



The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

Supplier Manual for Packaging and Shipping Instructions

<u>Version:</u>	<u>01</u>
<u>Created By:</u>	<u>Brian Lloyd</u>
<u>Approved By:</u>	<u>John Hiovich</u>
<u>Released By:</u>	<u>John Hiovich</u>



The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

Valid From:

12-1-2022

Content

Process Summary.....	4
Supplier Roles & Responsibilities.....	5
1. Expendable Packaging Design.....	5
2. Packaging Approval.....	5
3. Packaging Pricing Determination.....	5
4. Sourcing of Expendable Packaging.....	5
5. Expendable Packaging Specifications.....	5
6. Inventory Control of Expendable Packaging.....	6
7. Returnable Packaging.....	6
7.1 CSP Packaging Approval Form.....	6
7.2 Packaging Approval Form responsibility.....	6
7.3 System Loop Size.....	6
7.4 Returnable Packaging Costs.....	6
7.5 Returnable Packaging Responsibility.....	6
7.6 Not Having Returnable Packaging.....	6
7.7 Returnable Packaging for WIP.....	6
7.8 Damaged Returnable Containers.....	7
8. Weight Restrictions for Handheld Containers.....	7
9. Expendable Box Requirements.....	7
9.1 Material Choice.....	7
9.2 Standard Corrugated Material.....	7
9.3 Internal Dunnage.....	7
10. Domestic Pallet Requirements.....	8
10.1 Domestic Pallet Dimensions.....	8
10.2 Good Cube Efficiency.....	8
10.3 International Standards.....	8
10.4 ISPM No. 15 Compliance.....	8
10.5 Fork Entry Capability.....	8
10.6 Pallet Materials.....	8
10.7 Overall Height Restriction.....	8
11. International Pallet Requirements.....	9
11.1 Off-Shore Pallet Dimensions.....	9
11.2 All International Pallet Requirements.....	9
11.3 Optimize Sea Containers.....	9



The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

11.4	ISPM No. 15 Compliance.....	9
11.5	Fork Entry Capability.....	9
11.6	Pallet Materials.....	9
11.7	Overall Height Restriction.....	9
12.	Labeling.....	10
12.1	Standard AIAG Specs.....	10
13.	Container Securement (Unitization).....	11
13.1	Securing Expendable Packaging to Pallets.....	11
13.2	Strapping.....	11
13.3	Stretch Film.....	11
14.	Packaging must not overhang the pallet.....	12
15.	Hazardous Materials.....	12
15.1	Government Regulations.....	12
15.2	EH&S.....	12



The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

Process Summary

1. This manual will guide the Supplier in the proper use of packaging, labeling, and shipping requirements to successfully support CSP.
2. Shipping from CSP's supply base typically utilizes expendable corrugate packaging and in some special cases, returnable packaging.

Related Document(s)

1. CSP Packaging Proposal Form [PUR-F0013-01]



The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

Supplier Roles & Responsibilities

1. Expendable Packaging Design

Supplier assumes responsibility for the design of expendable packaging used for parts supplied to CSP. The expendable packaging must meet the CSP packaging standards and design style specifications set forth in this manual. Supplier assumes responsibility for part quality in transit for all approved packaging. The Supplier and CSP will continuously look for cost, quality, and workability improvements throughout the model life of a program.

2. Packaging Approval

Final approval of expendable packaging will be the responsibility of the Supplier and CSP Facility Materials Manager. The Supplier will provide packaging design approval to CSP through the CSP Packaging Proposal Form. CSP Packaging Proposal Forms must have final approval by the receiving CSP facility. Sample shipments may be required for the CSP Facility Materials Manager to review prior to final approval.

3. Packaging Pricing Determination

Determining pricing for expendable packaging occurs between the Supplier and CSP Purchasing. CSP Packaging Engineer will support this activity to ensure the lowest cost is attained. The Supplier will submit a packaging cost quotation to CSP Purchasing. Returnable packaging follows a different process for payment.

4. Sourcing of Expendable Packaging

Supplier is responsible for sourcing expendable packaging vendors for supply of mass production level packaging. CSP Packaging Engineer may recommend a source if asked.

5. Expendable Packaging Specifications

Supplier is responsible for ensuring that production level packaging meets the specifications provided by CSP within the given tolerances. If the packaging is non-compliant, Supplier holds responsibility for all



The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

costs associated to make the packaging compliant. Any part quality problem caused by packaging non-compliance is the responsibility of the Supplier.

