05 12 Structural Steel Framing 05 12 23 - Structural Steel for Buildings

Dot Lightweight Framing Made from recycled materials		
0015 Made from recycled materials 0200 For load-bearing steel studs see Section 05 41 13.30 0400 Angle froming, field forbricated, 4" and larger R051223.45 E3 440 .055 lb. .95 3.41 .33 0450 Less than 4" angles G 265 .091 " .98 5.65 .56 0460 1/2" x 1/2" x 1/8" G 200 .120 LF. .20 .7.50 .74 0462 3/4" x 3/4" x 1/8" G 160 .150 .55 .9.40 .92 0464 1" x 1" x 1/8" G 135 .178 79 11.10 .100 0464 1-1/4" x 1-1/4" x 3/16" G E3 .115 .209 LF. .1.45 13.05 1.28 0466 1-1/2" x 1-1/2" x 3/16" G E3 .115 .209 LF. .1.45 13.05 1.28 0468 1-1/2" x 1-1/2" x 3/16" G 6 53 .69 .58 23 <td< th=""><th></th><th></th></td<>		
0400 Angle framing, field fobricated, 4" and larger R051223-45 E-3 440 .055 lb. .95 3.41 .33 0450 Less than 4" angles G 265 .091 " .98 5.65 .56 0460 1/2" x 1/2" x 1/8" G 200 .120 LE. .20 7.50 .74 0462 3/4" x 3/4" x 1/8" G 160 .150 .55 9.40 .92 0464 1" x 1" x 1/8" G 160 .150 .55 9.40 .92 0466 1-1/4" x 3-1/4" x 3/16" G E-3 115 .209 LE. 1.45 13.05 1.28 0468 1-1/2" x 1-1/2" x 3/16" G 100 .240 1.77 15 1.47 0470 2" x 2" x 1/4" G 90 .267 3.13 16.70 1.64 0472 3" x 3" x 3/8" G 6 5.369 5.80 23 2.27 0474 3" x 2" x		
Company Com		
0450 Less than 4" angles G 265 .091 " .98 5.65 .56 0460 1/2" x 1/2" x 1/8" G 200 .120 L.F. .20 7.50 .74 0462 3/4" x 3/4" x 1/8" G 160 .150 .55 9.40 .92 0464 1" x 1" x 1/8" G 135 .178 .79 11.10 1.09 0466 1-1/4" x 1-1/4" x 3/16" G 100 .240 1.77 15 1.47 0470 2" x 2" x 1/4" G 90 .267 3.13 16.70 1.64 0472 2-1/2" x 2-1/2" x 1/4" G 72 .333 4.03 21 2.05 0474 3" x 2" x 3/8" G 65 .369 5.80 23 2.27 0476 3" x 3" x 3/8" G 57 .421 7.05 26.50 2.59 0600 Channel framing, field fabricated, 8" and larger G 500 .048 Lb .98 3 .29 0650 Less than 8" channels G	4.69	6.6
0460 1/2" x 1/2" x 1/8" G 200 .120 L.F. .20 7.50 .74 0462 3/4" x 3/4" x 1/8" G 160 .150 .55 9.40 .92 0464 1" x 1" x 1/8" G 135 .178 — .79 11.10 1.09 0466 1-1/4" x 1-1/4" x 3/16" G 100 .240 1.45 13.05 1.28 0468 1-1/2" x 1-1/2" x 3/16" G 100 .240 1.77 15 1.47 0470 2" x 2" x 1/4" G 90 .267 3.13 16.70 1.64 0472 2-1/2" x 2-1/2" x 1/4" G 72 .333 4.03 21 2.05 0474 3" x 2" x 3/8" G 65 .369 5.80 23 2.27 0476 3" x 3" x 3/8" G 57 .421 7.05 26.50 2.59 0600 Channel framing, field fabricated, 8" and larger G 500 .048 lb. .98 3 .29 0650 Less than 8" channels <td< td=""><td>7.19</td><td>10.4</td></td<>	7.19	10.4
0462 3/4" x 3/4" x 1/8" G 160 .150 .55 9.40 .92 0464 1" x 1" x 1/8" G 135 .178 .79 11.10 1.09 0466 1-1/4" x 1-1/4" x 3/16" G 100 .240 1.77 15 1.47 0468 1-1/2" x 1-1/2" x 3/16" G 100 .240 1.77 15 1.47 0470 2" x 2" x 1/4" G 90 .267 3.13 16.70 1.64 0472 2-1/2" x 2-1/2" x 1/4" G 72 .333 4.03 21 2.05 0474 3" x 3" x 3/8" G 65 .369 5.80 23 2.27 0476 3" x 3" x 3/8" G 57 .421 7.05 26.50 2.59 0600 Channel framing, field fabricated, 8" and larger G 500 .048 lb. .98 3 .29 0650 Less than 8" channels G 115 .209 LF. 1.75 13.05 1.28 0662 C3 x 4.1 G 80	8.44	12.6
