SECTION 7 Galvanized

SECTION 7: Galvanized	101
General Information	102
Angles	103
Beams American Standard	103
Beams Wide Flange	104
Channels	104
Tees	104
Plate	105
Expanded Metal	106
Strip	106
Flat Bars	106-107
Rounds	107
Square Tubing	107
Pipe Threaded & Coupled	

Products in this section are normally stocked. Most products in this catalog can be sent out per your requirement.

General Information on Hot Dip Galvanized Steel

Hot dip galvanizing is the process of applying a zinc coating to iron and steel by immersing the material in a bath consisting primarily of molten zinc.

There are three basic elements in the galvanizing process:

- Surface Preparation This process consists of hot alkali solution to remove organic contaminants like dirt, paint markings, grease, and oil from metal surfaces. Next the material is pickled by dipping it in a diluted solution of hot sulfuric acid or ambient temperature hydrochloric acid. The material is then fluxed by dipping it in an aqueous solution of zinc ammonium chloride.
- Galvanizing This is the complete immersion of the material in a bath of at least 98% pure molten zinc until it reaches bath temperature of 850 degrees fahrenheit. It is then slowly withdrawn and the excess galvanizing is removed.
- Inspection This consists of visual checks for appearance and a variety of simple laboratory tests for thickness, uniformity and adherence of coating.

Galvanizing is used in a variety of applications such as: bridges, highways, power generation, transportation, water and waste treatment, buildings, agriculture and food processing, petrochemical and chemical, pulp and paper, and original equipment manufacturing.



Galvanized Angles

A36 Hot Rolled, Hot Dipped Stock Lengths 20 Ft. Est. Lbs include Wgt of Zinc

Size in	Inches B	С	Est. Lbs. Per Ft.	Est. Lbs. Per 20'
3/4	x 3/4 x 1	x 1/8 x 1/8 x 3/16	.620 .840 1.218	12.40 16.80 24.36
1 1/4	x 1 1/4	x 1/4 x 1/8 x 3/16	1.565 1.061 1.554	31.29 21.21 31.08
1 1/2	x 1 1/2	x 1/4 x 1/8 x 3/16	2.016 1.292 1.890	40.32 25.83 37.80
2	x 2	x 1/4 x 1/8 x 3/16	2.457 1.733 2.562	49.14 34.65 51.24
		x 1/4 x 3/8	3.350 4.935	66.99 98.70
2 1/2	x 2 1/2 x 3	x 1/4 X 3/16 x 1/4	4.305 3.896 5.145	86.10 77.92 102.90
3 4	x 3 x 4	x 3/8 x 1/4 x 5/16	7.56 6.93 8.61	151.20 138.60 172.20
		x 3/8	10.29	205.80



Galvanized American Standard Beams

A36 Hot Rolled, Hot Dipped Stock Lengths 20 Ft. Galvanizing adds approximately 5% to the Lbs per foot shown

Siz Thickn		Lbs.	Lbs. Depth Flange Thickness		Web
Α		Per Ft.	В	С	D
3	х	5.7	2.330	.260	.170
4	X	7.7	2.663	.293	.193
6	X	12.5	3.332	.359	.232
8	X	18.4	4.001	.425	.271



Galvanized Wide Flange Beams

A36 Hot Rolled, Hot Dipped Stock Lengths 20 Ft. Galvanizing adds approximately 5% to the Lbs per foot shown

Size	е	Lbs. Per Ft.	Depth A	Flange Width B	Flange Thickness C	Web Thickness D
4	X	13	4.16	4.060	.345	.280
6	X	15 20	5.99 6.20	5.990 6.020	.260 .365	.230
8	X	18 26	8.14 12.22	5.250 6.490	.330	.230



Galvanized Channels

A36 Hot Rolled, Hot Dipped Stock Lengths 20 Ft. Galvanizing adds approximately 5% to the Lbs per foot shown

Size	Э				Lbs. Per Ft.	Lbs. Per 20'
2	Х	1	X	3/16	2.436	48.72
3	X	4.1#			4.305	86.10
4	X	5.4#			5.67	113.40
6	X	8.2#			8.61	172.20
8	X	11.5#			12.075	241.50
10	X	15.3#			16.065	321.30

