





**Supplier**  
**Packaging & Labeling**  
**Requirements**

	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 2 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>


## Contents



.....	1
1.0 Introduction .....	5
2.0 Compliance .....	5
3.0 Environmental Considerations .....	5
4.0 Packaging Responsibilities .....	6
4.1 General .....	6
4.2 Essential Packaging Functions .....	6
4.3 Compliance with Regulatory Requirements .....	6
4.4 Compliance with Import/Export Packaging Requirements .....	6
5.0 General Packaging Requirements .....	7
5.1 Packaging Costs .....	7
5.2 Packaging Material .....	7
5.3 Ergonomics .....	7
5.4 Unique Packaging Requirements .....	7
6.0 Shipping Instructions and Documentation .....	7
6.1 Destination Label .....	7
6.2 Packing List .....	8
6.3 Numbering Cartons and Containers .....	9
6.4 Handling Instructions .....	9
7.0 Shipping Container Specifications .....	9
7.1 Definition .....	9

	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 3 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

7.2	Hand-Handled Container Requirements .....	9
7.3	Mechanically-Handled Container Requirements .....	10
7.4	Container Height.....	10
7.5	Temperature .....	10
7.6	Moisture.....	10
7.7	Special Considerations .....	10
7.8	Salvaged Packaging Materials.....	11
8.0	Corrugated Fiberboard Specifications.....	11
8.1	General.....	11
8.2	Certificate of Box Manufacturer.....	11
9.0	Dunnage Material.....	11
10.0	Pallet Specifications .....	12
10.1	General.....	12
10.2	Pallet Size Requirements.....	12
10.3	Construction Requirements.....	12
11.0	Load Containment .....	13
11.1	General.....	13
11.2	Metallic Strapping .....	13
11.3	Plastic Strapping.....	13
11.4	Plastic Stretch Film .....	13
11.5	Shrink Film.....	13
11.6	Unitizing Adhesives .....	14
11.7	Stacking Cartons .....	14
11.8	Loading of Cartons .....	14
11.9	Mixed Load Procedure.....	14
12.0	Package Testing .....	14
13.0	MLNA/MLMX-Owned Returnable Containers.....	15
14.0	Supplier-Owned Returnable Containers .....	15
15.0	Mode of Transportation .....	15
16.0	Hazardous Materials.....	15
17.0	Bar Coded Shipping Label Requirements .....	16
17.1	General.....	16
17.2	Quality .....	16
17.3	Label Size and Materials.....	16
17.4	Label Information .....	17
17.5	Bar Code Symbology .....	19

	<p>MEKRA Lang North America, LLC  101 Tillessen Boulevard  Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b>  <b>Rev 7</b>  Page 4 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir  Revised By: Mauricio Alvarez  Released By: Renee Tuttle  Release Date: 2/22/2024</p>

17.6 Label Location and Protection..... 19

17.7 Special Labels ..... 20

18.0 Individual Piece Part Bar-Coding Requirements.....21

18.1 General..... 21

18.2 Quality ..... 21

18.3 Label, Size, Material, and Special Requirements ..... 21

18.4 Label Information ..... 22

18.5 Bar Code Symbology ..... 22

18.6 Approval of Bar Code Label by MLNA/MLMX ..... 23


19.0 New Product and Part Changes .....23

19.1 Trial Parts ..... 23

19.2 PPAP Samples ..... 23

19.3 Safe Launch ..... 23

20.0 Exhibits.....25

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> <b>Rev 7</b> Page 5 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

## 1.0 Introduction

This manual has been prepared to assist Suppliers in meeting **Mekra Lang North America/Mekra Lang Mexico (MLNA/MLMX)** packaging, labeling and shipping requirements.


Suppliers are responsible for packaging and labeling parts so that they arrive, at **MLNA/MLMX** and/or the point-of-use, in damage free condition, with appropriate documentation. In addition, packaging must be economical with minimum impact on the environment and labeling must be in accordance with industry standards. It is essential that Suppliers and **MLNA/MLMX** cooperate to achieve acceptable packaging and labeling at reasonable cost, in our mutual interest and to our customer's satisfaction. Questions regarding compliance, content, intent or recommendations for these requirements should be directed to your **MLNA/MLMX**'s buyer or to Mekra Lang North America, LLC 101 Tillessen Blvd Ridgeway, S.C. 29130. Telephone (803) 337-5264.

