

# Hollow Structural Sections Bundling Chart

## Squares and Rectangles

Size	Nominal Wall	Gauge	LBS/FT.	20 FT.			24 FT.			40 FT.			48 FT.		
				Piece Count	Bundle Weight (lbs.)	Feet / Bundle	Piece Count	Bundle Weight (lbs.)	Feet / Bundle	Piece Count	Bundle Weight (lbs.)	Feet / Bundle	Piece Count	Bundle Weight (lbs.)	Feet / Bundle
2" SQ.	.120	11 ga.	3.07	49	3,009	980	49	3,610	1,176	25	3,070	1,000	25	3,684	1,200
	.188	3/16"	4.32	49	4,234	980	49	5,080	1,176	25	4,320	1,000	25	5,184	1,200
	.250	1/4"	5.41	49	5,302	980	49	6,362	1,176	25	5,410	1,000	25	6,492	1,200
2.5" SQ.	.120	11 ga.	3.90	35	2,730	700	35	3,276	840	20	3,120	800	20	3,744	960
	.188	3/16"	5.59	35	3,913	700	35	4,696	840	20	4,472	800	20	5,366	960
	.250	1/4"	7.11	35	4,977	700	35	5,972	840	20	5,688	800	20	6,826	960
3" x 2"	.120	11 ga.	3.90	35	2,730	700	35	3,276	840	20	3,120	800	20	3,744	960
	.188	3/16"	5.59	35	3,913	700	35	4,696	840	20	4,472	800	20	5,366	960
	.250	1/4"	7.11	35	4,977	700	35	5,972	840	20	5,688	800	20	6,826	960
3" SQ.	.120	11 ga.	4.75	28	2,660	560	28	3,192	672	16	3,040	640	16	3,648	768
	.188	3/16"	6.87	28	3,847	560	28	4,617	672	16	4,397	640	16	5,276	768
	.250	1/4"	8.81	28	4,934	560	28	5,920	672	16	5,638	640	16	6,766	768
3.5" SQ.	.120	11 ga.	4.75	28	2,660	560	28	3,192	672	16	3,040	640	16	3,648	768
	.188	3/16"	8.15	24	3,912	480	24	4,694	576	12	3,912	480	12	4,694	576
	.250	1/4"	10.51	24	5,045	480	24	6,054	576	12	5,045	480	12	6,054	576
4" x 2"	.120	11 ga.	4.75	28	2,660	560	28	3,192	672	16	3,040	640	16	3,648	768
	.188	3/16"	6.87	28	3,847	560	28	4,617	672	16	4,397	640	16	5,276	768
	.250	1/4"	8.81	28	4,934	560	28	5,920	672	16	5,638	640	16	6,766	768
4" x 3"	.120	11 ga.	5.61	24	2,693	480	24	3,231	576	12	2,693	480	12	3,231	576
	.188	3/16"	8.15	24	3,912	480	24	4,694	576	12	3,912	480	12	4,694	576
	.250	1/4"	10.51	24	5,045	480	24	6,054	576	12	5,045	480	12	6,054	576
4" SQ.	.120	11 ga.	6.46	20	2,584	400	20	3,101	480	12	3,101	480	12	3,721	576
	.188	3/16"	9.42	20	3,768	400	20	4,522	480	12	4,522	480	12	5,426	576
	.250	1/4"	12.21	20	4,884	400	20	5,861	480	12	5,861	480	12	7,033	576
5" x 2"	.120	11 ga.	5.61	24	2,693	480	24	3,231	576	12	2,693	480	12	3,231	576
	.188	3/16"	8.15	24	3,912	480	24	4,694	576	12	3,912	480	12	4,694	576
	.250	1/4"	10.51	24	5,045	480	24	6,054	576	12	5,045	480	12	6,054	576
5" x 3"	.120	11 ga.	6.46	18	2,326	360	18	2,791	432	12	3,101	480	12	3,721	576
	.188	3/16"	9.42	18	3,391	360	18	4,069	432	12	4,522	480	12	5,426	576
	.250	1/4"	12.21	18	4,396	360	18	5,275	432	12	5,861	480	12	7,033	576
5" SQ.	.188	3/16"	11.97	16	3,830	320	16	4,596	384	9	4,309	360	9	5,171	432
	.250	1/4"	15.62	16	4,998	320	16	5,998	384	9	5,623	360	9	6,748	432
6" x 2"	.120	11 ga.	6.46	18	2,326	360	18	2,791	432	12	3,101	480	12	3,721	576
	.188	3/16"	9.42	18	3,391	360	18	4,069	432	12	4,522	480	12	5,426	576
	.250	1/4"	12.21	18	4,396	360	18	5,275	432	12	5,861	480	12	7,033	576
6" x 3"	.188	3/16"	10.70	18	3,852	360	18	4,622	432	10	4,280	400	10	5,136	480
	.250	1/4"	13.91	18	5,008	360	18	6,009	432	10	5,564	400	10	6,677	480
6" x 4"	.188	3/16"	11.97	15	3,591	300	15	4,309	360	9	4,309	360	9	5,171	432
	.250	1/4"	15.62	15	4,686	300	15	5,623	360	9	5,623	360	9	6,748	432
6" SQ.	.188	3/16"	14.53	12	3,487	240	12	4,185	288	6	3,487	240	6	4,185	288
	.250	1/4"	19.02	12	4,565	240	12	5,478	288	6	4,565	240	6	5,478	288
7" x 5"	.188	3/16"	14.53	12	3,487	240	12	4,185	288	8	4,650	320	8	5,580	384
	.250	1/4"	19.02	12	4,565	240	12	5,478	288	6	4,565	240	6	5,478	288
7" SQ.	.188	3/16"	17.08	9	3,074	180	9	3,689	216	6	4,099	240	6	4,919	288
	.250	1/4"	22.42	9	4,036	180	9	4,843	216	6	5,381	240	6	6,457	288
8" x 4"	.188	3/16"	14.53	12	3,487	240	12	4,185	288	6	3,487	240	6	4,185	288
	.250	1/4"	19.02	12	4,565	240	12	5,478	288	6	4,565	240	6	5,478	288
8" x 6"	.188	3/16"	17.08	12	4,099	240	12	4,919	288	6	4,099	240	6	4,919	288
	.250	1/4"	22.42	12	5,381	240	12	6,457	288	6	5,381	240	6	6,457	288

