



CANAM

Solutions + Service

Manufacturers of  **United Steel Deck** products.

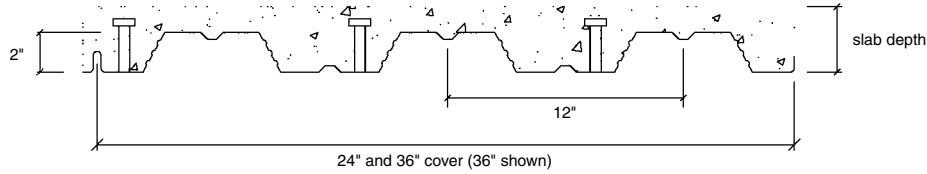
Appendix

*Design Manual Excerpts Containing Information
Related to the Example Problems*

2" LOK-FLOOR

2" x 12" 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	ϕR_{be}	ϕR_{bi}	ϕV_n	studs
22	0.0295	1.5	0.440	0.312	0.251	0.262	700	1190	2160	0.43
20	0.0358	1.8	0.540	0.390	0.332	0.345	800	1360	2930	0.53
19	0.0418	2.1	0.630	0.455	0.413	0.424	1060	1800	3410	0.61
18	0.0474	2.4	0.710	0.517	0.480	0.483	1340	2270	3860	0.70
16	0.0598	3.1	0.900	0.653	0.611	0.611	2040	3460	4860	0.70

COMPOSITE PROPERTIES

	Slab Depth	ϕM_{nt} in.k	A_c in ²	Vol. ft ³ /ft ²	W psf	S_c in ³	I_{av} in ⁴	ϕM_{no} in.k	ϕV_{nt} lbs.	Max Unshored Span, ft.			A_{wvf} in ² /ft
										1 span	2 span	3 span	
22 gage	4.50	48.06	32.6	0.292	42	1.04	5.9	35.55	5200	6.07	8.14	8.28	0.023
	5.00	55.54	37.5	0.333	48	1.22	8.0	41.78	5650	5.78	7.76	7.89	0.027
	5.50	63.02	42.6	0.375	54	1.41	10.5	48.19	6130	5.52	7.42	7.56	0.032
	6.00	70.50	48.0	0.417	60	1.61	13.5	54.74	6630	5.31	7.12	7.27	0.036
	6.50	77.98	53.6	0.458	66	1.80	17.1	61.40	7150	5.18	6.85	7.02	0.041
	7.00	85.46	59.5	0.500	73	2.00	21.2	68.15	7700	5.05	6.53	6.79	0.045
	7.25	89.20	61.9	0.521	76	2.10	23.5	71.55	7920	5.00	6.32	6.58	0.047
20 gage	4.50	57.78	32.6	0.292	42	1.25	6.3	42.94	5970	7.21	9.36	9.67	0.023
	5.00	66.96	37.5	0.333	48	1.48	8.5	50.48	6420	6.84	8.92	9.22	0.027
	5.50	76.14	42.6	0.375	54	1.71	11.2	58.25	6900	6.53	8.54	8.82	0.032
	6.00	85.32	48.0	0.417	60	1.94	14.4	66.21	7400	6.27	8.20	8.47	0.036
	6.50	94.50	53.6	0.458	66	2.18	18.2	74.31	7920	6.11	7.89	8.16	0.041
	7.00	103.68	59.5	0.500	73	2.42	22.6	82.52	8470	5.96	7.44	7.75	0.045
	7.25	108.27	61.9	0.521	76	2.54	25.0	86.66	8690	5.89	7.20	7.50	0.047
19 gage	4.50	66.15	32.6	0.292	42	1.44	6.7	49.32	6080	8.21	10.36	10.71	0.023
	5.00	76.86	37.5	0.333	48	1.70	9.0	58.03	6900	7.79	9.88	10.21	0.027
	5.50	87.57	42.6	0.375	54	1.96	11.8	67.03	7380	7.43	9.46	9.77	0.032
	6.00	98.28	48.0	0.417	60	2.23	15.2	76.25	7880	7.12	9.08	9.39	0.036
	6.50	108.99	53.6	0.458	66	2.51	19.2	85.63	8400	6.94	8.75	9.04	0.041
	7.00	119.70	59.5	0.500	73	2.79	23.7	95.15	8950	6.76	8.45	8.73	0.045
	7.25	125.06	61.9	0.521	76	2.93	26.3	99.96	9170	6.68	8.31	8.58	0.047
18 gage	4.50	73.29	32.6	0.292	42	1.60	7.0	54.96	6080	8.97	11.05	11.42	0.023
	5.00	85.36	37.5	0.333	48	1.89	9.4	64.68	6980	8.50	10.54	10.89	0.027
	5.50	97.43	42.6	0.375	54	2.19	12.4	74.74	7830	8.10	10.09	10.43	0.032
	6.00	109.50	48.0	0.417	60	2.49	15.9	85.06	8330	7.77	9.69	10.02	0.036
	6.50	121.57	53.6	0.458	66	2.80	20.0	95.58	8850	7.56	9.34	9.65	0.041
	7.00	133.64	59.5	0.500	73	3.12	24.7	106.25	9400	7.37	9.02	9.32	0.045
	7.25	139.67	61.9	0.521	76	3.28	27.3	111.64	9620	7.28	8.87	9.17	0.047
16 gage	4.50	73.29	32.6	0.292	42	1.97	7.7	54.96	6080	10.30	12.40	12.79	0.023
	5.00	85.36	37.5	0.333	48	2.33	10.3	64.68	6980	9.75	11.83	12.23	0.027
	5.50	97.43	42.6	0.375	54	2.70	13.5	74.74	7940	9.29	11.58	11.71	0.032
	6.00	109.50	48.0	0.417	60	3.08	17.3	85.06	8940	8.90	10.89	11.26	0.036
	6.50	121.57	53.6	0.458	66	3.47	21.8	95.58	9850	8.66	10.50	10.85	0.041
	7.00	133.64	59.5	0.500	73	3.87	26.9	106.25	10400	8.44	10.14	10.48	0.045
	7.25	139.67	61.9	0.521	76	4.07	29.8	111.64	10620	8.33	9.98	10.31	0.047
	7.50	145.71	64.3	0.542	79	4.27	32.8	117.05	10840	8.23	9.82	10.15	0.050

Note:
50 ksi material is also available.
See website for load tables.

2" LOK-FLOOR - NW

