

Ultimate and Allowable Load Capacities for Removable 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.
1/4	5/8	670	165	650	165	840	210	880	220	885	220	880	220
	3/4	785	195	805	200	1,125	280	1,115	280	1,180	295	1,115	280
	7/8	925	230	990	250	1,200	295	1,230	310	1,240	310	1,230	310
	1-1/8	1,210	300	1,365	340	1,350	330	1,470	370	1,450	365	1,470	370
	1-3/8	1,315	320	1,555	390	1,440	365	1,645	410	1,520	375	1,645	410
	1-3/4	1,470	360	1,840	460	1,595	395	1,910	480	1,650	410	1,910	480
	1-7/8	1,480	370	1,840	460	1,600	400	1,910	480	1,660	415	1,910	480

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.