



Temperature and Humidity

Package Engineering

Keep your cool when temperature or humidity-sensitive goods get shipped.

Mitigate the risk of damage and loss.

Confidence of UPS's service and guarantee.

Get professional, industry certified packaging guidance.

Whether your shipping to the hottest desert or the frozen north, protecting your products during transit ensures your image of quality. Your shipping cartons can lose half their original compressive resistance in a 95% relative humidity climate; inversely, in arid, hot climates it can become brittle and susceptible to tearing. We recognize that it takes effective packaging solutions to improve a product's transportation survivability, and UPS can help.

UPS's Package Engineering team has certified packaging engineers and the right equipment that allows UPS to provide industry standard testing. Our temperature-humidity chamber allows us to test the temperature and humidity-sensitive of transportation packaging materials; and the effects that can impact your products, such as pharmaceuticals or food products.

Benefits

Package Engineering will help you keep your products within specified temperature ranges from pickup to delivery. No matter what type of temperature-sensitive shipment you have, Package Engineering can help mitigate the risks.

Protect your temperature or humidity sensitive goods

Our expertise in meeting customer and regulatory guidelines specific to the healthcare industry enables us to handle your shipments the way you would handle them.

Pharmaceuticals become unsafe or ineffective if temperatures or humidity levels exceed allowable ranges. Pharmaceutical shippers and manufacturers must evaluate the safety of their products through detailed and documented testing. Properly testing not only your goods, but their transportation packaging can reliably meet your customer's expectations and any relevant government regulations.

Packaging consultation and guidance

You have access to not only the certified packaging engineering experts, but also UPS's more than 100 years of logistics experience.

See How it Works

Identify packages, environmental forces, and destinations

Before you even begin shipping a new product or if you are experiencing an issue with your current packaging, having an expert evaluate your baseline shipping containers, packaging material and measuring the results caused by elemental forces can improve the bottom-line.

If your shipments are governed by federal, state or local regulations, having the assurance of proper packaging provides you peace-of-mind, keeps regulators and your customers satisfied.

Work with experts

Our certified packaging engineers are experienced in recognizing the situations in which your packages and goods will encounter in your supply chain. Engineers first conduct a baseline examination of your packages and your packaging processes. After a baseline has been established, testing begins and our engineers document the results. When testing has been completed, we are able to make design and material recommendations that can mitigate the various elemental forces endangering your shipments.

Rely on state-of-the-art technology

Our testing facility is an International Safe Transit Association (ISTA) certified facility and includes the necessary equipment to simulate frozen or winter ambient, tropical (wet) , desert (dry) or summer ambient, or cycling of various conditions. Our engineers can then immediately apply other ISTA certified tests, such as:

- TAPPI** 810 Bursting Strength

- TAPPI 811 Edge Crush Resistance

- ASTM*** D642 Compression

- ASTM D3332 Product Shock Fragility

- ASTM D3580 Product Vibration

Getting Started

Speak to your UPS Account Executive for an in-depth review of your business needs and what solutions fit best for your supply chain.

Customer Solutions

To learn more visit

[ups.com/customersolutions](https://www.ups.com/customersolutions)