0464 1" x 1" x 1/8" G 135 1.78 79 11.10 1.09 0466 1-1/4" x 1-1/4" x 3/16" G E3 115 .209 L.E 1.45 13.05 1.28 0468 1-1/2" x 1-1/2" x 3/16" G 100 .240 1.77 15 1.47 0470 2" x 2" x 1/4" G 90 .267 3.13 16.70 1.64 0472 2-1/2" x 2-1/2" x 1/4" G 72 .333 4.03 21 2.05 0474 3" x 2" x 3/8" G 65 .369 5.80 23 2.27 0476 3" x 3" x 3/8" G 57 .421 7.05 26.50 2.59 0600 Channel froming, field fabricated, 8" and larger G 500 .048 lb. .98 3 .29 0650 Less than 8" channels G 115 .209 L.F. 1.75 13.05 1.28 0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.4	10.87	16.0
0466 1-1/4" x 1-1/4" x 3/16" G E-3 115 .209 L.F. 1.45 13.05 1.28 0468 1-1/2" x 1-1/2" x 3/16" G 100 .240 1.77 15 1.47 0470 2" x 2" x 1/4" G 90 .267 3.13 16.70 1.64 0472 2-1/2" x 2-1/2" x 1/4" G 72 .333 4.03 21 2.05 0474 3" x 2" x 3/8" G 65 .369 5.80 23 2.27 0476 3" x 3" x 3/8" G 57 .421 7.05 26.50 2.59 0600 Channel framing, field fabricated, 8" and larger G 500 .048 Lb. .98 3 .29 0650 Less than 8" channels G 335 .072 " .98 4.48 .44 0660 C2 x 1.78 G 115 .209 LF. 1.75 13.05 1.28 0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.	12.98	19.2
0468 1-1/2" x 1-1/2" x 3/16" G 100 .240 1.77 15 1.47 0470 2" x 2" x 1/4" G 90 .267 3.13 16.70 1.64 0472 2-1/2" x 2-1/2" x 1/4" G 72 .333 4.03 21 2.05 0474 3" x 2" x 3/8" G 65 .369 5.80 23 2.27 0476 3" x 3" x 3/8" G 57 .421 7.05 26.50 2.59 0600 Channel framing, field fabricated, 8" and larger G 500 .048 Lb. .98 3 .29 0650 Less than 8" channels G 335 .072 " .98 4.48 .44 0660 C2 x 1.78 G 115 .209 LF. 1.75 13.05 1.28 0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.4 G 66 .364 5.30 23 2.23 0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	15.78	23
0470 2" x 2" x 1/4" G 90 .267 3.13 16.70 1.64 0472 2-1/2" x 2-1/2" x 1/4" G 72 .333 4.03 21 2.05 0474 3" x 2" x 3/8" G 65 .369 5.80 23 2.27 0476 3" x 3" x 3/8" G 57 .421 7.05 26.50 2.59 0600 Channel framing, field fabricated, 8" and larger G 500 .048 lb98 3 .29 0650 Less than 8" channels G 335 .072 " .98 4.48 .44 0660 C2 x 1.78 G 115 .209 l.F. 1.75 13.05 1.28 0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.4 G 66 .364 5.30 23 2.23 0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	18.24	26.5
0472 2-1/2" x 2-1/2" x 1/4" G 72 .333 4.03 21 2.05 0474 3" x 2" x 3/8" G 65 .369 5.80 23 2.27 0476 3" x 3" x 3/8" G 57 .421 7.05 26.50 2.59 0600 Channel framing, field fabricated, 8" and larger G 500 .048 lb. .98 3 .29 0650 Less than 8" channels G 335 .072 " .98 4.48 .44 0660 C2 x 1.78 G 115 .209 LF. 1.75 13.05 1.28 0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.4 G 66 .364 5.30 23 2.23 0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65<	21.47	31
0474 3" x 2" x 3/8" G 65 .369 5.80 23 2.27 0476 3" x 3" x 3/8" G 57 .421 7.05 26.50 2.59 0600 Channel framing, field fabricated, 8" and larger G 500 .048 Lb. .98 3 .29 0650 Less than 8" channels G 335 .072 " .98 4.48 .44 0660 C2 x 1.78 G 115 .209 LE. 1.75 13.05 1.28 0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.4 G 66 .364 5.30 23 2.23 0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30	27.08	38.5
