	*158*	*3,470*	*206*	*1,110*	*95*	*1,670*
	132	38.8	14.7	0.645	14.7	1.03	1,530	209	6.28	234	548	74.5	3.76	113
	196	*25,000*	*373*	*16.4*	*373*	*26.2*	*637*	*3,420*	*160*	*3,830*	*228*	*1,220*	*95.5*	*1,850*
W14X16	145	42.7	14.8	0.68	15.5	1.09	1,710	232	6.33	260	677	87.3	3.98	133
	216	*27,500*	*376*	*17.3*	*394*	*27.7*	*712*	*3,800*	*161*	*4,260*	*282*	*1,430*	*101*	*2,180*
	159	46.7	15	0.745	15.6	1.19	1,900	254	6.38	287	748	96.2	4	146
	237	*30,100*	*381*	*18.9*	*396*	*30.2*	*791*	*4,160*	*162*	*4,700*	*311*	*1,580*	*102*	*2,390*
	176	51.8	15.2	0.83	15.7	1.31	2,140	281	6.43	320	838	107	4.02	163
	262	*33,400*	*386*	*21.1*	*399*	*33.3*	*891*	*4,600*	*163*	*5,240*	*349*	*1,750*	*102*	*2,670*
	193	56.8	15.5	0.89	15.7	1.44	2,400	310	6.5	355	931	119	4.05	180
	287	*36,600*	*394*	*22.6*	*399*	*36.6*	*999*	*5,080*	*165*	*5,820*	*388*	*1,950*	*103*	*2,950*
	211	62	15.7	0.98	15.8	1.56	2,660	338	6.55	390	1,030	130	4.07	198
	314	*40,000*	*399*	*24.9*	*401*	*39.6*	*1,110*	*5,540*	*166*	*6,390*	*429*	*2,130*	*103*	*3,240*
	233	68.5	16	1.07	15.9	1.72	3,010	375	6.63	436	1,150	145	4.1	221
	347	*44,200*	*406*	*27.2*	*404*	*43.7*	*1,250*	*6,150*	*168*	*7,140*	*479*	*2,380*	*104*	*3,620*
	257	75.6	16.4	1.18	16	1.89	3,400	415	6.71	487	1,290	161	4.13	246
	382	*48,800*	*417*	*30*	*406*	*48*	*1,420*	*6,800*	*170*	*7,980*	*537*	*2,640*	*105*	*4,030*
W16X5½	26	7.68	15.7	0.25	5.5	0.345	301	38.4	6.26	44.2	9.59	3.49	1.12	5.48
W16 x *W410 X*	*38.8*	*4,950*	*399*	*6.35*	*140*	*8.76*	*125*	*629*	*159*	*724*	*3.99*	*57.2*	*28.4*	*89.8*
	31	9.13	15.9	0.275	5.53	0.44	375	47.2	6.41	54	12.4	4.49	1.17	7.03
	46.1	*5,890*	*404*	*6.99*	*140*	*11.2*	*156*	*773*	*163*	*885*	*5.16*	*73.6*	*29.7*	*115*

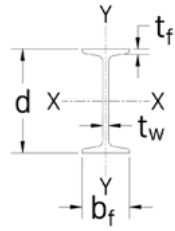
	Shape		Area	WEB		FLANGE		AXIS X-X				AXIS Y-Y			
	in. *(mm)*	lb/ft *(kg/m)*	$in.^2$ *(cm^2)*	d in. *(mm)*	t_w in. *(mm)*	b_f in. *(mm)*	t_w in. *(mm)*	I_x $in.^4$ *($10^6 mm^4$)*	S_x $in.^3$ *($10^3 mm^3$)*	r_x in. *(mm)*	Z_x $in.^3$ *($10^3 mm^3$)*	I_y $in.^4$ *($10^6 mm^4$)*	S_y $in.^3$ *($10^3 mm^3$)*	r_y in. *(mm)*	Z_y $in.^3$ *($10^3 mm^3$)*
W16X7		36	10.6	15.9	0.295	6.99	0.43	448	56.5	6.51	64	24.5	7	1.52	10.8
		53	*6,840*	*404*	*7.49*	*178*	*10.9*	*186*	*926*	*165*	*1,050*	*10.2*	*115*	*38.6*	*177*
		40	11.8	16	0.305	7	0.505	518	64.7	6.63	73	28.9	8.25	1.57	12.7
		60	*7,610*	*406*	*7.75*	*178*	*12.8*	*216*	*1,060*	*168*	*1,200*	*12*	*135*	*39.9*	*208*
		45	13.3	16.1	0.345	7.04	0.565	586	72.7	6.65	82.3	32.8	9.34	1.57	14.5
		67	*8,580*	*409*	*8.76*	*179*	*14.4*	*244*	*1,190*	*169*	*1,350*	*13.7*	*153*	*39.9*	*238*
		50	14.7	16.3	0.38	7.07	0.63	659	81	6.68	92	37.2	10.5	1.59	16.3
		75	*9,480*	*414*	*9.65*	*180*	*16*	*274*	*1,330*	*170*	*1,510*	*15.5*	*172*	*40.4*	*267*
	W16 x *W410 X*	57	16.8	16.4	0.43	7.12	0.715	758	92.2	6.72	105	43.1	12.1	1.6	18.9
		85	*10,800*	*417*	*10.9*	*181*	*18.2*	*316*	*1,510*	*171*	*1,720*	*17.9*	*198*	*40.6*	*310*
W16X10¼		67	19.6	16.3	0.395	10.2	0.665	954	117	6.96	130	119	23.2	2.46	35.5
		100	*12,600*	*414*	*10*	*259*	*16.9*	*397*	*1,920*	*177*	*2,130*	*49.5*	*380*	*62.5*	*582*
		77	22.6	16.5	0.455	10.3	0.76	1,110	134	7	150	138	26.9	2.47	41.1
		114	*14,600*	*419*	*11.6*	*262*	*19.3*	*462*	*2,200*	*178*	*2,460*	*57.4*	*441*	*62.7*	*674*
		89	26.2	16.8	0.525	10.4	0.875	1,300	155	7.05	175	163	31.4	2.49	48.1
		132	*16,900*	*427*	*13.3*	*264*	*22.2*	*541*	*2,540*	*179*	*2,870*	*67.8*	*515*	*63.2*	*788*
		100	29.4	17	0.585	10.4	0.985	1,490	175	7.1	198	186	35.7	2.51	54.9
		149	*19,000*	*432*	*14.9*	*264*	*25*	*620*	*2,870*	*180*	*3,240*	*77.4*	*585*	*63.8*	*900*
W18X6		35	10.3	17.7	0.3	6	0.425	510	57.6	7.04	66.5	15.3	5.12	1.22	8.06
		52	*6,650*	*450*	*7.62*	*152*	*10.8*	*212*	*944*	*179*	*1,090*	*6.37*	*83.9*	*31*	*132*
		40	11.8	17.9	0.315	6.02	0.525	612	68.4	7.21	78.4	19.1	6.35	1.27	10
		60	*7,610*	*455*	*8*	*153*	*13.3*	*255*	*1,120*	*183*	*1,280*	*7.95*	*104*	*32.3*	*164*
		46	13.5	18.1	0.36	6.06	0.605	712	78.8	7.25	90.7	22.5	7.43	1.29	11.7
		68	*8,710*	*460*	*9.14*	*154*	*15.4*	*296*	*1,290*	*184*	*1,490*	*9.37*	*122*	*32.8*	*192*
W18X7½		50	14.7	18	0.355	7.5	0.57	800	88.9	7.38	101	40.1	10.7	1.65	16.6
		74	*9,480*	*457*	*9.02*	*191*	*14.5*	*333*	*1,460*	*187*	*1,660*	*16.7*	*175*	*41.9*	*272*
	W18 x *W460 X*	55	16.2	18.1	0.39	7.53	0.63	890	98.3	7.41	112	44.9	11.9	1.67	18.5
		82	*10,500*	*460*	*9.91*	*191*	*16*	*370*	*1,610*	*188*	*1,840*	*18.7*	*195*	*42.4*	*303*
		60	17.6	18.2	0.415	7.56	0.695	984	108	7.47	123	50.1	13.3	1.68	20.6
		89	*11,400*	*462*	*10.5*	*192*	*17.7*	*410*	*1,770*	*190*	*2,020*	*20.9*	*218*	*42.7*	*338*
		65	19.1	18.4	0.45	7.59	0.75	1,070	117	7.49	133	54.8	14.4	1.69	22.5
		97	*12,300*	*467*	*11.4*	*193*	*19.1*	*445*	*1,920*	*190*	*2,180*	*22.8*	*236*	*42.9*	*369*
		71	20.9	18.5	0.495	7.64	0.81	1,170	127	7.5	146	60.3	15.8	1.7	24.7
		106	*13,500*	*470*	*12.6*	*194*	*20.6*	*487*	*2,080*	*191*	*2,390*	*25.1*	*259*	*43.2*	*405*

	Shape		Area	WEB		FLANGE		AXIS X-X				AXIS Y-Y			
	in. *(mm)*	lb/ft *(kg/m)*	$in.^2$ *(cm^2)*	d in. *(mm)*	t_w in. *(mm)*	b_f in. *(mm)*	t_w in. *(mm)*	I_x $in.^4$ *($10^6 mm^4$)*	S_x $in.^3$ *($10^3 mm^3$)*	r_x $in.^3$ *(mm)*	Z_x in. *($10^3 mm^3$)*	I_y $in.^4$ *($10^6 mm^4$)*	S_y $in.^3$ *($10^3 mm^3$)*	r_y $in.^3$ *(mm)*	Z_y in. *($10^3 mm^3$)*
W18X11	W18 x *W460 X*	76	22.3	18.2	0.425	11	0.68	1,330	146	7.73	163	152	27.6	2.61	42.2
		113	*14,400*	*462*	*10.8*	*279*	*17.3*	*554*	*2,390*	*196*	*2,670*	*63.3*	*452*	*66.3*	*692*
		86	25.3	18.4	0.48	11.1	0.77	1,530	166	7.77	186	175	31.6	2.63	48.4
		128	*16,300*	*467*	*12.2*	*282*	*19.6*	*637*	*2,720*	*197*	*3,050*	*72.8*	*518*	*66.8*	*793*
		97	28.5	18.6	0.535	11.1	0.87	1,750	188	7.82	211	201	36.1	2.65	55.3
		144	*18,400*	*472*	*13.6*	*282*	*22.1*	*728*	*3,080*	*199*	*3,460*	*83.7*	*592*	*67.3*	*906*
		106	31.1	18.7	0.59	11.2	0.94	1,910	204	7.84	230	220	39.4	2.66	60.5
		158	*20,100*	*475*	*15*	*284*	*23.9*	*795*	*3,340*	*199*	*3,770*	*91.6*	*646*	*67.6*	*991*
		119	35.1	19	0.655	11.3	1.06	2,190	231	7.9	262	253	44.9	2.69	69.1
		177	*22,600*	*483*	*16.6*	*287*	*26.9*	*912*	*3,790*	*201*	*4,290*	*105*	*736*	*68.3*	*1,130*
		130	38.3	19.3	0.67	11.2	1.2	2,460	256	8.03	290	278	49.9	2.7	76.7
		193	*24,700*	*490*	*17*	*284*	*30.5*	*1,020*	*4,200*	*204*	*4,750*	*116*	*818*	*68.6*	*1,260*
		143	42	19.5	0.73	11.2	1.32	2,750	282	8.09	322	311	55.5	2.72	85.4
		213	*27,100*	*495*	*18.5*	*284*	*33.5*	*1,140*	*4,620*	*205*	*5,280*	*129*	*909*	*69.1*	*1,400*
		158	46.3	19.7	0.81	11.3	1.44	3,060	310	8.12	356	347	61.4	2.74	94.8
		235	*29,900*	*500*	*20.6*	*287*	*36.6*	*1,270*	*5,080*	*206*	*5,830*	*144*	*1,010*	*69.6*	*1,550*
		175	51.4	20	0.89	11.4	1.59	3,450	344	8.2	398	391	68.8	2.76	106
		260	*33,200*	*508*	*22.6*	*290*	*40.4*	*1,440*	*5,640*	*208*	*6,520*	*163*	*1,130*	*70.1*	*1,740*
		192	56.2	20.4	0.96	11.5	1.75	3,870	380	8.28	442	440	76.8	2.79	119
		286	*36,300*	*518*	*24.4*	*292*	*44.5*	*1,610*	*6,230*	*210*	*7,240*	*183*	*1,260*	*70.9*	*1,950*
		211	62.3	20.7	1.06	11.6	1.91	4,330	419	8.35	490	493	85.3	2.82	132
		315	*40,200*	*526*	*26.9*	*295*	*48.5*	*1,800*	*6,870*	*212*	*8,030*	*205*	*1,400*	*71.6*	*2,160*
W21x6½	W21 x *W530 X*	44	13	20.7	0.35	6.5	0.45	843	81.6	8.06	95.4	20.7	6.37	1.26	10.2
		66	*8,390*	*526*	*8.89*	*165*	*11.4*	*351*	*1,340*	*205*	*1,560*	*8.62*	*104*	*32*	*167*
		50	14.7	20.8	0.38	6.53	0.535	984	94.5	8.18	110	24.9	7.64	1.3	12.2
		74	*9,480*	*528*	*9.65*	*166*	*13.6*	*410*	*1,550*	*208*	*1,800*	*10.4*	*125*	*33*	*200*
		57	16.7	21.1	0.405	6.56	0.65	1,170	111	8.36	129	30.6	9.35	1.35	14.8
		85	*10,800*	*536*	*10.3*	*167*	*16.5*	*487*	*1,820*	*212*	*2,110*	*12.7*	*153*	*34.3*	*243*
W21X8¾		48	14.1	20.6	0.35	8.14	0.43	959	93	8.24	107	38.7	9.52	1.66	14.9
		72	*9,100*	*523*	*8.89*	*207*	*10.9*	*399*	*1,520*	*209*	*1,750*	*16.1*	*156*	*42.2*	*244*
		55	16.2	20.8	0.375	8.22	0.522	1,140	110	8.4	126	48.4	11.8	1.73	18.4
		82	*10,500*	*528*	*9.53*	*209*	*13.3*	*475*	*1,800*	*213*	*2,060*	*20.1*	*193*	*43.9*	*302*
		62	18.3	21	0.4	8.24	0.615	1,330	127	8.54	144	57.5	14	1.77	21.7
		92	*11,800*	*533*	*10.2*	*209*	*15.6*	*554*	*2,080*	*217*	*2,360*	*23.9*	*229*	*45*	*356*
		68	20	21.1	0.43	8.27	0.685	1,480	140	8.6	160	64.7	15.7	1.8	24.4
		101	*12,900*	*536*	*10.9*	*210*	*17.4*	*616*	*2,290*	*218*	*2,620*	*26.9*	*257*	*45.7*	*400*
		73	21.5	21.2	0.455	8.3	0.74	1,600	151	8.64	172	70.6	17	1.81	26.6
		109	*13,900*	*538*	*11.6*	*211*	*18.8*	*666*	*2,470*	*219*	*2,820*	*29.4*	*279*	*46*	*436*
		83	24.4	21.4	0.515	8.36	0.835	1,830	171	8.67	196	81.4	19.5	1.83	30.5
		123	*15,700*	*544*	*13.1*	*212*	*21.2*	*762*	*2,800*	*220*	*3,210*	*33.9*	*320*	*46.5*	*500*
		93	27.3	21.6	0.58	8.42	0.93	2,070	192	8.7	221	92.9	22.1	1.84	34.7
		138	*17,600*	*549*	*14.7*	*214*	*23.6*	*862*	*3,150*	*221*	*3,620*	*38.7*	*362*	*46.7*	*569*

