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Everything You Need To Know To Properly Class Your Freight

Freight class is one of the most important factors to consider when trying to reduce your overall shipping expenditure. By properly classifying your freight, you'll be able to get more accurate quotes and avoid costly delays and reclassification fees. But freight classification can get complicated — especially for small and mid-sized businesses (SMBs) that are juggling multiple shipments and priorities.

The good news is that Unishippers has created this comprehensive guide full of freight class tips that will help you speak the lingo and class your freight with confidence.

What is freight classification?

FREIGHT CLASS

Freight class is a standardized way of classifying less-than-truckload (LTL) freight shipments based on varying characteristics, including: density, stowability, liability and handling. A commodity's freight class is assigned by the National Motor Freight Traffic Association (NMFTA), giving LTL freight carriers and shippers a simple way to compare and price it. Freight class is broken up into 18 numeric categories, ranging from class 50 (the least expensive) to class 500 (the most expensive). Each of the 18 commodity categories is defined based on a number of factors that determine how cost-effective it will be to transport the shipment. For instance, easily stowed items like bricks and cement are class 55, while couches and stuffed furniture fall under class 175.

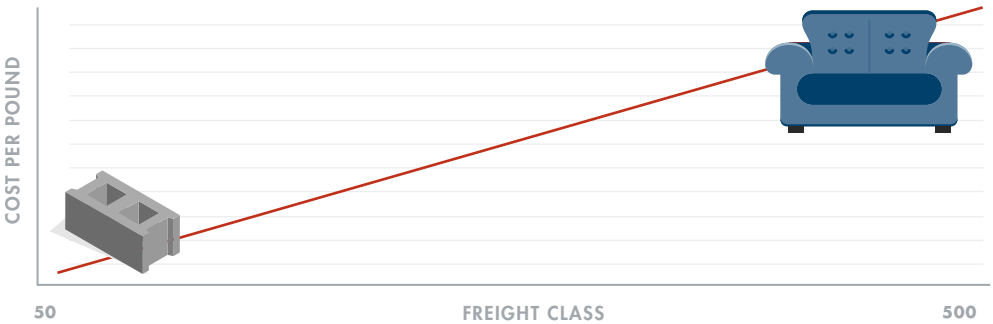
What's the difference?

All commodities have both a freight class and an NMFC code. While freight class puts shipments into one of 18 broader categories, NMFC codes further classify shipments within their designated freight classes.

NMFC CODES

Every type of product or commodity corresponds to a National Motor Freight Classification (NMFC). While freight class represents a finite number of broad commodity categories, NMFC codes represent more specific subcategories within freight classifications for further identification. For example, while computers and monitors will both have a freight class of 92.5, they will each have unique NMFC codes based on their different specifications and shipping requirements. These codes serve to standardize fair rates applied to all shipment commodities.

Items with a lower freight class will have a lower cost per pound, while those with a higher freight class will have a higher cost per pound.



Still not sure how freight classification works? **Check out Unishippers' simple 3-step guide to classifying your LTL freight.**

Why is freight class important?

Freight classification standardizes several elements of the shipping process, making it easier for all parties involved to keep your shipments on the move without damage, delay or difficulty. Streamlining the shipping process through proper freight classification can help your business save money and time on each shipment. Particularly for SMBs, freight classification will help you:

SAVE TIME AND EFFORT

Carriers inspect your shipments for improper labeling — and that includes freight class and NMFC codes. If your freight is classified incorrectly, reclassification will slow down your shipments. The last thing you want is to waste time on unnecessary communication with your carriers. And if your freight is frequently causing bottlenecks, carriers will be less inclined to take your shipment the next time around. So if you want to streamline your shipping and keep your customers and carriers happy, be sure to stay up to date on the latest changes to freight classification and NMFC codes.

