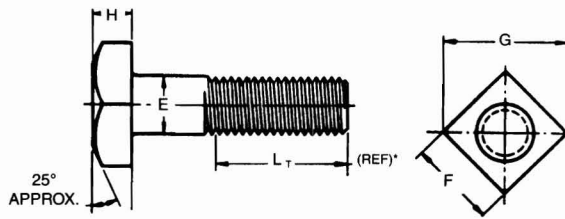
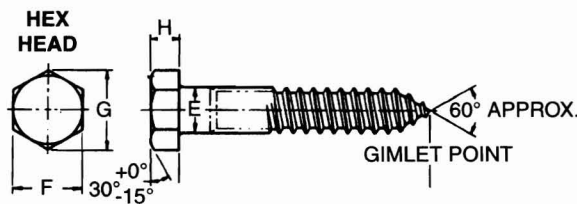


SQUARE HEAD BOLTS



| Nominal Size or Basic Bolt Dia. | E | | F | | | | G | | H | | | L _T (Ref) Thread Length For Bolt Lengths | |
|---------------------------------|----------|---------|--------------------|-------|----------------------|-------|--------|-------|-------|--------------|--------------|--|--|
| | Body Dia | | Width Across Flats | | Width Across Corners | | Height | | | Less Than 6" | More Than 6" | | |
| | Max | Basic | Max | Min | Max | Min | Basic | Max | Min | Basic | Basic | | |
| 1/4 | 0.260 | 3/8 | 0.375 | 0.362 | 0.530 | 0.498 | 11/64 | 0.188 | 0.156 | 0.750 | 1.000 | | |
| 5/16 | 0.324 | 1/2 | 0.500 | 0.484 | 0.707 | 0.665 | 13/64 | 0.220 | 0.186 | 0.875 | 1.125 | | |
| 3/8 | 0.388 | 9/16 | 0.562 | 0.544 | 0.795 | 0.747 | 1/4 | 0.268 | 0.232 | 1.000 | 1.250 | | |
| 7/16 | 0.452 | 5/8 | 0.625 | 0.603 | 0.884 | 0.828 | 19/64 | 0.316 | 0.278 | 1.125 | 1.375 | | |
| 1/2 | 0.515 | 3/4 | 0.750 | 0.725 | 1.061 | 0.995 | 21/64 | 0.348 | 0.308 | 1.250 | 1.500 | | |
| 5/8 | 0.642 | 15/16 | 0.938 | 0.906 | 1.326 | 1.244 | 27/64 | 0.444 | 0.400 | 1.500 | 1.750 | | |
| 3/4 | 0.768 | 1 1/8 | 1.125 | 1.088 | 1.591 | 1.494 | 1/2 | 0.524 | 0.476 | 1.750 | 2.000 | | |
| 7/8 | 0.895 | 1 5/16 | 1.312 | 1.269 | 1.856 | 1.742 | 19/32 | 0.620 | 0.568 | 2.000 | 2.250 | | |
| 1 | 1.022 | 1 1/2 | 1.500 | 1.450 | 2.121 | 1.991 | 21/32 | 0.684 | 0.628 | 2.250 | 2.500 | | |
| 1 1/8 | 1.149 | 1 11/16 | 1.688 | 1.631 | 2.386 | 2.239 | 3/4 | 0.780 | 0.720 | 2.250 | 2.750 | | |
| 1 1/4 | 1.277 | 1 7/8 | 1.875 | 1.812 | 2.652 | 2.489 | 27/32 | 0.876 | 0.812 | 2.750 | 3.000 | | |
| 1 3/8 | 1.404 | 2 1/16 | 2.062 | 1.994 | 2.917 | 2.738 | 29/32 | 0.940 | 0.872 | 3.000 | 3.250 | | |
| 1 1/2 | 1.531 | 2 1/4 | 2.250 | 2.175 | 3.182 | 2.986 | 1 | 1.036 | 0.964 | 3.250 | 3.500 | | |

HEX HEAD LAG SCREWS



| Nominal Size or Basic Product Dia | E | | F | | | G | | H | | | Threads per inch |
|-----------------------------------|-----------------------|-------|--------------------|-------|-------|----------------|-------|--------|-------|-------|------------------|
| | Body or Shoulder Dia. | | Width Across Flats | | | Hex Lag Screws | | Height | | | |
| | Max | Min | Basic | Max | Min | Max | Min | Basic | Max | Min | |
| No. 10 | 0.199 | 0.178 | 9/32 | 0.281 | 0.271 | 0.323 | 0.309 | 1/8 | 0.140 | 0.110 | 11 |
| 1/4 | 0.260 | 0.237 | 3/8 | 0.375 | 0.362 | - | - | - | - | - | 10 |
| 1/4 ** | 0.260 | 0.237 | 7/16 | 0.438 | 0.425 | 0.505 | 0.484 | 11/64 | 0.188 | 0.150 | 10 |
| 5/16 | 0.324 | 0.298 | 1/2 | 0.500 | 0.484 | 0.577 | 0.552 | 7/32 | 0.235 | 0.195 | 9 |
| 3/8 | 0.388 | 0.360 | 9/16 | 0.562 | 0.544 | 0.650 | 0.620 | 1/4 | 0.268 | 0.226 | 7 |
| 7/16 | 0.452 | 0.421 | 5/8 | 0.625 | 0.603 | 0.722 | 0.687 | 19/64 | 0.316 | 0.272 | 7 |
| 1/2 | 0.515 | 0.482 | 3/4 | 0.750 | 0.725 | 0.866 | 0.826 | 11/32 | 0.364 | 0.302 | 6 |
| 5/8 | 0.642 | 0.605 | 15/16 | 0.938 | 0.906 | 1.083 | 1.033 | 27/64 | 0.444 | 0.378 | 5 |
| 3/4 | 0.768 | 0.729 | 1 1/8 | 1.125 | 1.088 | 1.299 | 1.240 | 1/2 | 0.524 | 0.455 | 4 1/2 |
| 7/8 | 0.895 | 0.852 | 1 15/16 | 1.312 | 1.269 | 1.516 | 1.447 | 37/64 | 0.604 | 0.531 | 4 |
| 1 | 1.022 | 0.976 | 1 1/2 | 1.500 | 1.450 | 1.732 | 1.653 | 43/64 | 0.700 | 0.591 | 3 1/2 |
| 1 1/8 | 1.149 | 1.098 | 1 11/16 | 1.688 | 1.631 | 1.949 | 1.859 | 3/4 | 0.780 | 0.658 | 3 1/4 |
| 1 1/4 | 1.277 | 1.223 | 1 7/8 | 1.875 | 1.812 | 2.165 | 2.066 | 27/32 | 0.876 | 0.749 | 3 1/4 |

** Hex Lag Screw