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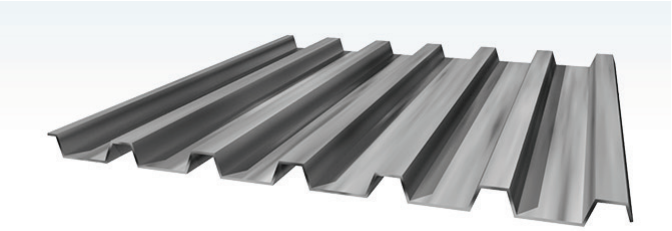
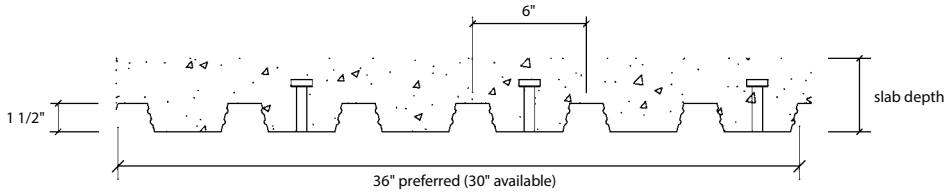


INVERTED B-LOK

Inverted 1.5" x 6" deck F_y = 40 ksi f'_c = 3 ksi 145 pcf concrete

Studs are not required for composite slab action. Studs on the cross-section indicate that it is possible to install studs at the beams.



DECK PROPERTIES										
Gage	t	w	A_s	I_p	S_p	S_n	R_{be}	R_{bi}	V_n	studs
22	0.0295	1.6	0.470	0.184	0.191	0.189	1290	1690	2830	0.33
20	0.0358	1.9	0.570	0.225	0.241	0.233	1830	2440	3420	0.40
19	0.0418	2.3	0.670	0.264	0.283	0.276	2420	3270	3980	0.47
18	0.0474	2.6	0.760	0.300	0.322	0.317	3040	4140	4500	0.53
16	0.0598	3.3	0.960	0.380	0.408	0.406	4620	6390	5620	0.53

COMPOSITE PROPERTIES													
	Slab Depth	M_{nf} in.k	A_c in^2	Vol. ft^3/ft^2	W psf	S_c in^3	I_{av} in^4	M_{no} in.k	V_{nt} lbs.	Max Unshored Span, ft. 1 span	2 span	3 span	A_{wwf} in^2/ft
22 gage	4.00	48.62	33.3	0.286	42	1.13	5.1	37.91	5930	5.14	6.89	6.97	0.023
	4.50	56.61	38.3	0.328	48	1.33	7.1	44.93	6390	4.90	6.58	6.66	0.027
	5.00	64.60	43.3	0.370	54	1.54	9.6	52.08	6860	4.69	6.31	6.39	0.032
	5.50	72.59	48.6	0.411	60	1.75	12.5	59.33	7350	4.51	6.08	6.15	0.036
	6.00	80.58	54.0	0.453	66	1.97	16.0	66.66	7860	4.39	5.87	5.94	0.041
	6.50	88.57	59.6	0.495	72	2.18	20.1	74.04	8380	4.29	5.69	5.75	0.045
	6.75	92.57	62.4	0.516	75	2.29	22.3	77.75	8640	4.25	5.60	5.67	0.047
	7.00	96.56	65.3	0.536	78	2.40	24.7	81.47	8910	4.20	5.52	5.58	0.050
20 gage	4.00	57.70	33.3	0.286	42	1.34	5.5	45.32	6210	5.95	7.77	8.03	0.023
	4.50	67.39	38.3	0.328	48	1.59	7.6	53.74	6980	5.66	7.41	7.66	0.027
	5.00	77.08	43.3	0.370	54	1.84	10.2	62.32	7450	5.41	7.09	7.33	0.032
	5.50	86.77	48.6	0.411	60	2.09	13.3	71.04	7940	5.19	6.81	7.04	0.036
	6.00	96.46	54.0	0.453	66	2.35	17.0	79.85	8450	5.06	6.56	6.78	0.041
	6.50	106.15	59.6	0.495	72	2.61	21.3	88.74	8970	4.94	6.33	6.54	0.045
	6.75	111.00	62.4	0.516	75	2.75	23.7	93.21	9230	4.88	6.23	6.44	0.047
	7.00	115.84	65.3	0.536	78	2.88	26.2	97.69	9500	4.83	6.13	6.33	0.050
19 gage	4.00	66.34	33.3	0.286	42	1.55	5.8	52.53	6210	6.56	8.45	8.73	0.023
	4.50	77.73	38.3	0.328	48	1.84	8.1	62.32	7120	6.24	8.05	8.32	0.027
	5.00	89.12	43.3	0.370	54	2.13	10.8	72.33	8010	5.96	7.71	7.97	0.032
	5.50	100.51	48.6	0.411	60	2.43	14.1	82.49	8500	5.72	7.40	7.65	0.036
	6.00	111.90	54.0	0.453	66	2.73	17.9	92.78	9010	5.57	7.13	7.37	0.041
	6.50	123.29	59.6	0.495	72	3.04	22.4	103.17	9530	5.43	6.89	7.12	0.045
	6.75	128.98	62.4	0.516	75	3.19	24.9	108.39	9790	5.37	6.78	7.00	0.047
	7.00	134.68	65.3	0.536	78	3.34	27.6	113.63	10060	5.31	6.67	6.89	0.050
18 gage	4.00	73.73	33.3	0.286	42	1.74	6.1	58.93	6210	7.10	9.04	9.34	0.023
	4.50	86.65	38.3	0.328	48	2.06	8.4	69.94	7120	6.74	8.62	8.91	0.027
	5.00	99.57	43.3	0.370	54	2.39	11.3	81.20	8070	6.43	8.25	8.53	0.032
	5.50	112.49	48.6	0.411	60	2.73	14.7	92.66	9020	6.17	7.93	8.19	0.036
	6.00	125.41	54.0	0.453	66	3.07	18.8	104.27	9530	6.01	7.64	7.89	0.041
	6.50	138.33	59.6	0.495	72	3.41	23.4	115.98	10050	5.86	7.38	7.63	0.045
	6.75	144.79	62.4	0.516	75	3.59	26.0	121.88	10310	5.79	7.26	7.50	0.047
	7.00	151.25	65.3	0.536	78	3.76	28.8	127.79	10580	5.72	7.14	7.38	0.050
16 gage	4.00	73.73	33.3	0.286	42	2.13	6.7	58.93	6210	8.16	10.19	10.54	0.023
	4.50	86.65	38.3	0.328	48	2.54	9.2	69.94	7120	7.74	9.72	10.05	0.027
	5.00	99.57	43.3	0.370	54	2.95	12.4	81.20	8070	7.39	9.31	9.63	0.032
	5.50	112.49	48.6	0.411	60	3.37	16.1	92.66	9050	7.08	8.95	9.25	0.036
	6.00	125.41	54.0	0.453	66	3.80	20.4	104.27	10060	6.89	8.63	8.92	0.041
	6.50	138.33	59.6	0.495	72	4.23	25.5	115.98	11100	6.71	8.33	8.61	0.045
	6.75	144.79	62.4	0.516	75	4.44	28.3	121.88	11430	6.63	8.20	8.47	0.047
	7.00	151.25	65.3	0.536	78	4.66	31.3	127.79	11700	6.56	8.07	8.34	0.050

