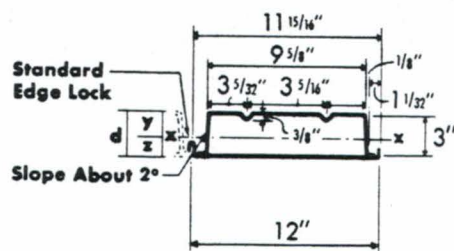
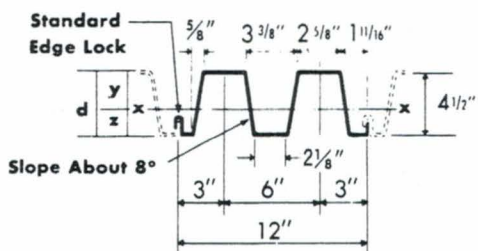


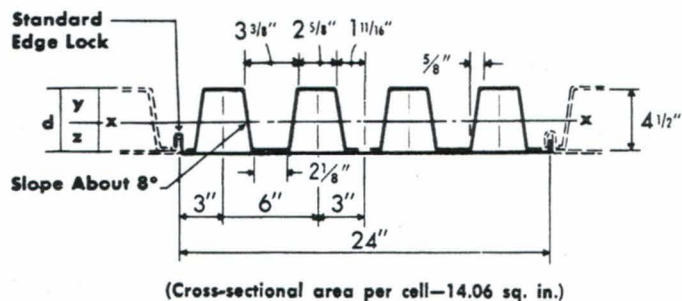
NKX



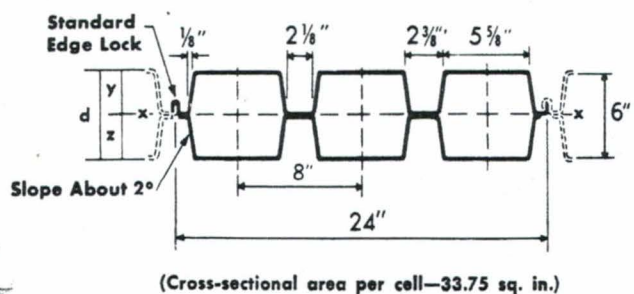
NKC



SEC. 12



FKX



CK

VOLUME OF CONCRETE IN CU. FT. PER SQ. FT. OF AREA

SECTION	THICKNESS OVER TOP OF DECK					
	2"	2 1/2"	3"	3 1/4"	3 1/2"	4"
3						
UKX	.215	.26	.30	.32	.34	.38
RK						
21						
NKX	.24	.28	.32	.345	.365	.405
CK						
12	.335	.38	.42	.44	.46	.505
FKX						
RKC	.19	.23	.27	.295	.315	.36
NKC	.21	.255	.295	.32	.34	.38

TABLE OF PROPERTIES • ROBERTSON Q-FLOOR AND Q-AIR FLOOR

		Section and Gauge	Actual Wt./Sq. Ft. Lbs.	Overall Depth	Gross Area	Y Dist. In.	I for Def. In. ⁴
SEC. 3		3-22	1.8	1.53	0.53	.826	.180
		3-20	2.2	1.53	0.65	.804	.230
		3-18	2.9	1.55	0.86	.764	.337
		3-16	3.5	1.56	1.07	.732	.442
		3-14	4.4	1.58	1.35	.712	.562
		3-12	5.9	1.61	1.84	.745	.756
UKX		UKX 20-20	3.8	1.57	1.07	1.127	.381
		UKX 20-18	4.3	1.58	1.22	1.183	.411
		UKX 18-20	4.4	1.58	1.26	1.045	.520
		UKX 18-18	4.8	1.60	1.50	1.105	.566
		UKX 18-16	5.3	1.61	1.65	1.152	.603
		UKX 16-16	5.8	1.63	1.85	1.089	.763
		UKX 16-14	6.5	1.64	2.03	1.144	.820
		UKX 14-14	7.3	1.66	2.32	1.078	1.011
		UKX 12-12	9.9	1.72	3.24	1.085	1.373
RK		RK 18-18	5.6	3.10	1.74	1.630	1.899
		RK 18-16	6.2	3.12	1.96	1.726	2.128
		RK 16-16	6.8	3.13	2.18	1.606	2.497
		RK 14-14	8.4	3.16	2.71	1.611	3.304
		RK 12-12	11.4	3.22	3.65	1.584	4.446
RKC		RKC 16-16	6.73	3.12	1.94	1.840	2.238
		RKC 14-14	8.41	3.16	2.42	1.800	3.009
		RKC 12-12	11.78	3.22	3.39	1.750	4.729
SEC. 21		21-22	2.1	3.030	0.65	1.633	.675
		21-20	2.6	3.036	0.78	1.595	.855
		21-18	3.5	3.048	1.04	1.530	1.258
		21-16	4.2	3.060	1.31	1.462	1.703
		21-14	5.2	3.075	1.63	1.393	2.264
		21-12	6.9	3.105	2.29	1.313	3.381
NKX		NKX 20-20	4.2	3.072	1.19	2.200	1.431
		NKX 20-18	4.7	3.084	1.34	2.311	1.542
		NKX 18-20	5.0	3.084	1.42	2.035	1.951
		NKX 18-18	5.4	3.096	1.69	2.149	2.125
		NKX 18-16	5.8	3.108	1.86	2.214	2.226
		NKX 16-16	6.5	3.120	2.11	2.109	2.888
		NKX 16-14	7.2	3.134	2.32	2.204	3.084
		NKX 14-14	8.1	3.149	2.64	2.068	3.903
		NKX 12-12	11.1	3.209	3.68	2.014	6.049
NKC		NKC 18-18	5.46	3.10	1.54	1.868	2.765
		NKC 16-16	6.83	3.12	1.96	1.837	3.572
		NKC 14-14	8.54	3.15	2.46	1.822	4.514
SEC. 12		12-20	3.6	4.53	1.01	2.494	2.933
		12-18	4.9	4.55	1.35	2.447	4.078
		12-16	5.9	4.56	1.69	2.419	5.195
		12-14	7.3	4.58	2.11	2.410	6.180
		12-12	10.0	4.61	2.89	2.501	8.587
FKX		FKX 18-18	6.5	4.60	1.97	3.01	5.93
		FKX 18-16	7.0	4.61	2.12	3.13	6.30
		FKX 16-16	7.9	4.63	2.47	2.98	7.57
		FKX 16-14	8.5	4.64	2.68	3.11	8.06
		FKX 14-14	9.8	4.66	3.06	2.98	9.02
		FKX 12-12	13.4	4.72	4.26	3.07	12.59
CK		CK 18-18	6.7	6.10	2.02	3.38	8.28
		CK 18-16	7.4	6.11	2.26	3.57	9.24
		CK 16-18	7.4	6.11	2.28	3.13	9.81
		CK 16-16	8.1	6.12	2.52	3.33	10.94

