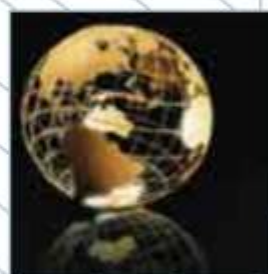




**Building Systems FZC**

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**THE NEW ADDRESS FOR  
HIGH QUALITY  
PRE-ENGINEERED BUILDINGS  
AND STEEL TUBES**



○ G E N E R A L ○  
○ P R O D U C T ○  
○ B R O C H U R E ○  
○ ○ ○ ○ ○ ○ ○ ○ ○





Frames

# Introduction

*F*rames Building Systems FZC was established in 2006 due to the high incoming local and global demand on top quality pre-engineered steel buildings.

We are committed to design, manufacture, supply and erect pre-engineered steel buildings to be used as factory buildings, warehouses, workshops, exhibition centers, showrooms, aircraft hangars, shopping malls, sports halls, labor camps, supermarkets, cold stores, office buildings, car parking sheds, and practically any two or three storey building.

Our vision from the day of establishment is to occupy a strong competitive position and to reach an attractive share of the local and global market. To achieve that, we have found a highly qualified and professional team supported with the most recent and most widely used software for the design and detailing of pre-engineered steel buildings across the world. Our factory is also equipped with all kind of modern and high-tech machinery specialized in steel fabrication.

# Mild Steel Tubes

At Frames we manufacture Steel Tubes/ Pipes as per the below mentioned standards:

- ASTM A 53
- ASTM A 252
- ASTM A 795
- EN 10255

We at Frames we can supply you with pipes of various steel Grades

For your requirement on sizes and other technical parameters, kindly refer the respective standards or you may write to us at [info@framessteel.com](mailto:info@framessteel.com).

# Technical Data for ASTM A 53

Nominal Bore		Outside Diameter		Schedule	Wall Thickness		Weight of Black Pipes (Plain End)	
Inch	mm	Inch	mm		Inch	mm	lbs/ft	kg/mtr
1/2	15	0.840	21.3	40	0.109	2.77	0.85	1.27
				80	0.147	3.73	1.09	1.62
3/4	20	1.050	26.7	40	0.113	2.87	1.13	1.69
				80	0.154	3.91	1.48	2.20
1	25	1.315	33.4	40	0.133	3.38	1.68	2.50
				80	0.179	4.55	2.17	3.24
1 1/4	32	1.660	42.2	40	0.140	3.56	2.27	3.39
				80	0.191	4.85	3.00	4.47
1 1/2	40	1.900	48.3	40	0.145	3.68	2.72	4.05
				80	0.200	5.08	3.63	5.41
2	50	2.375	60.3	40	0.154	3.91	3.66	5.44
				80	0.218	5.54	5.03	7.48
2 1/2	65	2.875	73.0	40	0.203	5.16	5.80	8.63
				80	0.276	7.01	7.67	11.41
3	80	3.500	88.9	40	0.216	5.49	7.58	11.29
				80	0.300	7.62	10.26	15.27
3 1/2	90	4.000	101.6	40	0.226	5.74	9.12	13.57
				80	0.318	8.08	12.52	18.63
4	100	4.500	114.3	40	0.237	6.02	10.80	16.07
				80	0.337	8.56	15.00	22.32
5	125	5.560	141.3	40	0.258	6.55	14.63	21.77
6	150	6.625	168.3	40	0.028	7.11	18.99	28.26
8	200	8.625	219.1	20	0.250	6.35	22.38	33.31
				30	0.277	7.04	24.72	36.31
				40	0.322	8.18	28.58	42.55
10	250	10.750	273.0	40	0.365	9.27	40.52	60.29
12	300	12.750	323.9	STD	0.375	9.52	49.61	73.78