6. Inventory Control of Expendable Packaging

Supplier must utilize a FIFO system to control inventory. A minimum of three weeks packaging inventory at the Supplier is required unless otherwise agreed to by receiving CSP facility.

7. Returnable Packaging

- 7.1 If returnable packaging is preferred way of shipping parts, Supplier must also provide an expendable packaging back up alternative using the CSP Packaging Approval Form and must be approved by the receiving CSP facility.
- 7.2 In some cases, Supplier may be required to use returnable packaging (steel shipping racks, plastic pallet boxes, hand-held totes, etc.) for shipments to CSP. The Supplier and CSP Packaging Engineer are responsible for returnable packaging design. The Supplier will provide packaging design approval to CSP through the Supplier Packaging Approval Form. Supplier Packaging Approval Forms must have final approval by both the receiving CSP facility Material Manager, and Packaging Engineer.
- 7.3 Both the Supplier and CSP Packaging Engineer are responsible for determining the amount of returnable packaging required to support the system loop size between the Supplier location and the CSP facility location. The system loop size is determined by frequency of truck delivery and frequency of truck returns. A return ratio may also be a part of the loop equation if the packaging is collapsible. A three-day minimum of returnable packaging is required at the Supplier location. Typically, a two-day minimum of returnable packaging is required at the CSP facility location. Returnable packaging will require a FIFO system to control inventory at the Supplier.
- 7.4 Pricing of returnable packaging is negotiated between the Supplier and CSP Purchasing. CSP may pay for and provide the returnable packaging, add the returnable packaging cost into the piece price, or pay lump sum to the Supplier.
- 7.5 Supplier is responsible for maintenance, replacement, cleaning of the packaging, and tracking inventory levels.
- 7.6 Not having returnable packaging is not an excuse to not ship parts.**



The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

7.7 CSP will not provide the Supplier with returnable packaging to be used internally (WIP). Returnable packaging supplied by CSP is to only be used for shipment of parts.

7.8 Supplier will contact the CSP Facility Materials Manager (or designate) for any damage of returnable containers or if shortages occur.

8. Weight Restrictions for Handheld Containers

Manually handled boxes for shipments cannot exceed 13.6 kg or 30.00 lbs. gross weight. This weight should include the entire handheld pack (parts and packaging). Supplier must receive permission from CSP receiving facility Material Manager or CSP Packaging Engineer to exceed the weight limit.

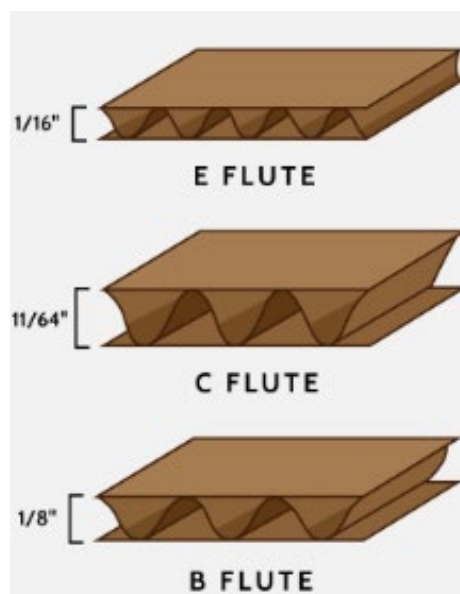
9. Expendable Box Requirements

9.1 Material choice for all expendable packaging should be a corrugated one-way shipping box.

9.2 Standard corrugated material for all expendable shipping boxes and expendable layer pads should be 32ECT / 200# C flute corrugated.

9.3 Internal dunnage can be made from C, B, and E flute corrugated. Choose material based on the needs of the commodity and that it protects the parts from possible damage.

Flute Types





The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

10. Domestic Pallet Requirements

10.1 All domestic pallet dimensions must be built to exact specifications below (figure 1).

10.2 These dimensions are used to ensure that good cube efficiency is achieved and to fully optimize a standard 53' trailer used for shipments to CSP.

10.3 International Standards for Phytosanitary Measures No. 15 (ISPM No. 15) (<https://ispm15.com/>) compliance is not required for domestic pallets. These pallets are only used for shipments within the United States.

