To obtain the cubic dimensions of a shipment measure length, width and

height. Next multiply the length, width and height to obtain the cubic dimensions inches.

Example:
Length 21", Width 20", Height 22"
21 x 20 x 22 = 9,240 cubic inches.

To convert cubic inches to cubic feet, divide the cubic inches by 1728 (the number of a cubic inches in a cubic foot).
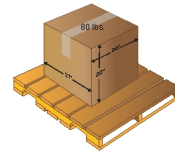
Example:
9,240 / 1,728 = 5.35 cubic feet

To determine density, divide the weight of the shipment by the number of cubic feet.

Example:
80 / 5.35 = 14.95 lbs per cubic foot.

In cases where the shipment is palletized, the dimensions of the pallet

determine cubic dimensions.

Although the original dimensions of the carton remains the same, the cubic dimensions now include those of the pallet.

Example:
Lenght 48", Width 40", Height 28" (22" plus 6" of pallet) 48 x 40 x 28 = 53,760 cubic inches.

Convert to cubic feet by dividing by 1728.

Example:
53,760 / 1728 = 31.1 cubic feet.

The density then equals the weight 110 (80lbs for the carton plus approximately 30 lbs for the pallet) divided by the cubic dimension.

Example:
110 / 31.1 = 3.54 lbs per cubic foot.