

Sizing Dock Pile Caps

Maximum Loading/Pounds per Linear Foot (PLF)

SYP #2 P.T.

Uniform Load/Simple Beam Span/NDS-91

40#/Ft² Live Load; 6#/Ft² Dead Load; 46#/Ft² Total Load

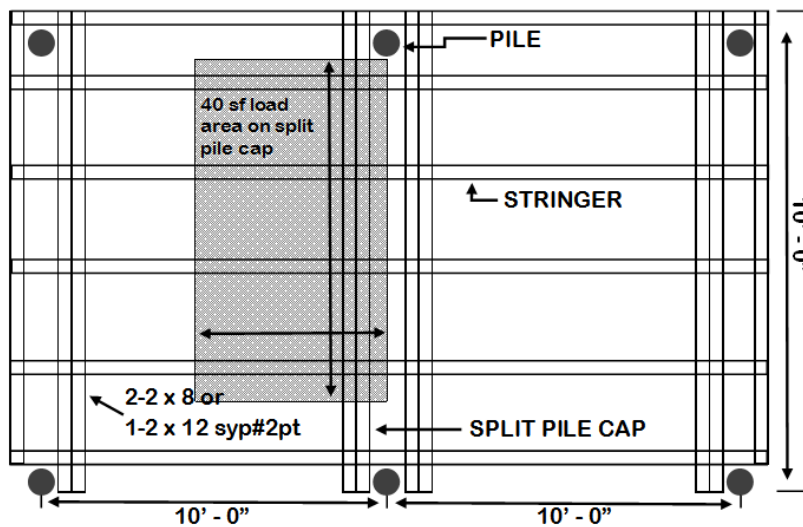
Total Load PLF							
Pile Cap Span:	4'	5'	6'	7'	8'	9'	10'
<u>Size</u>							
1-2x8	450	330	260	210	160	125	100
2-2x8	900	660	520	420	320	250	200
1-2x10	670	460	355	290	230	180	145
2-2x10			715	585	460	360	290
1-2x12			485	375	315	245	200

Go to desired pile cap span column to a value equal or greater then follow line across to size pile cap.

FORMULA:

Load Area X Design Load = Total Load

Total Load / Pile Cap Span = Load per Linear Feet



Load area on pile cap has been reduced from 50 ft² to 40 ft² by attaching each end stringers to piles with 2-5/8" x 5" HDG lag bolts w/washers at each pile location.

$$5' \times 8' = 40 \text{ Ft}^2 \times 46\#/ \text{Ft}^2 = 1,840\#$$

$$1,840/10 = 184 \text{ PLF}^*$$

*Required beam with a 10' span with a 184# PLF load would be 2-2x8 or 1-2x12.

WORK SHEET:

_____ X 46#/ft² = _____ # / _____ = _____ PLF