## 2.0 Compliance

Supplier compliance to the requirements in this document is mandatory. However, some parts supplied to **MLNA** may require special packaging or labeling not covered in this document. If you supply this type of part, contact your **MLNA/MLMX**'s buyer for assistance in development of a package or label compatible with **MLNA/MLMX**'s requirements. Any deviation from the requirements listed in this document must have approval by **MLNA/MLMX**.

## 3.0 Environmental Considerations

**MLNA/MLMX** is participating in industry efforts toward the reuse and recycling of packaging materials. Successful implementation of waste minimization programs, recycling, and use of returnable containers has substantially eliminated or reduced the amount of materials sent for disposal. In addition, we are investigating new technologies, materials and distribution alternatives which will minimize the overall impact of packaging waste on the environment. The concept of Product Stewardship, in which industry assumes the responsibility of their products and packaging from conception to disposal, is vital in achieving an environmentally responsible packaging strategy.

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> Rev 7 Page 6 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

MLNA/MLMX requests that Suppliers commit to Product Stewardship and faithfully practice the 3 R’s principle of Reduce, Re-use and Recycle. By doing so, the elimination and reduction of packaging related wastes will reduce packaging costs as well as minimize the impact of packaging on the environment.

#### 4.0 Packaging Responsibilities

##### 4.1 General

Suppliers are responsible for designing packaging that will deliver parts and material to MLNA/MLMX and/or the point-of-use in damage free condition, assuming normal handling and storage.

##### 4.2 Essential Packaging Functions

Packaging must perform a number of essential functions during transportation and storage. Suppliers should consider the following functions in designing a package for their product:

- Protection of the product from physical damage,
- Convenience of use, safety and ease of handling,
- Compliance to legal and regulatory requirements,
- Communication of information (labeling), and
- Environmental acceptability and ease of disposal or recycling.


##### 4.3 Compliance with Regulatory Requirements

As a supplier for MLNA/MLMX you are required to develop packaging and use packaging materials which are consistent with regulations established by state, provincial, or local governments wherever your package is discarded (recycled, reused, disposed of, etc.). MLNA/MLMX will attempt to notify suppliers of any relevant legislation, which may apply directly to containers, and packaging shipped to MLNA/MLMX locations. However, the supplier has ultimate responsibility for assuring their packaging is in compliance with regulations.

##### 4.4 Compliance with Import/Export Packaging Requirements

Special considerations **must** be made when importing product to MLNA/MLMX. Please refer to the United States Department of Agriculture – Animal & Plant Health Inspection Service (APHIS) website.

Web link: <http://www.aphis.usda.gov/ppq/wpm/index.html>

	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 7 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

## 5.0 General Packaging Requirements

### 5.1 Packaging Costs

All part quotations are to include packaging and labeling costs. The supplier is responsible for packaging and labeling as required by this document and must include the costs for all materials and labor in the piece-part price at the time of quotation.

### 5.2 Packaging Material

Packaging should consist of recycled materials where possible and be cost effective. Plastic material must be labeled in accordance with the Society of the Plastics Industry Recycling Symbolology (See Exhibit A and Section 6.8). Corrugated containers must display a Certificate of Box Manufacturer in a readily visible location on the container (See Exhibit B and Section 7.2). The use of salvaged containers, pallets and other packaging material must have written approval from **MLNA/MLMX**. No extra labels shall be visible on the packaging. All old labels or markings on the package must be removed or covered.

### 5.3 Ergonomics

All containers and packaging must be designed with consideration given to ease of handling and part removal. Appropriate consideration must be given to height restrictions, weight restrictions, carton disassembly and any other issues that may affect worker safety.


### 5.4 Unique Packaging Requirements

Unique packaging requirements such as rust prevention, weight, fragility and surface appearance, which are not covered by these guidelines, are the responsibility of the parts supplier.

## 6.0 Shipping Instructions and Documentation

### 6.1 Destination Label

1. All destination labels shall be machine-printed. Handwritten or illegible labels are unacceptable.
2. Destination labels shall be located on two adjacent sides of the container or package, where possible.
3. Suppliers shall refer to the **MLNA/MLMX**'s Purchase Order or Supplier Release Authorization for the correct shipping address.