	Shape		Area	WEB		FLANGE		AXIS X-X				AXIS Y-Y			
	in. (mm)	lb/ft (kg/m)	$in.^2$ (cm^2)	d in. (mm)	t_w in. (mm)	b_f in. (mm)	t_w in. (mm)	I_x $in.^4$ ($10^6 mm^4$)	S_x $in.^3$ ($10^3 mm^3$)	r_x in. (mm)	Z_x $in.^3$ ($10^3 mm^3$)	I_y $in.^4$ ($10^6 mm^4$)	S_y $in.^3$ ($10^3 mm^3$)	r_y in. (mm)	Z_y $in.^3$ ($10^3 mm^3$)
W21x12¼	W21 x W530 X	101	29.8	21.4	0.5	12.3	0.8	2,420	227	9.02	253	248	40.3	2.89	61.7
		150	19,200	544	12.7	312	20.3	1,010	3,720	229	4,150	103	660	73.4	1,010
		111	32.6	21.5	0.55	12.3	0.875	2,670	249	9.05	279	274	44.5	2.9	68.2
		165	21,000	546	14	312	22.2	1,110	4,080	230	4,570	114	729	73.7	1,120
		122	35.9	21.7	0.6	12.4	0.96	2,960	273	9.09	307	305	49.2	2.92	75.6
		182	23,200	551	15.2	315	24.4	1,230	4,470	231	5,030	127	806	74.2	1,240
		132	38.8	21.8	0.65	12.4	1.04	3,220	295	9.12	333	333	53.5	2.93	82.3
		196	25,000	554	16.5	315	26.4	1,340	4,830	232	5,460	139	877	74.4	1,350
		147	43.2	22.1	0.72	12.5	1.15	3,630	329	9.17	373	376	60.1	2.95	92.6
		219	27,900	561	18.3	318	29.2	1,510	5,390	233	6,110	157	985	74.9	1,520
		166	48.8	22.5	0.75	12.4	1.36	4,280	380	9.36	432	435	70	2.99	108
		248	31,500	572	19.1	315	34.5	1,780	6,230	238	7,080	181	1,150	75.9	1,770
		182	53.6	22.7	0.83	12.5	1.48	4,730	417	9.4	476	483	77.2	3	119
		272	34,600	577	21.1	318	37.6	1,970	6,830	239	7,800	201	1,270	76.2	1,950
		201	59.3	23	0.91	12.6	1.63	5,310	461	9.47	530	542	86.1	3.02	133
		300	38,300	584	23.1	320	41.4	2,210	7,550	241	8,690	226	1,410	76.7	2,180
W24x7		55	16.2	23.6	0.395	7.01	0.505	1,350	114	9.11	134	29.1	8.3	1.34	13.3
		82	10,500	599	10	178	12.8	562	1,870	231	2,200	12.1	136	34	218
		62	18.2	23.7	0.43	7.04	0.59	1,550	131	9.23	153	34.5	9.8	1.38	15.7
		92	11,700	602	10.9	179	15	645	2,150	234	2,510	14.4	161	35.1	257
W24x9		68	20.1	23.7	0.415	8.97	0.585	1,830	154	9.55	177	70.4	15.7	1.87	24.5
		101	13,000	602	10.5	228	14.9	762	2,520	243	2,900	29.3	257	47.5	401
		76	22.4	23.9	0.44	8.99	0.68	2,100	176	9.69	200	82.5	18.4	1.92	28.6
		113	14,500	607	11.2	228	17.3	874	2,880	246	3,280	34.3	302	48.8	469
		84	24.7	24.1	0.47	9.02	0.77	2,370	196	9.79	224	94.4	20.9	1.95	32.6
		125	15,900	612	11.9	229	19.6	986	3,210	249	3,670	39.3	342	49.5	534
		94	27.7	24.3	0.515	9.07	0.875	2,700	222	9.87	254	109	24	1.98	37.5
		140	17,900	617	13.1	230	22.2	1,120	3,640	251	4,160	45.4	393	50.3	615
		103	30.3	24.5	0.55	9	0.98	3,000	245	10	280	119	26.5	1.99	41.5
		153	19,500	622	14	229	24.9	1,250	4,010	254	4,590	49.5	434	50.5	680
W24x12¾	W24 x W610 X	104	30.7	24.1	0.5	12.8	0.75	3,100	258	10.1	289	259	40.7	2.91	62.4
		155	19,800	612	12.7	325	19.1	1,290	4,230	257	4,740	108	667	73.9	1,020
		117	34.4	24.3	0.55	12.8	0.85	3,540	291	10.1	327	297	46.5	2.94	71.4
		174	22,200	617	14	325	21.6	1,470	4,770	257	5,360	124	762	74.7	1,170
		131	38.6	24.5	0.605	12.9	0.96	4,020	329	10.2	370	340	53	2.97	81.5
		195	24,900	622	15.4	328	24.4	1,670	5,390	259	6,060	142	869	75.4	1,340
		146	43	24.7	0.65	12.9	1.09	4,580	371	10.3	418	391	60.5	3.01	93.2
		217	27,700	627	16.5	328	27.7	1,910	6,080	262	6,850	163	991	76.5	1,530
		162	47.8	25	0.705	13	1.22	5,170	414	10.4	468	443	68.4	3.05	105
		241	30,800	635	17.9	330	31	2,150	6,780	264	7,670	184	1,120	77.5	1,720
		176	51.7	25.2	0.75	12.9	1.34	5,680	450	10.5	511	479	74.3	3.04	115
		262	33,400	640	19.1	328	34	2,360	7,370	267	8,370	199	1,220	77.2	1,880
		192	56.5	25.5	0.81	13	1.46	6,260	491	10.5	559	530	81.8	3.07	126
		285	36,500	648	20.6	330	37.1	2,610	8,050	267	9,160	221	1,340	78	2,060
		207	60.7	25.7	0.87	13	1.57	6,820	531	10.6	606	578	88.8	3.08	137
		307	39,200	653	22.1	330	39.9	2,840	8,700	269	9,930	241	1,460	78.2	2,250

	Shape		Area	WEB		FLANGE		AXIS X-X				AXIS Y-Y			
	in. *(mm)*	lb/ft *(kg/m)*	$in.^2$ *(cm^2)*	d in. *(mm)*	t_w in. *(mm)*	b_f in. *(mm)*	t_w in. *(mm)*	I_x $in.^4$ *($10^6 mm^4$)*	S_x $in.^3$ *($10^3 mm^3$)*	r_x in. *(mm)*	Z_x $in.^3$ *($10^3 mm^3$)*	I_y $in.^4$ *($10^6 mm^4$)*	S_y $in.^3$ *($10^3 mm^3$)*	r_y in. *(mm)*	Z_y $in.^3$ *($10^3 mm^3$)*
W27x10		84	24.7	26.7	0.46	10	0.64	2,850	213	10.7	244	106	21.2	2.07	33.2
		125	*15,900*	*678*	*11.7*	*254*	*16.3*	*1,190*	*3,490*	*272*	*4,000*	*44.1*	*347*	*52.6*	*544*
		94	27.6	26.9	0.49	10	0.745	3,270	243	10.9	278	124	24.8	2.12	38.8
		140	*17,800*	*683*	*12.4*	*254*	*18.9*	*1,360*	*3,980*	*277*	*4,560*	*51.6*	*406*	*53.8*	*636*
		102	30	27.1	0.515	10	0.83	3,620	267	11	305	139	27.8	2.15	43.4
		152	*19,400*	*688*	*13.1*	*254*	*21.1*	*1,510*	*4,380*	*279*	*5,000*	*57.9*	*456*	*54.6*	*711*
		114	33.6	27.3	0.57	10.1	0.93	4,080	299	11	343	159	31.5	2.18	49.3
		170	*21,700*	*693*	*14.5*	*257*	*23.6*	*1,700*	*4,900*	*279*	*5,620*	*66.2*	*516*	*55.4*	*808*
		129	37.8	27.6	0.61	10	1.1	4,760	345	11.2	395	184	36.8	2.21	57.6
		192	*24,400*	*701*	*15.5*	*254*	*27.9*	*1,980*	*5,650*	*284*	*6,470*	*76.6*	*603*	*56.1*	*944*
W27x14	W27 x *W690 X*	146	43.2	27.4	0.605	14	0.975	5,660	414	11.5	464	443	63.5	3.2	97.7
		217	*27,900*	*696*	*15.4*	*356*	*24.8*	*2,360*	*6,780*	*292*	*7,600*	*184*	*1,040*	*81.3*	*1,600*
		161	47.6	27.6	0.66	14	1.08	6,310	458	11.5	515	497	70.9	3.23	109
		240	*30,700*	*701*	*16.8*	*356*	*27.4*	*2,630*	*7,510*	*292*	*8,440*	*207*	*1,160*	*82*	*1,790*
		178	52.5	27.8	0.725	14.1	1.19	7,020	505	11.6	570	555	78.8	3.25	122
		265	*33,900*	*706*	*18.4*	*358*	*30.2*	*2,920*	*8,280*	*295*	*9,340*	*231*	*1,290*	*82.6*	*2,000*
		194	57.1	28.1	0.75	14	1.34	7,860	559	11.7	631	619	88.1	3.29	136
		289	*36,800*	*714*	*19.1*	*356*	*34*	*3,270*	*9,160*	*297*	*10,300*	*258*	*1,440*	*83.6*	*2,230*
		217	63.9	28.4	0.83	14.1	1.5	8,910	627	11.8	711	704	100	3.32	154
		323	*41,200*	*721*	*21.1*	*358*	*38.1*	*3,710*	*10,300*	*300*	*11,700*	*293*	*1,640*	*84.3*	*2,520*
		235	69.4	28.7	0.91	14.2	1.61	9,700	677	11.8	772	769	108	3.33	168
		350	*44,800*	*729*	*23.1*	*361*	*40.9*	*4,040*	*11,100*	*300*	*12,700*	*320*	*1,770*	*84.6*	*2,750*
W30x10½		90	26.3	29.5	0.47	10.4	0.61	3,610	245	11.7	283	115	22.1	2.09	34.7
		134	*17,000*	*749*	*11.9*	*264*	*15.5*	*1,500*	*4,010*	*297*	*4,640*	*47.9*	*362*	*53.1*	*569*
		99	29	29.7	0.52	10.5	0.67	3,990	269	11.7	312	128	24.5	2.1	38.6
		147	*18,700*	*754*	*13.2*	*267*	*17*	*1,660*	*4,410*	*297*	*5,110*	*53.3*	*401*	*53.3*	*633*
		108	31.7	29.8	0.545	10.5	0.76	4,470	299	11.9	346	146	27.9	2.15	43.9
		161	*20,500*	*757*	*13.8*	*267*	*19.3*	*1,860*	*4,900*	*302*	*5,670*	*60.8*	*457*	*54.6*	*719*
	W30 x *W760 X*	116	34.2	30	0.565	10.5	0.85	4,930	329	12	378	164	31.3	2.19	49.2
		173	*22,100*	*762*	*14.4*	*267*	*21.6*	*2,050*	*5,390*	*305*	*6,190*	*68.3*	*513*	*55.6*	*806*
		124	36.5	30.2	0.585	10.5	0.93	5,360	355	12.1	408	181	34.4	2.23	54
		185	*23,500*	*767*	*14.9*	*267*	*23.6*	*2,230*	*5,820*	*307*	*6,690*	*75.3*	*564*	*56.6*	*885*
		132	38.8	30.3	0.615	10.5	1	5,770	380	12.2	437	196	37.2	2.25	58.4
		196	*25,000*	*770*	*15.6*	*267*	*25.4*	*2,400*	*6,230*	*310*	*7,160*	*81.6*	*610*	*57.2*	*957*
		148	43.6	30.7	0.65	10.5	1.18	6,680	436	12.4	500	227	43.3	2.28	68
		220	*28,100*	*780*	*16.5*	*267*	*30*	*2,780*	*7,140*	*315*	*8,190*	*94.5*	*710*	*57.9*	*1,110*
W33x11½		118	34.7	32.9	0.55	11.5	0.74	5,900	359	13	415	187	32.6	2.32	51.3
		176	*22,400*	*836*	*14*	*292*	*18.8*	*2,460*	*5,880*	*330*	*6,800*	*77.8*	*534*	*58.9*	*841*
		130	38.3	33.1	0.58	11.5	0.855	6,710	406	13.2	467	218	37.9	2.39	59.5
		193	*24,700*	*841*	*14.7*	*292*	*21.7*	*2,790*	*6,650*	*335*	*7,650*	*90.7*	*621*	*60.7*	*975*
	W33 x *W840 X*	141	41.5	33.3	0.605	11.5	0.96	7,450	448	13.4	514	246	42.7	2.43	66.9
		210	*26,800*	*846*	*15.4*	*292*	*24.4*	*3,100*	*7,340*	*340*	*8,420*	*102*	*700*	*61.7*	*1,100*
		152	44.9	33.5	0.635	11.6	1.06	8,160	487	13.5	559	273	47.2	2.47	73.9
		226	*29,000*	*851*	*16.1*	*295*	*26.9*	*3,400*	*7,980*	*343*	*9,160*	*114*	*773*	*62.7*	*1,210*
		169	49.5	33.8	0.67	11.5	1.22	9,290	549	13.7	629	310	53.9	2.5	84.4
		251	*31,900*	*859*	*17*	*292*	*31*	*3,870*	*9,000*	*348*	*10,300*	*129*	*883*	*63.5*	*1,380*

