

Ultimate Load Capacities for Dual Machine Bolt Anchor in Normal-Weight Concrete ^{1,2,3,4,5,6}

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	1 1/4	700	1,110	890	1,135	1,210	1,335
5/16	1 1/2	1,125	1,735	1,495	2,020	2,155	2,155
3/8	1 3/4	1,360	2,690	1,995	3,000	3,080	4,030
1/2	2 1/4	2,585	3,740	3,545	4,310	4,640	6,930
5/8	2 1/2	4,285	9,640	6,145	10,270	6,885	11,580
3/4	3 1/2	6,000	10,920	8,140	13,330	11,500	14,480

1. Dual Machine Bolt anchors are not recommended for use in life safety or overhead applications.
2. Ultimate load capacities must be reduced by a minimum safety factor of 4.0 or greater to determine the Allowable working load.
3. Consideration of safety factor of 20 or higher may be necessary depending upon the application such as sustained tensile loading applications.
4. Tables above are calculated for anchors installed in normal weight concrete.
5. Concrete compressive strength must be at the specified minimum at the time of installation.
6. Linear interpolation may be used to determine loads for immediate compressive strength.

Allowable Load Capacities for Dual Machine Bolt Anchor in Normal-Weight Concrete ^{1,2,3,4,5,6}

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	1 1/4	175	280	215	285	300	335
5/16	1 1/2	280	435	370	505	535	540
3/8	1 3/4	335	675	495	750	765	1,010
1/2	2 1/4	645	935	885	1,080	1,155	1,735
5/8	2 1/2	1,065	2,410	1,530	2,570	1,715	2,895
3/4	3 1/2	1,490	2,730	2,030	3,335	2,870	3,620

1. Dual Machine Bolt anchors are not recommended for use in life safety or overhead applications.
2. Ultimate load capacities must be reduced by a minimum safety factor of 4.0 or greater to determine the Allowable working load.
3. Consideration of safety factor of 20 or higher may be necessary depending upon the application such as sustained tensile loading applications.
4. Tables above are calculated for anchors installed in normal weight concrete.
5. Concrete compressive strength must be at the specified minimum at the time of installation.
6. Linear interpolation may be used to determine loads for immediate compressive strength.