LOWER YOUR SHIPPING COST

Your shipment's costs come down to shipping rates as well as tariffs and fees. Since freight class and NMFC codes are used to determine the price of your shipment, it's essential that you enter the right class on its documentation. After all, if a driver needs to reweigh and/or reclassify your shipment, you'll be charged an accessorial fee. Keep in mind that freight carriers inspect every shipment, so it's imperative that you class each shipment correctly. In short, knowing how to properly class your freight will help you get an accurate shipping estimate and avoid unnecessary fees and surcharges.

IMPROVE CARE DURING SHIPPING

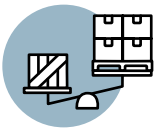
Some commodities — like sensitive electronics, medical devices or hazardous materials — require special care. When shipping special care freight, labeling it with the right freight class is paramount. Doing so gives the carriers and everyone along the supply chain the context they need to take care of your shipments. You'll want your LTL carriers to have every piece of information they need — including the right class and NMFC code — to make the arrangements necessary for your shipment to get from point A to point B safely.

Paying too much for LTL freight shipping?

Get a free freight quote with Unishippers and see how much your business can save.

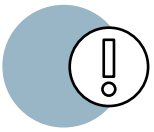
Factors that determine freight class

When preparing your LTL freight shipments, it's important to understand the variables that could impact your freight class. Freight class is calculated based on several factors that fall under four main categories: density or commodity type, stowability, liability and handling. Let's take a look at these four categories and what they mean for your freight classification.



DENSITY OR COMMODITY TYPE

Density is determined by the total weight in pounds divided by total cubic feet. In other words, the density represents the amount of space your freight will take up on a carrier relative to its weight. Freight with a lower density will typically correlate to a higher (and more expensive) freight class. In some cases, commodity types have predictable sizes and weight. These standardized commodity types will have pre-determined freight classes, allowing freight shippers to skip density calculations during shipment preparation.

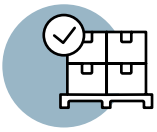


STOWABILITY

Most freight should be fairly easy to fit into the shipping container. However, some commodities are cumbersome, difficult to load or can't be loaded with other items on the container for various reasons. Stowability comes down to this: if an item is difficult to fit in the truck, it will have a higher freight class, which in turn will result in a higher overall shipping cost. For example, things like wooden cabinets and chairs fall under a 300 freight class because they can be difficult to stow in freight trucks, while easily packaged items like nuts and bolts fall into NMFC class 50.

LIABILITY

Freight that is at an increased risk of being damaged, stolen or causing damage to other freight within the vicinity has a higher liability. Combustible materials, for example, are at an increased risk of harming the surrounding environment, which will result in a higher freight class and cost per pound.



HANDLING

Freight goes through several checkpoints and distribution facilities on the path to its final destination. For this reason, items that require special handling and additional care — e.g., HAZMAT and sensitive electronics — may have a higher freight class.

Watch and learn!

Our short video will teach you how to class freight in under 4 minutes.

Understanding density-based freight class

Density-based freight is classified depending on the shipment's density (how heavy the shipment is relative to its size). Items that are unpredictable in size and weight will be assigned a density-based freight class, while compact items with consistent spatial requirements are assigned a freight class by commodity type.

Certain commodity groups — such as car parts or crated machinery — have a wide range of possible densities. As a result, these groups are assigned a density-based freight class. Additionally, freight that varies greatly in size will likely be assigned a density-based classification.

While density-based freight class was mostly used for unpredictable commoditiesin the past, it's becoming increasingly common for freight carriers to require this method for all items. After all, determining a shipment's density gives carriers the insight they need to select the most profitable loads.

Did you know?

Lower density means your freight class will be higher — and, in turn, more expensive. Many SMB shippers lose money on freight quotes due to inaccurate density-based freight classification. Unishippers can help you demystify density-based freight class so you can get the most accurate — and cost effective — freight quotes.

FREIGHT CLASSIFICATION CHART

Understanding density-based freight class can help you prepare your shipments with a strategy in mind.