	Shape		Area	WEB		FLANGE		AXIS X-X				AXIS Y-Y			
	in. *(mm)*	lb/ft *(kg/m)*	$in.^2$ *(cm^2)*	d in. *(mm)*	t_w in. *(mm)*	b_f in. *(mm)*	t_w in. *(mm)*	I_x $in.^4$ *($10^6 mm^4$)*	S_x $in.^3$ *($10^3 mm^3$)*	r_x in. *(mm)*	Z_x $in.^3$ *($10^3 mm^3$)*	I_y $in.^4$ *($10^6 mm^4$)*	S_y $in.^3$ *($10^3 mm^3$)*	r_y in. *(mm)*	Z_y $in.^3$ *($10^3 mm^3$)*
W36X12	W36 x *W920 X*	135	39.9	35.6	0.6	12	0.79	7,800	439	14	509	225	37.7	2.38	59.7
		201	*25,700*	*904*	*15.2*	*305*	*20.1*	*3,250*	*7,190*	*356*	*8,340*	*93.7*	*618*	*60.5*	*978*
		150	44.3	35.9	0.625	12	0.94	9,040	504	14.3	581	270	45.1	2.47	70.9
		223	*28,600*	*912*	*15.9*	*305*	*23.9*	*3,760*	*8,260*	*363*	*9,520*	*112*	*739*	*62.7*	*1,160*
		160	47	36	0.65	12	1.02	9,760	542	14.4	624	295	49.1	2.5	77.3
		238	*30,300*	*914*	*16.5*	*305*	*25.9*	*4,060*	*8,880*	*366*	*10,200*	*123*	*805*	*63.5*	*1,270*
		170	50	36.2	0.68	12	1.1	10,500	581	14.5	668	320	53.2	2.53	83.8
		253	*32,300*	*919*	*17.3*	*305*	*27.9*	*4,370*	*9,520*	*368*	*10,900*	*133*	*872*	*64.3*	*1,370*
		182	53.6	36.3	0.725	12.1	1.18	11,300	623	14.5	718	347	57.6	2.55	90.7
		271	*34,600*	*922*	*18.4*	*307*	*30*	*4,700*	*10,200*	*368*	*11,800*	*144*	*944*	*64.8*	*1,490*
		194	57	36.5	0.765	12.1	1.26	12,100	664	14.6	767	375	61.9	2.56	97.7
		289	*36,800*	*927*	*19.4*	*307*	*32*	*5,040*	*10,900*	*371*	*12,600*	*156*	*1,010*	*65*	*1,600*
		210	61.9	36.7	0.83	12.2	1.36	13,200	719	14.6	833	411	67.5	2.58	107
		313	*313*	*39,900*	*21.1*	*310*	*34.5*	*5,490*	*11,800*	*371*	*13,700*	*171*	*1,110*	*65.5*	*1,750*
		232	68	37.1	0.87	12.1	1.57	15,000	809	14.8	936	468	77.2	2.62	122
		345	*43,900*	*943*	*22.1*	*307*	*39.9*	*6,240*	*13,300*	*376*	*15,300*	*195*	*1,270*	*66.5*	*2,000*
		256	75.3	37.4	0.96	12.2	1.73	16,800	895	14.9	1,040	528	86.5	2.65	137
		381	*48,600*	*951*	*24.4*	*310*	*43.9*	*6,990*	*14,700*	*378*	*17,000*	*220*	*1,420*	*67.3*	*2,250*



d - Depth

t_w - Thickness of web

b_f - Width of flange

I - Moment of inertia

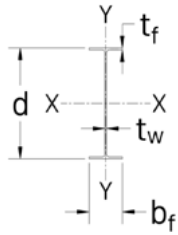
S - Elastic section modulus

r - Radius of gyration

Z - Plastic section modulus

STANDARD BEAM DIMENSIONS

Shape		Area	d	WEB	FLANGE		AXIS X-X				AXIS Y-Y			
in. *(mm)*	lb/ft *(kg/m)*	$in.^2$ *(cm^2)*	in. *(mm)*	t_w in. *(mm)*	b_f in. *(mm)*	t_w in. *(mm)*	I_x $in.^4$ *($10^6 mm^4$)*	S_x $in.^3$ *($10^3 mm^3$)*	r_x in.3 *(mm)*	Z_x in. *($10^3 mm^3$)*	I_y $in.^4$ *($10^6 mm^4$)*	S_y $in.^3$ *($10^3 mm^3$)*	r_y in.3 *(mm)*	Z_y in. *($10^3 mm^3$)*
	5.7	1.66	3	0.17	2.33	0.26	2.50	1.67	1.23	1.94	0.447	0.383	0.518	0.656
S3 X	*8.5*	*1,070*	*76*	*4.3*	*59*	*6.6*	*1.04*	*27*	*31*	*32*	*0.186*	*6.28*	*13.2*	*10.70*
S75 X	7.5	2.2	3	0.349	2.51	0.26	2.91	1.94	1.15	2.35	0.578	0.461	0.513	0.821
	11.2	*1,420*	*76*	*8.9*	*64*	*6.6*	*1.21*	*32*	*29*	*39*	*0.241*	*7.55*	*13.0*	*13.50*
	7.7	2.26	4	0.193	2.66	0.293	6.05	3.03	1.64	3.50	0.748	0.562	0.6	0.97
S4 X	*11.5*	*1,460*	*102*	*4.9*	*68*	*7.4*	*2.52*	*50*	*42*	*57*	*0.311*	*9.21*	*14.6*	*15.90*
S100 X	9.5	2.79	4	0.326	2.8	0.293	6.76	3.38	1.56	4.04	0.887	0.635	0.564	1.13
	14.1	*1,800*	*102*	*8.3*	*71*	*7.4*	*2.81*	*55*	*40*	*66*	*0.369*	*10.40*	*14.3*	*18.50*
S5 X	10	2.93	5	0.214	3	0.326	12.30	4.90	2.05	5.66	1.190	0.795	0.638	1.37
S130 X	*15*	*1,890*	*127*	*5.4*	*76*	*8.3*	*5.12*	*80*	*52*	*93*	*0.495*	*13.00*	*16.2*	*22.50*
	12.5	3.66	6	0.232	3.33	0.359	22.0	7.34	2.45	8.45	1.800	1.08	0.7	1.86
S6 X	*18.6*	*2,360*	*152*	*5.9*	*85*	*9.1*	*9.16*	*120*	*62*	*138*	*0.749*	*17.70*	*17.8*	*30.50*
S150 X	17.25	5.05	6	0.465	3.57	0.359	26.2	8.74	2.28	10.5	2.290	1.28	0.673	2.35
	25.7	*3,260*	*152*	*11.8*	*91*	*9.1*	*10.90*	*143*	*58*	*172*	*0.953*	*21.00*	*17.1*	*38.50*
	18.4	5.4	8	0.271	4	0.425	57.5	14.4	3.26	16.5	3.690	1.84	0.8	3.18
S8 X	*27.4*	*3,480*	*203*	*6.9*	*102*	*10.8*	*23.90*	*236*	*83*	*270*	*1.540*	*30.20*	*21.0*	*52.10*
S200 X	23	6.76	8	0.441	4.17	0.425	64.7	16.2	3.09	19.2	4.270	2.05	0.795	3.67
	34	*4,360*	*203*	*11.2*	*106*	*10.8*	*26.90*	*265*	*79*	*315*	*1.780*	*33.60*	*20.2*	*60.10*
	25.4	7.45	10	0.311	4.66	0.491	123.0	24.6	4.07	28.3	6.730	2.89	1.0	4.99
S10 X	*37.8*	*4,810*	*254*	*7.9*	*118*	*12.5*	*51.20*	*403*	*103*	*464*	*2.800*	*47.40*	*24.1*	*81.80*
S250 X	35	10.3	10	0.594	4.94	0.491	147.0	29.4	3.78	35.4	8.300	3.36	0.899	6.19
	52	*6,650*	*254*	*15.1*	*125*	*12.5*	*61.20*	*482*	*96*	*580*	*3.450*	*55.10*	*22.8*	*101.00*
S12 X	31.8	9.31	12	0.35	5	0.544	217.0	36.2	4.83	41.8	9.330	3.73	1.0	6.44
S310 X	*47.3*	*6,010*	*305*	*8.9*	*127*	*13.8*	*90.30*	*593*	*123*	*685*	*3.880*	*61.10*	*25.4*	*106.00*



d - Depth

t_w - Thickness of web

b_f - Width of flange

I - Moment of inertia

S - Elastic section modulus

r - Radius of gyration

Z - Plastic section modulus

MISCELLANEOUS BEAM DIMENSIONS

				WEB	FLANGE		AXIS X-X				AXIS Y-Y			
Shape		**Area**	**d**	t_w	b_f	t_w	I_x	S_x	r_x	Z_x	I_y	S_y	r_y	Z_y
in. *(mm)*	**lb/ft** *(kg/m)*	**in.^{2}** *(cm^2)*	**in.** *(mm)*	**in.** *(mm)*	**in.** *(mm)*	**in.** *(mm)*	**in.^{4}** *(10^6mm^4)*	**in.^{3}** *(10^3mm^3)*	**in.^{3}** *(mm)*	**in.** *(10^3mm^3)*	**in.^{4}** *(10^6mm^4)*	**in.^{3}** *(10^3mm^3)*	**in.^{3}** *(mm)*	**in.** *(10^3mm^3)*
M8 X *M200 X*	6.5	1.92	8	0.135	2.28	0.189	19	4.63	3.11	5.43	0.376	0.329	0.443	0.529
	9.7	*1,240*	*203*	*3.4*	*58*	*4.8*	*8*	*76*	*79*	*89*	*0.157*	*5.39*	*11.3*	*8.67*
M10 X *M250 X*	8	2.37	9.95	0.141	2.69	0.182	35	6.95	3.82	8.2	0.593	0.441	0.5	0.711
	11.9	*1,530*	*253*	*3.6*	*68*	*4.6*	*14*	*114*	*97*	*134*	*0.247*	*7.23*	*12.7*	*11.70*
	9	2.65	10	0.157	2.69	0.206	39	7.79	3.83	9.22	0.672	0.5	0.503	0.809
	13.4	*1,710*	*254*	*4.0*	*68*	*5.2*	*16*	*128*	*97*	*151*	*0.280*	*8.19*	*12.8*	*13.30*
M12 X *M310 X*	10.8	3.18	12	0.16	3.07	0.21	67	11.1	4.58	13.2	1.010	0.661	0.564	1.070
	16.1	*2,050*	*305*	*4.1*	*78*	*5.3*	*28*	*182*	*116*	*216*	*0.420*	*10.80*	*14.3*	*17.50*
	11.8	3.47	12.00	0.177	3.065	0.225	72.2	12	4.56	14.3	1.09	0.709	0.559	1.15
	17.6	*22.4*	*305*	*4.5*	*78*	*5.7*	*30*	*197*	*116*	*234*	*0.454*	*11.6*	*14.2*	*18.8*
M12.5 X *M318 X*	11.6	3.4	12.5	0.155	3.5	0.211	80	12.8	4.86	15	1.510	0.864	0.667	1.370
	17.3	*2,190*	*318*	*3.9*	*89*	*5.4*	*33*	*210*	*123*	*246*	*0.629*	*14.20*	*16.9*	*22.50*
	12.4	3.63	12.5	0.155	3.75	0.228	89	14.2	4.96	16.5	2.010	1.070	0.744	1.680
	18.5	*2,340*	*318*	*3.9*	*95*	*5.8*	*37*	*233*	*126*	*270*	*0.837*	*17.50*	*18.9*	*27.50*

SOLAR


Power Block
43
Tracker
3
Row
4

Photo Credit SB Energy

GERDAU SOLAR PRODUCTS IN USE

ORION SOLAR BELT

Buckholts, Texas

With unprecedented growth in data center development in the US, Gerdau is growing its business to support the energy infrastructure needed for data centers. Gerdau supplied 22,800 tons of structural steel from its mills in Midlothian, TX and Cartersville, GA to the Orion Solar Belt. Given the size of the project, there was no margin for error in meeting the tight delivery schedule for the three sites. Gerdau's optimized solar process provided the flexibility to accommodate design changes and adapt to requirements on a weekly basis.

With nearly 1 GW of capacity spread across three energy facilities in Milam County, TX, the Orion Solar Belt is Google's largest solar energy investment in the world. Built with American-made steel, the project delivers domestic energy to the Texas grid to help power Google's Ellis County data centers and Dallas cloud region.

We're proud to have empowered SB Energy, the project owner, and its EPC provider Blattner to use Gerdau Solar Piles as the steel foundation supporting over 1.3 million solar modules, to build the future of energy independence. Together, we've built a blueprint for domestic innovation, job creation, and energy leadership.

FASTER. CLEANER. 100% DOMESTIC.

