



ULTRA-BOND COMPOSITE FLOOR DECK
 MAXIMUM SPECIFIED UNIFORMLY DISTRIBUTED LOAD (P.S.F)
 INCLUDES DEAD AND CONSTRUCTION LOAD CARRIED
 BY METAL DECK *(NOT SHOWN IN TABLES)*
 LIMIT STATE DESIGN (LSD) - IMPERIAL UNITS

0.0476" Deck
0.394" Rebar

INPUT SECTION:

ITEM	DESCRIPTION OR SECTION PROPERTIES	CONCRETE COVER ABOVE TOP OF METAL DECK (hf) OR (hc) (IN)							
		2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00
A	METAL DECK THICK (INCH) (Td)	0.0476	0.0476	0.0476	0.0476	0.0476	0.0476	0.0476	0.0476
B	METAL DECK YIELD STRENGTH (KSI)(Fy)	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6
C	METAL DECK EFF. (Ix) (IN ⁴)/FT	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09
D	METAL DECK EFF. (Sx) (IN ³)/FT	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
E	METAL DECK (Es)(PSI)	2.95E+07	2.95E+07	2.95E+07	2.95E+07	2.95E+07	2.95E+07	2.95E+07	2.95E+07
F	# REINFORCING STEEL BAR DIA. (INCH)	0.394	0.394	0.394	0.394	0.394	0.394	0.394	0.394
G	CONCRETE STRENGTH (f'c) (PSI)	4350	4350	4350	4350	4350	4350	4350	4350
H	CONCRETE (Ec) (PSI)	3.80E+06	3.80E+06	3.80E+06	3.80E+06	3.80E+06	3.80E+06	3.80E+06	3.80E+06
I	A _F (IN ²)/FT	0.865	0.865	0.865	0.865	0.865	0.865	0.865	0.865
J	I _{X(F)} (IN ⁴)/FT	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18
K	ALLOWABLE FORCE (LBS/FT)	659	659	659	659	659	659	659	659
L	FINAL EFF. CROSS SECT. AREA A _{SO} (IN ²)	0.467	0.467	0.467	0.467	0.467	0.467	0.467	0.467
M	DEFLECTION CRITERIA K _{1,2,3,4}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
N	DEFLECTION CRITERIA *	L/360	L/360	L/360	L/360	L/360	L/360	L/360	L/360

* DEFLECTION CRITERIA: L/360 (K₁=1), L/480 (K₂=1.333), L/600 (K₃=1.670) OR L/720 (K₄=2.0)
 # REINFORCING BAR Fy0=58.0KSI

OUTPUT SECTION #1

ITEM	DESCRIPTION	CONCRETE COVER ABOVE TOP OF METAL DECK (hf) OR (hc) (IN)							
		2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00
O	MAX. UNSHORED SPAN (C.L.21PSF).FT.	14.18	13.08	12.14	11.32	10.61	9.98	9.43	8.93
P	MAX. UNSHORED SPAN (C.L.42PSF).FT.	9.06	9.38	9.47	9.24	8.76	8.33	7.94	7.58
Q	TOTAL DEAD LOAD (NO CONST.).PSF.	53.37	59.62	65.87	72.11	78.36	84.61	90.86	97.10
R	CONCRETE VOLUME. YD ³ /100FT ²	1.240	1.394	1.549	1.703	1.857	2.011	2.166	2.320

C.L. = CONSTRUCTION LOAD (PSF)

OUTPUT SECTION #2: PLOT DATA - AND INPUT SECTION AS SHOWN #

ITEM	DESCRIPTION	(hf) OR (hc) (IN)	# MAXIMUM SPECIFIED UNIFORMLY DISTRIBUTED LOAD (P.S.F)							
			150	200	250	300	350	400	450	500
1	ALLOW. SINGLE UNSUP. SPAN - FT.	2.50	17.83	15.44	13.81	12.61	11.67	10.92	10.29	9.76
2	ALLOW. SINGLE UNSUP. SPAN - FT.	3.00	18.33	15.87	14.20	12.96	12.00	11.22	10.58	10.04
3	ALLOW. SINGLE UNSUP. SPAN - FT.	3.50	18.81	16.29	14.57	13.30	12.32	11.52	10.86	10.30
4	ALLOW. SINGLE UNSUP. SPAN - FT.	4.00	19.29	16.70	14.94	13.64	12.63	11.81	11.14	10.56
5	ALLOW. SINGLE UNSUP. SPAN - FT.	4.50	19.75	17.10	15.30	13.96	12.93	12.09	11.40	10.82
6	ALLOW. SINGLE UNSUP. SPAN - FT.	5.00	20.20	17.49	15.65	14.28	13.22	12.37	11.66	11.06
7	ALLOW. SINGLE UNSUP. SPAN - FT.	5.50	20.64	17.88	15.99	14.60	13.51	12.64	11.92	11.31
8	ALLOW. SINGLE UNSUP. SPAN - FT.	6.00	21.08	18.25	16.33	14.90	13.80	12.91	12.17	11.54

Figures shown in yellow to be multiplied by a factor of 0.9 - See Manual (Creep Stress)

