



# Freight Packaging Guide: Building Efficiency into Shipping

Freight packaging puts your final touches, literally, on customer orders before they head out of the dock. Well-packaged freight might not get all the accolades, but it plays a major role in keeping shipments safe and the overall costs of your operations.

This guide offers the building blocks and best practices to fuel your freight efficiency — courtesy of Worldwide Express (WWEX).

# Pallets = The Foundation

The pallet (also known as a skid) offers package protection, and determines your shipment's footprint and total weight threshold. **A standard 48-inch x 48-inch pallet, for example, holds about 3,500 pounds.** However, pallet size and materials, including new wood, recycled wood or plastic, ultimately determine shipment weight limits. As your shipment's "foundation," the pallet needs to be in good shape. Before stacking packages, check for split wood, a wobbly frame or panels more than six inches apart to ensure you're shipping on a solid foundation.

While pallets are the most common kind of handling unit, the options are almost endless. To make sure you're securely packaging your freight, no matter its container type, consult your carrier or WWEX.



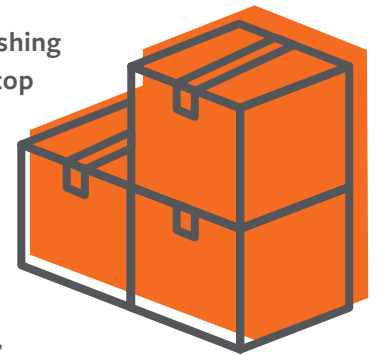
# Boxes = The Bricks

## Corrugated Containers

Cardboard boxes have lower structural integrity, meaning they're more susceptible to crushing and dents. Because of this, carriers may charge a fee if they can't stack another pallet on top of yours. However, these containers come in single-, double- and triple-corrugated varieties with increasing strength properties to match your durability needs. Even without visible damage to these boxes, it's smart to use new boxes for shipments just in case. On the plus side, these containers are generally cheaper, easy to work with, and break down for simpler storage.

## Crates

Crates (either plastic or plywood) offer greater container strength and are often easier to stack, but come at higher material costs than cardboard. However, crates are often durable enough for reuse, somewhat offsetting higher material costs. Because shippers often use screws and nails to close crates, these containers take more time to work with, which slows the shipping or receiving process.



# Wrapping = The Mortar

If boxes are bricks, then wrapping is the mortar keeping it all together. Simply put, wrapping needs to keep boxes (or other packaged units) from shifting and sliding, and there's no shortage of materials to get the job done.

- » **Stretch wrap** puts shipments in a cocoon of protection, binding boxes together as one while keeping them from shifting or falling off the pallet. This wrap should be a minimum of 60-gauge to withstand tearing and chafing.
- » **Breakaway adhesive** is a sustainable, eco-friendly material to bind units together.
- » **Cord straps** go over the top of pallets to bind box stacks together. Strap strengths vary to accommodate the weight boxes may exert on the cord.
- » **Edge boards** act as bumpers for your pallet. Bent at ninety-degrees, these boards to fit over box edges vertically, top to bottom.
- » **Flattened corrugated boxes** make great padding between boxes (especially cardboard that's no longer reliable as a container).







# The Right Stuff

Putting together sound freight is all about material selection. Always follow National Motor Freight Classification® (NMFC) guidelines. Start with your boxes, matching the weight and dimensions of your items to the container. Then, match your packaged items to the right handling unit — be it a pallet, drum, jerrican or otherwise. Leave some space on all sides so that the pallet protects containers from impact while travelling on trucks or forklifts.

**A good rule of thumb is to occupy about 95% of a pallet's surface area.**

## Remember, space is money.

The key is to take up the least amount of space while meeting your packages' weight thresholds and safety needs. Reducing footprint reduces carrier quotes, but going too small creates issues that often lead to surcharges.

A carrier may charge a fee for unused pallet space or add a surcharge for not being able to stack with your pallet. Also, each mode of transportation has different weight and footprint limitations. Exceeding weight or size requirements results in fees or rejected shipments, so check with your freight carriers to be sure about your materials.

If you're looking for best practices on how to prepare containers, [check out our Parcel Packaging Guide](#).