GERDAU SOLAR PILE MIDLOTHIAN

Gerdau's North American emissions are substantially lower than overseas solar pile alternatives

Location	Emissions per Tonne
U.S. Scope 1 + 2 Average (CO_2e)	
Gerdau	0.89x U.S. Average
Turkey (offshore)	3.55x U.S. Average
India (offshore)	7.62x U.S. Average

100% Domestic: Melted and manufactured in the United States

Vertically integrated supply chain

Powered by renewable energy: 80 megawatt onsite solar farm in TX

Equivalent to the annual energy consumption of 14,000 Texas homes

New state of the art facility, located next to our TX mill

Captive steel supply

Faster lead time and flexible scheduling to match project needs

Dedicated team of project managers

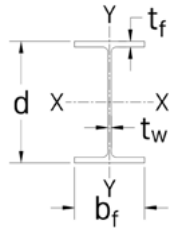
Systems and processes designed for solar

Network of partners for additional value-added processing steps

Customizable sections

Higher strength grades available

Design flexibility



d - depth
t_w - Thickness of web
b_f - Width of flange

I - Moment of inertia
S - Elastic section modulus
r - Radius of gyration
Z - Plastic section modulus

WIDE FLANGE BEAM DIMENSIONS

	Shape	Area	WEB d	WEB t_w	FLANGE b_f	FLANGE t_w	AXIS X-X I	AXIS X-X S	AXIS X-X r	AXIS X-X Z	AXIS Y-Y I	AXIS Y-Y S	AXIS Y-Y r	AXIS Y-Y Z
		$in.^2$ (cm^2)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	$in.^4$ ($10^6 mm^4$)	$in.^3$ ($10^3 mm^3$)	$in.^3$ (mm)	in. ($10^3 mm^3$)	$in.^4$ ($10^6 mm^4$)	$in.^3$ ($10^3 mm^3$)	$in.^3$ (mm)	in. ($10^3 mm^3$)
W6X4	7	2.1	5.8	0.1	3.9	0.2	12.3	4.3	2.4	4.7	1.6	0.8	0.9	1.3
	10.4	*1335.5*	*147*	*3.4*	*99*	*4.1*	*5.1*	*69.6*	*62.0*	*77.5*	*0.7*	*13.4*	*22.3*	*20.6*
	7.5	2.3	5.8	0.2	3.9	0.2	13.7	4.7	2.4	5.3	1.8	0.9	0.9	1.4
	11.2	*1477.4*	*148*	*3.8*	*100*	*4.5*	*5.1*	*77.0*	*62.0*	*86.0*	*0.7*	*14.9*	*22.4*	*22.9*
	8.5	2.52	5.83	0.17	3.94	0.195	14.9	5.1	2.43	5.73	1.99	1.01	0.89	1.56
	13	*1,630*	*148*	*4.32*	*100*	*5.0*	*6.2*	*83.6*	*61.7*	*93.9*	*0.828*	*16.6*	*22.6*	*25.6*
	9	2.68	5.9	0.17	3.94	0.215	16.4	5.56	2.47	6.23	2.2	1.11	0.905	1.72
	13.5	*1,730*	*150*	*4.32*	*100*	*5.5*	*6.83*	*91.1*	*62.7*	*102*	*0.916*	*18.2*	*23*	*28.2*
	10.4	3.1	6.0	0.2	4.0	0.2	19.3	6.5	2.5	7.3	2.6	1.3	0.9	2.0
W6X	*15.5*	*2,019*	*151*	*5.1*	*101*	*6.3*	*8.0*	*106.2*	*63.0*	*119.8*	*1.1*	*21.3*	*23.1*	*32.9*
W150X	12	3.55	6.03	0.23	4	0.28	22.1	7.31	2.49	8.3	2.99	1.5	0.918	2.32
	18	*2,290*	*153*	*5.84*	*102*	*7.1*	*9.2*	*120*	*63.2*	*136*	*1.24*	*24.6*	*23.3*	*38.0*
	16	4.74	6.28	0.26	4.03	0.405	32.1	10.2	2.6	11.7	4.43	2.2	0.967	3.39
	24	*3,060*	*160*	*6.6*	*102*	*10.3*	*13.4*	*167*	*66*	*192*	*1.84*	*36.1*	*24.6*	*55.6*
W6X6	15	4.43	5.99	0.23	5.99	0.26	29.1	9.72	2.56	10.8	9.32	3.11	1.45	4.75
	22.5	*2,860*	*152*	*5.84*	*152*	*6.6*	*12.1*	*159*	*65*	*177*	*3.88*	*51*	*36.8*	*77.8*
	20	5.87	6.2	0.26	6.02	0.365	41.4	13.4	2.66	14.9	13.3	4.41	1.5	6.72
	29.8	*3,790*	*157*	*6.6*	*153*	*9.27*	*17.2*	*220*	*67.6*	*246*	*5.54*	*72.3*	*38.1*	*110*
	25	7.34	6.38	0.32	6.08	0.455	53.4	16.7	2.7	18.9	17.1	5.61	1.52	8.56
	37.1	*4,740*	*162*	*8.13*	*154*	*11.6*	*22.2*	*274*	*68.6*	*310*	*7.12*	*91.9*	*38.6*	*140*
W8X4	10	2.96	7.89	0.17	3.94	0.205	30.8	7.81	3.22	8.87	2.09	1.06	0.841	1.66
W8X	*15*	*1,910*	*200*	*4.32*	*100*	*5.21*	*12.8*	*128*	*81.8*	*145*	*0.87*	*17.4*	*21.4*	*27.2*
W200X	13	3.84	7.99	0.23	4	0.255	39.6	9.91	3.21	11.4	2.73	1.37	0.843	2.15
	19.3	*2,480*	*203*	*5.84*	*102*	*6.48*	*16.5*	*162*	*81.5*	*187*	*1.14*	*22.5*	*21.4*	*35.2*
W8X5 1/4	18	5.26	8.14	0.23	5.25	0.33	61.9	15.2	3.43	17	7.97	3.04	1.23	4.66
W8X	*26.6*	*3,390*	*207*	*5.84*	*133*	*8.38*	*25.8*	*249*	*87.1*	*279*	*3.32*	*49.8*	*31.2*	*76.4*
W200X	21	6.16	8.28	0.25	5.27	0.4	75.3	18.2	3.49	20.4	9.77	3.71	1.26	5.69
	31.3	*3,970*	*210*	*6.35*	*134*	*10.2*	*31.3*	*298*	*88.6*	*334*	*4.07*	*60.8*	*32*	*93.2*

Steel Grades: Beams available in standard structural grades, including A572-50 and 65. Inquire for other high-strength grades. For heavier sections please reference the structural section.

Lengths: Available in standard lengths of 20', 25', 30', 35', 40', 45', 50', 55', 60', and 65'. Non-standard lengths are also available subject to mill tonnage minimums. Inquire for lengths >65'.

Tolerances: All structural sections listed in this document shall comply to the general requirements determined by ASTMA6/A6M. *W6x7, W6x7.75 and W6x10.4 are not listed in ASTM A6/A6M Table A1.2 (nor in AISC Steel Construction Manual) and herefore dimensions may vary slightly depending on the producing steel mill.

Updated: 12-25

PILING

Photo Credit Triad Metals

GERDAU PILING PRODUCTS IN USE

ROCKAWAY BEACH

New York City, NY

Rockaway Beach is a neighborhood located in the borough of Queens, New York City. It is renowned for the Rockaway Beach and Boardwalk, the largest urban beach in the United States. The dune is reinforced using PZC sheet piling to defend inland areas from erosion and wave attacks during storm events. This limits storm surge inundation and cross-island flooding.

Gerdau contributed to this project by providing its customer with custom ordered lengths that helped optimize logistics and reduced the need for additional processing of the sheets, resulting in a lower cost for the overall project.

PILING PRODUCTS AND BUNDLES

H-PILE: MIDLOTHIAN, TX & PETERSBURG, VA

SHAPE	MILL	PCS/ BUNDLE
H8x36	TX, VA	6
H10x42	TX, VA	4
H10x57	VA	4
H12x53 , 63	VA	4
H12x74	VA	3
H12x84	VA	2
H14x73 , 89 , 102 , 117	VA	2
H16x88 , 101 , 121 , 141	VA	1

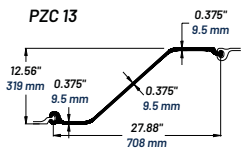
PZC™ SHEET PILE: PETERSBURG, VA

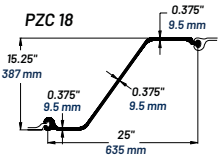
SHAPE	MILL	PCS/ BUNDLE
PZC 12	VA	4
PZC 13	VA	4
PZC 14	VA	4
PZC 17	VA	4
PZC 18	VA	4
PZC 19	VA	4
PZC 25	VA	4
PZC 26	VA	4
PZC 28	VA	4
PZC 37	VA	4
PZC 39	VA	4
PZC 41	VA	4

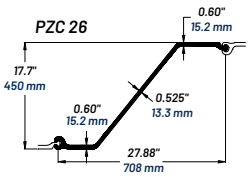
PS FLAT SHEET: MIDLOTHIAN, TX

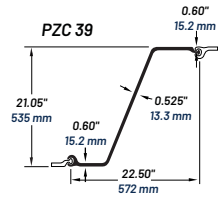
SHAPE	MILL	PCS/ BUNDLE
PS 27.5	TX	4
PS 31	TX	4

GERDAU SHEET PILING









PZC™ SHEET PILING PROPERTIES

					PER SINGLE SELECTION							PER UNIT OF WALL				
Section	Nominal Width	Wall Depth (Height)	Web Thickness	Flange Thickness	Area	Weight	Moment of Inertia	Elastic Section Modulus	Plastic Section Modulus	Total Surface Area	Nominal Coating Area*	Cross Sectional Area	Weight	Moment of Inertia	Elastic Section Modulus	Plastic Section Modulus
	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in.^{2} (cm^2)	lbs/ft (kg/m)	in.^{4} (cm^4)	in.^{3} (cm^3)	in.^{3} (cm^3)	ft^2/ft (m^2/m)	ft^2/ft (m^2/m)	ft^2/ft (m^2/m)	lbs/ft^2 (kg/m^2)	in.^{4}/ft (cm^4/m)	in.^{4}/ft (cm^4/m)	in.^{3}/ft (cm^3/m)
PZC12	27.88	12.52	0.335	0.335	13.64	46.4	324.5	51.8	61.51	6.1	5.6	5.87	20.0	139.7	22.3	26.47
	708	318	8.5	8.5	88.0	69.1	13,510	850	1,008	1.86	1.71	124.3	97.6	19,080	1,200	1,423
PZC13	27.88	12.56	0.375	0.375	14.82	50.4	353.0	56.2	66.93	6.1	5.6	6.38	21.7	152.0	24.2	28.81
	708	319	9.5	9.5	95.6	75.1	14,690	920	1,097	1.86	1.71	135.1	106.0	20,760	1,300	1,549
PZC14	27.88	12.60	0.420	0.420	16.15	55.0	381.6	60.5	72.61	6.1	5.6	6.95	23.7	164.3	26.0	31.25
	708	320	10.7	10.7	104.2	81.8	15,890	1,190	990	1.86	1.71	147.2	115.5	22,440	1,400	1,680
PZC17	25.00	15.21	0.335	0.335	13.64	46.4	491.8	64.6	76.07	6.1	5.6	6.55	22.3	236.1	31.0	36.5
	635	386	8.5	8.5	88.0	69.1	20,470	1,060	1,246	1.86	1.71	138.6	108.8	32,235	1,670	1,962
PZC18	25.00	15.25	0.375	0.375	14.82	50.4	532.2	69.8	82.2	6.1	5.6	7.12	24.2	255.5	33.5	39.46
	635	387	9.5	9.5	95.6	75.1	22,150	1,145	1,347	1.86	1.71	150.6	118.2	34,890	1,800	2,121
PZC19	25.00	15.30	0.420	0.420	16.16	55.0	576.3	75.3	89.14	6.1	5.6	7.75	26.4	276.6	36.1	42.79
	635	388	10.7	10.7	104.2	81.8	23,990	1,235	1,461	1.86	1.71	164.1	128.8	37,780	1.945	2,301
PZC25	27.88	17.66	0.485	0.560	20.40	69.4	938.7	106.3	126.77	6.65	6.15	8.78	29.9	404.1	45.7	54.56
	708	449	12.3	14.2	131.6	103.3	39,070	1,740	2,077	2.03	1.87	185.9	145.9	55,190	2,455	2,933
PZC26	27.88	17.70	0.525	0.600	21.27	73.9	994.3	112.4	134.46	6.65	6.15	9.35	31.8	428.1	48.4	57.89
	708	450	13.3	15.2	140.1	110.0	41,390	1,840	2,203	2.03	1.87	197.9	155.4	58,460	2,600	3,112
PZC28	27.88	17.75	0.570	0.645	23.22	79.0	1057	119.1	143.07	6.65	6.15	10.00	34.0	455.1	51.3	61.58
	708	451	14.5	16.4	149.8	117.6	44,000	1,950	2,344	2.03	1.87	211.6	166.1	62,150	2,755	3,311
PZC37	22.50	21.01	0.485	0.560	20.44	69.6	1,352	128.7	152.3	6.75	6.3	10.90	37.1	721.1	68.6	81.20
	572	534	12.3	14.2	131.9	103.9	56,270	2,109	2,496	2.06	1.92	230.7	181.2	98,470	3,688	4,366
PZC39	22.50	21.05	0.525	0.600	21.83	74.3	1,436	136.4	162.0	6.75	6.3	11.64	39.6	765.9	72.7	86.40
	572	535	13.3	15.2	140.8	110.6	59,770	2,235	2,655	2.06	1.92	246.4	193.5	104,590	3,909	4,645
PZC41	22.50	21.09	0.570	0.645	23.10	78.6	1,512	143.4	170.8	6.75	6.3	12.32	41.9	806.4	76.5	91.10
	572	536	14.5	16.4	149.0	117.0	62,930	2,350	2,799	2.06	1.92	260.8	204.7	110,120	4,113	4,898

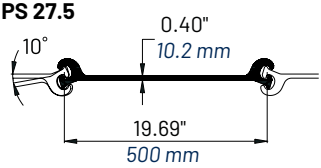
ASTM DESIGNATION**	YIELD STRENGTH		APPLICATION
	ksi	MPa	
A572	60	415	Mill Standard Produced
A588	50	345	Atmospheric Corrosion
A690	50	345	Marine Environment

*Both sides of sheet; excludes socket interior and ball of interlock.
Manufactured to ASTM A6 specifications.

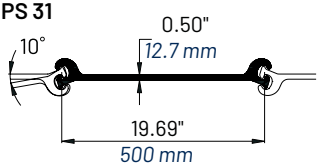
**Other grades available upon request.

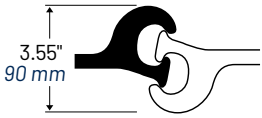
Updated: 12-25

PS 27.5



PS 31





PS (FLAT SHEET) PILING PROPERTIES

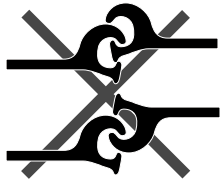
					PER SINGLE SELECTION						PER UNIT OF WALL			
Section	Nominal Width in. *(mm)*	Depth (Height) in. *(mm)*	Wall Depth (Height) in. *(mm)*	Web Thickness in. *(mm)*	Area in.2 *(cm2)*	Weight lbs/ft *(kg/m)*	Moment of Inertia $in.^4$ *(cm^4)*	Section Modulus $in.^3$ *(cm^3)*	Total Surface Area ft^2/ft *(m^2/m)*	Nominal Coating Area* ft^2/ft *(m^2/m)*	Area $in.^2/ft$ *(cm^2/m)*	Weight lbs/ft2 *(kg/m^2)*	Moment of Inertia $in.^4/ft$ *(cm^4/m)*	Section Modulus $in.^3/ft$ *(cm^3/m)*
PS27.5	19.69 *500*	2.83 *72*	3.55 *90*	0.40 *10.2*	13.26 *85.5*	45.1 *67.1*	5.0 *207*	3.2 *52*	4.50 *1.37*	3.64 *1.11*	8.08 *171.0*	27.5 *134.2*	3.0 *414*	1.9 *103*
PS31	19.69 *500*	2.83 *72*	3.55 *90*	0.50 *12.7*	14.96 *96.5*	50.9 *75.7*	5.0 *207*	3.2 *52*	4.50 *1.37*	3.64 *1.11*	9.11 *192.9*	31.0 *151.4*	3.0 *414*	1.9 *103*

*Both sides of sheet; excludes socket interior and ball of interlock.
Manufactured to ASTM A6 specifications.