INVERTED B-LOK-NW

INVERTED B-LOK

1.5" x 6" deck F_y = 40 ksi f'_c = 3 ksi 145 pcf concrete

	Slab Depth	M_n	Span " L" feet, Uniform Live Unfactored Service Loads, psf												
	in.	k	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00
22 gage	4.00	48.62	400	400	400	400	380	330	285	250	220	190	170	150	135
	4.50	56.61	400	400	400	400	400	380	330	290	255	225	200	175	160
	5.00	64.60	400	400	400	400	400	400	380	330	290	255	230	205	180
	5.50	72.59	400	400	400	400	400	400	400	375	325	290	255	230	205
	6.00	80.58	400	400	400	400	400	400	400	400	365	320	285	255	225
	6.50	88.57	400	400	400	400	400	400	400	400	400	355	315	280	250
	6.75	92.57	400	400	400	400	400	400	400	400	400	370	330	295	260
	7.00	96.56	400	400	400	400	400	400	400	400	400	385	345	305	275
20 gage	4.00	57.70	400	400	400	400	400	395	345	300	265	235	210	185	165
	4.50	67.39	400	400	400	400	400	400	400	350	310	275	245	220	195
	5.00	77.08	400	400	400	400	400	400	400	400	355	315	280	250	225
	5.50	86.77	400	400	400	400	400	400	400	400	400	355	315	280	255
	6.00	96.46	400	400	400	400	400	400	400	400	400	395	350	315	280
	6.50	106.15	400	400	400	400	400	400	400	400	400	400	385	345	310
	6.75	111.00	400	400	400	400	400	400	400	400	400	400	400	360	325
	7.00	115.84	400	400	400	400	400	400	400	400	400	400	400	380	340
19 gage	4.00	66.34	400	400	400	400	400	400	400	350	310	275	245	220	190
	4.50	77.73	400	400	400	400	400	400	400	400	360	320	285	255	230
	5.00	89.12	400	400	400	400	400	400	400	400	400	370	330	295	265
	5.50	100.51	400	400	400	400	400	400	400	400	400	400	370	335	300
	6.00	111.90	400	400	400	400	400	400	400	400	400	400	400	370	335
	6.50	123.29	400	400	400	400	400	400	400	400	400	400	400	400	370
	6.75	128.98	400	400	400	400	400	400	400	400	400	400	400	400	385
	7.00	134.68	400	400	400	400	400	400	400	400	400	400	400	400	400
18 gage	4.00	73.73	400	400	400	400	400	400	400	390	345	305	265	230	200
	4.50	86.65	400	400	400	400	400	400	400	400	400	360	325	290	260
	5.00	99.57	400	400	400	400	400	400	400	400	400	400	375	335	300
	5.50	112.49	400	400	400	400	400	400	400	400	400	400	400	380	340
	6.00	125.41	400	400	400	400	400	400	400	400	400	400	400	400	380
	6.50	138.33	400	400	400	400	400	400	400	400	400	400	400	400	400
	6.75	144.79	400	400	400	400	400	400	400	400	400	400	400	400	400
	7.00	151.25	400	400	400	400	400	400	400	400	400	400	400	400	400
16 gage	4.00	73.73	400	400	400	400	400	400	400	390	345	305	265	230	200
	4.50	86.65	400	400	400	400	400	400	400	400	400	360	325	290	260
	5.00	99.57	400	400	400	400	400	400	400	400	400	400	375	335	300
	5.50	112.49	400	400	400	400	400	400	400	400	400	400	400	380	340
	6.00	125.41	400	400	400	400	400	400	400	400	400	400	400	400	380
	6.50	138.33	400	400	400	400	400	400	400	400	400	400	400	400	400
