# AN ESSENTIAL **PACKING GUIDE** FOR EXPRESS SHIPMENTS

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### PACK IT RIGHT FOR THE EXPRESS JOURNEY

At DHL we do everything we can to ensure your packages are always delivered on time and in great condition.

Parcels can travel many thousands of miles through DHL's sophisticated global network to reach their destinations. Packing your shipments in the right way with appropriate materials will help ensure they arrive safely and stay intact.

Do you pack your shipments with express transportation in mind? International standards for express packaging are more stringent than other types of transportation as shipments are handled by a network of conveyors, aircraft and people.

At all times, it remains the responsibility of the sender to ensure adequate packaging is used. As a reference for DHL customers, this Packing Guide provides some general instructions and examples of good packing practices. Different shipment contents requires different level of protection, therefore this should not be perceived as a final solution suitable for all customers.

A Packing Guide for Specific Items is also available at DHL.com to provide more specific guidelines for packing Electronic Goods, Fashion Apparel, Palletized Cargo and Temperature Sensitive Goods. Should you need further assistance, your DHL Customer Service team is only a call or email away.

#### **Quick Tips**

If you are short of time, here are some basics of good packing.



#### Step 4 - Label • Apply shipment label to

the top surface of your package • Clearly display shipment label on a single surface

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#### DISCLAIMER:

Please note that the information contained herein is general and may not apply in a specific situation, nor does it constitute an alternative to legal or other advice from an appropriately qualified professional. While reasonable care has been taken in the preparation of this document, DHL Express excludes all representations, warranties, undertakings and guarantees relating to the information contained herein to the maximum extent permitted by applicable laws. It is the responsibility of the Shipper to ensure compliance with all applicable laws, regulations and requirements at all times. All services are rendered subject to and in accordance with the DHL Express Terms and Conditions of Carriage, a copy of which is available from your local DHL Customer Service.

### **ASSESS** YOUR PACKING NEEDS

Quality packaging is key when it comes to preventing damage. Assessing your packing needs is an essential step to determine what's best for the type of goods you wish to transport.

### CONSIDERATIONS THAT WILL HELP YOU DETERMINE YOUR PACKAGING REQUIREMENTS

Weight	<ul> <li>Consider the strength and durability of the packaging box</li> <li>An appropriate box should be able to securely hold the weight of the contents being shipped</li> </ul>
Size and Shape	<ul> <li>Items should not touch the outer wall of the box</li> </ul>
	<ul> <li>Odd-shaped or rounded packaging may need extra attention</li> </ul>
Form of Contents	<ul> <li>Special packaging materials and packing techniques are required for shipping liquids and powders</li> </ul>
Value of Contents	<ul> <li>Extra cushioning and protection may be required for high value goods</li> </ul>
Fragility	<ul> <li>Extra cushioning and protection are required for fragile items</li> </ul>
	Apply special handling label
Final Use	Does the box need to be retail ready? Do you want to avoid any markings on the box?
Regulations	<ul> <li>Some regulated items may require specialist packaging</li> </ul>

# INFLUENCING FACTORS







and more

#### **Dangerous Goods**

Did you know that food flavoring, perfumes, chemicals and electronic equipment can be classified as dangerous goods?

Contact our Restricted Commodities team via the DHL Customer Service Hotline for specialist advice, and to learn about specific regulatory requirements if you would like to ship dangerous goods with DHL Express.

If you are shipping Dangerous Goods, the appropriate dangerous goods transport regulations (IATA DGR, ADR, IMDG, etc.) must be followed. Additionally, DHL requires shipments to always be placed in a rigid outer box, i.e., jerricans and drums need to be placed in a box.

If your shipment is Not Restricted according to the IATA Dangerous Goods Regulations through the application of a "**Special Provision**", DHL Express requires the shipment description statement to include the following: "**Not restricted as per special provision X**" on the transport label.

#### **Restricted and Prohibited Commodities**

Some items are prohibited for transportation with DHL Express and are classified as either Prohibited or Restricted commodities.

Please refer to DHL.com for more information, or contact your local Customer Service team,

### **CHOOSE** SUITABLE MATERIALS

Good quality packaging is critical to protecting your shipment during transportation. DHL provides a range of packaging supplies that are tried and tested. However, if you prefer to use your own materials, the following provides some general guidelines.

Since this guide is designed for general use across a wide variety of products, we recommend that you also refer to packaging standards within your industry.

