

Column Load Capacity Comparison

DEAN COLUMN CO., INC.



	Dean Column Safe Load		Dean Column Ultimate Load	
	3-1/2"	4"	3-1/2"	4"
6-0	16,500#	21,300#	31.0 kips	40.0 kips
6-6	15,850#	20,650#	29.8 kips	38.8 kips
7-0	15,200#	20,000#	28.7 kips	37.7 kips
7-6	14,600#	19,350#	27.5 kips	36.4 kips
8-0	14,000#	18,700#	26.3 kips	35.2 kips
8-6	13,300#	18,000#	25.0 kips	33.9 kips
9-0	12,600#	17,300#	23.8 kips	32.6 kips
10-0	11,300#	15,800#	21.3 kips	29.8 kips
11-0	10,000#	14,400#	18.7 kips	27.1 kips
12-0	8,700#	12,900#	16.4 kips	24.3 kips
14-0	N/A	10,200#	N/A	19.2 kips

Ultimate Load: the specific load that a structure, member or part must withstand without failure.

Safe Load: a load determined by using a safety factor.

Safety Factor: a factor that engineers use to allow for the failure stress or stresses assumed to exist in a structure or a member. It provides a margin of error in the strength, rigidity, deformation, and endurance of a structure or its component parts to compensate for irregularities in structural materials and workmanship, uncertainties involved in mathematical analysis and stress distribution, service deterioration, and other unevaluated conditions.

Dead Load: a static load due to the weight of the structure.

Live Load: a dynamic load (such as traffic) that is applied to a structure suddenly or that is accompanied by vibration, oscillation, or other conditions that affects its intensity.

Kips: a unit of weight (equal to 1,000 pounds) that is used to express deadweight loads.