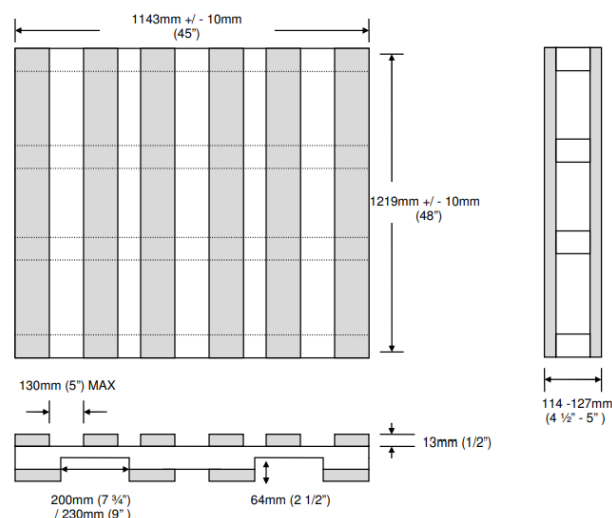
10.4 Customs regulations require that all wood material shipping to and from Canada and Mexico ship on pest treated pallets. ISPM No. 15 compliance is required. Pallets must include IPPC stamp to ensure treatment.

10.5 Domestic pallets must have fork entry capability from all four sides.

10.6 Domestic pallets must be constructed of hardwood. Composite materials such as hardwood plywood, particle board, and medium density fiberboard are prohibited.

10.7 If material can be double stacked, and the bottom load is able to support, overall height restriction for each domestic pallet must not exceed 52". This is to ensure that pallets can be stacked 2 high in a standard 53' trailer.

Domestic Pallet Standard (figure 1)





The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

11. International Pallet Requirements

11.1 All offshore pallet dimensions must be built to exact specifications below (figure 2).

11.2 All pallets coming to or leaving the United States must be ISPM No. 15 compliant.

11.3 These dimensions are used to ensure that good cube efficiency is achieved and to fully optimize a standard 20' or 40' sea container.

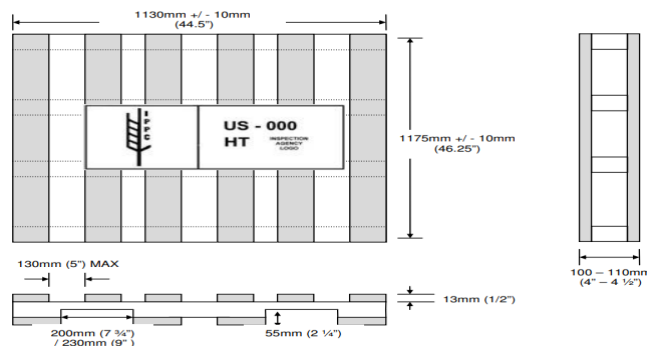
11.4 Customs regulations require that all wood material to or from foreign countries ship on pest treated pallets. ISPM No. 15 (see figure 1.) compliance is required for offshore pallets. Pallets must include IPPC stamp to ensure treatment (figure 3)

11.5 Off-shore pallets must have fork entry capability from all four sides.

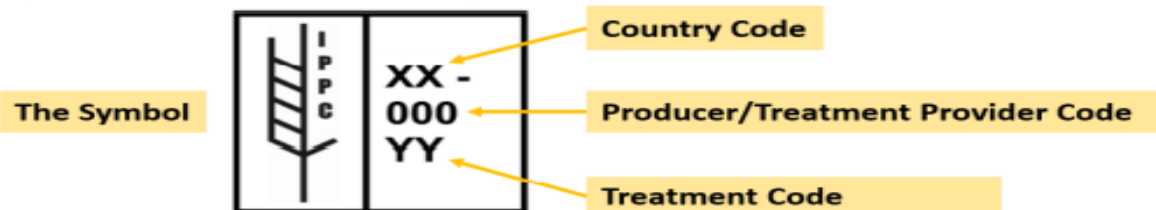
11.6 Off-shore pallets must be constructed of hardwood. Composite materials such as hardwood plywood, particle board, and medium density fiberboard are prohibited.

11.7 If material can be double stacked, and the bottom load is able to support, overall height restriction for offshore pallet cannot exceed 44". This is to ensure that pallets can be stacked 2 high in a standard 20' or 40' sea container.

