

# **Supplement to ASME B18.2.6-2010 Fasteners for Use in Structural Applications**

The supplement correction listed below applies to ASME B18.2.6-2010. This supplement was approved by the American National Standards Institute (ANSI) on May 5, 2011. See revised table on the overleaf.

| <i>Page</i> | <i>Location</i> | <i>Change</i>  |
|-------------|-----------------|----------------|
| 2           | Table 1         | Note (6) added |

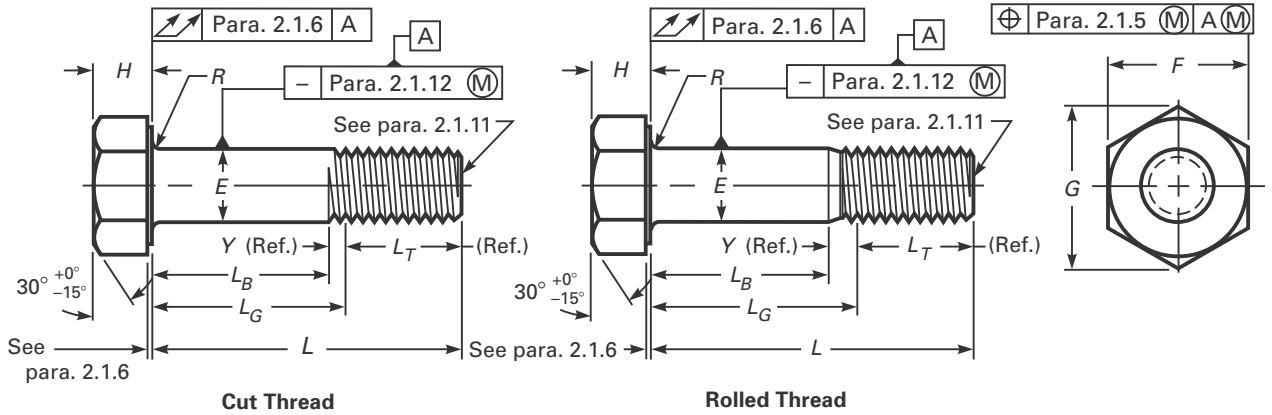
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
Three Park Avenue, New York, NY 10016-5990

May 2011



M0161S

**Table 1 Dimensions of Heavy Hex Structural Bolts**



| Nominal Size<br>or Basic<br>Product<br>Diameter | Body<br>Diameter,<br><i>E</i><br>[Note (6)] |       | Width Across Flats,<br><i>F</i><br>[Note (2)] |                  |               | Width<br>Across<br>Corners,<br><i>G</i> |       | Head Height,<br><i>H</i><br>[Note (3)] |                 |                | Radius of<br>Fillet,<br><i>R</i> |       | Thread<br>Length,<br><i>L<sub>T</sub></i><br>[Note (4)] | Transition<br>Thread<br>Length,<br><i>Y</i><br>[Note (4)] | Maximum<br>Total<br>Runout<br>of<br>Bearing<br>Surface<br>FIM |            |
|-------------------------------------------------|---------------------------------------------|-------|-----------------------------------------------|------------------|---------------|-----------------------------------------|-------|----------------------------------------|-----------------|----------------|----------------------------------|-------|---------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------|------------|
|                                                 |                                             |       |                                               |                  |               |                                         |       |                                        |                 |                |                                  |       |                                                         |                                                           |                                                               |            |
|                                                 | [Note (1)]                                  | Max.  | Min.                                          | Nominal          | Max.          | Min.                                    | Max.  | Min.                                   | Nominal         | Max.           | Min.                             | Max.  | Min.                                                    | Ref.                                                      | Ref.                                                          | [Note (5)] |
|                                                 | $\frac{1}{2}$                               | 0.500 | 0.515                                         | 0.482            | $\frac{7}{8}$ | 0.875                                   | 0.850 | 1.010                                  | 0.969           | $\frac{5}{16}$ | 0.323                            | 0.302 | 0.031                                                   | 0.009                                                     | 1.00                                                          | 0.19       |
| $\frac{5}{8}$                                   | 0.625                                       | 0.642 | 0.605                                         | $1\frac{1}{16}$  | 1.062         | 1.031                                   | 1.227 | 1.175                                  | $\frac{25}{64}$ | 0.403          | 0.378                            | 0.062 | 0.021                                                   | 1.25                                                      | 0.22                                                          | 0.019      |
| $\frac{3}{4}$                                   | 0.750                                       | 0.768 | 0.729                                         | $1\frac{1}{4}$   | 1.250         | 1.212                                   | 1.443 | 1.383                                  | $\frac{15}{32}$ | 0.483          | 0.455                            | 0.062 | 0.021                                                   | 1.38                                                      | 0.25                                                          | 0.022      |
| $\frac{7}{8}$                                   | 0.875                                       | 0.895 | 0.852                                         | $1\frac{7}{16}$  | 1.438         | 1.394                                   | 1.660 | 1.589                                  | $\frac{35}{64}$ | 0.563          | 0.531                            | 0.062 | 0.031                                                   | 1.50                                                      | 0.28                                                          | 0.025      |
| 1                                               | 1.000                                       | 1.022 | 0.976                                         | $1\frac{5}{8}$   | 1.625         | 1.575                                   | 1.876 | 1.796                                  | $\frac{39}{64}$ | 0.627          | 0.591                            | 0.093 | 0.062                                                   | 1.75                                                      | 0.31                                                          | 0.028      |
| $1\frac{1}{8}$                                  | 1.125                                       | 1.149 | 1.098                                         | $1\frac{13}{16}$ | 1.812         | 1.756                                   | 2.093 | 2.002                                  | $\frac{11}{16}$ | 0.718          | 0.658                            | 0.093 | 0.062                                                   | 2.00                                                      | 0.34                                                          | 0.032      |
| $1\frac{1}{4}$                                  | 1.250                                       | 1.277 | 1.223                                         | 2                | 2.000         | 1.938                                   | 2.309 | 2.209                                  | $\frac{25}{32}$ | 0.813          | 0.749                            | 0.093 | 0.062                                                   | 2.00                                                      | 0.38                                                          | 0.035      |
| $1\frac{3}{8}$                                  | 1.375                                       | 1.404 | 1.345                                         | $2\frac{3}{16}$  | 2.188         | 2.119                                   | 2.526 | 2.416                                  | $\frac{27}{32}$ | 0.878          | 0.810                            | 0.093 | 0.062                                                   | 2.25                                                      | 0.44                                                          | 0.038      |
| $1\frac{1}{2}$                                  | 1.500                                       | 1.531 | 1.470                                         | $2\frac{3}{8}$   | 2.375         | 2.300                                   | 2.742 | 2.622                                  | $\frac{15}{16}$ | 0.974          | 0.902                            | 0.093 | 0.062                                                   | 2.25                                                      | 0.44                                                          | 0.041      |

GENERAL NOTE: See additional requirements in section 2.

NOTES:

- (1) See para. 2.4.1.
- (2) See paras. 2.1.2 and 2.1.3.
- (3) See para. 2.1.4.
- (4) See para. 2.1.10.2.
- (5) See para. 2.1.6.
- (6) The body diameter limits are shown in this table. Any swell or fin under the head or any die seam on the body shall not exceed the basic bolt diameter by the following:
  - (a) 0.030 in. for sizes 1/2 in.
  - (b) 0.050 in. for sizes 5/8 in. and 3/4 in.
  - (c) 0.060 in. for sizes over 3/4 in. through 1 1/4 in.
  - (d) 0.090 in. for sizes over 1 1/4 in.