## **Finding Cargo Dimensions**

## **Measuring Cargo for Transport and Storage**

Measuring cargo for storage and transportation requires planners to imagine how those cargo items will realistically occupy space. Though as certain volume of liquid may be contained in a cylinder, the physical cylinder itself will still require additional "real" volumetric space. Real used volumetric space can always be envisioned as a measure of:

## Length (I) x Width (w) x Height (h)

Due to the nature of storage facilities and transport facilities, it is helpful to imagine a box around any not cubic object, with edges at the longest and tallest points. The length of those imaginary edges will be used to plan volume for storage and transport.

Unit Type

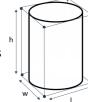
"Real" Volumes for Storage and Transport

**Boxes** 

To find the volume of regular boxes, multiply the width, length and height of the box along the outer edges.



Though there's a formula for determining liquid volume in a cylinder, the Cylinders volume for storage and transport is measured by the maximum length of it's edges.



Cargo

Stacked If cargo will be shipped or stored stacked or "nested", measure the volume of all anticipated cargo items as they will ultimately be shipped or stored, Nested nested into each other or stacked on top of each other. Do not account for the size of each individual unit.



**Shapes** 

The volume needs of irregular shapes will vary. Unless irregular cargo items are stacked in a pile, planner may need to view the total volume used to properly store or transport an irregular shaped item.



## **Generic Relief Items**

A generic list of volumes per common relief item can be found in the below table\*:

Item	Estimated Weight (Kilogram)	Estimated Volume (Cubic Meters)
Blankets (Bale of 20)	25 - 30	0.15 - 0.2
Body Soap (Carton of 50)	10	0.02
Buckets (Nested Stack of 50)	50	0.4
Cement (50 kg bag)	50	0.04
Empty Jerry Can (10 Litre)	0.5	0.01 - 0.02
Keep Cool Box	2-5	0.025 - 0.075
Latrine Slab	12	0.4
Laundry Soap (Carton of 50)	10	0.018
Mosquito Net (Bale of 50)	22 - 28	0.1 - 0.2
Oral Rehydration Salts (ORS) (Carton of 1,000 Sachet)	20	0.05
Ready to Use Therapeutic Feeding (RUTF) (Carton of 150 Sachet)	15	0.02
Sack of Grain (50 kg sack)	50	0.07 - 0.09
Sleeping Mat (Bundle of 25)	20	0.15

Item	Estimated Weight (Kilogram)	Estimated Volume (Cubic Meters)
Tarpaulin (4 x 6 meter sheet) (Bale of 5)	23	0.025
Tin of Vegetable Oil (1 Litre)	1	0.001
Zinc Sheeting (Bundle of 20)	35	0.025
Dry Sand (loose large grained - dense fine grained)	1,450 - 1,850	1
Dry Gravel	1,500 - 1,700	1

<sup>\*</sup>Actual items obtained from local or international sources may vary in volumes and weights. Understanding the specific storage needs might involve obtaining the volumetric measurements and all special handling needs of all related relief items from either a supplier or a central distribution warehouse.