LEAST EXPENSIVE

MOST EXPENSIVE

FREIGHT CLASS	COMMODITY EXAMPLES	DENSITY (PER CUBIC FT.)
50	Nuts, bolts, steel rods	50+ LBS
60	Car Parts	30-35 LBS
70	Food items, paper	15-22.5 LBS
85	Cast iron stoves, machinery	12-13.5 LBS
100	Vehicle covers, wine cases	9-10.5 LBS
125	Small household appliances	7-8 LBS
175	Clothing and furniture	5-6 LBS
250	Televisions, mattress, box springs	3-4 LBS
400	Deer antlers	1-2 LBS
500	Bags of ping pong balls	<1 LBS

How to determine your freight class

STEP 1:

Determine if the shipment is commodity- or density-based

If you ship commodities that vary in size, or if the number of items in each shipment varies, your freight will likely be assigned a density-based classification. Commodity-based classifications, on the other hand, are given to commodity types that are fairly consistent in size and weight from shipment to shipment. Ceramic tiles, books and bottled drinks are common types of commodity-based classifications.

STEP 2:

Calculate density

LxWxH

1. Measure the length, width and height of your shipment. Keep in mind that this measurement includes pallets and packaging that surrounds the actual shipment. It's always a good idea to round up to the next inch or so.

$$\frac{L \times W \times H}{1{,}728}$$

2. Multiply the length, width and height that you took note of in step 1. This calculation gives you the total cubic inches of the shipment. To convert this number to cubic feet, divide by 1,728.

$$\frac{\text{WEIGHT (LBS)}}{\text{TOTAL (CU FT)}}$$

3. Determine the weight of the shipment in pounds. Divide this number by the total cubic feet of the shipment. The result is the pounds per cubic foot, or density. If you are shipping multiple pieces, it will be easier to add the total weight of each piece before dividing by the total cubic feet.

STEP 3:

Determine freight class

Working with a third-party logistics (3PL) company will grant you access to a transportation management system (TMS) with a built-in freight class calculator. 3PLs like Unishippers also provide consultation to help you with any questions you have along the way. Additionally, online resources like ClassIT.com can be helpful in determining your freight's classification through simple search functionality. And if you're working with commodity-based freight, the manufacturer should be able to queue you in on the freight class for their products.

Make no mistake

Just remember: it's very important to properly class your freight. If the wrong code is used, the LTL carrier will need to reclassify (and the service is going to cost you in accessorial fees).

Preparing your goods for LTL shipping

FILLING OUT REQUIRED DOCUMENTATION

Once you've properly classified your freight, it's time to fill out the required documentation to set your LTL shipping up for success on the road ahead. The primary document for freight shipping is the bill of lading (BOL), which provides shipment details to help things run smoothly along the supply chain. A standard bill of lading includes the following information:

- ✓ **Carrier name and driver signature**
- ✓ **Date goods are to be shipped**
- ✓ **Detailed description of goods being shipped (including freight class)**
- ✓ **Shipper and receiver names and addresses**
- ✓ **Any special instructions for the carrier**

Not sure what documentation to include in your shipments?

If all of this seems overwhelming, don't worry: Unishippers put together a list of some of the most common LTL and international freight documentation.

PACKAGING AND LOADING YOUR SHIPMENT

To avoid trouble with your LTL carriers, load your goods on pallets or into crates prior to pickup. Place your heaviest items on the bottom and slowly work your way up to the lightest items. Include one or more large labels on each handling unit within your shipment. Once your shipment is packaged and labeled, you're ready to load it. Be sure to have the dimensions and important required documentation in hand when the carrier arrives.

Prepare your freight shipments like a pro!

Learn how to correctly prepare your freight shipments to avoid loss, damage and denied claims.

Through proper preparations, you can save money, prevent supply chain bottlenecks, maintain good relations with your carriers and ensure that your freight reaches its destination safely and on time.

Now that you know how to properly class your freight, it's time to put your skills to the test. Unishippers' freight TMS delivers hassle-free pricing from 75+ of the nation's best LTL freight carriers — and we can provide expert guidance in making sure you select the right class for your freight.

Contact Unishippers today to get started.

unishippers.com