Weight of Materials

TABLE 1. PIPE AND TUBING			
Type	**Size** (nominal in.)	**Schedule/Gauge**	**Weight** (lb./ln ft.)
Steel pipe	1¼"	Schedule 40	2.28
	1¼"	Schedule 80	3
	1½"	Schedule 40	2.72
	1½"	Schedule 80	3.64
Aluminum pipe	1¼"	Schedule 40	0.79
	1¼"	Schedule 80	1.04
	1½"	Schedule 40	0.95
	1½"	Schedule 80	1.26
Steel tube	1¼"	16 Gauge	0.83
	1¼"	14 Gauge	1.04
	1½"	16 Gauge	1
	1½"	14 Gauge	1.26
Aluminum tube	1¼"	16 Gauge	0.29
	1¼"	14 Gauge	0.36
	1½"	16 Gauge	0.35
	1½"	14 Gauge	0.44

TABLE 2. ROUND STEEL TUBING				
Outside diameter	**Gauge**	**Wall decimal**	**Inside diameter**	**Pounds per ft**
1 ½ in.	10	0.134	1.232	1.9550
	5/32	0.156	1.188	2.2390
	3/16	0.188	1.125	2.6340
	7/32	0.218	1.062	2.9960
	15/64	0.234	1.032	3.1640
	¼	0.250	1.00	3.3380
2 in.	10	0.134	1.732	2.6700
	5/32	0.156	1.688	3.0720
	7	1.180	1.640	3.3580
	3/16	0.188	1.625	3.6380
	7/32	0.218	1.563	4.1660
	15/64	0.244	1.512	4.5760
	¼	0.250	1.500	4.6730
Source: Industrial Metal Supply Co. (IMS).				

TABLE 3. STEEL AND ALUMINUM PIPE				
Nominal Pipe Size (in.)	**O.D. (in.)**	**Schedule 5S**	**Schedule 10S**	**Schedule 40 STD**
1 ½	1.900	0.065 Steel 1.2740 Aluminum 0.4408	0.109 Steel 2.0850 Aluminum 0.7214	0.145 Steel 2.7180 Aluminum 0.9404
2	2.375	0.065 Steel 1.6040 Aluminum 0.5549	0.109 Steel 2.6380 Aluminum 0.9127	0.145 Steel 3.6530 Aluminum 1.2640
Source: Industrial Metal Supply Co. (IMS). Other manufacturers may have different designations for this pipe.				

TABLE 4. DIMENTIONAL LUMBER				
White Pine			**Douglas Fir**	
Size (nominal in.)	**Weight** (lb./ln ft.)		**Size** (nominal in.)	**Weight** (lb./ln ft.)
1×3	0.33		1×3	0.46
1×4	0.46		1×4	0.64
1×6	0.72		1×6	1.01
1×12	1.47		1×12	2.06
2×4	-0.92		2×4	1.28
2×6	2.13		2×6	2.01
2×10	2.41		2×10	3.38
2×12	2.94		2×12	4.11
4×4	2.13		4×4	2.98
SOURCE: Cal OSHA. Weight will vary depending on moisture content and type of wood.				

TABLE 5. WOOD SHEET STOCK			
Type	**Size** (ft.)	**Thickness** (in.)	**Weight** (lb./panel)
Lauan (veneer panel)	4 × 10	¼	23
MDF (premium grade)	4 × 8	¾	92
Plywood (CDX sanded)	4 × 8	½	48
Plywood (CDX Sanded)	4 × 8	¾	70
Weight varies depending on the grade of material and moisture content.			

Sample Weight Calculation

The following list of materials has been provided for a set wall that will be suspended. Use the tables to determine the approximate weight of the wall.

3	10' studs	1 x 3" pine
2	4' top and bottom rails	1 x 3" pine
8	2' spreaders	1 x 3" pine
1	4' x 10'	Lauan panel

Solution:

54'	1x3" pine boards:	0.33 lb./foot	17.82 lb.
1	4' x 10' Lauan panel	23 lb./panel	23 lb.
Total weight			40.82 lb.