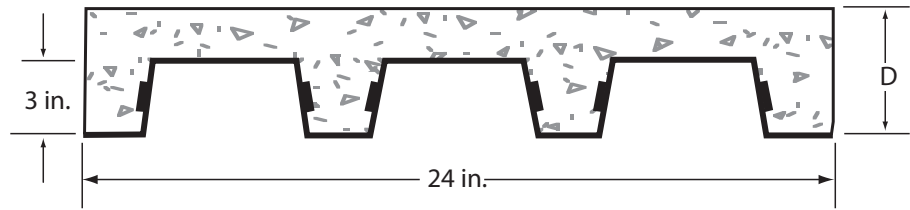




WF 324 COMPOSITE DECK



IMPERIAL

STEEL DECK SECTION PROPERTIES (Per Foot of Width)

COMPOSITE SLAB PROPERTIES (Per Foot of Width)

Base Steel Thickness (in.)	Weight (psf)	Area (in ²)	Section Modulus (in ³)		Deflection Inertia (in ⁴)	Overall Slab Depth, D (in.)									
			Midspan	Support		5.0	5.5	6.0	6.5	7.0					
0.030	2.15	0.615	0.380	0.402	0.679	Slab Weight (psf)									
0.036	2.57	0.738	0.487	0.508	0.881	41.4	47.7	53.9	60.2	66.4	Concrete Volume (yd ³ /100ft ²)				
0.048	3.40	0.984	0.670	0.721	1.26	0.92	1.07	1.23	1.38	1.54					
0.060	4.24	1.23	0.854	0.894	1.64										

MAXIMUM SPECIFIED UNIFORMLY DISTRIBUTED LOADS (psf)

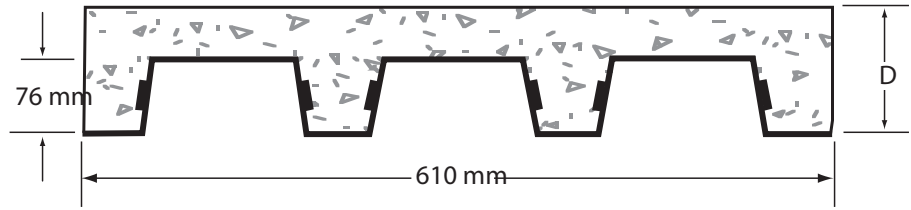
SLAB DEPTH, D (in.)		5.0			5.5			6.0			6.5			7.0		
BASE (in.)	SPAN (ft)	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
0.030	9'0"	129	129	129	150	150	150	170	170	170	191	191	191	200	200	200
	9'6"	116	116	116	135	135	135	153	153	153	171	171	171	190	190	190
	10'0"	105	105	105	121	121	121	138	138	138	155	155	155	171	171	171
	10'6"	95	95	95	110	110	110	125	125	125	140	140	140	155	155	155
	11'0"	87	87	87	100	100	100	114	114	114	128	128	128	142	142	142
	11'6"	79	79	79	92	92	92	104	104	104	117	117	117	129	129	129
0.036	10'0"	121	121	121	140	140	140	159	159	159	178	178	178	197	197	197
	10'6"	110	110	110	128	128	128	145	145	145	162	162	162	180	180	180
	11'0"	101	101	101	117	117	117	133	133	133	149	149	149	165	165	165
	11'6"	93	93	93	107	107	107	122	122	122	137	137	137	151	151	151
	12'0"	86	86	86	99	99	99	113	113	113	126	126	126	140	140	140
	12'6"	79	79	79	92	92	92	104	104	104	117	117	117	129	129	129
0.048	13'0"	74	74	74	85	85	85	97	97	97	108	108	108	120	120	120
	10'6"	179	179	179	207	207	207	235	235	235	264	264	264	292	292	292
	11'0"	166	166	166	192	192	192	219	219	219	245	245	245	271	271	271
	11'6"	155	155	155	179	179	179	204	204	204	228	228	228	253	253	253
	12'0"	145	145	145	168	168	168	191	191	191	214	214	214	237	237	237
	12'6"	136	136	136	157	157	157	179	179	179	201	201	201	222	222	222
	13'0"	128	128	128	148	148	148	168	168	168	189	189	189	209	209	209
	13'6"	121	121	121	140	140	140	159	159	159	178	178	178	197	197	197
	14'0"	114	114	114	132	132	132	150	150	150	168	168	168	187	187	187
0.060	14'6"	108	108	108	125	125	125	143	143	143	160	160	160	177	177	177
	15'0"	103	103	103	119	119	119	135	135	135	152	152	152	168	168	168
	11'0"	165	165	165	192	192	192	218	218	218	244	244	244	271	271	271
	11'6"	154	154	154	179	179	179	203	203	203	228	228	228	253	253	253
	12'0"	144	144	144	167	167	167	190	190	190	213	213	213	236	236	236
	12'6"	135	135	135	157	157	157	179	179	179	200	200	200	222	222	222
	13'0"	127	127	127	148	148	148	168	168	168	188	188	188	209	209	209
	13'6"	120	120	120	139	139	139	159	159	159	178	178	178	197	197	197
	14'0"	114	114	114	132	132	132	150	150	150	168	168	168	186	186	186
	14'6"	108	108	108	125	125	125	142	142	142	159	159	159	177	177	177
15'0"	102	102	102	119	119	119	135	135	135	151	151	151	168	168	168	
15'6"	98	98	98	113	113	113	129	129	129	144	144	144	160	160	160	