Galvanized Tees

A36 Hot Rolled, Hot Dipped Stock Lengths 20 Ft. Est. Lbs include the weight of the Zinc



Size	in Inche	s	Lbs.	Lbs.	
В	D	T	Per Ft.	Per 20'	
2	x 2	x 1/4	3.801	76.02	

Galvanized Plate

A36 Hot Rolled, Hot Dipped Est. Lbs include the weight of the Zinc



	Lbs. Per	Size	Lbs. Per
Thickness	Sq. Ft.	A B	Plate
3/16	8.043	48 x 120	321.72
1/4	10.721	48 x 120	428.84
1	42.882	48 x 96	1,372.22



Galvanized Expanded Metal

Hot Rolled, Hot Dipped Flattened and Standard (Raised) Est. Lbs include the weight of the Zinc

Size	Sheet	Est. Lbs.	Approx. Size of
Designation	Size	Per Sq. Ft.	Opening in Inches
1/2 x #16	48 x 96	.903	.375 x .938
x #13	48 x 96 48 x 120	1.5435	.312 x .938
3/4 x #13	48 x 96	.84	.750 x 1.688
x # 9	48 x 96	1.89	.688 x 1.562



Galvanized Strip

CQ Hot Rolled, Hot Dipped Stock Lengths 20 Ft.

Est. Lbs include the weight of the Zinc

Size in	Lbs.	Lbs.
Inches	Per Ft.	Per 20'
1/8 x 1	.4505	9.010
x 1 1/2	.6758	13.516
x 2	.901	18.020
3/16 x 1	.6758	13.516
x 1 1/4	.8447	16.894
x 1 1/2	1.0136	20.274
x 2	1.352	27.030
x 3	2.028	40.556
x 4	2.703	54.060



Galvanized Flat Bars

A36 Hot Rolled, Hot Dipped Stock Lengths 20 Ft. Est. Lbs include the weight of the Zinc

Size in Inches		Lbs. Per Ft.	Lbs. Per 20'
1/4 x x x	1 1 1/4 1 1/2	.8925 1.1162 1.3388	17.85 22.32 26.78
X X	2 3 4	1.785 2.6775 3.57	35.70 53.55 71.40
8/8 x x	6 1 1 1/4	5.355 1.3388 1.6737	107.10 26.78 33.47
X	1 1/2	2.0087	40.17

106

Harbor Steel

Galvanized Flat Bars (con't)

Size in Inches		Lbs. Per Ft.	Lbs. Per 20'
3/8 x	2	2.6775	53.55
X	3	4.0163	80.33
X	4	5.3550	107.10
1/2 x	3	5.3550	107.10
X	6	10.7100	214.20

Galvanized Rounds

A36 Hot Rolled, Hot Dipped Stock Lengths 20 Ft. Est. Lbs include the weight of the Zinc



Size in Inches	Lbs. Per Ft.	Lbs. Per 20'
3/8	.3943	7.89
1/2	.7010	14.02
5/8	1.0952	21.90
3/4	1.5771	31.54

Galvanized Square Tubing

Hot Rolled, Hot Dipped Stock Lengths 20 Ft. and 24 Ft. Est. Lbs include the weight of the Zinc



Size in Inches	Wall Thickness	Length	Lbs. Per Ft.	Lbs. Per 20'
	.120	24	1.51	30.2
1/2	.120	24	2.36	47.2
2	.120	24	3.22	64.4
2	.250	20	5.68	113.6

Galvanized Pipe, Threaded and Coupled

ASTM A53 Tested, Schedule 40 Stock Lengths 21 Ft. Est. Lbs include the weight of the Zinc

			-		
Nominal Size	O.D.	I.D.	Wall Thickness	Lbs. Per Ft.	Lbs. Per 21'
1/2	.840	.622	.109	.8925	18.74
3/4	1.050	.824	.113	1.1865	24.91
1	1.315	1.049	.133	1.7640	37.04
1 1/4	1.660	1.380	.140	2.3835	50.05
1 1/2	1.900	1.610	.145	2.8560	59.98
2	2.375	2.067	.154	3.8325	80.48
2 1/2	2.875	2.469	.203	6.0795	127.67
3	3.500	3.068	.216	7.9590	167.14
4	4.500	4.026	.237	11.3295	237.92