



PRESTRESSED CONCRETE SLAB

# Safe Load Table

10" 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	$\phi M_n$ in Ft.-Kips per Unit	Span Length ( $\ell$ ) in Ft.																		
					20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
1024G-D58	4-1/2	0.576	45.81	74.64	301	284	268	253	230	210	190	170	152	136	122	109	97	87	77	68	60	52	45
1024G-D50	2-1/2 & 2-7/16	0.504	41.44	66.42	294	277	254	228	204	183	164	146	130	116	103	91	80	71	62	54	46	40	
1024G-D43	4-7/16	0.432	37.07	57.85	273	241	214	190	169	150	134	119	106	94	83	73	63	55	47	40			
1024G-D38	2-7/16 & 2-3/8	0.376	33.67	50.98	232	204	180	159	141	124	110	97	85	75	66	57	50	42					
1024G-D32	4-3/8	0.320	30.27	43.93	191	167	146	128	112	98	85	74	64	55	47	40							
1024G-D29	2-1/2	0.288	28.33	39.82	167	145	126	110	95	82	71	61	52	44									
<del>1024G-D28</del>	<del>2-3/8 &amp; 2-5/16</del>	<del>0.276</del>	<del>27.60</del>	<del>38.24</del>	<del>157</del>	<del>137</del>	<del>118</del>	<del>103</del>	<del>89</del>	<del>76</del>	<del>66</del>	<del>56</del>	<del>47</del>										

\*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

$A = 157.4 \text{ in.}^2$        $f'_c = 5000 \text{ psi}$        $f_{pu} = 250 \text{ ksi}$   
 $b_w = 6.25 \text{ in.}$        $f'_{ci} = 3500 \text{ psi}$        $f_{si} = 175 \text{ ksi}$   
 $I_g = 1690.8 \text{ in.}^4$

NOTES:

1. Grouted weight of structural unit is 82 psf or 164 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.

