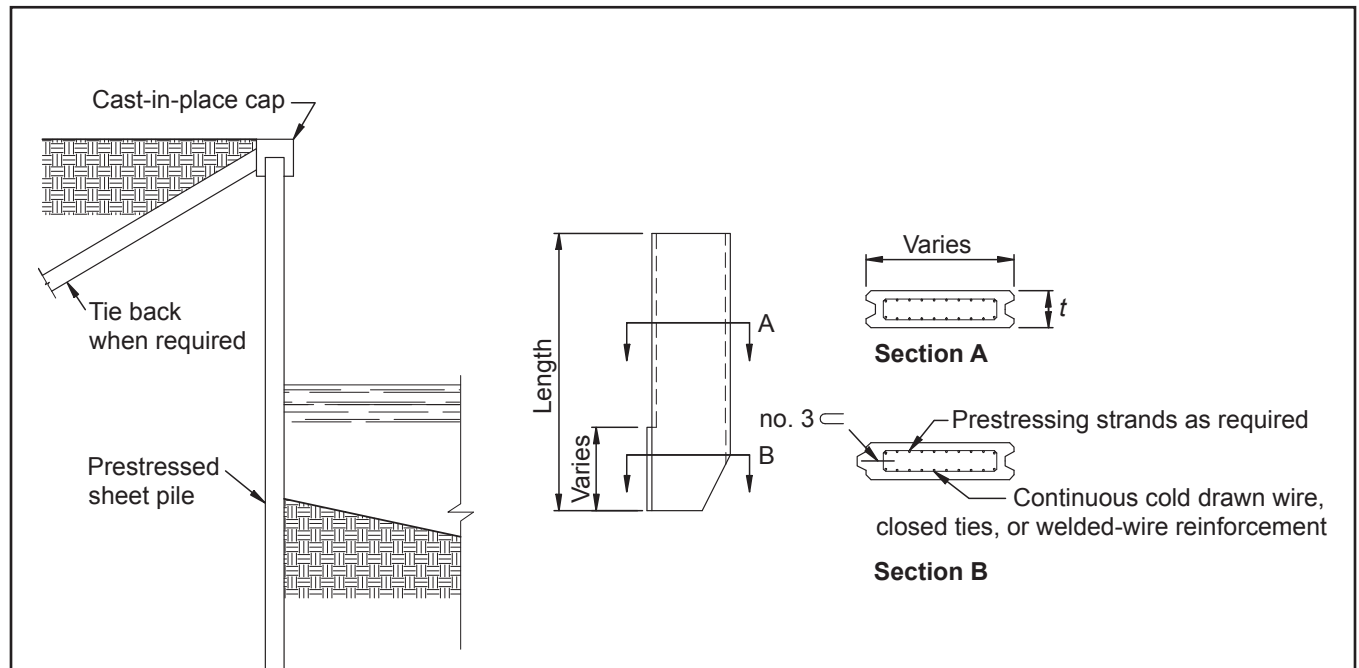


Design Aid 3.13.8. Section Properties and Allowable Service Loads for Prestressed Sheet Piles



Thickness <i>t</i> in.	Section properties per foot of width				Maximum allowable service load moment, ^b kip-ft per foot	
	Area in. ²	Weight ^a lb/ft ²	Moment of inertia in. ⁴	Section modulus in. ³	<i>f</i> ' _c = 5000 psi	<i>f</i> ' _c = 6000 psi
6 ^c	72	75	216	72	6.0	7.2
8 ^c	96	100	512	128	10.6	12.8
10	120	125	1000	200	16.6	20.0
12	144	150	1728	288	24.0	28.8
16	192	200	4096	512	42.7	51.2
18	216	225	5832	648	54.0	64.8
20	240	250	8000	800	66.7	80.0
24	288	300	13,824	1152	96.0	115.2

Notes:

^a Normalweight concrete.

^b Based on zero tension and maximum 0.4*f*'_c compression.

^c Strand can be placed in a single layer in thin sections. Strands should be arranged concentrically within the section. However, where site conditions require it, strand may be placed eccentrically and the engineer shall consider the effect of this eccentricity.

^d Maximum allowable service load moments based upon *f*_{pc} = 1000 psi for *f*'_c = 5000 and *f*_{pc} = 1200 psi for *f*'_c = 6000 psi. Check with local producers for availability.