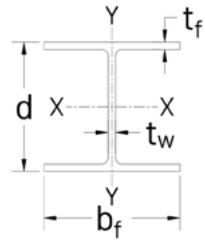
GRADE [1]	MINIMUM INTERLOCK STRENGTH [2]		MINIMUM SWING [3]
A572-50	20 kips/in.	(3,500 kN/m)	10 degrees
A572-60	24 kips/in.	(4,200 kN/m)	10 degrees

(1) Other grades available upon request.
(2) These minimum ultimate interlock strengths assume proper interlocking of sheets. To verify the strength of PS Sheet Piling, consider both yielding of the web and failure of the interlock.
(3) Swing reduces 1.5 degrees for each 10 feet (3 meters) in length over 70 feet (21 meters).


Proper Interlock


Improper Interlock

As a general rule, Gerdau advises against interlocking PS sections with other producers' section(s).
Gerdau PS 27.5 and PS 31 can be interlocked together. PS and Z-Piling sections should not be interlocked together.



H-PILE PROPERTIES

					THICKNESS			AXIS X-X				AXIS Y-Y			
Section	Weight	Area A	Depth d	Web bf	Flange tf	Web tw	Coating Area	I	S	Z	r	I	S	Z	r
	lbs/ft *(kg/m)*	in.2 *(cm^2)*	in. *(mm)*	in. *(mm)*	in. *(mm)*	in. *(mm)*	ft/ft2 *(m/m^2)*	in.3 *(cm^3)*	in.3 *(cm^3)*	in.3 *(cm^3)*	in. *(mm)*	in.4 *(cm^4)*	in.3 *(cm^3)*	in.3 *(cm^3)*	in. *(mm)*
HP 8x *HP200x*	36	10.6	8.02	8.16	0.445	0.445	3.92	119	29.8	33.6	3.36	40.3	9.88	15.2	1.95
	54	*68.4*	*204*	*207*	*11.3*	*11.3*	*1.21*	*4,980*	*488*	*552*	*8.53*	*1,670*	*162*	*249*	*4.95*
HP 10x *HP250x*	42	12.4	9.70	10.10	0.420	0.415	4.83	210	43.4	48.3	4.13	71.7	14.2	21.8	2.41
	62	*79.8*	*246*	*256*	*10.7*	*10.5*	*1.50*	*8,750*	*711*	*792*	*10.5*	*3,000*	*234*	*358*	*6.13*
	57	16.7	9.99	10.20	0.565	0.565	4.91	294	58.8	66.5	4.18	101	19.7	30.3	2.45
	85	*109.0*	*254*	*259*	*14.4*	*14.4*	*1.50*	*12,300*	*968*	*1,090*	*10.6*	*4,230*	*325*	*500*	*6.23*
HP 12x *HP310x*	53	15.5	11.80	12.00	0.435	0.435	5.82	393	66.7	74.0	5.03	127	21.1	32.2	2.86
	79	*99.8*	*299*	*306*	*11.0*	*11.0*	*1.80*	*16,300*	*1,090*	*1,210*	*12.8*	*5,260*	*344*	*525*	*7.26*
	63	18.4	11.90	12.10	0.515	0.515	5.86	472	79.1	88.3	5.06	153	25.3	38.7	2.88
	94	*119.0*	*303*	*308*	*13.1*	*13.1*	*1.81*	*19,600*	*1,300*	*1,450*	*12.9*	*6,390*	*415*	*635*	*7.33*
	74	21.8	12.10	12.20	0.610	0.605	5.91	569	93.8	105	5.11	186	30.4	46.6	2.92
	110	*141.0*	*308*	*310*	*15.4*	*15.4*	*1.83*	*23,700*	*1,540*	*1,730*	*13.0*	*7,710*	*497*	*763*	*7.40*
	84	24.6	12.30	12.30	0.685	0.685	5.97	650	106	120	5.14	213	34.6	53.2	2.94
	125	*159.0*	*312*	*312*	*17.4*	*17.4*	*1.84*	*27,000*	*1,730*	*1,960*	*13.0*	*8,820*	*566*	*870*	*7.45*
	89	25.9	12.36	12.32	0.720	0.720	6.04	689	111.6	126.3	5.16	225	36.5	56.2	2.94
	132	*167*	*314*	*313*	*18.3*	*18.3*	*1.84*	*28,700*	*1,830*	*2,070*	*13.1*	*9,370*	*599*	*922*	*7.48*
	102	29.9	12.56	12.64	0.819	0.819	6.17	811	129.3	147.6	5.20	276	43.7	67.1	3.04
	152	*193*	*319*	*321*	*20.8*	*20.8*	*1.88*	*33,800*	*2,120*	*2,420*	*13.2*	*11,500*	*716*	*1,100*	*7.71*
	117	34.4	12.76	12.87	0.929	0.929	6.26	946	148.2	170.8	5.24	331	51.4	79.3	3.11
	174	*222*	*324*	*327*	*23.6*	*23.6*	*1.91*	*39,400*	*2,430*	*2,800*	*13.3*	*13,800*	*843*	*1,300*	*7.89*
HP 14x *HP360x*	73	21.4	13.60	14.60	0.505	0.505	6.96	729	107	118	5.84	261	35.8	54.6	3.49
	108	*138*	*346*	*370*	*12.8*	*12.8*	*2.15*	*30,300*	*1,750*	*1,940*	*14.8*	*10,800*	*585*	*891*	*8.86*
	89	26.1	13.80	14.70	0.615	0.615	7.02	904	131	146	5.88	326	44.3	67.7	3.53
	132	*168*	*351*	*373*	*15.6*	*15.6*	*2.16*	*37,500*	*2,140*	*2,380*	*14.9*	*13,500*	*724*	*1,110*	*8.96*
	102	30.1	14.00	14.80	0.705	0.705	7.06	1050	150	169	5.92	380	51.4	78.8	3.56
	152	*194*	*3,556*	*376*	*17.9*	*17.9*	*2.18*	*43,900*	*2,470*	*2,770*	*15.0*	*15,900*	*845*	*1,290*	*9.05*
	117	34.4	14.20	14.90	0.805	0.805	7.12	1220	172	194	5.96	443	59.5	91.4	3.59
	174	*222*	*361*	*378*	*20.4*	*20.4*	*2.19*	*50,800*	*2,820*	*3,130*	*15.2*	*18,400*	*973*	*1,490*	*9.11*
HP 16x HP410x	88	25.8	15.30	15.70	0.540	0.540	7.52	1110	145	161	6.56	349	44.5	68.2	3.68
	131	*167*	*398*	*399*	*13.7*	*13.7*	*2.29*	*46,201*	*2,376*	*2,683.3*	*16.7*	*14,526*	*729*	*1,117.6*	*9.35*
	101	29.9	15.50	15.80	0.625	0.625	7.56	1300	168	187	6.59	412	52.2	80.1	3.71
	150	*193*	*394*	*401*	*15.9*	*15.9*	*2.30*	*54,110*	*2,753*	*3,064.4*	*16.7*	*17,149*	*855*	*1,312.6*	*9.42*
	121	35.8	15.80	15.90	0.705	0.705	7.62	1590	201	226	6.66	504	63.4	97.6	3.75
	180	*231*	*401*	*404*	*19.1*	*19.1*	*2.32*	*66,180*	*3,294*	*3,703.5*	*16.9*	*20,978*	*1,039*	*1,599.4*	*9.53*
	141	41.7	16.00	16.00	0.875	0.875	7.69	1870	234	264	6.70	599	74.9	116	3.79
	210	*269*	*406*	*406*	*22.2*	*22.2*	*2.34*	*77,835*	*3,835*	*4,326.2*	*17.0*	*24,932*	*1,227*	*1,900.9*	*9.63*

SPECIAL BAR QUALITY

GERDAU SPECIAL BAR QUALITY PRODUCTS IN USE

SUCKER RODS

Gerdau is the leading manufacturer of SBQ bars used in the production of sucker rods in North America for the oil and gas industry. Sucker rods are used in artificial lift applications and require exceptional dependability, uniform heat-treat response, high surface quality, and efficient production. Our steel enables manufacturers to meet these requirements through optimized SBQ processing, larger heats that result in less heat code changeovers, and state-of-the-art on-site eddy current inspection that can meet API standards when needed.

COMPARISON OF QUALITY DESIGNATIONS: SBQ VS MBQ

	QUALITY DESIGNATIONS	APPLICATIONS	KEY PRODUCT CHARACTERISTICS	SUPPLEMENTARY REQUIRMENTS OR SPECIFIC QUALITY APPLICATION	INDUSTRY STANDARDS
SBQ	Special Quality (Carbon Steels)	Forging Heat Treating Cold Drawing Machining Structural uses	Steel Process Chemistry Grain Size Surface Quality Internal Quality Dimensions	Cold Working Quality Thermal Treatment Special Internal Soundness Non-metallic Inclusion Special Hardenability Austenitic Grain Size Restricted Residual Elements Stress Relieving Descaling Surface Coating Restricted Heat Chemistry	ASTM A29/A29M ASTM A576/A576M
SBQ	Standard Quality (Alloy Steels)	Forging Heat treating Cold drawing Machining Structural components	Steel process Chemistry Grain size Slow cooling Surface quality Internal quality Dimensions	Cold Shearing Quality Cold Working Quality Thermal Treatment Special Internal Soundness Non-metallic Inclusion Special Hardenability Austenitic Grain Size Restricted Residual Elements Stress Relieving Descaling Surface Coating Restricted Heat Chemistry	ASTM A29/A29M ASTM A322/A322M
MBQ	Merchant Quality (Carbon Steels)	Structural and miscellaneous applications involving: Bending Moderate forming Punching and welding on non-critical parts	Chemistry (wide range) No visible pipe Dimensions	Special Straightness Descaled Surface Protective Oil Coating	ASTM A29/A29M ASTM A575/A575M

BAR PRODUCTS FOR FASTENERS

F1554 PROPERTIES AVAILABLE

GRADE	MIDLOTHIAN, TX	CAMBRIDGE, ON**	CHARLOTTE, NC
36	M1018M		M1018M
55	M1022M	55W	M1022M
105	4140*	NA	NA

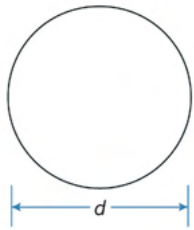
* Gerdau Midlothian Steel Processing (GMSP)
** Inquire on F1554 from Cambridge

OTHER FASTENER SPECIFICATIONS AVAILABLE

ASTM A354 BC
ASTM A193 B7
ASTM A320 L7 (under Development)
ASTM A434

* Please inquire other ASTM specifications

PITCH DIAMETER ROUNDS



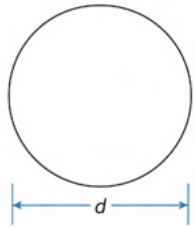
MIDLOTHIAN MILL

DIAMETER, d (in.)	WT / FT	REDUCTION RATIO*	A29 TOLERANCE
0.677	1.224	117.4	3/4
0.795	1.688	85.2	3/4
0.910	2.216	65.0	3/4
1.025	2.806	51.2	3/4
1.145	3.501	41.1	3/4
1.152	3.543	40.6	3/4
1.381	5.094	28.2	3/4
1.386	5.130	28.0	3/4
1.613	6.948	20.7	3/4
1.848	9.120	15.8	3/4
2.093	11.827	12.3	3/4
2.320	14.407	10.0	3/4
2.622	18.402	7.8	3/4

CHARLOTTE MILL

DIAMETER, d (in.)	WT / FT	REDUCTION RATIO*	A29 TOLERANCE
9/16	0.846	100.6	3/4
0.680	1.236	68.8	3/4
0.795	1.688	50.4	3/4
0.910	2.195	38.4	3/4
1.145	3.501	24.3	3/4

ROUNDS MIDLOTHIAN MILL



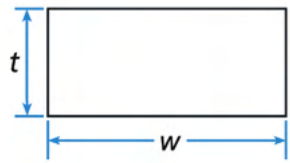
DIAMETER, d	WT / FT	REDUCTION RATIO*
5/8	1.043	137.10
11/16	1.262	113.31
3/4	1.502	95.21
13/16	1.763	81.11
7/8	2.044	69.96
15/16	2.347	60.93
1	2.670	53.56
1 1/16	3.015	47.43
1 1/8	3.380	42.31
1 3/16	3.766	37.97
1 1/4	4.172	34.28
1 5/16	4.600	31.09
1 3/8	5.049	28.32
1 7/16	5.518	25.92
1 1/2	6.008	23.80
1 9/16	6.519	21.94
1 5/8	7.051	20.28
1 11/16	7.604	18.81
1 3/4	8.178	17.49
1 13/16	8.773	16.30
1 7/8	9.388	15.23
1 15/16	10.020	14.27
2	10.681	13.39
2 1/16	11.524	12.41

DIAMETER, d	WT / FT	REDUCTION RATIO*
2 1/8	12.228	11.69
2 3/16	12.953	11.04
2 1/4	13.698	10.44
2 5/16	14.465	9.89
2 3/8	15.252	9.38
2 7/16	16.060	8.90
2 1/2	16.889	8.47
2 9/16	17.857	8.01
2 5/8	18.730	7.63
2 11/16	19.625	7.29
2 3/4	20.540	6.96
2 13/16	21.476	6.66
2 7/8	22.433	6.37
2 15/16	23.411	6.11
3	24.410	5.86
3 1/16	25.430	5.62
3 1/8	26.470	5.40
3 3/16	27.532	5.19
3 1/4	28.614	5.00
3 5/16	29.717	4.81
3 3/8	30.841	4.64
3 7/16	31.986	4.47
3 1/2	33.151	4.31
3 9/16	34.488	4.15

* Inquire on sizes not shown on the table.
* All sizes shown above are rolled to A29 dimensional tolerances. See page 83 for A29 bar tolerances.
* Reduction ratios subject to change.

