



PRESTRESSED CONCRETE SLAB

# Safe Load Table

12" x 24" SECTION

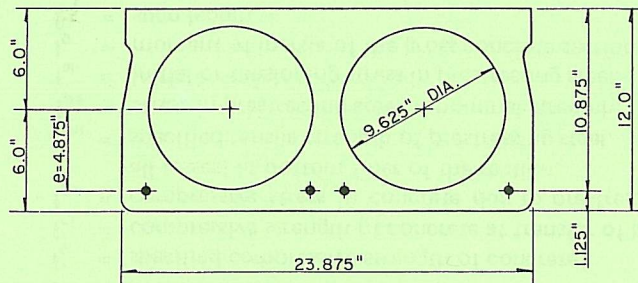
See instructions on back side of sheet for using this table.

## UNIFORMLY DISTRIBUTED SUPERIMPOSED\* LOAD IN PSF

Standard Designation	Strands No. & Size	Strand Area Sq. In.	M in Ft.-Kips per Unit	φM <sub>n</sub> in Ft.-Kips per Unit	Span Length (ℓ) in Ft.																							
					25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
1224D-D58	4-1/2	0.576	67.34	106.88	249	237	226	215	206	197	189	179	167	156	145	134	123	114	104	95	87	80	73	66	60	54	49	44
1224D-D50	2-1/2 & 2-7/16	0.504	60.83	94.60	241	229	219	209	199	187	171	157	144	132	121	111	102	94	86	79	72	65	59	53	47	42		
1224D-D43	4-7/16	0.432	54.33	82.03	240	225	204	186	169	154	140	128	117	106	97	88	81	73	66	60	54	49	44					
1224D-D40	2-1/2 & 1-7/16	0.396	51.07	75.63	224	203	184	167	151	137	125	113	103	93	85	77	70	63	57	51	45	40						
1224D-D38	2-7/16 & 2-3/8	0.376	49.27	71.99	211	190	172	156	141	128	116	105	95	86	78	70	63	57	51	45	40							
1224D-D36	1-1/2 & 2-7/16	0.360	47.82	69.05	200	180	162	147	133	120	109	98	89	80	72	65	58	52	46	41								
1224D-D32	4-3/8	0.320	44.21	61.67	172	154	139	125	112	101	91	81	73	65	58	51	46	40										
1224D-D30	2-7/16 & 1-3/8	0.296	42.04	57.20	155	139	124	111	100	89	80	71	63	56	49	43												
1224D-D29	2-1/2	0.288	41.32	55.71	149	133	119	107	95	85	76	68	60	53	47	41												
1224D-D28	2-3/8 & 2-5/16	0.276	40.23	53.46	141	126	112	100	89	79	70	62	55	48	42													

\*TABULATED LOADS ARE BASED ON U = 1.4D+ 1.7L AND WITH ALL LOAD SUPERIMPOSED ON THE STRUCTURAL SECTION CONSIDERED AS LIVE LOAD. (ALSO SEE NOTE 6)

### PHYSICAL PROPERTIES OF STRUCTURAL SECTION AND SPECIFICATIONS



$A = 141.0 \text{ in.}^2$        $f'_c = 5000 \text{ psi}$        $f_{pu} = 250 \text{ ksi}$   
 $b_w = 4.625 \text{ in.}$        $f'_{ci} = 3500 \text{ psi}$        $f_{si} = 175 \text{ ksi}$   
 $I_g = 2595.4 \text{ in.}^4$

NOTES:

1. Grouted weight of structural unit is 73 psf or 146 plf based on concrete unit weight of 150 pcf.
2. Design is based on ACI Standard, "Building Code Requirements for Reinforced Concrete (ACI 318-77)."
3. For spans in shaded area consult your local manufacturer.
4. No shear reinforcement is required for the tabulated loads.
5. Tabulated loads to the left of solid stepped line are controlled by shear strength of the concrete. Shear reinforcement may be added to increase the safe loads.
6. Tabulated loads to the right of dashed stepped line are controlled by permissible flexural tension at service loads.
7. For longer spans and conditions not covered in the load table, consult your local manufacturer.

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