0476 3" x 3" x 3/8" G 57 .421 √ 7.05 26.50 2.59 0600 Channel framing, field fabricated, 8" and larger G 500 .048 Lb. .98 3 .29 0650 Less than 8" channels G 335 .072 " .98 4.48 .44 0660 C2 x 1.78 G 115 .209 LE. 1.75 13.05 1.28 0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.4 G 66 .364 5.30 23 2.23 0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	31.07	44.5
0600 Channel framing, field fabricated, 8" and larger G 500 .048 Lb. .98 3 .29 0650 Less than 8" channels G 335 .072 " .98 4.48 .44 0660 C2 x 1.78 G 115 .209 LE. 1.75 13.05 1.28 0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.4 G 66 .364 5.30 23 2.23 0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	36.14	51
0650 Less than 8" channels G 335 .072 " .98 4.48 .44 0660 C2 x 1.78 C 115 .209 LE 1.75 13.05 1.28 0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.4 G 66 .364 5.30 23 2.23 0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	4.27	6
0660 C2 x 1.78 G 115 .209 LF. 1.75 13.05 1.28 0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.4 G 66 .364 5.30 23 2.23 0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	5.90	8.4
0662 C3 x 4.1 G 80 .300 4.03 18.75 1.84 0664 C4 x 5.4 G 66 .364 5.30 23 2.23 0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	16.08	23.5
0664 C4 x 5.4 G 66 .364 5.30 23 2.23 0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	24.62	35.5
0666 C5 x 6.7 G 57 .421 6.60 26.50 2.59 0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	30.53	43.5
0668 C6 x 8.2 G 55 .436 7.80 27.50 2.68 0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	35.69	50.5
0670 C7 x 9.8 G 40 .600 9.65 37.50 3.68 0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	37.981	
0672 C8 x 11.5 G 36 .667 11.30 41.50 4.09	50.83	72.5
	56.89	81
0710 Structural bar tee, field fabricated, 3/4" x 3/4" x 1/8" G 160 1.150 .55 9.40 .92	10.87	16.0
0712 - 1"x 1/8"	12.98	19.2
0714 1-1/2" x 1-1/2" x 1/4"	16.74	24.5
0716 2" x 2" x 1/4"	21.64	31.5
0718 2-1/2" x 2-1/2" x 3/8"	28.85	40.5
0720 3" x 3" x 3/8"	36.14	51
0730 Structural zee, field fabricated, 1-1/4" x 1-3/4" x 1-3/4" G 114 211 .75 13.15 1.29	15.19	22.5
0732 2-11/16" x 3" x 2-11/16"	16.19	22.5
	1	21.5
<u>.</u>	15.05	
	16.01	22.5
0738 3-1/2" x 6" x 3-1/2"	15.77	21.5
0740 Junior beam, field fabricated, 3" G 80 .300 5.60 18.75 1.84 0742 4" G 72 .333 7.55 21 2.05	26.19	37
	30.60	42.5
0744 5" G 67 .358 9.80 22.50 2.20	34.50	47.5
0746 6" G 62 .387 12.30 24 2.38	38.68	53.5
0748 7" G 57 .421 15.05 26.50 2.59	44.14	60
0750 8"	49.33	66.5
1000 Continuous slotted channel framing system, shop fab, simple framing	5.46	6.2
1200 Complex framing G " 1600 .010 5.75 .62	6.37	7.2
1300 Cross bracing, rods, shop fabricated, 3/4" diameter	4.31	5.7
1310 7/8" diameter	3.90	5.0
1320 1" diameter	3.61	4.6
1330 Angle, 5" x 5" x 3/8" G E-3 2800 .009 Lb. 1.96 .54 .05	2.55	3.0
1350 Hanging lintels, shop fabricated	3.90	5.0
1380 Roof frames, shop fabricated, 3'-0" square, 5' span G E-2 4200 .013 1.96 .82 .59	3.37	4.1
1400 Tie rod, not upset, 1-1/2" to 4" diameter, with turnbuckle	3.37	4.5
1420 No turnbuckle G 700 .023 2.05 1.41	3.46	4.4
1500 Upset, 1-3/4" to 4" diameter, with turnbuckle G 800 .020 2.13 1.24	3.37	4.5
1520 No turnbuckle G 700 .023 2.05 1.41		4.4