



**MID-STATES**  
CONCRETE INDUSTRIES

500 South Park Avenue

South Beloit, IL 61080

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msprecast.com

## **8" X 48" HOLLOW CORE**

**2" STRUCTURAL TOPPING**

**(4 HOUR FIRE RATING)**

**COMPOSITE DESIGN**

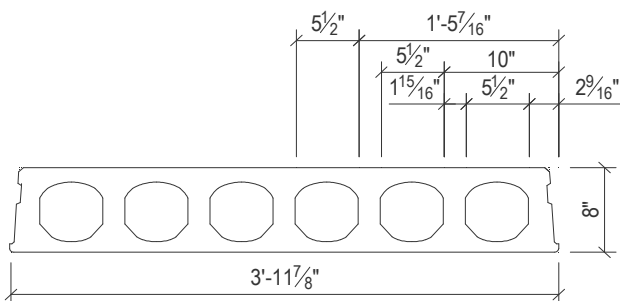
**SAFE LOAD TABLE**

Standard Designation	#/Size of 7-Wire strand	Strand Area Sq.In.	Mu in Ft.-Kips per unit	SIMPLE SPAN IN FEET-CENTER TO CENTER OF END BEARINGS																																			
				10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40					
1.75-28510	2-1/2,5-.6	1.391	179.79	632	568	515	457	403	359	322	291	261	298	280	246	217	191	168	148	130	115	100	88	76	66	57	48	40											
1.75-78	7-1/2	1.071	145.84	593	507	440	386	341	305	272	246	223	232	201	174	151	130	113	97	83	71	60	50	41															

### **UNIFORMLY DISTRIBUTED SUPERIMPOSED LOAD IN LBS. PER SQ. FT.**

(Includes the live load plus dead load that is in addition to the weight of the grouted slabs in place and 2" topping.)

**FOR LOADS & SPANS NOT SHOWN CONTACT MID-STATES CONCRETE INDUSTRIES**



HOLLOW CORE: F'c = 9000 psi, WEIGHT = 62 psf

TOPPING: F'c = 4000 psi, WEIGHT = 25 psf

1- Dead Load, 87 psf grouted weight of structural unit.

2- Tabulated loads are based on ACI318-14 where  $M_u = 1.2 M_d + 1.6 M_L$  and with all loads superimposed on the structural section considered as live load.

3- Camber is a result of the design rather than a design requirement. Heavy superimposed loads & / or long spans may cause excessive camber.

Contact Mid-States Concrete Industries for more specific camber information.

4- Shaded blue values are governed by shear. No ties required to topping.

5- Shaded red values governed by M<sub>cr</sub> criteria at partially developed strands.

6- All strand stresses to 65% of ultimate.