Updated: 12-25

FLATS WILTON MILL



THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
3/16	1 1/2	0.954	109.71
3/16	2	1.272	82.29
3/16	3	1.910	54.80
3/16	3.15	2.000	52.33
1/4	1 1/4	1.063	98.46
1/4	1.5	1.275	82.09
1/4	1 3/4	1.488	70.34
1/4	2	1.700	61.57
1/4	2 1/4	1.913	54.71
1/4	2.5	2.130	49.14
1/4	3	2.550	41.05
1/4	3.5	2.975	35.18
1/4	4	3.400	30.78
1/4	5	4.250	24.63
0.275	2	1.899	55.12
0.275	2.275	2.133	49.07
0.275	3	2.840	36.85
0.275	4.038	3.780	27.69
9/32	1.281	1.282	81.64
9/32	1.406	1.406	74.44
9/32	1 1/2	1.530	68.41
9/32	2.031	2.024	51.71
9/32	2.281	2.272	46.07
9/32	2.531	2.519	41.55
9/32	3	3.014	34.73

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
9/32	3.531	3.508	29.84
9/32	4	4.003	26.15
9/32	6.031	5.982	17.50
5/16	1 1/4	1.330	78.70
5/16	1 1/2	1.591	65.79
5/16	1 3/4	1.856	56.39
5/16	2	2.128	49.19
5/16	2 1/4	2.391	43.78
5/16	2.5	2.661	39.33
5/16	3	3.193	32.78
5/16	3.5	3.725	28.10
5/16	4	4.257	24.59
5/16	5	5.321	19.67
5/16	6	6.385	16.39
23/73	3.540	3.791	27.61
15/47	3 1/2	3.840	27.26
23/71	2.046	2.250	46.52
1/3	3 1/2	4.032	25.96
11/32	2.031	2.456	42.62
11/32	2 1/2	3.056	34.25
11/32	3.031	3.656	28.63
3/8	1	1.275	82.09
3/8	1 1/4	1.594	65.66
3/8	1 1/2	1.913	54.71
3/8	1 3/4	2.231	46.92

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

Updated: 12-25

FLATS WILTON MILL

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
3/8	2	2.550	41.05
3/8	2 1/4	2.869	36.48
3/8	2 1/2	3.188	32.83
3/8	2.75	3.506	29.85
3/8	3	3.825	27.36
3/8	3.5	4.463	23.45
3/8	4	5.100	20.52
3/8	5	6.375	16.42
3/8	6	7.650	13.68
2/5	1.036	1.409	74.29
2/5	2	2.778	37.68
2/5	3.043	4.138	25.29
2/5	4	5.498	19.04
13/32	1.031	1.479	70.77
13/32	1.281	1.833	57.10
13/32	1.531	2.187	47.86
13/32	1.781	2.540	41.21
13/32	2.031	2.894	36.17
13/32	2.281	3.247	32.24
13/32	2.531	3.601	29.07
13/32	2.781	3.955	26.46
13/32	3.031	4.308	24.30
0.406	3 1/2	5.015	20.87
0.406	4.031	5.723	18.29
0.406	5	7.137	14.67
0.406	6.031	8.551	12.24
1/2	1	1.700	61.57
1/2	1 1/4	2.125	49.26
1/2	1 1/2	2.550	41.05
1/2	1 3/4	2.975	35.18
1/2	2	3.400	30.78
1/2	2 1/4	3.825	27.36
1/2	2 1/2	4.250	24.63
1/2	2 3/4	4.675	22.39

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
1/2	3	5.100	20.52
1/2	3 1/2	5.950	17.59
1/2	4	6.800	15.39
1/2	5	8.500	12.31
1/2	6	10.200	10.26
17/33	2.515	4.632	22.60
17/32	1	1.924	54.40
17/32	1.281	2.384	43.90
17/32	1.406	2.614	40.04
17/32	1.531	2.844	36.80
17/32	1.781	3.304	31.68
17/32	2.031	3.763	27.82
17/32	2.281	4.223	24.79
17/32	2.531	4.683	22.35
17/32	2.781	5.143	20.35
17/32	3.031	5.603	18.68
17/32	3.281	6.063	17.26
17/32	3.531	6.523	16.05
17/32	4	7.442	14.06
17/32	5.031	9.625	10.87
0.531	6	11.530	9.08
0.546	2 1/4	4.177	25.06
0.563	1	2.209	47.38
0.594	1.313	2.650	39.50
19/32	1 3/8	2.776	37.70
14/23	1.313	2.849	36.74
5/8	1	2.125	49.26
5/8	1 1/4	2.656	39.41
5/8	1.531	3.338	31.36
5/8	2	4.250	24.63
5/8	2 1/2	5.313	19.70
5/8	3	6.375	16.42
5/8	3 1/2	7.438	14.07
5/8	4	8.500	12.31

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

Updated: 12-25

FLATS WILTON MILL

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
5/8	5	10.620	9.86
5/8	6	12.750	8.21
21/32	1	2.301	45.49
21/32	1.281	2.935	35.66
21/32	1.406	3.218	32.53
21/32	1.531	3.501	29.90
21/32	1.781	4.067	25.74
21/32	2.031	4.633	22.59
21/32	2.281	5.199	20.13
21/32	2.531	5.765	18.16
21/32	2.781	6.331	16.53
21/32	3.031	6.897	15.18
21/32	3 1/2	8.030	13.03
21/32	4.031	9.162	11.42
21/32	5	11.770	8.89
21/32	6.031	14.100	7.42
2/3	1.295	3.063	34.17
3/4	1	2.550	41.05
3/4	1 1/4	3.188	32.83
3/4	1 1/2	3.825	27.36
3/4	2	5.100	20.52
3/4	2.5	6.375	16.42
3/4	3	7.650	13.68
3/4	3.5	8.925	11.73
3/4	4	10.200	10.26
3/4	5	12.750	8.21
3/4	6	15.300	6.84
25/32	1.031	2.813	37.21
25/32	1.281	3.485	30.03
25/32	1.531	4.158	25.17
25/32	1.781	4.830	21.67
25/32	2.031	5.503	19.02
25/32	2 1/2	6.847	15.29
25/32	2.781	7.520	13.92

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
25/32	3	8.192	12.78
25/32	3.281	8.864	11.81
25/32	3 1/2	9.537	10.97
25/32	4.031	10.880	9.62
25/32	5	13.910	7.52
25/32	6.031	16.670	6.28
7/8	5	14.870	7.04
7/8	6	17.850	5.86
29/32	1.281	4.036	25.93
29/32	1.781	5.593	18.71
0.906	3 1/2	11.040	9.48
0.906	5.031	15.710	6.66
1.000	1 1/2	5.100	20.52
1.000	1.75	5.950	17.59
1	2	6.800	15.39
1	2 1/2	8.500	12.31
1	3	10.200	10.26
1	4.0	13.600	7.70
1	6.0	20.400	5.13
1 1/32	1.281	4.609	22.71
1 1/32	1 1/2	5.498	19.04
1 1/32	1.656	5.943	17.61
1 1/32	1.781	6.367	16.44
1 1/32	2.031	7.242	14.45
1 1/32	2.281	8.126	12.88
1 1/32	2.531	9.011	11.62
1 1/32	2.781	9.896	10.58
1 1/32	3.031	10.780	9.71
1 1/32	3.281	11.660	8.98
1 1/32	3.531	12.550	8.34
1 1/32	4	14.320	7.31
1 1/32	5.031	18.200	5.75
1 1/32	6	21.990	4.76
1 5/32	1.531	6.155	17.01

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

Updated: 12-25

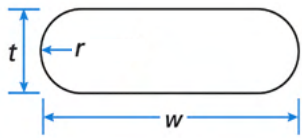
FLATS WILTON MILL

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
1 5/32	2	8.110	12.91
1 5/32	2.531	10.090	10.37
1 5/32	3	12.070	8.67
1 5/32	4.031	6.530	16.03
1 1/4	2	8.500	12.31
1 1/4	2.450	10.410	10.05
1 1/4	2 1/2	10.620	9.86
1 1/4	3	12.750	8.21
1.250	4	17.000	6.16
1.281	1.656	7.363	14.22
1.281	1.781	7.883	13.28
1.281	2.031	9.240	11.33
1 9/32	2.531	11.490	9.11

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
1 9/32	3.031	13.740	7.62
1 9/32	4	17.760	5.89
1 11/32	2.344	10.710	9.77
1 13/32	2.031	9.850	10.63
1 13/32	3.031	14.660	7.14
1 7/16	2.563	12.530	8.35
1 7/16	2.625	12.830	8.16
1 1/2	2	10.200	10.26
1 17/32	2.031	10.720	9.76
1 17/32	2.281	12.030	8.70
1 17/32	2.531	13.340	7.85
1 17/32	3	15.950	6.56

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

SPRING FLATS WILTON MILL



THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
0.167	3.250	1.834	57.07
0.209	4.000	2.825	37.05
0.214	1.750	1.265	82.74
0.214	2.000	1.447	72.33
0.237	1.720	1.375	76.12
0.237	1.970	1.577	66.37
0.237	2.500	2.000	52.33
0.237	3.000	2.413	43.38

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
0.25	1.250	1.050	99.68
0.25	2.500	2.112	49.56
0.25	3.000	2.554	40.98
0.25	4.000	3.394	30.84
0.262	1.500	1.321	79.23
0.262	1.720	1.517	69.00
0.262	1.750	1.540	67.97
0.262	1.970	1.740	60.15

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

Updated: 12-25

SPRING FLATS WILTON MILL

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
0.262	2.000	1.767	59.23
0.262	2.500	2.212	47.32
0.262	3.000	2.665	39.28
0.291	1.720	1.682	62.23
0.291	1.750	1.710	61.21
0.291	1.970	1.929	54.26
0.291	2.000	1.960	53.40
0.291	2.500	2.454	42.65
0.291	3.000	2.960	35.36
0.307	2.500	2.587	40.46
0.312	1.720	1.801	58.12
0.315	2.362	2.505	41.78
0.315	2.756	2.935	35.66
0.315	2.992	3.188	32.83
0.323	1.720	1.863	56.18
0.323	1.970	2.137	48.98
0.323	2.000	2.170	48.23
0.323	2.250	2.445	42.81
0.323	2.500	2.719	38.50
0.323	3.000	3.277	31.94
0.323	4.000	4.270	24.51
0.335	3.515	3.983	26.28
0.341	3.000	3.457	30.28
0.36	1.720	2.071	50.54
0.36	1.970	2.377	44.03
0.36	2.000	2.410	43.43
0.36	2.500	3.025	34.60
0.36	3.000	3.647	28.70
0.36	4.000	4.871	21.49
0.375	3.000	3.797	27.57
0.375	4.000	5.070	20.64
0.375	5.000	6.359	16.46
0.38	2.500	3.190	32.81
0.38	3.000	3.847	27.21

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
0.393	2.362	3.113	33.62
0.401	1.720	2.300	45.51
0.401	1.970	2.641	39.63
0.401	2.000	2.681	39.04
0.401	2.470	3.322	31.51
0.401	2.500	3.363	31.12
0.401	2.940	3.974	26.34
0.401	2.970	4.015	26.07
0.401	3.000	4.056	25.81
0.401	3.500	4.737	22.10
0.401	4.000	5.419	19.32
0.423	2.500	3.544	29.53
0.423	3.000	4.274	24.49
0.423	4.000	5.713	18.32
0.437	2.000	2.920	35.85
0.447	1.970	2.935	35.66
0.447	2.000	2.981	35.11
0.447	2.470	3.695	28.33
0.447	2.500	3.741	27.98
0.447	2.940	4.421	23.68
0.447	2.970	4.467	23.43
0.447	3.000	4.513	23.19
0.447	4.000	6.032	17.35
0.473	3.000	4.770	21.94
0.473	4.000	6.703	15.62
0.499	1.750	2.893	36.18
0.499	2.500	4.165	25.13
0.499	2.940	4.925	21.25
0.499	2.969	4.974	21.04
0.499	3.000	5.027	20.82
0.499	3.500	5.875	17.82
0.499	4.000	6.724	15.57
0.499	5.000	8.437	12.41
0.5	3.000	5.037	20.78

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

Updated: 12-25

SPRING FLATS WILTON MILL

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
0.5	4.000	6.740	15.53
0.527	4.000	7.095	14.75
0.536	4.000	7.214	14.51
0.558	2.940	5.494	19.05
0.558	3.000	5.608	18.66
0.558	3.500	6.556	15.97
0.558	4.000	7.505	13.95
0.562	1.720	3.186	32.85
0.587	4.000	7.887	13.27
0.59	3.000	5.922	17.67
0.594	3.313	6.591	15.88
0.625	1.720	3.527	29.68
0.625	1.750	3.590	29.16
0.625	3.000	6.264	16.71
0.625	3.975	7.335	14.27
0.625	4.000	8.389	12.48
0.625	5.000	10.530	9.94
0.662	3.000	6.625	15.80
0.662	3.975	8.819	11.87
0.662	4.000	8.876	11.79
0.669	2.933	6.564	15.95
0.702	3.000	7.014	14.92
0.708	3.503	8.282	12.64
0.715	3.500	8.355	12.53
0.715	4.000	9.570	10.94
0.748	2.933	7.288	14.36
0.75	1.500	3.663	28.57
0.75	1.750	4.271	24.51
0.75	2.440	6.030	17.36
0.75	4.000	10.020	10.45
0.77	2.500	6.342	16.50
0.788	2.940	7.684	13.62
0.788	2.970	7.765	13.48

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
0.788	3.500	9.184	11.40
0.788	4	10.450	10.02
0.788	4.000	10.520	9.95
0.788	5.000	13.230	7.91
0.812	2.933	7.891	13.26
0.812	3	8.075	12.96
0.815	4.000	10.870	9.63
0.827	3.503	9.633	10.87
0.840	2.5	6.894	15.18
0.850	4	11.330	9.24
0.866	2 3/4	7.876	13.29
0.875	3.975	11.580	9.04
0.887	3	8.793	11.90
0.887	4	11.810	8.86
0.887	5	14.850	7.05
0.938	2.940	9.090	11.51
0.938	2.970	9.185	11.40
0.94	4.00	12.490	8.38
0.97	2.500	7.910	13.23
0.999	2 1/2	8.134	12.87
0.999	4	13.250	7.90
0.999	5	16.680	6.28
1	2	6.442	16.25
1	3	9.732	10.76
1	3	9.869	10.61
1.000	3.97	13.180	7.94
1.085	4	14.350	7.29
1.125	3	11.040	9.48
1.125	5	18.730	5.59
1.210	4	15.920	6.57
1.25	2	7.925	13.21
1.25	2.005	7.886	13.27
1.25	4	16.450	6.36
1.375	3	13.070	8.01

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

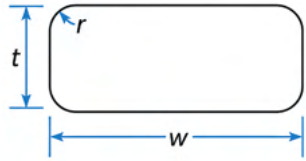
Updated: 12-25

SPRING FLATS WILTON MILL

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
1.375	2.960	13.170	7.95
1.375	2.970	13.210	7.92
1.378	2.756	12.240	8.55
1.625	2.970	15.320	6.83
7	60MM	2.199	47.60
9	60MM	2.810	37.25
12.7	100MM	6.630	15.79
1	3	9.869	10.61
1.000	3.97	13.180	7.94

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
1.085	4	14.350	7.29
1.125	3	11.040	9.48
1.125	5	18.730	5.59
1.210	4	15.920	6.57
1.25	2	7.925	13.21
1.25	2.005	7.886	13.27
1.25	4	16.450	6.36
1.375	3	13.070	8.01