### **EXTERNAL PACKAGING MATERIALS**

Parcel		
Material	<ul> <li>Always use high quality corrugated cardboard boxes for parcels. For fragile or heavy items, double-wall or tri-wall constructions are recommended.</li> </ul>	
	Avoid reusing old boxes as they may have lost some of their rigidity.	
Strength	Look out for the manufacturer stamp which tells you information about the construction type and strength of a box. Ask your box supplier for more information as required.	ALL CLARKER CONTROL OF C
	Refer to the box specifications below to select suitable packaging for the weight of your shipment.	
Size	<ul> <li>Under-filled boxes may collapse and over-filled boxes may burst. Prevent this by choosing a box with the right size for the content being shipped.</li> </ul>	
Flyer Bag		
Strength	To avoid splits or tears, the tensile (stretch) and seam (seal glue) strength of the flyer bag should meet the recommended standards outlined below.	_DHL_
	<ul> <li>DHL Flyer Bags have a minimum elongation (stretch) of 35cm prior to failure and can hold 30% more weight at the seam.</li> </ul>	FLYER

### **CHOOSE A BOX OR FLYER APPROPRIATE FOR THE WEIGHT OF YOUR SHIPMENT**

Box Specifications						
Parcel Weight	Construction	Bursting Test (kPa)	Edge Crush Test (kN/m)			
Up to 5kg	Single Wall	1000	4.5			
5-10kg	Single Wall	1000	4.5			
10-15kg	Double Wall	1000	7			
15-20kg	Double Wall	1000	7			
20-25kg	Double Wall	1200	8			
25-30kg	Double Wall	1200				
>30kg	Spe	Specialist Packing Method				

Flyer Bag Specifications					
Document Weight	Construction	Seam Strength	Tensile Strength (MPa)		
Up to 3kg	LDPE (60µm)	6 kg	MD/TD 25 MPa & 400% elongation at break		

Remarks:

- Burst-Test (aka Mullen Test) is the force of pounds per square inch required to rupture or burst the side of a corrugated box. The result indicates the box's ability to withstand external or internal forces, and how the box will contain its contents during rough handling.
- Edge-Crush-Test (ECT) measures the stacking strength of corrugated cardboard boxes or fiberboard. Determining a finished box's compression-strength is defined by the amount of force that is needed to crush the cardboard by standing it on its edge.
- Seam Strength refers to the load requires to break a seam.
- Tensile Strength is the maximum stress that a material can withstand while being stretched or pulled before failing or breaking.
- Objects with a rigid edge are not suitable for flyers, as they can pierce the plastic.

### **DHL PACKAGING RANGE**



A range of DHL packaging supplies are made available for DHL account holders to order online or by calling local DHL Customer Service Hotline. Limited quantities are also available at DHL Service Point Locations for use by non-account holders shipping with us.

				GOGREEN PLUS
		Boxes		
Вох Туре	Weight Limit	Size (mm)	Bursting Test (kPa)	Edge Crush Test (kN/m)
Box 2	1 kg	337 x 182 x 81	1000	4.5
Box 3	2 kg	337 x 322 x 92	1000	4.5
Box 4	5 kg	337 x 322 x 180	1000	4.5
Box 5	10 kg	337 x 322 x 345	1000	7
Box 6	15 kg	417 x 359 x 369	1000	7
Box 7	20 kg	481 x 404 x 389	1200	
Box 8	25 kg	541 x 444 x 409	1200	

Envelopes and Flyers*					
Туре		Weight Limit	Size (mm)	Seam Strength	Tensile Strength
Express Envelope GoGreen Plus	LUNE DEFENSE LUNESSERVELOF LUNESSERVELOF	0.3 kg	320 x 240	_	_
Envelope 0	en anticipation de la constante de la constant	0.5 kg	252 x 190		_
Envelope 1	and a second sec	0.5 kg	350 x 275	_	_
Standard Flyer	ELYER	2 kg	400 x 300	4 kg	MD/TD 25Mpa & 400% elongation at break
Large Flyer	FLYER	3 kg	475 x 370	6 kg	MD/TD 25Mpa & 400% elongation at break

Remarks: Dimensions mentioned above are for reference only. Packaging range may vary in different countries. Please refer to ordering portal or contact DHL Customer Service Hotline in your country for options available. \*DHL Express Flyers are made of at least 66% recycled plastic and are 100% recyclable.



### **INTERNAL PACKAGING MATERIALS**

Bubble wrap, airbags, cardboard and foam peanuts/pellets are all commonly used as packaging material. All have different qualities and it is important to use them appropriately.

Following the below table will help you decide what material is suitable for your needs. Note that while bubble wrap offers some void fill properties, it is more effective to use more suitable materials when trying to fill larger spaces.



