

Meeting Safety Standards



360 Newtons per metre run (N/m) Industrial Use-Non Emergency
 740 Newtons per metre run (N/m) Commercial Use
 1500 Newtons per metre run (N/m) Retail/Public Access

The current regulations give various design requirements to be fulfilled of which the Design Load is the most important.

Kee Klamp Load Chart

Tube Size	6 3.2mm	7 3.2mm	7 4mm	8 3.2mm	8 4mm	8 5mm	9 3.65mm	9 4.5mm
Grade	BS EN 10255 Medium	BS EN 10255 Medium	BS EN 10255 Heavy	BS EN 10255 Medium	BS EN 39	EN 10210 S355 JOH	BS EN 10255 Medium	BS EN 10255 Heavy
Design Load Criteria	Upright Height 900mm							
360 N/m	814mm (4.44KN)	1369mm (6.52KN)	1595mm (7.60KN)	1828mm (7.73KN)	2584mm (10.92KN)	3052mm (12.90KN)	3265mm (13.80KN)	3856mm (14.75KN)
740 N/m	396mm (4.44KN)	666mm (6.52KN)	776mm (7.60KN)	889mm (7.73KN)	1257mm (10.92KN)	2229mm (19.36KN)	1588mm (13.80KN)	1876mm (14.75KN)
1500 N/m	195mm (4.44KN)	329mm (6.52KN)	383mm (7.60KN)	439mm (7.73KN)	620mm (10.92KN)	1100mm (19.36KN)	784mm (13.80KN)	925mm (14.75KN)
Design Load Criteria	Upright Height 1000mm							
360 N/m	732mm (4.44KN)	1232mm (6.52KN)	1435mm (7.60KN)	1645mm (7.73KN)	2326mm (10.92KN)	2930mm (13.76KN)	2939mm (13.80KN)	3470mm (14.75KN)
740 N/m	356mm (4.44KN)	599mm (6.52KN)	698mm (7.60KN)	800mm (7.73KN)	1131mm (10.92KN)	2006mm (19.36KN)	1430mm (13.80KN)	1688mm (14.75KN)
Design Load Criteria	Upright Height 1100mm							
360 N/m	666mm (4.44KN)	1120mm (6.52KN)	1305mm (7.60KN)	1496mm (7.73KN)	2114mm (10.92KN)	2778mm (14.35KN)	2671mm (13.80KN)	3155mm (14.75KN)
740 N/m	324mm (4.44KN)	545mm (6.52KN)	635mm (7.60KN)	728mm (7.73KN)	1028mm (10.92KN)	1824mm (19.36KN)	1300mm (13.80KN)	1535mm (14.75KN)
1500 N/m	160mm (4.44KN)	269mm (6.52KN)	313mm (7.60KN)	359mm (7.73KN)	507mm (10.92KN)	900mm (19.36KN)	641mm (13.80KN)	757mm (14.75KN)

Base upon rail diameter being the same as the upright but using BS EN 10255 medium wall tubing.

Design Loads are as stated in BS 8118, BS 6180, BS 6399 & BS 7818.

The above bay sizes are based upon using the **KEE KLAMP** Type 62 base fitting fixed perpendicular to the line of the handrails.

The figures shown in brackets are the required anchor pull out loads for the bay size indicated after all reduction factors have been applied.

Notes

- The table is based on the maximum permissible bending moment of the tube
- All rails are the same tube size as uprights but in BS EN 10255 medium grade tube
- Where tube is to be used to form ground sockets:
 - Tube size 6 fits inside tube size 7 medium grade only
 - Tube size 8 fits inside tube size 9 all grades.

Kee Lite Load Chart

Tube Size	6 3.38mm	7 3.56mm	8 4.05mm	9 4.06mm
Grade	6082 T6	6082 T6	6082 T6	6082 T6
Design Load Criteria	Upright Height 900mm			
360 N/m	720mm	1388mm	1879mm	2490mm
740 N/m	N/A	N/A	1220mm	1940mm
Design Load Criteria	Upright Height 1000mm			
360 N/m	540mm	1117mm	1664mm	2370mm
740 N/m	N/A	N/A	950mm	1690mm
Design Load Criteria	Upright Height 1100mm			
360 N/m	400mm	871mm	1398mm	2205mm
740 N/m	N/A	N/A	730mm	1400mm

Based upon rail diameter being the same size & grades as the upright.

Design Loads are as stated in BS 8118, BS 5950, BS 6180, BS 6399 & BS 7818.

To achieve bigger bay sizes than those stated please contact Kee Safety Ltd for further details.

KEE LITE components are made from high grade Aluminium Silicon Magnesium Alloy.

- Recommended set screw torque is 39Nm
- Minimum slip load capacity on aluminium tube: 7.56KN (safety factor = 2 with tube having a minimum UTS of 275 N/mm²)
- Large grub screws are designed to resist thread stripping
- The core range of **KEE LITE** fittings has undergone independent testing by TÜV.