

# KEY CONSIDERATIONS FOR Designing Packaging to Reduce Damage

Consider the  
Distribution  
Environment

Design for  
Packaging &  
Stacking

Avoid  
Reducing  
Quality to  
Reduce Cost



## Consider the Distribution Environment

- Not designing to the entire mode of transport can cause damage and impact cost through the entire system. Always consider the product's distribution environment at the start of design.
- Consider what are you are packing, as well as where it is coming from and where it is going.
  - Identify the mode of transport. Is it packed and shipped within the US or overseas?
  - Determine what environmental conditions it will be exposed to in the distribution environment.
  - Examine how many drop off and touch points there are throughout its distribution environment.

## Design for Packaging & Stacking

- Failure to use the correct internal support, using incorrect outer materials and board grades or inefficient palletization can cause damage and impact your ROI.
- Select the correct packing materials for the product and the weight.
  - Select and develop the most efficient internal supports without compromising structural integrity and efficiencies.
  - Avoid overpackaging and underpackaging.
  - Stabilize the product as one cohesive unit. This eliminates waste and space in the package.
  - Select the correct board grades and fluting.
  - Determine the correct corrugation direction for stacking strength.
  - Select the correct stacking pattern for transport-overhang and under hang to avoid causing damage. Column stacking is ideal. Point to point contact on cartons increases stacking strength. The correct pattern eliminates shifting on the pallet.

## Avoid Reducing Quality to Reduce Cost

- Reducing or eliminating materials and specifications can cause damage, impact structural integrity and incur unexpected cost throughout the entire system. This could lead to increased warranty claims and costs, repacking costs, product damage and returns.
- Avoid reducing and downgrading the design, fluting and board grades and material specifications
  - Avoid reducing and downgrading internal supports.
  - Avoid reducing material and specifications for internal supports, this can cause damage to the product.