

Ultimate Load Capacities for Sure-Lag in Normal-Weight Concrete^{1,2,3}

Rod/Anchor Diameter <i>d</i> in.	Minimum Embedment Depth <i>h_v</i> in.	Minimum Concrete Compressive Strength					
		2,000 psi		4,000 psi		6,000 psi	
		Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.
1/4 Short	1	195	790	275	1,005	365	1,005
1/4 Long	1 1/2	295	790	335	1,005	415	1,005
5/16 Short	1 1/4	305	995	505	1,115	655	1,115
5/16 Long	1 3/4	365	995	540	1,115	560	1,115
3/8 Short	1 3/4	585	1,175	845	1,450	900	1,450
3/8 Long	2 1/2	735	1,175	1,070	1,450	1,285	1,450
1/2 Short	2	790	1,335	1,185	1,600	1,255	1,600
1/2 Long	3	1,450	1,335	2,100	1,600	2,360	1,600
5/8 Short	2	850	2,000	1,220	2,250	1,345	2,250

1. Sure-Lags are not recommended for use in either life safety or overhead applications.
2. Tabulated load values are ultimate loads and should be reduced by a factor of safety of 4.0 or greater to determine the allowable working loads.
3. Concrete compressive strength must be at the specified minimum at the time of installation.

Allowable Load Capacities for Sure-Lag in Normal-Weight Concrete^{1,2,3}

Rod/Anchor Diameter <i>d</i> in.	Minimum Embedment Depth <i>h_v</i> in.	Minimum Concrete Compressive Strength					
		2,000 psi		4,000 psi		6,000 psi	
		Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.
1/4 Short	1	45	200	65	250	85	250
1/4 Long	1 1/2	70	200	75	250	100	250
5/16 Short	1 1/4	75	245	125	275	155	275
5/16 Long	1 3/4	85	245	125	275	135	275
3/8 Short	1 3/4	135	290	205	360	220	360
3/8 Long	2 1/2	175	290	265	360	315	360
1/2 Short	2	195	330	295	400	315	400
1/2 Long	3	355	330	515	400	585	400
5/8 Short	2	205	500	300	560	325	560

1. Sure-Lags are not recommended for use in either life safety or overhead applications.
2. Tabulated load values are ultimate loads and should be reduced by a factor of safety of 4.0 or greater to determine the allowable working loads.
3. Concrete compressive strength must be at the specified minimum at the time of installation.