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> <b>Rev 7</b> Page 8 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

## 6.2 Packing List

1. All shipments shall contain at least one packing list.
2. Packing lists shall bear the proper **MLNA/MLMX**'s vendor code.
3. Packing lists shall contain a Shipper Number (SID).

Packing lists should have a separate location for the **Shipper Number** (SID).

The **Shipper Number** (SID) shall be a unique number assigned by the supplier (not necessarily in sequential order) that specifically identifies a shipment. This number shall be referenced on invoices presented to **MLNA/MLMX** for payment. In this way, each shipment will have a unique "control" number that differentiates it from others (for accounting purposes).

Only one **Shipper Number** (SID) shall be used per shipment, and **Shipper Number** (SID) shall not be repeated within any calendar year. The **Shipper Number** (SID) shall be a maximum of ten (10) alphanumeric characters. For suppliers using Electronic Data Interchange (EDI), this SID shall be the same SID used on advanced shipping notices (type 856) and invoice (type 810) transactions. Suppliers may use any convenient number (B/L, Work Order, Invoice #, Sales Order, etc.) for the **Shipper Number** if it conforms to the above guidelines and is **clearly** identified as the **Shipper Number** on the packing list.


4. All parts and material included in a shipment shall be represented on the packing list by the following:

The **MLNA/MLMX**'s Part Number,  
 The **MLNA/MLMX**'s Purchase Order Number/Scheduling Agreement  
 The quantity shipped (by the Supplier).

5. Location of Packing List

The packing list shall be enclosed in the carton or container, on top of the parts, or shall be securely attached to the outside in a protective envelope labeled "Packing List". For shipment of multiple cartons or containers, the location of the packing list shall be labeled or marked in some way stating "Packing List" or "Packing List Inside" on two adjacent sides of the carton or container carrying the packing list. For



	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> Rev 7 Page 9 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

international shipments, attach one packing list to the outside marked “Customs Packing List” and, in addition, enclose one packing list inside the carton or container.

### 6.3 Numbering Cartons and Containers

For shipment of multiple cartons or containers, each individual carton or container must be consecutively numbered and marked on the outside (e.g., 1 of 3, 2 of 3, 3 of 3). This will assist in identifying individual cartons that may get separated during shipment.

### 6.4 Handling Instructions

Material handling instructions should be marked in bold letters and proportionately sized to the container or carton.

- **Direction of Travel** – If a package is designed to travel in a specific direction, it should be indicated on two adjacent sides of the package.
- **Stacking Instructions** – If a package will not support the weight of other packages, it should be indicated in two visible locations. The use of a cone is advisable to prevent the stacking of boxes or pallets.
- **Fragile** – If a product is fragile such that it may be damaged with normal handling or if it requires special handling, it should be indicated in two visible locations on the package.


## 7.0 Shipping Container Specifications

### 7.1 Definition

Expendable containers are containers that are designed for one-way use. Exhibit C illustrates typical expendable shipping containers.

### 7.2 Hand-Handled Container Requirements

1. Gross Weights shall not exceed 30 lbs.
2. Corrugated cartons are the most common hand-handled containers, and are acceptable with the following qualifications:
3. The container must be expendable (designed for one-way use).

	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 10 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

4. Use a regular slotted carton (RSC) except when other styles may be dictated by part characteristics.
5. The unsupported bottom of a carton must be able to hold the contents.
6. Hand-holds are desirable for bulky packages.
7. Construction must be in accordance with the Corrugated Fiberboard Specifications in Section 7 and Fiberboard Box Specifications in Exhibit D of this document.

### 7.3 Mechanically-Handled Container Requirements

1. Gross Weight shall not exceed 3,500 lbs.
2. All shipments of mechanically handled containers must be on expendable wooden pallets as specified in Section 9 of this document.

### 7.4 Container Height

Containers should not exceed 42” in height (including the pallet) where part size allows. Any exceptions must be approved in advance by **MLNA/MLMX**.

### 7.5 Temperature

Expendable containers should be designed to withstand temperature variations from -40° C to 80° C.

### 7.6 Moisture

Expendable containers should be designed to withstand 90% humidity at 150°F (65.6°C) exposure during transit and storage.


