

## How to calculate correct freight dimensions

When sending freight without it is important that both the weight and volume are accurately calculated and recorded. This helps us achieve...

### 1. SAFETY OF OUR PEOPLE

*Under declared freight can cause physical injury e.g. back strain.*

### 2. SAFETY ON THE ROADS

*Over-weight vehicles can cause handling and stopping problems or worse, accidents.*

### 3. LEGAL COMPLIANCE

*We must comply with the law or face prosecution and hefty fines.*

### Measuring weight

*To calculate the correct weight of freight, use a calibrated set of scales or accurate standard figures for your units of product (eg. packages, boxes, bags or the product itself). Record this figure in kilograms or tonnes.*

### Conversion rates (tonne/cubic)

**INTRA ISLAND (within the island)**  
 $3m^3 = 1 \text{ tonne}$  or  $333kg = 1m^3$

**INTER ISLAND (between islands)**  
 $2m^3 = 1 \text{ tonne}$  or  $500kg = 1m^3$

### Calculating volume

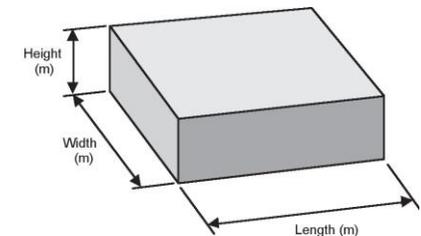
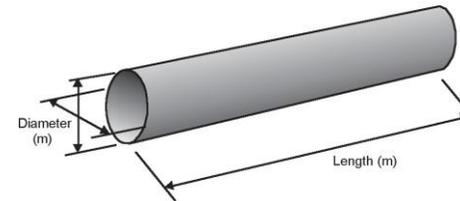
*Use these formulas to calculate a volume figure for your freight.*

For a box:

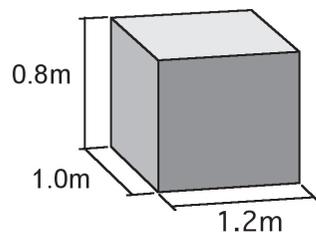
$$\text{Volume (m}^3\text{)} = \text{Height (m)} \times \text{Width (m)} \times \text{Length (m)}$$

For a cylinder:

$$\text{Volume (m}^3\text{)} = \text{Diameter (m)} \times \text{Diameter (m)} \times \text{Length (m)}$$



### Here is an example:



*Actual weight = 400kg*

*Volume = 0.8m x 1m x 1.2m = 0.96m<sup>3</sup>*

*INTRA ISLAND volumetric weight = (0.96m<sup>3</sup> x 333kg) x 1000 = 320kg*

*INTER ISLAND volumetric weight = (0.96m<sup>3</sup> x 500kg) x 1000 = 480kg*

*The GREATER of the weights is used.*

*In this example, if the freight was moving intra island then the actual weight (400kgs) would be used, as it is greater than the volumetric*

*weight of 320kgs. If the freight was moving inter island, the volumetric weight (480kgs) would be used as it is greater than the actual weight of 400kgs.*