- NOTES:
- One shore support required at midspan in shaded areas.
 - Slab weight includes steel deck and concrete slab, which has been accounted for in load tables.
 - See Composite slab notes and design example.
 - Prepared by Dr. R.M. Schuster, P.Eng. Distinguished Professor Emeritus, University of Waterloo.



Fabricator Member

WF 324 COMPOSITE DECK



STEEL DECK SECTION PROPERTIES (Per Metre of Width)							COMPOSITE SLAB PROPERTIES (Per Metre of Width)									
METRIC	Base Steel Thickness (mm)	Mass (kg/m ²)	Area (mm ²)	Section Modulus (x 10 ³ mm ³)		Deflection Inertia (x10 ⁶ mm ⁴)	Overall Slab Depth, D (mm)									
				Midspan	Support		130	140	150	160	170					
	0.762	10.5	1300	20.4	21.6	0.926	Slab Weight (kPa)									
	0.914	12.5	1560	26.2	27.2	1.20	Concrete Volume (m ³ /10m ²)									
	1.22	16.6	2081	36.0	38.7	1.72	1.98	2.20	2.43	2.65	2.88	0.79	0.89	0.99	1.09	1.19
1.52	20.7	2601	45.9	48.1	2.24											
MAXIMUM SPECIFIED UNIFORMLY DISTRIBUTED LOADS (kPa)																
SLAB DEPTH, D (mm)		130			140			150			160			170		
BASE (mm)	SPAN (m)	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
0.762	2.5	7.8	7.8	7.8	8.7	8.7	8.7	9.6	9.6	9.6	10.6	10.6	10.6	11.5	11.5	11.5
	2.6	7.2	7.2	7.2	8.0	8.0	8.0	8.9	8.9	8.9	9.8	9.8	9.8	10.6	10.6	10.6
	2.8	6.2	6.2	6.2	6.9	6.9	6.9	7.7	7.7	7.7	8.4	8.4	8.4	9.2	9.2	9.2
	3.0	5.4	5.4	5.4	6.0	6.0	6.0	6.7	6.7	6.7	7.3	7.3	7.3	8.0	8.0	8.0
	3.2	4.7	4.7	4.7	5.3	5.3	5.3	5.9	5.9	5.9	6.4	6.4	6.4	7.0	7.0	7.0
	3.4	4.2	4.2	4.2	4.7	4.7	4.7	5.2	5.2	5.2	5.7	5.7	5.7	6.2	6.2	6.2
	3.5	4.0	4.0	4.0	4.4	4.4	4.4	4.9	4.9	4.9	5.4	5.4	5.4	5.9	5.9	5.9
	3.6	3.7	3.7	3.7	4.2	4.2	4.2	4.6	4.6	4.6	5.1	5.1	5.1	5.5	5.5	5.5
0.914	2.6	8.1	8.1	8.1	9.1	9.1	9.1	10.1	10.1	10.1	11.1	11.1	11.1	12.0	12.0	12.0
