DAVID CALL
Products

STANDARD FOR DIMENSIONAL TOLERANCE ON PLASTICS

I. General Practice:

A. Dimensions must be drawn to and from controlled surfaces.

B. The controlled surface on a molded part is the surface against the mold.

C. Call out Mold release + draft or – draft angle from datum . . . 2 degrees typical

1 degree acceptable

D. Variance in thickness of Stock Material is typically . . . . . +/- 10%

II. Tolerances for molded and fabricated Dimensions:

A. To controlled part surface for dimensions less than 15"

1. Two position dimension, tolerance should be . . . . . +/- .30"

2. Three position dimension, tolerance should be . . . . . +/- .015"

B. To controlled part surface greater than 15" less than 30"

1. Two position dimension, tolerance should be . . . . . +/- .040"

2. Three position dimension, tolerance should be. . . . . +/- .020"

III. Tolerances for machined Dimensions:

A. Center of hole to center of hole . . . . . +/- .005"

B. Machined edge to machined edge for dimensions less than 15"

1. Two position dimension, tolerance should be . . . . . +/- .020"

2. Three position dimension, tolerance should be . . . . . +/- .010"

C. Machined edge to machined edge for dimensions greater than 15" less than 30"

1. Two position dimension, tolerance should be . . . . . +/- .030"

2. Three position dimension, tolerance should be . . . . . +/- .015"

IV. Tolerances for Angles . . . . . +/- 1 degree

V. Tolerances for Flatness . . . . . +/- .003" per inch