

Ultimate and Allowable Load Capacities for Zinc Nail-in Anchors in Normal-Weight Concrete ^{1,2,3,4,5}

Rod/ Anchor Diameter d in.	Min. Embed. Depth h _v in.	Minimum Concrete Compressive Strength											
		2,000 psi				4,000 psi				6,000 psi			
		Tension		Shear		Tension		Shear		Tension		Shear	
		Ultimate lbs.	Allowable lbs.	Ultimate lbs.	Allowable lbs.	Ultimate lbs.	Allowable lbs.	Ultimate lbs.	Allowable lbs.	Ultimate lbs.	Allowable lbs.	Ultimate lbs.	Allowable lbs.
3/16	3/4	280	65	415	105	395	95	560	140	475	115	560	140
1/4	5/8	405	100	440	110	570	140	655	165	575	140	655	165
	3/4	535	130	600	150	760	180	850	215	795	195	850	215
	1	615	150	640	160	870	210	890	225	890	215	890	225
	1-1/4	695	170	720	180	980	245	970	245	980	245	990	250

1. Allowable load values listed above, have been calculated using a safety factor of 4.0.
2. Linear interpolation may be used to determine allowable loads for anchors at intermediate compressive strengths.
3. Tabulated load values are for anchors installed in concrete, concrete compressive strength must be at the minimum at the time of installation.
4. All anchors were installed in normal-weight concrete.
5. Zinc Nail in anchors are not recommended for overhead use or life safety applications.