

Packaging Inspection Cheat Sheet

Ideas for your packaging checklist, with a pass criterion and a verification method for each one.

HOW TO USE THIS CHEAT SHEET

This example is intended to stimulate ideas for your packaging checks. Depending on your product and situation, some checks may be unnecessary or different. For example, not all inspections will require detailed pallet checks and some won't have an inner carton with separate retail packs. It's important to consider the specifics of your product, packaging, and supply chain to decide on the most appropriate steps.

The Five Levels

Depending on the details of your product, packaging, inspection timing, and other factors, you may be inspecting some or all of these.

TERM	WHAT IT MEANS
Pallet	The loaded, wrapped, and potentially banded unit load
Master carton	The outer shipping carton, sometimes called the export carton
Inner carton	Any intermediate carton inside the master carton
Retail pack (Exterior)	The consumer-facing box, bag, or blister the customer sees
Retail pack (Interior)	Everything that surrounds the product, including packing materials

BEFORE THE INSPECTOR STARTS

Confirm all three are on hand and current.

ITEM	WHY IT MATTERS
Signed packaging sample	The physical reference for color, print, and construction
Written packaging specification	Board grade, dimensions, materials, closure method, pallet pattern
Purchase order and artwork files	The source of truth for quantities, marks, and label content

SAMPLING PLAN

Determine the sample size before the inspector arrives.

CHECK TYPE	TYPICAL PLAN
Cosmetic and labeling defects	ISO 2859-1 (AQL Sampling), General Inspection Level II, AQL 2.5 major / 4.0 minor
Dimension and weight	5 master cartons per item/SKU, spread across the lot
Pallet checks	ISO 2859-1 (AQL Sampling), Special Inspection Levels S-1 to S-4
Drop test	1 carton per item/SKU

1 Pallet

Our standard procedure for most inspections is to take measurements on the pallets at a Special Inspection Level between S-1 to S-4. However, we can meet our client's special requirements. The checks below represent a wide range of detailed pallet verification steps that might be appropriate for some situations.

Most Common Checks:

CHECK	WHAT PASSES	HOW TO VERIFY
Load dimensions	Length, width, and total height within spec tolerance	Tape measure
Pallet label	Shipping mark content correct, label legible, positioned per spec on the required faces	Compare against the purchase order

Less Common Checks:

CHECK	WHAT PASSES	HOW TO VERIFY
Load pattern	Correct number of layers, units per layer, and total cartons per pallet	Count against spec.
Overhang/Coverage	Zero carton overhang past the pallet edge unless the spec allows it, with the tolerance stated in mm. If pallet coverage percentage is specified, verify that it matches	Straightedge along each pallet face, or tape measure to determine coverage
Banding straps	Straps tight with no lateral movement when pushed firmly by hand, buckles fully fastened	Hand pressure test on each strap
Shrink film	No tears, film anchors the top layer to the pallet deck	Visual check

CHECK	WHAT PASSES	HOW TO VERIFY
Edge and corner protection	Cardboard protectors on edges, corners, top, and bottom, seated flush under the straps with no gaps or crushing	Visual and hand check under each strap
Pallet specification match	Pallet type, size, and material match the written spec	Compare against the spec sheet before anything is unwrapped
Pallet condition	No broken deck boards, protruding nails, splinters, mold, or visible moisture	Visual on all four sides plus the top deck
Load stability	Load does not shift or lean when the pallet is moved	Observe during the pull for inspection
IPPC heat treatment mark	Wood pallets carry a legible IPPC stamp, HT code, and country	Visual, on the stringer or block face.

2 Master carton

Most Common Checks:

CHECK	WHAT PASSES	HOW TO VERIFY
Shipping mark content	Every required field present, correct, and matching the purchase order (Purchase Order number, SKU number, Country of Manufacture, etc.)	Field-by-field comparison against the purchase order
Shipping mark legibility	Print sharp with no smearing, readable from 60 cm	Visual from 60 cm
Carton gross weight	Within spec tolerance	Calibrated scale, 5 cartons per SKU

CHECK	WHAT PASSES	HOW TO VERIFY
Handling marks	Fragile, this-side-up, humidity, and stacking-limit marks present and correctly oriented	Visual
Carton surface	No dents, crushed corners, cracks, water staining, or scuffs	Visual on all six faces
Closure and sealing	Specified tape, glue, staples, or bands used. Tape pattern correct, e.g. H-tape.	Visual plus a thumb pull at each seam end
Carton dimensions	Length, width, and height within spec tolerance	Measure 5 cartons per SKU
Contents count	Correct number of inner cartons or retail packs inside	Open per sampling plan and count
Assortment ratio	Mixed-SKU cartons contain the correct ratio and mix	Open and verify against the assortment sheet

Less Common Checks:

CHECK	WHAT PASSES	HOW TO VERIFY
Odor	No solvent, mildew, chemical, or other unusual odor on opening	Open the carton and check immediately, before the air clears
Packing accessories	Desiccants, humidity cards, void fill, and dividers present in the specified quantity and position	Visual on opening
Board grade	Corrugate grade, flute type, and wall construction match spec	View cross-section on a sample carton, compare flute profile and liner to the signed sample. Confirm the box maker's certificate printed on the carton.

