

Swift Lift Anchor Effective Tensile Capacity in Thin Walls

Swift Lift Anchor Tons x Length	Effective Wall Thickness 2de	Actual Edge Distance de	Tensile Safe Working Load Per Anchor				
			Actual Corner Distance				
			12"	18"	24"	36"	45"
8 Tons x 13-3/8" Long	4-3/4"	2-3/8"	4,000 lbs.	4,800 lbs.	5,400 lbs.	6,000 lbs.	6,100 lbs.
	5"	2-1/2"	4,200 lbs.	5,100 lbs.	5,700 lbs.	6,300 lbs.	6,400 lbs.
	6"	3"	5,100 lbs.	6,100 lbs.	6,800 lbs.	7,500 lbs.	7,600 lbs.
	7"	3-1/2"	5,900 lbs.	7,100 lbs.	8,000 lbs.	8,800 lbs.	8,900 lbs.
	8"	4"	6,800 lbs.	8,100 lbs.	9,100 lbs.	10,100 lbs.	10,200 lbs.
	10"	5"	8,500 lbs.	10,200 lbs.	11,400 lbs.	12,600 lbs.	12,700 lbs.
	12"	6"	10,200 lbs.	12,200 lbs.	13,700 lbs.	15,100 lbs.	15,200 lbs.
8 Tons x 26-3/4" Long	4-3/4"	2-3/8"	5,800 lbs.	7,000 lbs.	8,000 lbs.	9,600 lbs.	11,200 lbs.
	5"	2-1/2"	6,100 lbs.	7,400 lbs.	8,500 lbs.	10,100 lbs.	11,800 lbs.
	6"	3"	7,300 lbs.	8,900 lbs.	9,500 lbs.	12,100 lbs.	14,100 lbs.
	7"	3-1/2"	8,500 lbs.	10,300 lbs.	11,800 lbs.	14,200 lbs.	16,000 lbs.
	8"	4"	9,700 lbs.	11,800 lbs.	13,500 lbs.	16,000 lbs.	16,000 lbs.
	10"	5"	12,100 lbs.	14,800 lbs.	16,000 lbs.	16,000 lbs.	16,000 lbs.
	12"	6"	14,500 lbs.	16,000 lbs.	16,000 lbs.	16,000 lbs.	16,000 lbs.

Safe Working Load provides a factor of safety of approximately 4 to 1 in 4,500 psi normal weight concrete.

Swift Lift Anchor Tons x Length	Effective Wall Thickness 2de	Actual Edge Distance de	Tensile Safe Working Load Per Anchor				
			Actual Corner Distance				
			10"	16"	24"	30"	42"
20 Tons x 19-3/4" Long	6-1/2"	3-1/4"	6,200 lbs.	7,500 lbs.	9,400 lbs.	10,300 lbs.	11,500 lbs.
	7"	3-1/2"	6,700 lbs.	8,100 lbs.	10,100 lbs.	11,100 lbs.	12,400 lbs.
	8"	4"	7,600 lbs.	8,900 lbs.	11,500 lbs.	12,600 lbs.	14,200 lbs.
	10"	5"	9,500 lbs.	11,600 lbs.	14,400 lbs.	15,800 lbs.	17,700 lbs.
	12"	6"	11,500 lbs.	14,000 lbs.	17,300 lbs.	19,000 lbs.	22,000 lbs.
	14"	7"	13,400 lbs.	16,300 lbs.	20,100 lbs.	22,100 lbs.	24,800 lbs.

Safe Working Load provides a factor of safety of approximately 4 to 1 in 4,500 psi normal weight concrete.

To recalculate the safe working load when the anchor is used in a lower strength concrete, multiply the tabulated Safe Working Load by the following reduction factors:

Concrete Strength	Reduction Factor
2,000 psi	.66
2,500 psi	.74
3,000 psi	.81
3,500 psi	.88
4,000 psi	.94
4,500 psi	1.00

Swift Lift System

Vermont Agency of Transportation  
**RECEIVED**  
 CK'D BY NV08, JMI, KM, TM OK'D BY JG  
 March 21, 2017  
 RESUBMIT No Approved  
 BY K. Higgins DATE 03/23/17