	Packaging Function					
Type of Material	Cushioning	Void Fill	Protection	Divider	Other Function	
Bubble Wrap	√	√	√			
<b>Small Cell ¼ inch</b> Suitable for lightweight items					Interleaving	
Large Cell ½ inch Suitable for medium weight products					Blocking	
Foam Wrap	✓	$\checkmark$	$\checkmark$			
Foam peanuts/pellets	✓	✓		~		
Air Bags		✓				
Crumpled Paper		$\checkmark$	$\checkmark$			
Corrugated Inserts		✓	$\checkmark$	$\checkmark$		
Shredded Cardboard				✓	Shock absorptio	

### **APPLY** PACKING TECHNIQUES

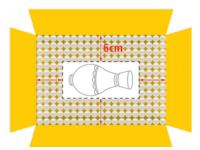
Following the first two sections of this guide you will now have assessed your packing needs and prepared suitable packaging materials for your shipment.

Before introducing packing methods, here are some important principles applicable for packing your shipment contents.

### Leave No Empty Space

- It is important to completely fill empty space within the box to avoid contents moving during transit which can cause damage to both contents and box.
- Place void filler on the base of the box then around the item you are shipping.
   Ensure there are no gaps or movement.
- When choosing void filling materials, always ensure that they would provide sufficient support for the weight of the shipment contents. Some materials may sink or deflate under the weight of the content which may eventually leave empty space inside the box.





### **6cm Distance**

- Always place items being shipped in the center of the box with at least 6cm of separation from any external walls or corners.
- Take this into consideration when determining the size of box relative to the size of the contents.

### Wrap Items Individually and Use Dividers

- When shipping multiple items in a single package, always wrap each item individually and separate with corrugated inserts or other divider materials as appropriate.
- Dividers are helpful to avoid damage caused by individual items making contact during transit, especially when items are stacked.
- Small or loose items should be placed in an inner container or plastic bag to avoid the items separating during transportation.



### **PACKING METHODS**

The most suitable packing method to use will depend upon the assessment you have carried out in section 1. The main packing methods we recommend are outlined below but If you need any assistance, please contact your local Customer Service team.

### **Basic Packing Method**

Protection Level:

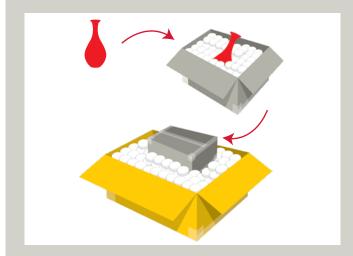
Suitable for most non-fragile articles (e.g. printed matters, machinery parts, metal parts etc.)



### **Box-in-box Method**

#### Protection Level:

The box-in-box method utilizes a second outer box to offer additional protection. It is useful for the transportation of more fragile items or where the inner box will be used for retail purposes.



- Both an outer and inner box will need to be prepared.
- We recommend using the original manufacturer's packaging as the inner box where possible. Alternatively, the inner box should be packed using the basic packing method outlined above.
- The outer box should be at least 14cm larger in all dimensions than the inner box to provide sufficient overpack protection. We recommend a double wall box but if using single wall, ensure your box has suitable strength for the weight of its contents.
- Place approximately 6cm of void fill in the base of the outer box before centrally placing the inner box inside.
- Restrict any movement of the inner box by filling void space on all sides before sealing the outer box ready for transportation.

### **Liquids and Powders**

Many common household liquids and powders are classified as dangerous goods and are carefully regulated for transport on aircraft. Contact your local Customer Service team for more information.

If the items are not classed as dangerous goods and subject to more stringent packaging requirements, the following steps will help prevent loss or damage during transport.



### **Sharp Objects**

What is meant by a sharp object? This could be items such as hand tools, machinery parts, professional chef knives or similar. This could also include regular items with sharp edges. How you pack these as the shipper, is important for both the safe delivery of your shipment, and for the safety of those Suppliers handling your sharp object shipment.

Below are tips to help you ensure that prior to shipment pick up, your shipment packing and packaging are fit for purpose. You should also refer to your Company's Quality manual or manufacturer guides.

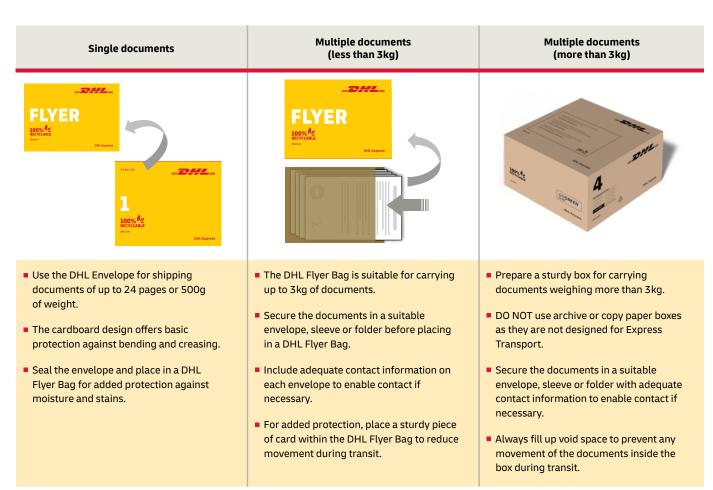
- 1. Sharp items must be shipped with strong and safe packaging. It is unsafe to have: loose items, sharp objects strapped to a pallet, sharp objects without secondary packing methods, unsuitable packaging such as flyer bags.
- 2. Sharp items should be shipped by using either a proper protection case or using the Box-in-Box method (described in this document).
  - **a.** We recommend the use of the Original Manfuacturer's Packaging for the inner packaging, which will provide additional strength for the shipment.\*
  - **b.** The outer box should be at least 14cm larger in all dimensions than the inner box to provide sufficient overpack protection.
  - **c.** Place the inner package in the center of the box with at least 6cm of void fill surrounding the inner package. This ensures there is enough filler to provide secure cushioning and reduce internal package movement.
- 3. Strong tape using the H-Taping method (described in this document) to secure all outer packaging.
- 4. Orientation marking / labels as applicable (described in this document).