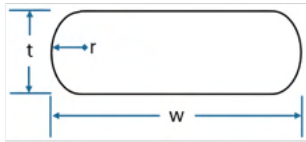
ROUND CORNERED FLATS WILTON MILL



THICKNESS, t	WIDTH, w	CORNER RADIUS, r	WT / FT	REDUCTION RATIO*
0.315	1.969	0.125	2.063	50.74
0.315	2.953	0.125	3.117	33.58
0.625	1.125	0.125	2.450	42.72
0.650	1 1/32	0.125	2.333	44.86
0.650	1 1/8	0.125	2.441	42.88
0.650	1 5/32	0.125	2.509	41.72

THICKNESS, t	WIDTH, w	CORNER RADIUS, r	WT / FT	REDUCTION RATIO*
0.650	1	0.125	2.227	47.00
11/32	2 9/32	0.050	2.756	37.98
9/32	1 25/32	0.050	1.770	59.13
9/32	2 9/32	0.050	2.272	46.07
9/32	3 1/32	0.050	3.006	34.82

FULL ROUND EDGE FLATS WILTON MILL



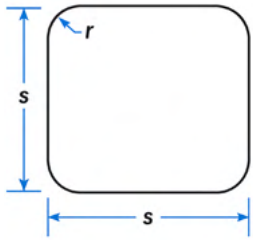
THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
1/4	1 3/8	1.123	93.20

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
3/8	1 1/2	1.810	57.83
9/32	3 1/32	2.952	35.46

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

Updated: 12-25

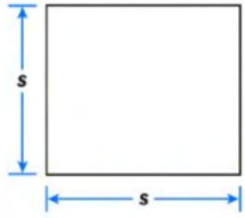
ROUND CORNER SQUARES WILTON MILL



SIDE, s	CORNER RADIUS, r	WT / FT	REDUCTION RATIO*
1 1/4"	0.125	5.270	19.86
1.265"	0.125	5.400	19.38
1 3/8"	0.156	6.357	16.46
1 1/2"	0.250	7.470	14.01
1 3/4"	0.250	10.230	10.23

SIDE, s	CORNER RADIUS, r	WT / FT	REDUCTION RATIO*
2"	0.312	13.316	7.86
2"	0.250	13.418	7.80
2 1/4"	0.250	17.260	6.06
2 1/2"	0.250	21.323	4.91

SQUARE CORNER SQUARES WILTON MILL



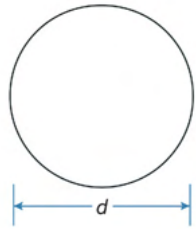
SIDE, s	CORNER RADIUS, MAXIMUM	WT / FT	REDUCTION RATIO*
1 1/16"	0.063	3.842	27.24
1 1/4"	0.063	5.313	19.70
1 5/16"	0.094	5.786	18.09
1 7/16"	0.094	7.127	14.69
1 1/2"	0.094	7.650	13.68
1 9/16"	0.094	8.369	12.51

SIDE, s	CORNER RADIUS, MAXIMUM	WT / FT	REDUCTION RATIO*
1 3/4"	0.094	10.410	10.05
1 13/16"	0.097	11.251	9.30
2"	0.125	13.600	7.70
2 1/32"	0.125	14.220	7.36
2 1/16"	0.125	14.445	7.25
2 1/16"	0.125	14.445	7.25

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

Updated: 12-25

ROUNDS WILTON MILL



DIAMETER, d	WT / FT	REDUCTION RATIO*
1 1/4	4.172	25.09
1 3/8	5.049	20.73

DIAMETER, d	WT / FT	REDUCTION RATIO*
1 3/4	8.178	12.80

FLATS CAMBRIDGE MILL

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
3/8	3/4	0.956	131.23
3/8	1 1/2	1.913	65.58
3/8	1 3/4	2.231	56.23
3/8	2 1/2	3.190	39.33
3/8	2	4.172	30.07
3/8	5	6.375	19.68
13/32	1 17/32	2.120	59.18
13/32	2 1/32	2.808	44.68
13/32	3 1/32	4.191	29.94
13/32	4 1/32	5.573	22.51
7/16	1 1/8	1.673	74.99
1/2	3/4	1.280	98.02
1/2	2	3.400	36.90
1/2	2 1/2	4.240	29.59
1/2	3	5.100	24.60
1/2	4	6.800	18.45
17/32	1 1/32	1.924	65.21
17/32	1 17/32	2.844	44.11
17/32	2 1/32	3.674	34.15
17/32	2 17/32	4.683	26.79
17/32	3 1/32	5.603	22.39
17/32	3 17/32	6.523	19.23
17/32	4 1/32	7.280	17.23
5/8	7/8	1.859	67.49

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

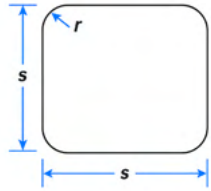
Updated: 12-25

FLATS CAMBRIDGE MILL

THICKNESS, t	WIDTH, w	WT / FT	REDUCTION RATIO*
5/8	1	2.130	58.90
5/8	2	4.250	29.52
5/8	2 1/2	5.313	23.61
.488	1.790	2.972	42.21
.646	1.535	3.371	37.22
3/4	1	2.550	49.20
3/4	1 1/4	3.190	39.33
3/4	2	5.100	24.60
25/32	1 1/32	2.739	45.81
25/32	1 5/32	3.070	40.87
25/32	1 17/32	4.065	30.86
25/32	1 25/32	4.736	26.49
25/32	2 1/32	5.396	23.25
25/32	2 17/32	6.847	18.32
25/32	3 1/32	8.192	15.31
25/32	3 17/32	9.537	13.16
13/16	1	2.765	45.37
7/8	1 1/2	4.470	28.07
29/32	1 1/32	3.180	39.45
1	1 1/4	4.250	29.52
1	1 3/4	5.950	21.09
1	2	6.800	18.45
1 1/32	1 9/32	4.609	27.22
1 1/32	1 11/32	4.700	26.69
1 1/32	1 17/32	5.374	23.35
1 1/32	2 1/32	7.129	17.60
1 1/32	2 17/32	9.011	13.92
1 1/32	3 1/32	10.624	11.81
1 1/32	3 17/32	12.551	10.00
1 1/16	2 9/16	9.257	13.55
1 1/16	3 1/16	11.074	11.33
1 1/16	3 9/16	12.869	9.75
1.080	1.380	5.072	24.74

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

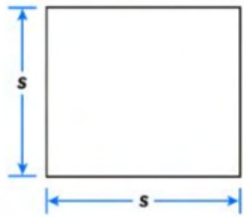
Updated: 12-25



ROUND CORNER SQUARES CAMBRIDGE MILL

SIDE, s	CORNER RADIUS, r	WT / FT	REDUCTION RATIO*
1 1/4	0.219	5.270	23.81

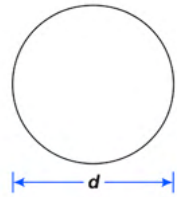
* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.



SQUARE CORNER SQUARES CAMBRIDGE MILL

SIDE, s	CORNER RADIUS, MAXIMUM	WT / FT	REDUCTION RATIO*
3/8	0.03	0.478	262.47
7/16	0.03	0.651	192.72
1/2	0.03	0.850	147.60
5/8	0.04	1.328	94.47
3/4	0.04	1.503	83.47
7/8	0.04	2.600	48.25
1	0.062	3.400	36.90
1 1/16"	0.062	3.842	32.65
1 1/4"	0.062	5.310	23.63
1 5/16"	0.062	5.786	21.68
1 1/2"	0.062	7.650	16.40

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.



ROUNDS / PITCH CAMBRIDGE MILL

DIAMETER, d	WT / FT	REDUCTION RATIO*
1/2	0.668	187.81
17/32	0.754	166.39
5/8	1.043	120.29
3/4	1.502	83.53
7/8	2.044	61.38
1	2.670	46.99
1 1/4	4.172	30.07
0.559	0.835	150.25
0.678	1.229	102.08
0.680	1.235	101.59
0.798	1.702	73.71
0.860	1.975	63.52
0.910	2.221	56.49
1.151	3.541	35.43

* Inquire on sizes not shown on the table.
* Reduction Ratio is subject to change.

GRADE FAMILIES OF CARBON AND ALLOYS STEELS BY MILL

SERIES DESIGNATION [A]	CAMBRIDGE	MANITOBA	MIDLOTHIAN	WILTON
10XX	X	X	X[B]	X
11XX			X	
15XX	X	X[B]	X[B]	X
41XX		X[B]	X	X
43XX			Inquire	
46XX			Inquire	
47XX			X	
50XX		X[B]	X[B]	
51XX	X		X[B]	X
61XX				X
86XX			X	X
87XX			X	
92XX			X	
Inquire on Boron Grades		X	X	

A Inquire for series designations not shown
B Inquire on boron grades

BAR TOLERANCE FOR HOT ROLLED CARBON AND ALLOY BARS

SPECIFIED SIZES (ROUNDS OR SQUARES)	VARIATION FROM SIZE [A]		OUT-OF-ROUND OR SQUARE [B]
	OVER	UNDER	
To 5/16" included	.005"	.005"	.008"
Over 5/16" to 7/16" included	.006"	.006"	.009"
Over 7/16" to 5/8" included	.007"	.007"	.010"
Over 5/8" to 7/8" included	.008"	.008"	.012"
Over 7/8" to 1" included	.009"	.009"	.013"
Over 1" to 1-1/8" included	.010"	.010"	.015"
Over 1-1/8" to 1-1/4" included	.011"	.011"	.016"
Over 1-1/4" to 1-3/8" included	.012"	.012"	.018"
Over 1-3/8" to 1-1/2" included	.014"	.014"	.021"
Over 1-1/2" to 2" included	1/64"	1/64"	.023"
Over 2" to 2-1/2" included	1/32"	0"	.023"
Over 2-1/2" to 3-1/2" included	3/64"	0"	.035"
Over 3-1/2" to 4-1/2" included	1/16"	0"	.046"
Over 4-1/2" to 5-1/2" included	5/64"	0"	.058"
Over 5-1/2" to 6-1/2" included	1/8"	0"	.070"
Over 6-1/2" to 8-1/4" included	5/32"	0"	.085"
Over 8-1/4" to 9-1/2" included	3/16"	0"	.100"
Over 9-1/2" to 10" included	1/4"	0"	.120"

A. Steel bars are regularly cut to length by shearing or hot sawing, which can cause end distortion resulting in those portions of the bar being outside the applicable size tolerance. When this end condition is objectionable, a machine cut end should be considered.
B. Out-of-round is the difference between the maximum and minimum diameters of the bar, measured at the same cross section. Out-of-square is the difference in the two dimensions at the same cross section of a square bar between opposite faces.
NOTE: Tolerances shown are based upon ASTM A29.

PERMISSABLE VARIATIONS IN THICKNESS AND WIDTH FOR HOT ROLLED SQUARE EDGE AND ROUND EDGE FLAT BARS*

PERMISSIBLE VARIATIONS IN THICKNESS FOR THICKNESS GIVEN, OVER AND UNDER**								PERMISSABLE VARIATIONS IN WIDTH	
SPECIFIED WIDTH (IN)	.203" TO .230" EXCLUSIVE	.230" TO 1/4" EXCLUSIVE	1/4" TO 1/2" INCLUSIVE	OVER 1/2" TO 1" INCLUSIVE	1" TO 2" INCLUSIVE	2" TO 3" INCLUSIVE	OVER 3"	OVER	UNDER
To 1", Included	.007"	.007"	.008"	.010"	---	---	---	1/64"	1/64"
Over 1" to 2" , Included	.007"	.007"	.012"	.015"	1/32"	---	---	1/32"	1/32"
Over 2" to 4" , Included	.008"	.008"	.015"	.020"	1/32"	3/64"	3/64"	1/16"	1/32"
Over 4" to 6" , Included	.009"	.009"	.015"	.020"	1/32"	3/64"	3/64"	3/32"	1/16"
Over 6" to 8" , Included	***	.015"	.016"	.025"	1/32"	3/64"	3/64"	1/8"	3/32"

*When a square is held against a face and an edge of a square flat bar, the edge shall not deviate by more than 3" or 5% of the thickness
**Steel bars are cut to length by shearing which can cause distortion resulting in thos portions of the bar being outside the applicable size tolerance. If this is not acceptable a machine cut end should be considered.
***Flats over 6" to 8" included, are not available as hot rolled steel bars in thinckness under .230"
Note: Tolerances are based on ASTM A29

A Inquire for series designations not shown
Binquire on boron grades

Updated: 12-25

STRAIGHTNESS TOLERANCE FOR HOT ROLLED STEEL BARS

ROUNDS, SQUARES, HEXAGONS, OCTAGONS, FLATS, AND SPRING FLATS

Measurement is taken on the concave side of the bar with a straight edge.

NORMAL STRAIGHTNESS	SPECIAL STRAIGHTNESS
1/4" in any 5 feet or	1/8" in any 5 feet
$1/4" \times \frac{\text{length in feet}}{5}$	$1/8" \times \frac{\text{length in feet}}{5}$

NOTE: Because of warpage, straightness tolerances do not apply to bars if any subsequent heating operation or controlled cooling has been performed.
NOTE: Tolerances shown are based upon ASTM A29.

PERMISSABLE VARIATIONS IN LENGTH FOR HOT-ROLLED ROUNDS, SQUARES, HEXAGONS, AND BAR SIZE SECTIONS OF STEEL

SPECIFIED SIZE OF ROUNDS, SQUARES, AND HEXAGONS, IN.	PERMISSIBLE VARIATIONS OVER SPECIFIED LENGTH, IN.				
	5 to 10 ft, excl	10 to 20 ft, excl	20 to 30 ft, excl	30 to 40 ft, excl	40 to 60 ft, excl
MILL SHEARING					
To 1, incl	1/2	3/4	1 1/4	1 3/4	2 1/4
Over 1 to 2, incl	5/8	1	1 1/2	2	2 1/2
Over 2 to 5, incl	1	1 1/2	1 3/4	2 1/4	2 3/4
Over 5 to 10, incl	2	2 1/2	2 3/4	3	3 1/4
Bar Size Sections	5/8	1	1 1/2	2	2 1/2
HOT SAWING					
2 to 5, incl	**	1 1/2	1 3/4	2 1/4	2 3/4
Over 5 to 10, incl	**	2 1/2	2 3/4	3	3 1/4

*No permissible variations under.
**Smaller sizes and shorter lengths are not hot sawed.
NOTE: Tolerances shown are based upon ASTM A29.