### 7.7 Special Considerations

The use of non-recyclable wax impregnated and/or polyethylene (PE) coated corrugated fiberboard is prohibited.

The use of lead and cadmium is prohibited.

The use of asphaltic tape is prohibited.

The use of expanded polystyrene (EPS) is prohibited. All plastic material must be labeled in accordance with the Society of the Plastics Industry (SPI) guidelines (See Exhibit A). For more information, contact SPI at 1275 K Street N.W., Suite 400, Washington, D.C. 20005.

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> <b>Rev 7</b> Page 11 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

### 7.8 Salvaged Packaging Materials

Reuse programs may be established in controlled circumstances where packages are designed for multiple uses and/or distribution environments. The use of salvaged materials and reuse of cartons, pallets, crates, and other materials must be authorized by **MLNA/MLMX**.

### 8.0 Corrugated Fiberboard Specifications

#### 8.1 General

Corrugated fiberboard is the primary material to be used for one-way expendable shipping containers. **MLNA/MLMX** has historically required suppliers to use corrugated cartons with a minimum burst strength specification. However, Alternative Rule 41 of the Uniform Freight Classification and Item 222 of the National Motor Freight Classification allows packaging engineers to use edge-crush test (ECT) as an alternative to burst strength (Reference Exhibit D). The resulting packages have improved stacking strength with less corrugated material as compared to containers designed using burst strength specifications. Suppliers are encouraged to investigate the use of such alternatives when designing corrugated cartons in order to:


- Provide for improved stacking strength of corrugated containers,
- Increase the recycled content of corrugated paper,
- Reduce the overall amount of fiber used per shipping container.

#### 8.2 Certificate of Box Manufacturer

**MLNA/MLMX** requires all corrugated containers be stamped with the Certificate of Box Manufacturer (Reference Exhibit B), as indicated in Item 222-1 of the National Motor Freight Classification.

### 9.0 Dunnage Material

**MLNA/MLMX** encourages the use of paper-based rather than plastic-based dunnage material. Paper-based material is easily recycled along with corrugated containers, and does not require intermediate steps for segregation of materials. The use of foam or Styrofoam dunnage material must have written approval from **MLNA/MLMX** prior to use.

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> <b>Rev 7</b> Page 12 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

## 10.0 Pallet Specifications

MLNA/MLMX will not accept pallets with any damage or defects. Pallets should be new or in near new condition and must remain intact and properly functioning throughout their intended lifespan. Suppliers are responsible for failure of their pallets while in transit to MLNA/MLMX. All pallets must be “Heat Treated”, constructed, and marked in accordance with Pallet Specifications paragraphs 10.2 and 10.3 below. Supplier shipments that do not comply with this requirement will be subject to an MLNA/MLMX repackaging charge, advised to the supplier in the form of an MLNA/MLMX Debit Memo.

### 10.1 General

The proper use and design of **Heat Treated** wood pallets is critical to assure part protection and overall container performance, and to make the most efficient use of storage and trailer space.

### 10.2 Pallet Size Requirements

Unless authorized or requested by MLNA/MLMX and, where part size permits, the **Heat Treated standard pallet size for a repetitive part is 48” by 40” by 4” with 4-way entry. Pallets must be stamped HT on 2 sides and must have 4 –way roll in entry with 2 equal fork openings measuring a minimum of 2.5” x 9” on the stringer side and a minimum of 3.5” x 28” on the stringer side. Pallets with a center stringer dimension wider than 2” are not permitted.** If a pallet dimension is greater than standard 48” by 40” then the use must be pre-approved by MLNA/MLMX.

### 10.3 Construction Requirements


All pallets must provide 4-way fork entry and be of double-face, non-reversible wood construction (Reference Exhibit F). Pallets constructed of other-than-wood material must be approved by MLNA/MLMX.

A minimum 28” fork opening width must be maintained.

A minimum 3-1/2” fork opening height must be maintained.

Construction Specifications:

1. Top and bottom deck board width: minimum 3.5”
2. Top and bottom deck board thickness: minimum ½”
3. Stringer dimensions: standard 2” by 4” (Stringer type pallets)

	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 13 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

## 11.0 Load Containment

### 11.1 General

The decision to use strapping, stretch film, shrink film, or unitizing adhesives for load containment must fully evaluate both performance and environmental considerations. Suppliers must select the load containment option, which provides damage protection and optimum load containment with minimal environmental impact.