	2.8	7.1	7.1	7.1	7.9	7.9	7.9	8.8	8.8	8.8	9.6	9.6	9.6	10.4	10.4	10.4
	3.0	6.2	6.2	6.2	6.9	6.9	6.9	7.7	7.7	7.7	8.4	8.4	8.4	9.2	9.2	9.2
	3.2	5.5	5.5	5.5	6.1	6.1	6.1	6.8	6.8	6.8	7.4	7.4	7.4	8.1	8.1	8.1
	3.4	4.9	4.9	4.9	5.5	5.5	5.5	6.1	6.1	6.1	6.6	6.6	6.6	7.2	7.2	7.2
	3.5	4.6	4.6	4.6	5.2	5.2	5.2	5.7	5.7	5.7	6.3	6.3	6.3	6.8	6.8	6.8
	3.6	4.4	4.4	4.4	4.9	4.9	4.9	5.4	5.4	5.4	6.0	6.0	6.0	6.5	6.5	6.5
	3.8	4.0	4.0	4.0	4.4	4.4	4.4	4.9	4.9	4.9	5.4	5.4	5.4	5.9	5.9	5.9
1.22	2.8	11.0	11.0	11.0	12.3	12.3	12.3	13.6	13.6	13.6	15.0	15.0	15.0	16.3	16.3	16.3
	3.0	9.8	9.8	9.8	11.0	11.0	11.0	12.2	12.2	12.2	13.4	13.4	13.4	14.6	14.6	14.6
	3.2	8.9	8.9	8.9	9.9	9.9	9.9	11.0	11.0	11.0	12.1	12.1	12.1	13.1	13.1	13.1
	3.4	8.1	8.1	8.1	9.0	9.0	9.0	10.0	10.0	10.0	11.0	11.0	11.0	11.9	11.9	11.9
	3.5	7.7	7.7	7.7	8.6	8.6	8.6	9.6	9.6	9.6	10.5	10.5	10.5	11.4	11.4	11.4
	3.6	7.4	7.4	7.4	8.3	8.3	8.3	9.1	9.1	9.1	10.0	10.0	10.0	10.9	10.9	10.9
	3.8	6.8	6.8	6.8	7.6	7.6	7.6	8.4	8.4	8.4	9.2	9.2	9.2	10.0	10.0	10.0
	4.0	6.3	6.3	6.3	7.0	7.0	7.0	7.8	7.8	7.8	8.5	8.5	8.5	9.3	9.3	9.3
1.52	3.4	8.0	8.0	8.0	9.0	9.0	9.0	10.0	10.0	10.0	11.0	11.0	11.0	11.9	11.9	11.9
	3.5	7.7	7.7	7.7	8.6	8.6	8.6	9.5	9.5	9.5	10.5	10.5	10.5	11.4	11.4	11.4
	3.6	7.4	7.4	7.4	8.2	8.2	8.2	9.1	9.1	9.1	10.0	10.0	10.0	10.9	10.9	10.9
	3.8	6.8	6.8	6.8	7.6	7.6	7.6	8.4	8.4	8.4	9.2	9.2	9.2	10.0	10.0	10.0
	4.0	6.2	6.2	6.2	7.0	7.0	7.0	7.8	7.8	7.8	8.5	8.5	8.5	9.3	9.3	9.3
	4.2	5.8	5.8	5.8	6.5	6.5	6.5	7.2	7.2	7.2	7.9	7.9	7.9	8.6	8.6	8.6
	4.4	5.4	5.4	5.4	6.1	6.1	6.1	6.7	6.7	6.7	7.4	7.4	7.4	8.0	8.0	8.0
	4.5	5.2	5.2	5.2	5.9	5.9	5.9	6.5	6.5	6.5	7.1	7.1	7.1	7.7	7.7	7.7
	4.6	5.1	5.1	5.1	5.7	5.7	5.7	6.3	6.3	6.3	6.9	6.9	6.9	7.5	7.5	7.5
	4.8	4.7	4.7	4.7	5.3	5.3	5.3	5.9	5.9	5.9	6.5	6.5	6.5	7.0	7.0	7.0

- NOTES:
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