\* Note: Shipping with Original Manufacturer's Packaging is usually designed to ship the product once, not multiple times. Reuse can weaken the packaging and place the inside product at risk and lead to unintended safety issues.

### **Documents**

Whether you are shipping bills of lading, the contract for your new house, or transferring case files, DHL has the packaging to suit your needs. Our document shipping advice can be split depending on the weight, size and quantity of documents you are shipping.





### SEAL AND LABEL Shipment

A good seal helps to protect your package during transit. Both the adhesive tapes you choose and how you seal the shipment makes a difference in protecting your shipment contents from being exposed or damaged during transit.



DHL recommends the following pressure sensitive tapes for their strength and durability:

- Polypropylene tape (brown plastic tape)
- Vinyl adhesive tape (electrical tape)
- Fiber-reinforced paper tape (duct tape)



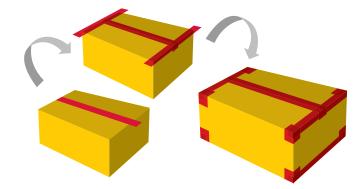
### Avoid Using...



### **H-taping**

Ensure all seams are sealed using the H-taping method:

- Apply 1 strip of tape along the center seam
- Apply 2 strips of tape across both edge seams
- Apply more strips of tapes for heavier shipments
- Repeat the H-taping so that both the box's top and bottom seams are sealed





### Strapping

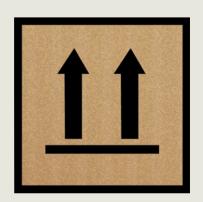
DHL Express does not endorse the use of strapping or banding for items less than 30kg in weight as it can damage both our network machinery and the package itself.

Suitable packaging should always be capable of carrying the weight of the items without the need for strapping.

When shipping pieces weighing more than 30kg, strapping is an ideal way to strengthen your shipment when applied correctly.

### **Special Handling Label\***

Although DHL cannot guarantee maintaining the stable orientation of shipments during transport, our teams actively look for visible special handling instructions. Proper use of handling instruction labels can help ensure the appropriate transport, handling and storage of your shipment during transit. Here are examples of commonly used labels:





This Way Up The upward arrows show the direction that the package must be transported handled and stored.

**Fragile, Handle with Care** The package must be handled carefully.



Keep Dry The package must be protected from excessive humidity and be stored under cover.

\*Any special handling label must be applied by the shipper prior to courier collection.

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### **Applying Shipment Label**

Displaying the shipment labels clearly is important in ensuring that your shipment moves swiftly through DHL's network. Below are a few key points to note:

- Fix the shipment label securely on the top surface of the shipment box. This will help us keep your shipment in an upright position as much as possible during transit!
- Ensure the label is wholly visible on one surface and that the label does not cover any seams.
- Do not let other labels, tapes or paperwork cover the shipment label.
- We never recommend using an old box but if you do, ensure all outdated shipment labels are removed prior to use.
- Placing a spare label inside the package will help us identify your shipment if the original label becomes detached or damaged.
- If you need to apply other labels on your shipment, please avoid placing them on the same surface as the shipment label.
- Use a plastic self-adhesive clear window pouch to hold any loose documents that are required to be placed outside of the box.

#### Did you know?

You can create your shipment label within a few clicks with > DHL's Electronic Shipping Solutions. Completing an electronic waybill is easy as you will be guided through the process to avoid missing any information required for swift and accurate delivery of your shipment.

To check out which electronic shipping solution best fits your needs of managing international express shipments effectively, please visit DHL.com

## HELP REDUCE YOUR CARBON FOOTPRINT. GET PACKAGING RIGHT THE FIRST TIME.

Damaged items lead to additional manufacturing and transportation. Protecting your shipment with appropriate packaging is an effective way of reducing carbon footprints.

DHL Express – Excellence. Simply delivered.

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