

# DATA SHEET FOR ENGINEERS

## FACTORS FOR CONVERSION OF ONE SYSTEM TO ANOTHER

| Measurement | FPS to metric and S.I. |                 |             | Metric and S.I. to FPS |                      |             |
|-------------|------------------------|-----------------|-------------|------------------------|----------------------|-------------|
|             | Unit                   | To convert into | Multiply by | Unit                   | To convert into      | Multiply by |
| Length      | inch                   | mm              | 25.4        | mm                     | inch                 | 0.03937     |
|             | foot                   | metres          | 0.3048      | metres                 | feet                 | 3.28        |
|             | yard                   | metres          | 0.9144      | metres                 | yard                 | 1.0936      |
|             | mile                   | K. Metre        | 1.6093      | K. Metre               | mile                 | 0.621       |
| Area        | sq. inch               | sq. cm          | 6.451       | sq. cm                 | sq. in               | 0.155       |
|             | sq. ft                 | Sq. m           | 0.0929      | sq.m                   | sq. ft               | 10.764      |
|             | acre                   | hectare         | 0.4047      | hectare                | acre                 | 2.471       |
| Volume      | cu. in                 | cc              | 16.3871     | cc                     | cu. in               | 0.061       |
|             | imp. gal               | litre           | 4.546       | litre                  | imp. gal             | 0.22        |
|             | imp. gal               | cum             | 0.004546    | cum                    | imp. gal             | 220         |
|             | US. gal                | litre           | 3.785       | litre                  | US. gal              | 0.2642      |
|             | cft                    | litre           | 28.316      | litre                  | cft                  | 0.0353      |
|             | cft                    | cum             | 0.02823     | cum                    | cft                  | 35.38       |
| Weight      | lb                     | kg              | 2.205       | kg                     | lb                   | 0.4536      |
|             | cwt                    | kg              | 0.0197      | kg                     | cwt                  | 50.802      |
|             | US ton<br>(2000 lb)    | tonne           | 1.102       | tonne                  | US. ton<br>(2000 lb) | 0.907       |
|             | UK ton<br>(2240 lb)    | tonne           | 0.98421     | tonne                  | UK ton<br>(2240 lb)  | 1.016       |
| Density     | lb/cft                 | kg/cum          | 16.02       | kg/cum                 | lb/cft               | 0.0625      |
|             | lb/cft                 | kg/litre        | 0.016       | kg/litre               | lb/cft               | 62.424      |
|             | lb/c.in                | kg/c.cm         | 27.6799     | kg/c.cm                | lb/c. in             | 0.0362      |