CHECK	WHAT PASSES	HOW TO VERIFY
Corrugated direction	Flute direction runs as specified	Visual against the master sample
Burst or edge crush rating	Meets the specified rating for the loaded weight, for example 200# test for gross weight up to 65 lb	Box maker's certificate, plus compare to approval sample. Most factories do not have testing equipment on site

3 Inner carton

Not all master cartons will have an inner carton, but here are some considerations if you do.

CHECK	WHAT PASSES	HOW TO VERIFY
Inner carton condition	No crushing, tears, or staining after removal from the master carton	Visual
Fit inside master carton	Snug fit with no lateral movement.	Push test inside the closed master carton
Contents count	Correct number of retail packs per inner carton	Count against spec
Print or label	Content matches spec, print legible, label positioned correctly	Compare to the signed sample
Barcode	Scans first pass, result matches the printed number and the purchase order	Handheld scanner or phone

4 Retail pack (Exterior)

The only packaging your customer will ever see.

CHECK	WHAT PASSES	HOW TO VERIFY
Color match to artwork	Matches the approved Pantone references and the signed sample	Side by side against the signed sample
Print quality	Text and logos sharp and correctly positioned, no blurring, color smear, misalignment, or ghosting	Visual against the signed sample
Surface finish	No visible scratches, stains, bubbles, or scuffing when viewed from 60 cm	Visual at 60 cm, consistent lighting
Shelf consistency	Multiple packs placed side by side show no discernible difference in color or finish	Line up 10 packs from different cartons and compare
Material	Substrate, coating, and finish match spec	Compare to the signed sample, verify against spec
Dimensions	Length, width, and height within tolerance	Measure per sampling plan
Label and ticket placement	Label, hangtag, and price ticket in the specified location and orientation	Compare to the spec drawing
Barcode scan	Every barcode scans on first pass and the result matches the printed number and the purchase order	Handheld scanner or phone, every barcode type on the pack

5 Retail pack (Interior)

The only packaging your customer will ever see.

CHECK	WHAT PASSES	HOW TO VERIFY
Packing materials present	Every item in the packing SOP present, including foam, bubble bag, paperboard, and inserts	Open one pack per sampling plan against the SOP
Packing material compliance	Required warning text, suffocation warnings, and venting holes present on poly bags	Visual against the destination market's requirements
Cushioning fit	Product held firmly with no movement when the pack is shaken	Shake test by hand
Unit orientation	Product sits in the specified orientation inside the pack	Visual
Inserts and accessories	Manuals, warranty cards, cables, and hardware are present and correctly placed	Verify against specification
Label and ticket placement	Labels, hangtags, and price tickets are in the specified position and orientation	Verify against specification

Carton drop testing

Conducted to ensure your packaging will survive the shipping journey.

TEST	WHAT PASSES	HOW TO VERIFY
Carton drop test	The carton survives 10 drops with no damage to the export carton, no damage to the packages inside, no scratches or dents on the product, and the product still functions.	ISTA 1A sequence: most fragile corner, three edges, six faces. Drop height is set by weight, from 30 in (760 mm) for cartons under 21 lb down to 8 in (200 mm) for 100 to 150 lb. ISTA 1B for heavier loads.

Documentation and evidence

What makes the result defensible after the shipment leaves.

REQUIREMENT	WHAT PASSES
Photos	Loaded pallet, shipping marks, opened master carton, retail pack front and back, every barcode, and every defect found
Measurement records	Actual measured values recorded, not just pass or fail
Defect classification	Every defect logged as critical, major, or minor per your agreed definitions
Sample retention	Signed sample and any failed samples retained and identified

Do You Need Someone on the Ground?

Packaging problems are cheapest to fix while the goods are still at the factory. Once a container leaves, your options narrow fast, and reworking product in your market country gets expensive.

Insight Quality Services offers product and packaging inspection services in more than 30 countries. Whether you're checking a new supplier's first production run or inspecting at a factory you've used for years, you need eyes on the factory floor before the goods ship.

Talk to us about your inspection needs →