	6.75	144.79	400	400	400	400	400	400	400	400	400	400	400	400	400
	7.00	151.25	400	400	400	400	400	400	400	400	400	400	400	400	400
22 gage	4.00	37.91	400	400	400	340	290	250	215	185	165	145	125	110	100
	4.50	44.93	400	400	400	400	345	295	255	220	195	170	150	135	120
	5.00	52.08	400	400	400	400	400	345	300	260	225	200	175	155	140
	5.50	59.33	400	400	400	400	400	395	340	295	260	230	200	180	160
	6.00	66.66	400	400	400	400	400	400	385	335	290	255	225	200	180
	6.50	74.04	400	400	400	400	400	400	400	370	325	285	255	225	200
	6.75	77.75	400	400	400	400	400	400	400	390	345	300	265	235	210
	7.00	81.47	400	400	400	400	400	400	400	400	360	315	280	250	220
20 gage	4.00	45.32	400	400	400	400	355	305	260	230	200	175	155	140	125
	4.50	53.74	400	400	400	400	400	360	315	275	240	210	185	165	150
	5.00	62.32	400	400	400	400	400	400	365	320	280	245	220	195	175
	5.50	71.04	400	400	400	400	400	400	400	365	320	280	250	220	200
	6.00	79.85	400	400	400	400	400	400	400	400	360	320	280	250	225
	6.50	88.74	400	400	400	400	400	400	400	400	400	355	315	280	250
	6.75	93.21	400	400	400	400	400	400	400	400	400	375	330	295	265
	7.00	97.69	400	400	400	400	400	400	400	400	400	390	345	310	275
19 gage	4.00	52.53	400	400	400	400	400	355	310	270	235	210	185	165	150
	4.50	62.32	400	400	400	400	400	400	370	320	285	250	220	200	175
	5.00	72.33	400	400	400	400	400	400	400	375	330	290	260	230	205
	5.50	82.49	400	400	400	400	400	400	400	400	380	335	295	265	240
	6.00	92.78	400	400	400	400	400	400	400	400	400	375	335	300	270
	6.50	103.17	400	400	400	400	400	400	400	400	400	400	375	335	300
	6.75	108.39	400	400	400	400	400	400	400	400	400	400	395	350	315
	7.00	113.63	400	400	400	400	400	400	400	400	400	400	400	370	330
18 gage	4.00	58.93	400	400	400	400	400	400	350	305	270	240	210	190	170
	4.50	69.94	400	400	400	400	400	400	400	365	320	285	255	225	205
	5.00	81.20	400	400	400	400	400	400	400	400	375	335	295	265	235
	5.50	92.66	400	400	400	400	400	400	400	400	400	380	340	305	270
	6.00	104.27	400	400	400	400	400	400	400	400	400	400	385	345	310
	6.50	115.98	400	400	400	400	400	400	400	400	400	400	400	385	345
	6.75	121.88	400	400	400	400	400	400	400	400	400	400	400	400	360
	7.00	127.79	400	400	400	400	400	400	400	400	400	400	400	400	380
16 gage	4.00	58.93	400	400	400	400	400	400	350	305	270	240	210	190	170
	4.50	69.94	400	400	400	400	400	400	400	365	320	285	255	225	205
	5.00	81.20	400	400	400	400	400	400	400	400	375	335	295	265	235
	5.50	92.66	400	400	400	400	400	400	400	400	400	380	340	305	270
	6.00	104.27	400	400	400	400	400	400	400	400	400	400	385	345	310
	6.50	115.98	400	400	400	400	400	400	400	400	400	400	400	385	345
	6.75	121.88	400	400	400	400	400	400	400	400	400	400	400	400	360
	7.00	127.79	400	400	400	400	400	400	400	400	400	400	400	400	380

Studs at 1 foot o.c. No Studs