### 11.2 Metallic Strapping

The use of metallic strapping is discouraged, but is recognized as the most appropriate material for certain applications.

### 11.3 Plastic Strapping

1. All plastic strapping must be of either Polypropylene (translucent clear only) or Polyester (translucent green only) materials. The color requirement aids in material identification for recycling purposes.
2. All plastic strapping must be free of metal clips and shall utilize either heat seal or friction weld as a sealing method.


### 11.4 Plastic Stretch Film

Plastic stretch film has a number of performance advantages, particularly for small cartons and parts shipped loose on pallets. Suppliers should investigate recyclability and adequacy for the application prior to use. In many cases, stretch film is used when the application calls for strapping.

1. All stretch film must be of linear low-density polyethylene (LLDPE) resin.  
The use of polyvinyl chloride (PVC) film is prohibited.
2. All stretch film must be clear.  
Tinted or colored film is prohibited.

### 11.5 Shrink Film

Shrink film offers some unique advantages for specific packaging applications and is considered an acceptable material if used within physical limitations. Suppliers should investigate recyclability and adequacy for the application prior to the use of shrink film.

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> Rev 7 Page 14 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

### 11.6 Unitizing Adhesives

Unitizing adhesive is a clear, water-soluble liquid, which is applied to the top and sides of corrugated cartons by spraying or brushing. The liquid forms a fiber bond, which prevents cartons from shifting, slipping or sliding off the pallet. **MLNA/MLMX** encourages suppliers to use unitized adhesives if recyclability of the cartons is not compromised.

### 11.7 Stacking Cartons

Suppliers should consider all the conditions under which their cartons and containers must perform.

Compression strength should be a primary consideration. Two-thirds of the stacking strength of a corrugated fiberboard carton is concentrated at the corners. Failure to properly utilize the corner strength of the carton(s) frequently leads to carton failure. Corrugated cartons will lose strength if stacked improperly or under adverse conditions (See Exhibit H).

### 11.8 Loading of Cartons

To minimize manual handling and to allow for stacking, all cartons must be “palletized” in individual layers on the pallet (See Exhibit I). The “pyramiding” of cartons is strictly prohibited (See Exhibit I). The supplier is responsible to assure that packaging is consistent with this policy. If material release quantities do not permit shipment of individual layers of cartons, **MLNA/MLMX** will assist in establishing consistent release quantities and/or alternative methods of packaging.


### 11.9 Mixed Load Procedure

When stacking cartons on a pallet and the shipment consists of more than one part number, organize the pallet by like part number. It is acceptable to mix different part numbers on a pallet only after full pallets of like part numbers have been built. Exhibit J illustrates when it is acceptable to ship different part numbers on the same pallet.

### 12.0 Package Testing

To assure satisfactory package performance throughout the distribution cycle, the testing of all packages prior to use is encouraged.

The American Society for Testing and Materials (ASTM) has issued standardized test methods which govern testing of packaging systems. Suppliers to **MLNA/MLMX** are encouraged to use the ASTM

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> <b>Rev 7</b> Page 15 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

standards for testing packages. The standards can be obtained from the ASTM at 1916 Race Street, Philadelphia, PA 19103.

### 13.0 MLNA/MLMX-Owned Returnable Containers

The use of MLNA/MLMX-owned returnable containers must be negotiated as part of the agreement to supply parts to MLNA/MLMX. The MLNA/MLMX’s Purchasing Department will maintain an “Authorized MLNA/MLMX-Owned Returnable Container Listing” for suppliers who are approved to use MLNA/MLMX-owned returnable containers. The supplier is responsible for maintenance of the returnable in a clean and functional manner. The supplier is responsible to remove **all of the old labels** prior to reuse for every shipment.

### 14.0 Supplier-Owned Returnable Containers


The use of Supplier-owned returnable containers must be negotiated as part of the agreement to supply parts to MLNA/MLMX. The supplier is responsible for maintenance of the returnable container in a clean and functional manner. The supplier is responsible to remove **all of the old labels** prior to reuse for every shipment.

