



Smart Fuel Cap - Eliminating Fuel Theft
Reduce Diesel Bills for \$950 Truck/Month

Fueloyal Inc.
109 Fairfield Way
60108 Bloomingdale, IL
www.fueloyal.com
info@fueloyal.com

10 Best Freight Density Calculators

1. [YRC Freight Density Calculator](#)

YRC Freight Density Calculator

Our density calculator helps you determine your freight rate. When shipping LTL freight, you must know how to handle shipment density conversions to properly describe your goods on the bill of lading. Divide the total weight of a shipment by the total cubic feet to determine the density.

Density Calculator					
Length	Width	Height	Weight		Result
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Convert"/>	<input type="text"/>

Step 1. Measure the height, width, and depth of the shipment in inches. Measure to the farthest points, including skids or other packaging. On shipments with multiple pieces, repeat Step 1 for each piece.

Step 2. Multiply the three measurements (height x width x depth). The result is the total cubic inches of the shipment. If you have multiple pieces, multiply the height x width x depth for each piece. Take the results for each piece and add them together to get the total cubic inches

Step 3. Divide the total cubic inches by 1,728 (the number of cubic inches in a cubic foot). The result is the cubic feet of the shipment.

Step 4. Divide the weight (in pounds) of the shipment by the total cubic feet. The result is the pounds per cubic foot, *i.e.*, density.

- For multiple pieces, add the weight of each piece together before dividing by the total cubic feet of the shipment.
- Round fractions to the nearest full cubic foot number.

If you need more information on how cubic feet and density relate to freight rates, contact your YRC Freight account executive.

For example, if the skid weighs 500 pounds with dimensions of 42 inches x 48 inches x 48 inches:

1. Multiply 42" x 48" x 48" = 96,768 cubic inches
2. Divide 96,768 by 1,728 = 56 cubic feet
3. Divide 500 pounds by 56 cubic feet = 8.9 pounds per cubic foot (PCF), *i.e.*, the shipment density.

[Click here for Trailer Dimensions](#)

2. [Bluegrace Density Calculator](#)



To use the Density Calculator:

1. If metric, please check the metric checkbox
2. Enter the dimensions of your shipment (in inches or cm if metric is selected)
3. Enter the total weight of your shipment
4. Use line 1 for total shipment information or use multiple lines to list individual pallets.
****Please note: Only use multiple lines for individual pallets if total shipment info is not submitted on Line 1
5. Select Calculate and your shipping class is calculated

Class	Min Density	Metric:	Length (Inches)	Width (Inches)	Height (Inches)	Weight (lbs)	
50	50	<input type="checkbox"/>					
55	35	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
60	30						
65	22.5	2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
70	15						
77.5	13	3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
85	12						
92.5	10.5	4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
100	9						
110	8	5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
125	7						
150	6	5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
175	5						
200	4	Calculate		Total Cube (cu ft)	Total Weight (lbs)	Total Density (lb/cu ft)	Class
250	3	Clear All		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
300	2						
400	1						
500	<1						

Additional surcharges may apply to shipments in length of 10' or more.

NOTES

The freight class is mainly based on the density of the shipment.
 More dense items such as steel and machinery have low classifications such as Class 50 through 85.
 Fragile or bulky items fall into freight classes 125 to 500.

The formula to determine the density of an item is:
 $L \times W \times H / 1728 = \text{Cubic Feet (CU FT)}$, $\text{Weight (Pounds)} / \text{CU FT} = \text{Density (\#PCF)}$

3. [Peninsula Truck Lines Density Calculator](#)

Density Calculator

Measurement	<input checked="" type="radio"/> US <input type="radio"/> Metric		<input checked="" type="radio"/> Inches <input type="radio"/> Feet	
Weight	<input type="text"/>	<input checked="" type="radio"/> Pounds <input type="radio"/> Kilograms		
Piece Count	Length	Width	Height	Cubic Feet
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Cubic Feet				<input type="text"/>
Total Pounds Per Cubic Foot (Density)				<input type="text"/>
* Estimated Freight Class Based On Density				<input type="text"/>

Calculate Reset

4. [XPOLogistics Shipment Density Calculator](#)

Shipment Density Calculator

The calculator provides the density for your shipment. Accurately measure the **length, width, and height** of the shipment, including packaging and pallet dimensions (refer to diagram below). If you have additional questions, please contact your nearest XPO Logistics location. [US/Canada](#)

