



BEAM Available Steel Grades								
AMERICAN			CANADIAN			EUROPEAN*		
ASTM	YIELD STRENGTH		CSA G40.21	YIELD STRENGTH		EN 10025 & EN 10113	YIELD STRENGTH	
	(ksi)	(MPa)		(ksi)	(MPa)		(ksi)	(MPa)
A 36	36	250	Grade 350 W	50	350	S 235	34	235
A 572 Grade 50	50	345				S 275	40	275
A 588	50	345				S 355	51	355
A 709	50	345				S 460 HISTAR	67	460
A 913	50	345						
A 913	65	450						
A 992	50	345						

*HISTAR only available in some sizes.

Delivery Conditions & Tolerances

ASTM A 6	
Mass	± 2.5%
Depth	± 0.125 inches
Length	30 feet and Under Over 30 Feet
Beams W 24 and Under	± 0.375 inches + (0.375 inches + (Length - 30) / 80 -0.375 inches
Beams Over W 24	± 0.5 inches + (0.5 inches + (Length - 30) / 80 -0.375 inches
Flanges out of Square	
Beams W 12 and Under	≤ 0.25 inches
Beams Over W 12	≤ 0.3125 inches
Web off Center	≤ 0.1875 inches
Greatest Depth over Theoretical	≤ 0.25 inches
Camber and Sweep	(0.125 in) * (Length / 10)
Camber and Sweep for Columns*	
45 Feet and Under	(0.125 in) * (Length / 10) but not over 0.375 inches
Over 45 Feet	(0.375 in) + (0.125 in * (Length - 45) / 10)

*W 8 x 31 and heavier, W 10 x 49 and heavier, W 12 x 65 and heavier, and W 14 x 90 and heavier order as columns. If other sections are ordered as columns, the tolerances are subject to negotiation with manufacturer.

Structural Sections

CHANNEL Available Steel Grades								
AMERICAN			CANADIAN			EUROPEAN		
ASTM	YIELD STRENGTH		CSA G40.21	YIELD STRENGTH		EN 10248	YIELD STRENGTH	
	(ksi)	(MPa)		(ksi)	(MPa)		(ksi)	(MPa)
A 36	36	250	Grade 350 W	50	350	S 235 GP	34	235
A 572 Grade 50	50	345				S 355 GP	51	355
A 572 Grade 60	60	415						
A 588	50	345						
A 242	50	345						

Delivery Conditions & Tolerances

Mass	± 2.5%						
Depth	3 to 7 in		7 to 14 in		Over 14 in		
	+ 0.9375 in	- 0.0625 in	+ 0.125 in	- 0.9375 in	+ 0.1875 in	- 0.125	
Length	5 to 10 ft	10 to 20 ft	20 to 30 ft	30 to 40 ft	40 to 50 ft	50 to 65 ft	
	+ 1.0 in	+ 1.5 in	+ 1.75 in	+ 2.25 in	+ 2.75 in	+ 2.75 in	
Flange Width	3 to 7 in		7 to 14 in		Over 14 in		
	± 0.125 in		+ 0.125 in	- 0.9375 in	+ 0.125 in	- 0.1875	
Flanges out of Square	≤ 0.03125 in						
Camber	(0.125 in) * (Length / 5)						
Sweep	Subject to negotiation with manufacturer						

ANGLE Available Steel Grades								
AMERICAN			CANADIAN			EUROPEAN		
ASTM	YIELD STRENGTH		CSA G40.21	YIELD STRENGTH		EN 10248	YIELD STRENGTH	
	(ksi)	(MPa)		(ksi)	(MPa)		(ksi)	(MPa)
A 36	36	250	Grade 350 W	50	350	S 235	34	235
A 572 Grade 50	50	345				S 355	51	355
A 572 Grade 60	60	415						
A 588	50	345						
A 242	50	345						

Delivery Conditions & Tolerances

Mass	± 2.5%						
Length	5 to 10 ft	10 to 20 ft	20 to 30 ft	30 to 40 ft	40 to 50 ft	50 to 65 ft	
	+ 1.0 in	+ 1.5 in	+ 1.75 in	+ 2.25 in	+ 2.75 in	+ 2.75 in	
Leg Length*	1 to 2 in	2 to 3 in	3 to 4 in		4 to 6 in	Over 6 in	
	± 0.046875 in	± 0.0625 in	+ 0.125 in	- 0.09375 in	± 0.125 in	+ 0.1875 in - 0.125 in	
Flanges out of Square	± 1.5 degrees						
Thickness	≤ 0.1875 in	0.1875 in to 0.375 in		Over 0.375 in			
1 to 2 in.	± 0.010 in	± 0.010 in		± 0.012 in.			
2 to 3 in.	± 0.012 in	± 0.015 in		± 0.015 in.			
Camber	(0.125 in) * (Length / 5)						
Sweep	Subject to negotiation with manufacturer						

* Longer leg length determines classification.

Maximum Rolled Lengths**

All Sections	60 feet
Most Sections	85 feet
Some Sections	120 feet

** Longer lengths may be possible upon request.