## Boxes, Assemble!

Assembling your freight is a lot like building a house or Jenga® tower — except you have to factor in air, ground or ocean travel conditions. The idea is to create as much stability vertically as possible while creating a symmetrical rectangular shape with your boxes. Place heavier boxes on the bottom to reduce swaying and crushing containers. **Use the “column stacking” technique by lining up box edges to take pressure off the weakest point of the box where the flaps join in the center.** Avoid stacking box edges on the center flaps, known as interlocking, as this may greatly reduce the strength of your stack.

While many shipments fit nicely into column stacking, irregular shaped items or a mixture of different size boxes may make this problematic. For these circumstances, [WWEX can help with a proper freight strategy](#) or help you work with the right carriers for shipments requiring special attention.

### Don't Get Creative With Your Stacks

Keep your stack simple. Muffin tops, leaning towers or mushroom-cloud shapes will cause extra fees or even rejected freight. These ill-formed pallets also increase the likelihood of forklift incidents in warehouses. Also, avoid “pyramid stacking” where one or more items on top of the shipment disturb an otherwise flat top. All stacked freight requires flat surfaces for proper wrapping, stacking and a snug fit inside trucks.

## Wrap It Up

After you're done stacking boxes into a tidy tower, it's time to keep everything in place. Cord straps should go over each vertical column. Add corner edges for extra padding, but be sure to keep padding within the frame of your pallet or other handling unit. Apply stretch wrap from the bottom, working your way around and up the shipment. At the top, round the corners several times before twisting to the bottom again.

Do not leave any shrink wrap unsecured as it may unravel in transit. For items on wheels or prone to sliding back and forth, it's important to block and brace. With this technique, a block is secured to the pallet in a position that locks the item in place.



## Labeling

Without proper labeling, items are left in the breeze if pallets are broken down. (Believe it — this happens a lot.) Each box needs to be labeled clearly on the top and sides (as directed by your carrier). Label information should include shipper and consignee addresses and

pertinent information from the bill of lading (BOL). If multiple packages are going to the same destination, it's a good idea to number them in sequence on the outside so carriers can easily headcount the entire batch.

Choose the best labeling tools for maximum readability and durability. This includes:

- » A wide-tip, dark permanent marker
- » An adhesive label sleeve
- » Waterproof printable adhesive labels
- » Paper labels secured on all sides (and across the middle) with clear packing tape

## Freight Shipping With or Without a Net?

No matter how confident you are in packaging, accidents happen either in warehouses or on trucks. Know the difference between liability and insurance coverage to cover profits on your orders properly.

**What is liability?** It's the maximum amount a carrier is responsible for in the event of loss, damage or theft. And although you can declare a higher value, it's still not insurance, so if and when you need to file a claim, it's on you to prove the value of items and that the carrier is at fault for damages.

**What is insurance?** It's extra coverage that helps you get reimbursement for the full invoice value of your goods if they're lost, damaged or stolen. **As a low-cost safety net, it's often a no-brainer for high-value and fragile shipments.**

With Worldwide Express, you have access to industry-leading coverage through UPS Capital Insurance Agency, Inc., which is easy to add and features a hassle-free claims process.







# Your Guide to Freight Perfection

As you can see there are a lot of variables that go into freight shipping. Worldwide Express is a third-party logistics (3PL) company on a mission to turn shipping into a differentiator. How? Partnering with WWEX offers:

## Strategic and Operational Support

With our help, you can find efficiencies and extra time in the day to get more done and stop worrying about shipping.

## Negotiated Freight Carrier Rates

We built a carrier network including more than 65 of the top less-than-truckload carriers and more than 85,000 FTL providers. Our decades-long partnerships offer you lower rates from carriers you need for freight headed across the country or your county.

## Robust Tools

Our transportation management system (TMS), SpeedShip<sup>®</sup>, lets you book orders, create shipping labels, compare transit times, review invoices, add insurance and track shipments from a single dashboard. And if you need to book parcel shipments, SpeedShip has that too. We're the national only non-retail Authorized UPS<sup>®</sup> Reseller, giving us unique advantages in the small package space you can't get anywhere else.

This guide should start your journey toward freight efficiency. But don't stop here.

Let's build an efficient freight shipping plan, together.

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