Off-Shore Pallet Standard (figure 2)



ISPM #15 Marking (figure 3)





The Composites Solution Partner

Supplier Manual

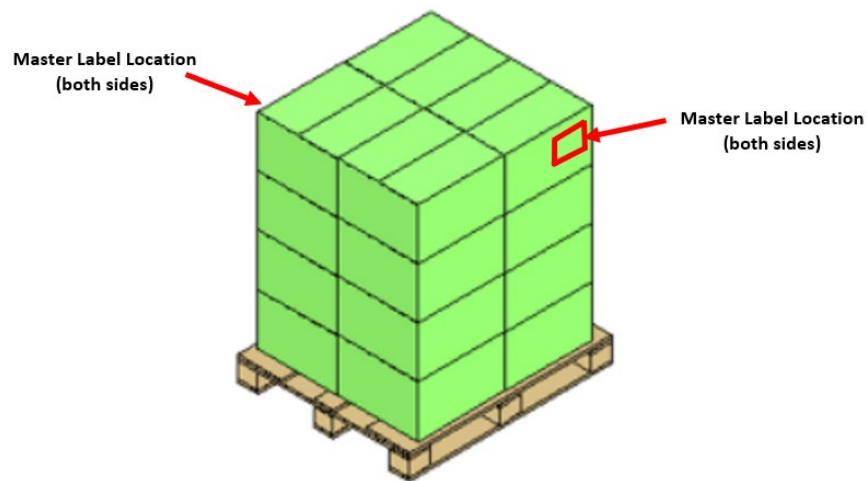
Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

12. Labeling

- 12.1 Each box must be labeled with a standard AIAG 6" X 4" label. The label requires an adhesive backing to attach to the box. Parts ordered as a full pallet also require a master label. Two master labels are to be applied in the upper right-hand corner on adjacent sides of the pallet. This label must be visible while stacked in a load. If the label is larger than the box surface area, ensure that the part number and bar code area are visible and can be scanned.

Master Label Locations:





The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

13. Container Securement (Unitization)

13.1 All expendable packaging shipped on pallets must be adequately secured to the pallets.

Nails, screws, metal staples, metal strapping, metal clips or banding buckles, glue, or PVC film to secure loads to pallets are prohibited.

13.2 Plastic (Non-Metallic) Strapping:

- A minimum of two vertical bands lengthwise and two vertical bands widthwise must be used for handheld container load.
- A minimum of two vertical bands widthwise must be used for bulk container load.
- Horizontal banding of corrugated boxes is prohibited without the use of corner supports.
- Polypropylene strapping is the preferred strapping material.
- Non-metallic strapping must be joined with a friction seal.
- Metal clips or buckles are prohibited.
- Metal strapping is prohibited.
- Suitable non-stapled corner and edge supports are permitted.
- CSP facility Materials Manager must approve the use of any other strapping material or configuration.

13.3 Stretch film

- Stretch film must be linear low-density polyethylene (LLDPE) and clear in color. Stretch film must have enough clarity to enable bar code scanning of labels.
- PVC film is not permitted.
- A minimum of three layers of stretch film, or the equivalent in performance, are required around and encompassing the pallet. Stretch film must securely capture the pallet when wrapping the bottom layer.



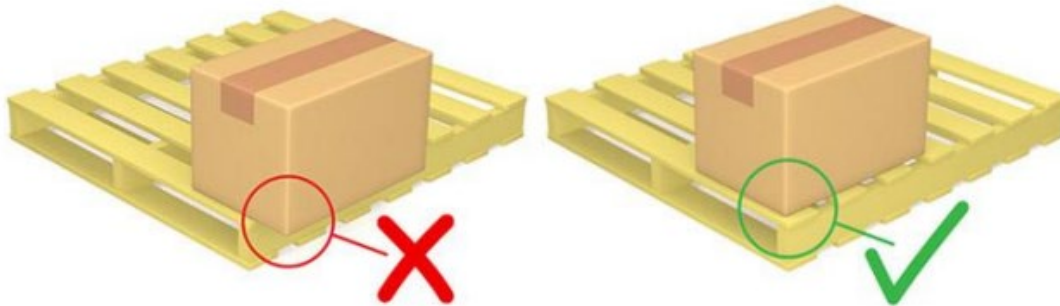
The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

14. Packaging must not overhang the pallet



15. Hazardous Materials

15.1 The Supplier is responsible for ensuring shipment of hazardous materials are compliant with all government regulations or any other relevant international, federal, state, provincial or local requirement.

15.2 The CSP receiving location's Environmental Health and Safety representative must approve any hazardous material.



The Composites Solution Partner

Supplier Manual

Supplier Manual for Packaging & Shipping Instructions

Manual # PUR-M0010-01

REV LEVEL	DATE ISSUED	CHANGE DESCRIPTION	ISSUED BY
00	01Nov2022	Initial Release	B. Lloyd
01	01Jul2025	Branding and grammar	K.Munoz