

500 South Park Avenue South Beloit, IL 61080 800.236.1072 msprecast.com

8" X 48" HOLLOWCORE

2" STRUCTURAL TOPPING
(2 HOUR FIRE RATING)

COMPOSITE DESIGN

03.31.17

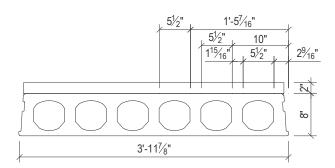
SAFE LOAD TABLE

Standard Designation	#/Size of 7-Wire strand	Strand Area Sq.ln.	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	2-1/2,56	1.391	179.79																	197	187	178	170	162	154	142	129	118	105	<u>94</u>	<u>83</u>	<u>73</u>	<u>64</u>	<u>56</u>
1.75-78	7-1/2	1.071	145.84											275	259	244	231	218	207	189	170	154	139	126	113	<u>102</u>	<u>90</u>	<u>79</u>	<u>68</u>	<u>59</u>	<u>50</u>	<u>42</u>	<u>34</u>	27
1.75-77	7-7/16	0.805	114.46										293	272	240	213	190	169	150	134	120	107	95	85	75	<u>66</u>	<u>55</u>	<u>46</u>	<u>37</u>	<u>29</u>				

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



- 1- Dead Load, 87 psf grouted weight of structural unit.
- 2- Tabulated loads are based on ACI318-02 where M_u =1.4 M_d +1.7 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- Loads to the left of the solid stepped line are governed by shear.
- 5- Loads underlined are controlled by permissible flexural tension at service loads.

PCI.

HOLLOWCORE: F'c = 9000 psi, WEIGHT = 62 psf

GROUT: F'c = 5000 psi

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