### 15.0 Mode of Transportation

MLNA/MLMX’s Supply Chain Management Department will designate the most economical mode of transportation and carrier routes to be used. The determination depends, to a large extent, upon the volume, weight and quantity of parts to be shipped. All packaging must be designed to absorb shock and vibration forces incurred in all types of transportation environments. However, no specific recommendations will be made in this document due to the variety of packaging and shipping modes.

### 16.0 Hazardous Materials

The U.S. Department of Transportation has established packaging regulations for materials determined to be hazardous as defined in two volumes of Title 49, Code of Federal Regulations parts 100 through 177, and parts 178 through 199. Included in this category are explosives, compressed gases, flammables, oxidizing materials, poisons, irritating materials, etiologic agents, blasting agents, radioactive materials, corrosives, and hazardous wastes.

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> Rev 7 Page 16 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

The first volume contains regulations on classification, packaging, marking, labeling, loading, paperwork, and other issues. The second volume sets forth shipping container specifications for many types of materials.

All suppliers shipping these type materials to **MLNA/MLMX** are required to adhere to these regulations.

Copies of the regulations can be obtained from:

Superintendent of Documents

U.S Government Printing Office

Washington, D.C. 20402.

## **17.0 Bar Coded Shipping Label Requirements**

### **17.1 General**

These specifications, which apply to bar codes for shipping labels, were developed according with the AIAG Shipping / Parts Identification Label Standard (AIAG: B-10, 2004).

For more information on AIAG Standards, contact the Automotive Industry Action Group, 26200 Lahser Road, Southfield, MI 48034.

### **17.2 Quality**

The use of bar code systems is intended to increase productivity, reduce costs and improve data accuracy within the automobile and truck manufacturing industries. An important aspect of any bar code system is that of quality. When labels cannot be decoded fast and accurately, the advantages of bar coding are lost.


Suppliers have the responsibility to provide bar code labels that meet the specification of this document and those of the Print Quality Guideline in Section 4 of AIAG B-1. It is recommended that verification audits be used in conjunction with statistical process control techniques to assure shipping label quality.

### **17.3 Label Size and Materials**

Label dimensions should be in accordance with the dimensions shown in Exhibit K. All other exhibits are for illustrative purposes only, and may not be to scale or bar code quality standards.

The recommended label size is 4.0” high by 6.5” wide, which should cover all conditions. The minimum label size shall be 4.0” high by 5.0” wide. The label paper shall be white with black printing. Adhesive



	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> <b>Rev 7</b> Page 17 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

labels can be pressure sensitive or dry gummed as long as adherence to the package substrate is assured, application is wrinkle-free, and for use on expendable packaging only.

Use the methods shown in Exhibit L to affix the label to the package or container, or use another method with MLNA/MLMX’s approval.

**17.4 Label Information**

1. Data Areas and Titles

The part number, quantity, supplier number, serial number, purchase order and line number data shall be displayed in both human readable characters and bar code symbols (Reference Exhibits M and N). Each data area shall be separated by border lines and shall contain the title and data identifier in the upper left hand corner. Titles and data identifiers shall be printed in 0.1” high letters. The Supplier’s name, city, state and zip code shall appear at the bottom of the label, and shall be in printed in 0.1” high letters. Human readable data characters shall be a minimum of 0.1” high. Bar code symbols shall be directly below the human readable data characters and shall be a minimum of 0.5” high.

2. Data Identifier Characters

A data identifier character shall be used to identify specific data.


The data identifier shall be printed separately in human readable characters under the title.

The data identifier shall not be included in the human readable characters.

The data identifier shall be included in the bar code symbol.

The data identifier characters are as follows:

- P – Part Number**
- R – Part Revision Level**
- Q – Quantity Shipped**
- V – Supplier Number**
- S – Unique Serial Number (SID)**
- M – Unique Serial Number (SID) - Master Label**
- G – Unique Serial Number (SID) - Mixed Load**

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> Rev 7 Page 18 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

**K – Purchase Order Number**

**ML – Manufactures Lot Number**

**L – Delivery Location of the parts**

**MD – Manufactures Date**

**CO – Country Origin**

**SN – Supplier Name**

**See Exhibit N**

3. Part Number

Part numbers shall be the same part numbers designated on the **MLNA/MLMX**'s Purchase Order/Scheduling Agreement or Material Release Authorization. The maximum length of the part number shall be twenty (20) alphanumeric characters. The length of the bar code symbol shall not exceed 5.5”.