All HSS products are manufactured to ASTM A500B / A500C specifications using the ERW process. Other grades and sizes are available, on an inquiry basis.



Geneva Plant

1201 R Street

Geneva, NE 68361-1020

Tel: 402.759.4401

[www.tmk-ipsco.com](http://www.tmk-ipsco.com)

ASTM A500 SQUARE AND RECTANGULAR STRUCTURAL TUBING CAPABILITY AND SPECIFICATIONS				
OUTSIDE DIAMETER		NOMINAL WALL THICKNESS		
Square	Rectangle	0.120" 11 ga.	0.188" 3/16"	0.250" 1/4"
2" x 2"		3.07	4.32	5.41
2.5" x 2.5"		3.90	5.59	7.11
3" x 3"		4.75	6.87	8.81
	3" x 2"	3.90	5.59	7.11
3.5" x 3.5"		4.75	8.15	10.51
4" x 4"		6.46	9.42	12.21
	4" x 2"	4.75	6.87	8.81
	4" x 3"	5.61	8.15	10.51
5" x 5"			11.97	15.62
	5" x 2"	5.61	8.15	10.51
	5" x 3"	6.46	9.42	12.21
6" x 6"			14.53	19.02
	6" x 2"	6.46	9.42	12.21
	6" x 2"	6.46	9.42	12.21
	6" x 3"		10.70	13.91
	6" x 4"		11.97	15.62
7" x 7"			17.08	22.42
	7" x 5"		14.53	19.02
	8" x 4"		14.53	19.02
	8" x 6"		17.08	22.42

SPECIFIED OUTSIDE DIMENSION TOLERANCE	
Largest Outside Dimension	Tolerance
2-1/2" and Under	±0.020"
2-1/2" to 3-1/2"	±0.025"
3-1/2" to 5-1/2"	±0.030"
Over 5-1/2"	±0.1%

MAXIMUM PERMISSIBLE VARIATIONS	
Specified Outside Large Flat Dimension	Maximum Twist in 3 feet
Over 1-1/2" to 2-1/2" Incl.	0.062"
Over 2-1/2" to 4" Incl.	0.075"
Over 4" to 6" Incl.	0.087"
Over 6" to 8" Incl.	0.100"

SHAPED STRUCTURAL TUBING TENSILE REQUIREMENTS			
Mechanical Properties	Grade A	Grade B	Grade C
Tensile Strength, min, psi	45,000	58,000	62,000
Yield Strength, min, psi	39,000	46,000	50,000
Elongation in 2 in., min, %	25%	23%	21%

CHEMICAL COMPOSITION, %				
Mix	Grade A & B		Grade C	
	Heat Analysis	Product Analysis	Heat Analysis	Product Analysis
Carbon	0.260	0.300	0.230	0.270
Manganese	1.350	1.400	1.350	1.400
Phosphorus	0.035	0.045	0.035	0.045
Sulphur	0.035	0.045	0.035	0.045
Copper	0.200	0.180	0.200	0.180

PERMISSIBLE VARIATIONS IN SHAPED TUBING	
Corner Radius	3 X nominal wall thickness
Straightness	1/8" times the number of feet of total length divided by 5
Squareness of Sides	90 °, ± 2°
Wall Thickness	± 10 % of nominal wall thickness, as measure at the center of the flat
Length	Tolerance: ≤ 20': over 1/2", under 1/4" & >20': over 3/4", under 1/4"
Outside Dimension*	Measured across the flats at least 2" from the ends of the tubing