SPECIAL SHAPES

GERDAU SPECIAL SHAPES PRODUCTS IN USE

ONE WORLD TRADE CENTER

New York City, NY

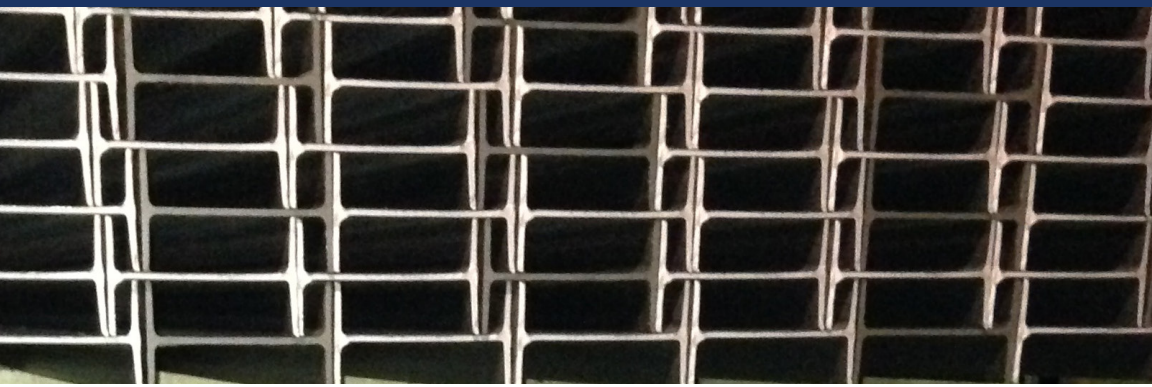
One World Trade Center is a historical landmark skyscraper located in Lower Manhattan, New York City. It stands as the tallest building in the Western Hemisphere, reaching a symbolic height of 1,776 feet.

Visitors are safely transported to the top of the tower thanks to elevator guide rails produced at our Selkirk, MB mill. Gerdau is a leader in elevator guide rails, and our steel can be found in many of the tallest buildings in the world.

Gerdau's larger elevator guide rail sizes as well as our advanced machining practices that create ultrasmooth surfaces allowed modern high-speed elevators to be installed in this project. This ensures visitors travel quickly and safely to the top.

OUR MANITOBA MILL HAS UNIQUE CAPABILITIES TO PRODUCE A WIDE RANGE OF SPECIAL GRADES, SHAPES AND SIZES

GERDAU
Shape the future



ENVIRONMENTAL

Gerdau Manitoba is one of the cleanest steel mills in the world

Manitoba's electricity is 97% derived from renewable hydropower

Our steel has greater than 96% recycled content

CAPABILITIES

Manitoba offers special sections with more than 90 steel grades and 300 sections

Inventory management and just-in-time shipments to ensure business continuity

Value-added capabilities: straightening, hole punching, welding, coating, milling, drilling, and more

A36, CSA 44W - 65W, A572 up to GR65

CVN grades up to 70 ksi with Cat. 2

CSA Gr400R/400W rebar

10XX, 15XX, 41XX, 15BXX, 50BXX, 51BXX, 41BXX

Billet capacity for sales in sizes from 6.75” to 10”x16”

MANITOBA IS NOT JUST YOUR SPECIALTY MILL

FLATS

WIDTH	THICKNESS (CURRENT)	THICKNESS (CAPABILITY)
2"	1 1/4" - 1 1/2"	1 - 1/2"
3"	1 1/2" - 2"	2"
4"	1/4" - 3"	3"
5"	1/4" - 3"	4"
6"	1/4" - 4 1/2"	4 1/2"
7"	1/4" - 2"	4 1/2"
8"	1/4" - 3"	3"
9"	1/2" - 1"	3"
10"	1/2" - 1 3/4"	2"
11"	1" - 1 1/2"	5"
12"	3/4" - 1 3/4"	5"
13"	1"	5"
14"	3/4" - 2 1/4"	3"
16"		1" - 3"

ROUNDS

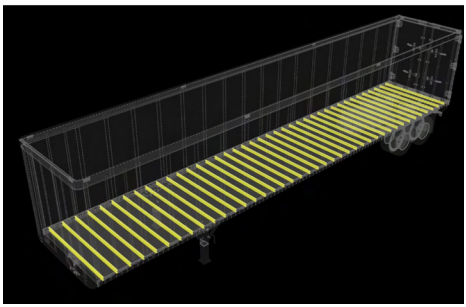
CAPABILITY
3/4"
7/8"
1"
1 1/8"
1 1/4"
1 3/8"
1 1/2"
1 5/8"
1 3/4"
2"
2 1/2"
3"
3 1/2"
3 3/8"
4"
4 1/2"
4 3/4"
5"
5 1/8"

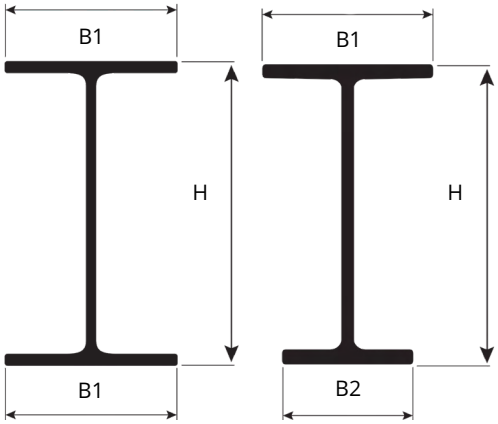
SUPER LIGHT BEAMS

Gerdau Manitoba is a major supplier of special steel sections, with Value Added Capabilities supplying Super Light Beams worldwide.

Value Added Capabilities include:

- Precision cut to length
- Welded end plates
- Wax coating
- Hole punching
- Galvanizing





SLB (Symmetric) SLB (Non-Symmetric)

SIZE	WEIGHT lbs / ft (kg / m)	B1 in (mm)	B2 in (mm)	H in (mm)
SLB 4" x 3.20# G80	3.20 *4.76*	2.25 *57.15*	2.25 *57.15*	4.00 *101.60*
SLB 4" x 3.45# G80	3.45 *5.13*	2.25 *57.15*	2.25 *57.15*	4.00 *101.60*
SLB 4" x 3.64# G80	3.64 *5.42*	2.25 *57.15*	2.25 *57.15*	4.00 *101.60*
SLB 4" x 3.26# G80	3.26 *4.85*	2.25 *57.15*	1.50 *38.10*	4.00 *101.60*
SLB 4" x 3.47# G80	3.47 *5.16*	2.25 *57.15*	1.75 *44.85*	4.00 *101.60*
SLB 3" x 2.9# G80	2.90 *4.32*	2.25 *57.15*	2.25 *57.15*	3.00 *76.20*
SLB 3" x 3.05# G80	3.05 *4.54*	2.25 *57.15*	2.25 *57.15*	3.00 *76.20*
SLB 3" x 2.54# G60	2.54 *3.78*	2.00 *50.80*	2.00 *50.80*	3.00 *76.20*

For profile, tolerances, or additional special requirements, reach out to your sales representative.


HEAT TREATED

Photo Credit Blattner

GERDAU HEAT TREATED PRODUCTS IN USE

SUNZIA WIND & TRANSMISSION

New Mexico

The SunZia Wind and Transmission Project is the largest renewable energy initiative in U.S. history, delivering over 3,500 MW of clean wind energy, enough to power one million homes.

Gerdau supplied A722 steel—the gold standard in strength and reliability for wind tower anchor bolts. Our GMSP facility in Midlothian, TX uses the most modern induction heat treat process available and is the only producer of true ASTM A722 in North America.

We're proud to stand alongside Pattern Energy, Blattner, and Dyson. Our A722 steel was transformed into anchor bolts, which serve as critical components connecting the towers to their foundations.

MOST MODERN STATE-OF-THE-ART INDUCTION HEAT TREATMENT PROCESS IN NORTH AMERICA

GERDAU MIDLOTHIAN STEEL PROCESSING

Gerdau's North American emissions are substantially lower

100% Domestic: Melted and manufactured in the United States

Powered by renewable energy: 80 megawatts onsite solar farm in TX

New state-of-the-art facility, located next to our TX mill

Captive steel supply

Only true producer of A722 in North America

Vertically integrated supply chain

Inhouse testing: tensile, hardness, metallography

Value added services: cut to length, turned & polished, saw cutting

Quench & tempering, cold shear anneal, normalizing, stress relieving

Expanded product range

Q&T size range: 1.0" to 3.0"

Grades: ASTM A722 Type I and Type II, ASTM F1554 Grade 105, ASTM A193 B7

Developing: A320 L7, A354 BC, & A354 BD

QUENCH AND TEMPERED BARS

Gerdau's Quench & Tempered bars are made at Gerdau Midlothian Steel Processing (GMSP), adjacent to Gerdau's Midlothian steel mill and 80-megwatt solar farm. GMSP is the newest, most technologically advanced heat treatment facility in North America. Our bars are passed through an advanced induction heat treating and proprietary quench process that treats each bar individually. The process adds strength and improves resistance to impact and abrasion, enabling customers to machine distortion-free parts, eliminating processes including stress relieving and straightening, resulting in cost savings.

GERDAU QUENCH & TEMPERED ADVANTAGES

ONE PIECE AT A TIME
Each bar is individually heat treated, superior to "batch" treatment.

UNIFORM HEATING
Each rotating bar is uniformly heated to a precise temperature.

INDIVIDUAL QUENCHING
Each bar is individually quenched through a proprietary process, achieving optimum transformation kinetics.

SUPERIOR STRAIGHTNESS
Rotation of individual bars through the spray quench leads to superior straightness.

UNIFORM HARDNESS
Every bar has uniform hardness end-to-end, piece-to-piece, and order-to-order.

STRESS FREE
Each bar is stress free, and ready for critical part applications.

STRENGTH & TOUGHNESS
Our advanced process produces a fully martensitic structure, allowing for demanding strength and toughness requirements.

VALUE-ADDED SERVICES
Orders can be custom cut for specific applications, along with other available services.

SPECIFICATIONS & CAPABILITIES

GRADES TREATED & AVAILABLE TREATMENTS

All heat treatable grades of carbon and alloy steels. Available heat treatments for carbon and alloy bar include quench & temper, normalizing, and stress relieving.

BAR PRODUCTS
- Hot finished.

LENGTH CAPACITY
- 20 ft. to 65 ft.

STRAIGHTNESS TOLERANCES
- 0.25" per 5 ft.

CUTTING
- Cut-to-length for product applications

OTHER VALUE-ADDED SERVICES
- Demagnetization
- Metallurgical support
- Complete traceability
- Complete test reports
- Small quantities available
- Color coding
- Experimental or trial orders
- Short lead times
- On-time, all-the-time delivery
- Overseas packaging

Inaugural GMSP shipment, with Gerdau's Midlothian steel mill and solar farm in background

TYPICAL APPLICATIONS

- Bolting stock
- Construction equipment
- Crane booms
- Drill collars
- Farm equipment
- Motor shafting
- Off-road equipment
- Oil country accessories
- Perforator guns
- Screw machine parts
- Tool joints
- Trucks & trailers

A722 BARS

A722 TYPE I (PLAIN) BARS & TYPE II (DEFORMED) BARS

Applications:

- Construction & post-tensioning, commonly for repairs & strengthening projects, or at joints between concrete & steel structures.
- Wind tower anchoring bolts.

Advantages:

- Fully compliant to ASTM A722 specification, a recognized international standard.
- Gerdau is North America's ONLY producer of true A722.
- Superior quality assurance. Each bar is proof-tested.
- Lower stress relaxation than comparable Quench & Temper Products.
- Longer lengths available compared to Quench & Temper Products.
- Shorter lead times due to complete Gerdau supply chain.

MIDLOTHIAN STEEL PROCESSING - SIZE & LENGTH CAPABILITIES

Type I Nominal Sizes, inches[1,2]	Type II Nominal Sizes, mm[1,2]	Available Lengths [2,3]
1.080	26	Available Lengths are from 30 to 65 feet.
1.316	32	
1.473	36	
1.842/1.867	46	

1. Inquire on sizes not listed
2. Dimensional and length tolerances are according to ASTM A29.
3. Short bar(s) due to testing are included in the bundle(s).

A722 - MECHANICAL PROPERTIES

	Tensile Strength	Yield Strength	Elongation
Type I	Minimum of 150 ksi (1,035 MPa)	85% of the minimum tensile strength 127.5 ksi (880 MPa)	4.0% minimum in a gauge length equal to 20 bar diameters, or a 7.0% in a gauge length equal to 10 bar diameters
Type II		80% of the minimum tensile strength 120 ksi (828 MPa)	

GERDAU JUMBO 75S™

HIGH STRENGTH ANCHOR BOLT MATERIAL

GERDAU JUMBO 75S™ BENEFITS

- Reduced fabrication costs
- Eliminates need to fabricate a hook
- Easier to machine than quench and tempered bolt material
- Rounder, heavier bar Flat spots in threaded area of bolt virtually eliminated
- Heat treated for toughness that is superior to standard rebar chemistries at all temperatures
- Certified to ASTM A615 / A615M chemical, dimensional, marking and mechanical requirements

With **Gerdau JUMBO 75S™** High Strength Anchor Bolt, Gerdau has met the utility industry's need for a high strength, easy to use anchor bolt material. **Gerdau JUMBO 75S™** is heat-treated, giving the bars added ductility and toughness. During a special rolling process, dimensions are controlled to produce a bar that's rounder and heavier than standard #18 and #14 ASTM A615 rebar.

GERDAU JUMBO 75S™ MECHANICAL PROPERTIES(B)

DEFORMED REBAR SIZE	NOMINAL WT / FT	MIN. CHARPY(C) V-NOTCH @-20°F	MINIMUM YIELD STRENGTH	MINIMUM TENSILE STRENGTH	MINIMUM ELONGATION(D)	BEND TEST 9D PIN
#18J	14.63 lbs	15 ft-lb	75,000 psi	100,000 psi	10%	90 degrees
#14J	9.48 lbs	15 ft-lb	75,000 psi	100,000 psi	10%	90 degrees

(b) This material is certified to ASTM A615/A615M Grade 75/520. (c) Charpy V-Notch per ASTM A673 - material tested on heat lot (H) frequency basis. (d) Full Section Testing, eight (8) inch gauge length

GERDAU JUMBO 75S™ CHEMICAL ANALYSIS, %(E)

C	Mn	P	Cu	Ni	Cr	Mo	V
.40	1.00	.06	.20	.50	.30	.10	.20
Max.	1.60	Max.	.50	Max.	Max.	Max.	Max.

(e) Aims only - not supplied to a chemical specification. Particular chemical elements or ranges are subject to change without notice.

GERDAU
(800) 237-0230
sales@gerdau.com
www.gerdau.com