	S.M In. ³	Coef. of Strength in Bending	Coefficient of Deflection At 1/360	Safe End Reaction 3" Bearing
	.203	2,705	7,900	855
	.265	3,530	10,070	1,294
	.398	5,310	14,700	2,240
	.506	6,750	19,350	3,357
	.633	8,445	24,575	4,916
	.880	11,725	33,000	8,648
	.310	4,130	16,650	1,294
	.317	4,230	17,960	1,294
	.462	6,160	22,730	2,240
	.472	6,290	24,700	2,240
	.481	6,420	26,350	2,240
	.654	8,700	33,350	3,357
	.667	8,900	35,850	3,357
	.893	11,900	44,200	4,916
	1.353	18,000	60,000	8,648
	1.104	14,725	83,000	2,240
	1.168	15,525	93,000	2,240
	1.483	19,775	109,100	3,357
	1.982	26,425	144,400	4,916
	2.865	38,200	194,300	8,648
	1.140	15,200	97,800	1,679
	1.560	20,770	131,500	2,458
	2.520	33,650	206,675	4,324
	.386	5,150	29,500	468
	.500	6,660	37,400	766
	.755	10,100	55,000	1,442
	.982	13,100	74,400	2,266
	1.261	16,800	99,000	3,409
	1.823	24,300	147,800	6,191
	.600	8,000	62,540	766
	.613	8,170	67,390	766
	.884	11,790	85,270	1,442
	.909	12,120	92,900	1,442
	.923	12,300	97,300	1,442
	1.260	16,800	126,200	2,266
	1.285	17,140	134,800	2,266
	1.746	23,300	170,600	3,409
	2.833	37,800	264,400	6,191
	1.405	18,733	120,842	964
	1.881	25,066	156,111	1,510
	2.460	32,800	197,280	2,270
	1.126	15,000	128,170	940
	1.610	21,460	178,200	1,922
	2.107	28,100	227,000	3,026
	2.694	35,915	270,100	4,608
	3.433	45,775	375,300	8,366
	1.90	25,330	259,000	1,922
	1.94	25,885	275,400	1,922
	2.49	33,160	331,100	3,026
	2.54	33,900	352,200	3,026
	3.18	42,470	394,200	4,608
	4.10	54,660	550,600	8,366
	2.32	31,000	362,000	1,442
	2.45	32,700	403,800	1,442
	2.95	39,400	428,700	1,442
	3.11	41,500	478,000	2,266

PROPERTIES

Q-FLOOR, Q-AIR FLOOR

NOTES:

Welded sections are designated by type and gauge of material. Letters designate type—RK, RKC, UKX, CK, FKX, NKX, and NKC. The first number following the letters indicates the gauge of metal in the top element and the second number indicates the gauge of metal in the bottom element.

1. All properties of all sections have been computed in accordance with A.I.S.I. Specifications for Design of Light Gauge Steel Structural Members (See Note 4).
2. "Y" values show distance from top of unit as used to center of gravity of unit.
3. All values given in table are for one-foot-widths of units.
4. End bearing values established by actual tests with a safety factor of 1.65 on yield strength.
5. To find total allowable uniformly distributed load per square foot, divide coefficient of bending given in table by the length of the span in feet squared. To find the allowable load which would cause the unit to deflect no greater than 1/360th of the span, divide the coefficient of deflection in column so marked by the cube of the length of the span in feet.
6. When the floor is continuous over three or more spans, the listed coefficient of strength may be increased by 1.25 and the coefficient of deflection increased by 1.89. When it is continuous over two spans, the listed coefficient of strength shall be used as is and the coefficient of deflection shall be increased by 2.40.
7. As with steel beams, it is generally considered good practice to limit the span of floor units to 25 times their depth with standard Q-Floor and 32 times with Q-Lock Floor. Due to increased stiffness resulting from the addition of concrete fill over the top of the steel floor, the depth under that condition may be considered as being the total depth of the concrete and the steel floor.
8. When used for electrical raceways, the Underwriters' Laboratories approval requires 18 gauge minimum thickness of steel for bottom element and 18 gauge minimum thickness for top element with minimum concrete fill of 2½". In some instances 20 gauge bottom elements are permitted. All Q-Lock units can be 20 gauge minimum top element. Consult local Robertson office for information on specifications.

NOTE: UK, FK and NK available. Their properties are almost identical to UKX, FKX and NKX. Check with H. H. R. Co. District Office.

ERECTION NOTE:

All Q-Floor units will be shipped to the field in standard widths and cut to proper lengths. Any additional fabrication such as column notching, bevel cuts, etc., are to be done by the Q-Floor erector.