# Technical Data for ASTM A 795

Nominal Bore		Outside Diameter		Schedule	Wall Thickness		Weight of Black Pipes (Plain End)	
Inch	mm	Inch	mm		Inch	mm	lbs/ft	kg/mtr
3/4	20	1.050	26.7	10	0.083	2.11	0.86	1.28
				30 & 40	0.113	2.87	1.13	1.69
1	25	1.315	33.4	10	0.109	2.77	1.41	2.09
				30 & 40	0.133	3.38	1.68	2.50
1 1/4	32	1.660	42.2	10	0.109	2.77	1.81	2.69
				30 & 40	0.140	3.56	2.27	3.39
1 1/2	40	1.900	48.3	10	0.109	2.77	2.09	3.11
				30 & 40	0.145	3.68	2.72	4.05
2	50	2.375	60.3	10	0.109	2.77	2.64	3.93
				30 & 40	0.154	3.91	3.66	5.45
2 1/2	65	2.875	73.0	10	0.120	3.05	3.53	5.26
				30 & 40	0.203	5.16	5.80	8.64
3	80	3.500	88.9	10	0.120	3.05	4.34	6.46
				30 & 40	0.216	5.49	7.58	11.29
3 1/2	90	4.000	101.6	10	0.120	3.05	4.98	7.41
				30 & 40	0.226	5.74	9.12	13.58
4	100	4.500	114.3	10	0.120	3.05	5.62	8.37
				30 & 40	0.237	6.02	10.80	16.09
5	125	5.560	141.3	10	0.134	3.40	7.78	11.58
				30 & 40	0.258	6.55	14.63	21.79
6	150	6.625	168.3	10	0.134	3.40	9.30	13.85
				30 & 40	0.280	7.11	18.99	28.29
8	200	8.625	219.1		0.188	4.78	16.96	25.26
					0.188	4.78	21.23	31.62
10	250	10.750	273.0		0.188	4.78	21.23	31.62

# Technical Data for ASTM A 252

Nominal Bore	Wall Thickness	Weight of Black Pipes (Plain End)
Inch	Inch	lbs/ft
6	0.134	8.40
	0.141	8.83
	0.156	9.75
	0.164	10.23
	0.172	10.72
8	0.141	11.85
	0.172	14.39
8 5/8	0.109	9.92
	0.141	12.79
	0.172	15.54
	0.188	16.96
	0.203	18.28
	0.219	19.68
	0.250	22.88
	0.277	24.72
	0.312	27.73
	0.322	28.58
	0.344	30.45
	0.375	33.07
	0.438	38.33
0.500	43.43	

Nominal Bore	Wall Thickness	Weight of Black Pipes (Plain End)
Inch	Inch	lbs/ft
10	0.120	12.67
	0.134	14.13
	0.141	14.86
	0.15	15.79
	0.164	17.24
	0.172	18.07
	0.179	18.79
	0.188	19.72
	0.203	21.26
	0.219	22.90
10 3/4	0.230	24.02
	0.250	26.06
	0.109	12.40
	0.120	13.64
	0.134	15.21
	0.141	15.90
	0.150	17.00
	0.164	18.56
	0.172	19.45
	0.179	20.23
	0.188	21.23
	0.203	22.89
	0.219	24.65
	0.230	25.87
	0.250	28.06
	0.279	31.23
	0.307	34.27
0.344	38.27	

# Standard Tolerances

## Tolerance for ASTM A 53

Outside Diameter	The Outside Diameter shall not vary more than $\pm 0.4\text{mm}$ than the specified outside diameter for Nominal Bore 1 1/2 and under and not more than $\pm 1\%$ for Nominal Bore 2 and above.
Wall Thickness	The wall thickness at any point shall not be more than 12.5% under the specified nominal wall thickness.
Weight	The weight shall not vary more than $\pm 10\%$ .

## Tolerance for ASTM A 795

Outside Diameter	The Outside Diameter shall not vary more than 0.4mm over or 0.8mm under the specified outside diameter for Nominal Bore 1 1/2 and under and not more than $\pm 1\%$ for Nominal Bore 2 and above.
Wall Thickness	The wall thickness at any point shall not be more than 12.5% under the specified nominal wall thickness.
Weight	The weight shall not vary more than $\pm 5\%$ .

## Tolerance for ASTM A 252

Outside Diameter	The Outside Diameter shall not vary more than $\pm 1\%$ from the specified outside diameter.
Wall Thickness	The wall thickness at any point shall not be more than 12.5% under the specified nominal wall thickness.
Length	The length shall not vary more than $\pm 1$ inch.

# Pre Engineered Buildings

At FBS we are proficient in providing you with the highest quality building using following codes:

## Design Code:

- American Institute of Steel Construction (AISC)  
Steel Construction Manual: 13<sup>th</sup> Edition 2005
- American Iron and Steel Institute (AISI)  
Cold formed steel design Manual: 2002 Edition
- American Welding Society (AWS)  
Structural Welding Code<sup>9</sup> Steel, AWS D19.1/D19.1M: 2006 Edition

FBS uses MBMA as a default building code for the design of the building. MBMA is the worldwide recognized building code for the design and manufacturing of PEB's.

## Building Code:

- Metal Building Manufacturer's Association Metal Building System Manual: 2002 Edition
- International Code Council, INC. (IBC) International Building Code: 2006 Edition

# Why Us ?

At FBS we make sure that our clients get:-

- Fastest and most Economical quotation possible.
- End To End Project Management Solutions.
- Impeccable quality in production
- Punctual and Swift delivery.
- Excellent after sales customer services





[www.framessteel.com](http://www.framessteel.com)



# Frames

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