



Packaging Cheat Sheet

A QUICK REFERENCE SHEET TO THE MAIN ESSENTIALS OF DESIGNING

1. Corrugate Basics (Know This Cold)

COMMON FLUTES

- **E flute** – thin, good print, small packs
- **B flute** – POP displays, strength + print
- **C flute** – most common shipping carton
- **BC** – heavy-duty, pallet & bulk

KEY TERMS

- **Caliper (CAL)** = board thickness
- **Inside Loss (IL / Scant)** = space lost at folds
- Rule of thumb: $2 \times IL \approx 1 \times CAL$
- **ALWAYS ACCOUNT FOR CAL + IL OR THE PRODUCT WILL NOT FIT.**

2. Strength Ratings (Mullen vs ECT)

MULLEN TEST (BURST)

- Best for dense / heavy / sharp products
- Fixed liner combinations
- Measures puncture & tear resistance
- **SWITCHING MULLEN -> ECT CAN REDUCE CONTAINMENT STRENGTH 10–15%. TEST BEFORE CHANGING SPECS**

ECT (EDGE CRUSH TEST)

- Best for stacking & compression
- More liner variability between runs
- Measures vertical load strength

3. Retail Reality (Design Thinking)

YOU HAVE ~7 SECONDS

- First impression = sale or miss
- 40% share unique packaging on social
- 52% repurchase when packaging feels “premium”

KISS PRINCIPLE

- Design bold -> simplify later
- Fewer parts = faster assembly + lower cost

GOOD / FAST / CHEAP

- You only get **two**. Pick intentionally.

4. The 4 Questions Every Design Must Answer

- **How is it transported?** (Courier, pallet, bulk, mixed freight)
- **Who sees it?** (Consumer, buyer, retailer)
- **Purpose?** (Shipper, display, seasonal, secondary)
- **What goes inside?** (Size, weight, value)

5. Core Design Priorities (5 Keys)

- **BRAND ALIGNMENT**
- **SUSTAINABILITY**
- **CREATIVITY (BUT MANUFACTURABLE)**
- **SHOPPER EXPERIENCE**
- **QUALITY & FIT**

6. Essential Math (Save These)

AREA (MATERIAL USE)

- $(X \times Y) \div 144 = sqft$

DIMENSIONAL SHIPPING WEIGHT

- $(L \times W \times H) \div 194 = lbs$ COURIERS CHARGE THE HIGHER BETWEEN ACTUAL VS DIMENSIONAL WEIGHT

RSC ADDITIONS (TYPICAL)

USED FOR QUICK CALCULATIONS

- E flute: **+ 1/8"**
- C flute: **+ 5/16"**
- B flute: **+ 1/4"**
- BC: **+ 9/16"**

VOLUME

- Cube: $(X \times Y \times Z) \div 1728 = ft^3$
- Cylinder: $(\pi \times R^2 \times H) \div 1728 = ft^3$