STRAND PATTERN DESIGNATION

76-S

- S = Straigt
- Diameter of strand in 16ths
- No. of Strand (7)

HOLLOWCORE PLANK

H8" x 48" SECTION
WITH 2" TOPPING (5,000 PSI)

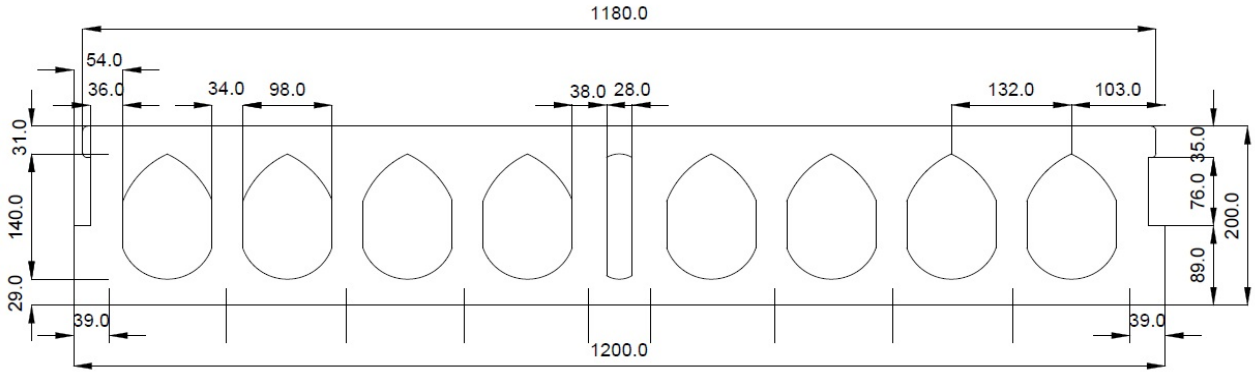
AERIAL PRECAST CONCRETE & STRUCTURAL STEEL

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

Standard Designation	7-Wire 270 Lolax P/S Strand Combination	P/S Strand Area Sq. In.	Ultimate Bending Moment, ϕ Mn Kip-Ft. per Unit	SIMPLE SPAN IN FEET																								ϕ Vcw in Kips per Unit
				10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
58 - S	5-1/2"ϕ	0.78	120.4	505	505	500	492	451	414	384	357	333	310	293	274	245	219	196	177	159	143	126	110	95	82	70	59	21.5
68 - S	6-1/2"ϕ	0.918	136.5	510	510	505	502	463	426	393	366	342	319	299	282	267	251	239	216	195	177	158	140	124	110	97	84	21.5
78 - S	7-1/2"ϕ	1.071	157.5	519	515	510	505	472	435	402	375	348	325	305	288	273	257	245	232	220	207	186	167	149	133	119	106	21.5
* INCLUDES THE LIVE LOAD PLUS ANY DEAD LOAD THAT IS ADDITIONAL TO THE WEIGHT OF THE BARE GROUTED PLANKS & TOPPING																												

<u>NOTES:</u>

1. Design Standard: ACI 318-2005
2. For longer spans, heavier loads, or conditions consult Aerial Precast.
3. The table indicates maximum safe loads. Camber and deflection must always be invesigated by the architect, and/or engineer for the contemplated loading and span so that these factors are compatible with the contiguous materials in the proposed structure.



Grouted weight of plank & 2" topping is 60+25 = 85 lbs. per sq. ft.

f'c = 5,000 psi f'ci = 3,000 psi Area = 222 in.²

f'pu = 270, 000 psi Ic = 3,143 in.⁴ bw = 14 in.

wt: 83 psf