Measurement		inches	lbs	Cubic		Density		Canadian Class Equivalent (applies to shipments within Canada only)
Pieces	Length	Width	Height	Weight	feet	meters	lb/cubic ft	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
Total	0			0	.00	.00	.00	.00

CALCULATE
RESET

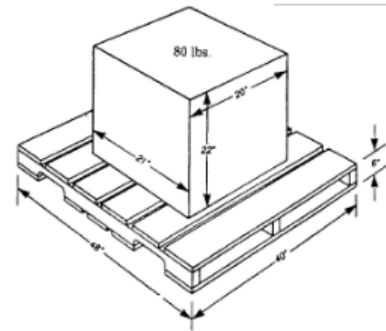
Measuring Tips

In cases where the shipment is palletized, the dimensions of the pallet determine the cubic dimensions. Although the original dimension of the carton remains the same, the cubic dimensions now include those of the pallet.

Example:

Length 48", Width 40", Height 28" (20" plus 8" of pallet) equals 53,760 cubic inches or 31.1 cubic feet.

The density equals the weight, 110 lbs (80 lbs for the carton and approximately 30 lbs for the pallet), divided by the cubic dimension, 3.54 lbs per cubic ft



5. [Calculator Freight Density and Dimensions Calculator](#)

Shipment Dimensions and Weight

	Pieces	Length ^{cm}	Width ^{cm}	Height ^{cm}	Weight ^{kg}	Volume ^{kg}	Cube ^{m³}
+	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>		

Density Calculator

(Consolidated Shipment Metrics)

Wgt	Vol.	Wgt Chargeable	Wgt Cube Ratio
-----	------	----------------	----------------

6. [Partnership Freight Density Calculator](#)

Freight Density Calculator

Freight density is one factor used to calculate freight class (the system created by the National Motor Freight Traffic Association (NMFTA) to standardize LTL freight pricing). Freight density is based on the shipment's overall dimensions and weight. Freight density can range from 50 to 1. A shipment with a lower density typically has a higher freight classification. You can use the tool below to determine your freight density and estimate your freight class.

Your Shipment Dimensions

Length (in.):

Width (in.):

Height (in.):

Actual Weight

Weight (lbs.):

Density	Estimated Freight Class
Less than 1	400
1 but less than 2	300
2 but less than 4	250
4 but less than 6	150
6 but less than 8	125
8 but less than 10	100
10 but less than 12	92.5
12 but less than 15	85
Over 15	70

CALCULATE NOW

Note: This is an estimate only. If you need help determining the actual freight class for your shipment, use our [Find Your Freight Class](#) form or call a PartnerShip freight representative at 800-599.2902 for assistance.

7. [Crawford Freight Shipment Density Calculator](#)

Qty	Length (in.)	Width (in.)	Height (in.)	Total Weight (lbs.)	Total Cubic ft.	Density lb./cft
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	0	0
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	0	0
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	0	0
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	0	0
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	0	0
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	0	0
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	0	0
Shipment Totals:				<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Automatic recalculation

10. [Viking Logistics Density Calculator](#)



Palletized Freight

To determine the cubic dimensions of a palletized shipment, combine the pallet dimensions with the shipment.

Length (in inches)

Width (in inches)

Height of Pallet (in inches)

Height of Freight (in inches)

Weight (in pounds)

CALCULATE

Your Density

(in pounds per cubic foot)

Nonpalletized Freight

To determine the cubic dimensions of a nonpalletized shipment, measure the shipment's height, width and length. Multiply those dimensions to obtain the cubic dimension of the shipment in inches.

Length (in inches)

Width (in inches)

Height (in inches)

Weight (in pounds)

CALCULATE

Your Density

(in pounds per cubic foot)

Cylindrical Freight

To determine the density of a cylindrical shaped object, or any article that is not square, rectangular or elliptical, multiply the greatest dimension on the cylindrical plane by itself, then multiply that result by the object's height or length. If the value is in cubic inches, divide the number by 1,728 cubic inches, then divide the weight by this number and the answer will provide your density figure.

Greatest Dimension (in inches)

Height or Length (in inches)

Weight (in pounds)

CALCULATE

Your Density

(in pounds per cubic foot)