Order Packing Dunnage And Void Fill Quality Standard

1.0 Objective & Scope

The objective of this procedure is to ensure that every outbound order is packed with the correct type and quantity of dunnage and void fill to prevent product damage during transit, minimize material waste, and maintain a 99% shipment quality rate. This SOP applies to all Packing Station operators, including Packers, Lead Packers, and Quality Auditors.

Proper dunnage selection reduces product returns, protects inventory value, and supports lean inventory practices by using only the necessary amount of void fill. This standard covers kraft paper, air pillows, bubble wrap, foam inserts, and corrugated dividers.

2.0 Required Systems, Tools & Materials

- SupplyGrid WMS Packing Dashboard (order details, item dimensions, fragility flags)
- Barcode scanner (Zebra or equivalent) for scanning order and item labels
- Dunnage dispenser (air pillow machine, kraft paper roll, bubble wrap roll)
- Pre-cut foam sheets or corrugated dividers (stored in labelled bins)
- Measuring tape or ruler for box interior dimensions
- Clipboard and dunnage usage log (or digital equivalent in WMS)
- Standard shipping cartons (various sizes) and tape dispenser

3.0 Safety & Handling Precautions

- Wear cut-resistant gloves when handling kraft paper rolls or bubble wrap to prevent paper cuts.
- Ensure air pillow machines are operated in well-ventilated areas; avoid blocking machine vents.
- Use proper ergonomic lifting techniques when moving heavy dunnage rolls or boxes over 15kg.
- Keep packing station aisles clear of loose dunnage scraps to prevent slip hazards.
- Do not use damaged or contaminated dunnage materials; dispose of them in designated recycling bins.

4.0 Step-by-Step Procedure

1. Log into the SupplyGrid WMS Packing Dashboard and scan the order barcode to load the item list and fragility flags.
2. Select the correct carton size based on the order’s total item dimensions and weight, ensuring at least 2 inches of void space on all sides.
3. Place a 2-3 inch layer of void fill (kraft paper crumpled or air pillows) at the bottom of the carton to cushion the items.
4. Scan each item barcode and place it in the carton, grouping fragile items together and separating them with bubble wrap or foam sheets.
5. Fill all remaining voids with appropriate dunnage: use air pillows for lightweight items, crumpled kraft paper for medium weight, and foam inserts for heavy or irregular shapes.

6. Perform the shake test: gently shake the closed carton to confirm no item movement; if movement is detected, add more void fill.

7. Seal the carton with tape, ensuring all seams are covered and the tape extends at least 2 inches beyond the edges.

8. Affix the shipping label and any fragile handling stickers to the top of the carton, avoiding covering the barcode.

9. Record the dunnage type and quantity used in the WMS packing log for waste tracking and cost analysis.

10. Place the packed order on the outbound conveyor or pallet designated for the correct carrier.

5.0 Verification & Discrepancy Reporting

1. The Lead Packer or Quality Auditor will randomly inspect 10% of packed orders per shift to verify dunnage adequacy and carton integrity.

2. If the shake test reveals item movement, the order is repacked immediately with additional void fill and the packer is retrained.

3. Any damaged or contaminated dunnage found during packing must be quarantined in a red bin and reported to the Inventory Clerk for disposal tracking.

4. If a dunnage material is consistently overused or underused, the Packing Supervisor logs a discrepancy in the WMS and initiates a root cause analysis to adjust standard pack profiles.

5. All discrepancies involving damaged product due to insufficient dunnage must be escalated to the Warehouse Manager within 1 hour for corrective action and potential carrier claim.