



## Bags)

# Choosing FIBC's (Bulk



## Step by Step Guide

### Step 1

**Determine how big your FIBC needs to be.**

Most products have different bulk densities (i.e the space they take up)  
Find out yours here : [www.simetric.co.uk/si\\_materials.htm](http://www.simetric.co.uk/si_materials.htm)

Once you know how much fits into 1 cubic metre you can work out volume required to pack 1000kgs

**Examples :**

Water, pure

1000

Although not really something you would transport in an FIBC it's an easy one!

1000kilos requires 1 cubic metre of space - so has a bulk density of 1.0

Divide 1000 by 1.0 to find the space/volume required to pack a tonne – in this case its 1 cubic metre - **1.0m<sup>3</sup>**

Sand, wet

1922

1922 kilos of wet sand requires 1 cubic metre of space – so has a bulk density of 1.922

Divide 1000 by 1.922 to find the space/volume required to pack a tonne – in this case its less than 1 cubic metre - **0.520 m<sup>3</sup>**

Turf

400

This means you can get approx 400 kilos of turf in 1 cubic metre of space – so it has a bulk density of 0.4

Divide 1000 by 0.400 to find the space/volume required to pack a tonne – in this case its more than 1 cubic metre - **2.5 m<sup>3</sup>**

**Remember these are approximate guidelines and product densities vary – especially due to moisture content  
We also do not recommend bags are filled to the very top so always add at least 10% extra**

## Step 2 – Decide on the size of your FIBC

Use the chart to see what options are available for the volume you require  
The smaller the base size the higher the bag will have to be to achieve the volume you need.

Take into account

- Standard FIBC's will belly at the sides by approx 20% when filled.
- We can limit this by supplying bags with internal baffles but they are more expensive
- Lifting bags into containers or trailers by the loops requires at least 50cm extra clearance
- Bags can be placed on a pallets and lifted from underneath
- Consider stability when choosing tall bags with small base sizes
- Taller bags may be less expensive to transport but are harder to fill
- Does your customer have any specific handling restrictions?

**Remember these are approximate guidelines and product densities can vary – especially due to moisture content  
We also do not recommend bags are filled to the very top so always add at least 10% extra**

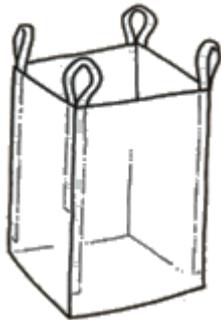
Inner dimensions of the base (cm)	76 x 76	87 x 87	95 x 95
Outer dimensions of the base (cm)	80 x 80	91 x 91	99 x 99
Diameter of bag when filled	101 cm	115 cm	125 cm
Volume (m3)	Height of the FIBC (cm)		
0.3	55		
0.4	70		
0.5	85	65	
0.6	105	80	
0.7	120	95	
0.8	140	105	
0.9	155	120	100
1.0	175	130	110
1.1	195	145	125
1.2		160	135
1.3		170	145
1.4		185	155
1.5		200	165
1.6			180
1.7			190
1.8			200

### Step 3 - Options

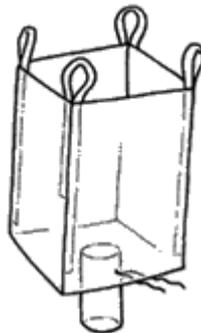
- How do you fill the FIBC?
- Does your product need protected from the elements or contamination?
- How are you lifting & transporting the FIBC?
- How will your customer empty the FIBC?
- Is it a single trip or multi use application?
- Do you require printing or document pocket?
- Are there any special requirements such as liners, coated fabric or dustproof seams?
- Has the FIBC got to be Food Grade or UN Certified for dangerous goods?
- Does the FIBC require to be certified to more than 1000kilos ?

***Refer to our guide below for the various configurations or call us for advice 0800 032 6447***

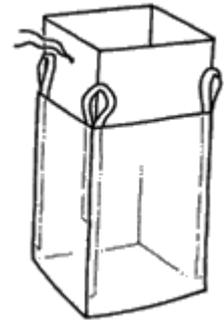
**Fill / discharge spouts from 15cm to 50cm diameter  
Standard Lifting loops 30cm from top of FIBC**



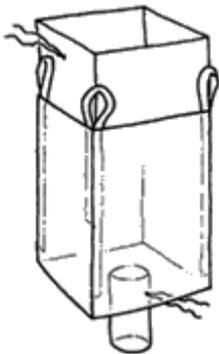
Open top / plain base



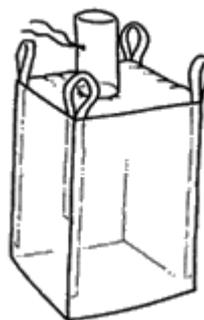
Open top / Discharge spout



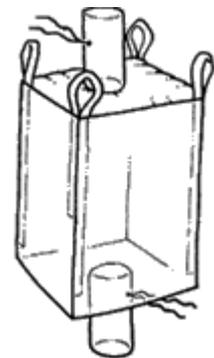
Top skirt / plain base



Top skirt / Discharge spout

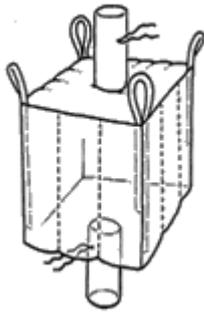


Fill spout / plain base

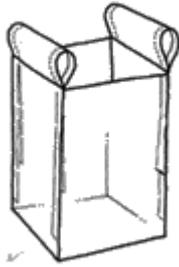


Fill & Discharge spout

**The above configurations of top/bottom are also available in the following**



Baffle type bag



Sleeve Lift



Single Loop



Two loop

**We are here to help – please contact our experienced sales team for assistance – thank you**



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