

# Tolerances

## Moulded Products

Two sets of tolerances, F and C are given and defined below:

**Fixed dimensions (F):** dimensions which are not affected by deforming influences like flash thickness or lateral displacement of different mould parts (upper and lower parts or cores).

**Closed dimensions (C):** dimensions which can be altered by variation in the flash thickness or lateral displacement of different mould parts.

| Nominal Dimensions |       | Class M1 +/- |      | Class M2 +/- |      | Class M3 +/- |      | Class M4 +/- |
|--------------------|-------|--------------|------|--------------|------|--------------|------|--------------|
| Above              | Up to | F +/-        | C    | F            | C    | F            | C    | F and C      |
| 0.0                | 6.3   | 0.10         | 0.10 | 0.15         | 0.20 | 0.25         | 0.40 | 0.50         |
| 6.3                | 10.0  | 0.10         | 0.15 | 0.20         | 0.20 | 0.30         | 0.50 | 0.70         |
| 10.0               | 16.0  | 0.15         | 0.20 | 0.20         | 0.25 | 0.40         | 0.60 | 0.80         |
| 16.0               | 25.0  | 0.20         | 0.20 | 0.25         | 0.35 | 0.50         | 0.80 | 1.00         |
| 25.0               | 40.0  | 0.20         | 0.25 | 0.35         | 0.40 | 0.60         | 1.00 | 1.30         |
| 40.0               | 63.0  | 0.25         | 0.35 | 0.40         | 0.50 | 0.80         | 1.30 | 1.60         |
| 63.0               | 100.0 | 0.35         | 0.40 | 0.50         | 0.70 | 1.00         | 1.60 | 2.00         |
| 100.0              | 160.0 | 0.40         | 0.50 | 0.70         | 0.80 | 1.30         | 2.00 | 2.50         |
| 160.0              | -     | 0.30%*       | *    | 0.50%*       | *    | 0.80%*       | *    | 1.50%*       |

Values in millimetres.

\*Tolerances for C nominal dimension 160 shall be agreed between the interested parties and expressed as a percentage

Mouldings are generally manufactured to Class M3.

**NB** Any tighter tolerances, if required, must be stated on your order/drawing.

## Extruded Products

Extrusion tolerances to BS3734 1978 – tolerances on Cross Sectional Dimensions

| Nominal Dimension |       | Class E1 +/- | Class E2 +/- | Class E3 +/- |
|-------------------|-------|--------------|--------------|--------------|
| Above             | Up to |              |              |              |
| 0.0               | 2.5   | 0.20         | 0.35         | 0.50         |
| 2.5               | 4.0   | 0.25         | 0.40         | 0.70         |
| 4.0               | 6.3   | 0.35         | 0.50         | 0.80         |
| 6.3               | 10.0  | 0.40         | 0.70         | 1.00         |
| 10.0              | 16.0  | 0.50         | 0.80         | 1.30         |
| 16.0              | 25.0  | 0.70         | 1.00         | 1.60         |
| 25.0              | 40.0  | 0.80         | 1.30         | 2.00         |
| 40.0              | 63.0  | ♦            | 1.60         | 2.50         |
| 63.0              | 100.0 | ♦            | 2.00         | 3.20         |

Values in millimetres. ♦ Tolerances agreed between parties.  
Class E1 60 shore+ Class E2 45-60 shore Class E3 25-45 shore