4. Quantity

The maximum length for the quantity is six (6) numeric characters. When the unit of measure is pieces, no notation is required. When the unit of measure is not pieces (i.e., pounds, pairs, feet, etc.), it shall be printed in human readable form only. When used, the unit of measure abbreviation (Reference Exhibit O) shall be directly to the right of the human readable quantity.

The unit of measure shall not be bar coded.

5. Supplier Number


The supplier number will be the Vendor Code assigned by **MLNA/MLMX** to each Supplier location.

The maximum length for the supplier number is five (5) characters.

6. Serial Number (Shipment Identification Number)

The serial number shall be the Shipper number (SID) described in Section 5.2.3 of this document.

The maximum length for this number shall be nine (9) alphanumeric characters.

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> Rev 7 Page 19 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

The line number item refers to the line number on the Purchase Order. The maximum length of the line number shall be three (3) characters.

#### 7. Manufacture Lot Number

The manufacture lot number not to exceed one coil/molt/batch or one 24 hour day, whichever is the lesser of the two. The lot number may be the manufacture date as well. For containers that a coil/molt/batch/date change over are required to meet a standard full pack, the second number is to be included. There shall not be more than two manufactures lot numbers per label.

#### 8. Manufacture Date

The manufacture date not to exceed 24 hours. For containers that a coil/molt/batch/date change over are required to meet a standard full pack, the second number is to be included. There shall not be more than two manufactures dates per label.

### 17.5 Bar Code Symbology

Bar codes shall be the 3-of-9 (Code 39) type as specified by the Automotive Industry Action Group (AIAG: B-1, 1984).

#### 1. Code Configurations

The four (4) characters (\$,/,+,% ) of the 3-of-9 symbology shall not be used in the bar code labels.

#### 2. Code Density and Dimensions

The bar heights shall be a minimum of 0.5". For each bar code symbol, the average width of narrow elements shall be within the range of .013 to .017 inches.


The ratio of the nominal width of the wide elements to the nominal width of the narrow elements shall be 3:1, with an allowable range of 2.8:1 to 3.2:1.

#### 3. Check Digits

Check digits shall not be used in the bar codes.

### 17.6 Label Location and Protection

#### 1. Label Locations

	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 20 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

Illustrations of the most common shipping packs and recommended label locations are shown in Exhibit L. The bottom edge of the label should be parallel to the base of the package/container. To facilitate automatic reading of the bar code symbols, the top edge of the label, whenever possible, should be 20” from the bottom of the container.

2. Label Protections

Label protection against moisture, weathering, abrasion, etc. may be required and is encouraged wherever practical. Laminates, sprays, window envelopes and clear plastic pouches are examples of possible protection methods. In choosing any protection method, care must be taken to assure that labels meet reflectivity and contrast requirements and can be scanned with contact and noncontact devices.

3. Separate Boxes

Each box even though on a master pallet requires individual labels. The individual labels are placed as shown in Exhibit C. This is for the purpose of lot tractability.

**17.7 Special Labels**


Special labels may be required for multiple and mixed item shipments. These labels should be used only when authorized by **MLNA/MLMX**.

1. Master Labels

A Master label, as shown in Exhibit P, shall be used when multiple packages of the same items are shipped together. The quantity listed on the Master Label shall be the total in all of the packages. Each individual package should be identified with a separate bar code label. The data identifier for the serial number shall be “M” instead of “S.”

2. Mixed Loads

A Mixed Load label, as shown in Exhibit Q, shall be used when packages of different items are shipped together. Each individual package should be identified with a separate bar code label. The data identifier for the serial number shall be “G” instead of “S.”

	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 21 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

## 18.0 Individual Piece Part Bar-Coding Requirements

### 18.1 General

These specifications, which apply to bar codes for individual piece parts or standard packs, were developed in conjunction with the TMC RP801C “Bar Code Guidelines.” For more information on TMC Standards, contact the Maintenance Council of the American Trucking Association, Director of Member Services at (703) 838-1761.

### 18.2 Quality

The use of bar code systems is intended to increase productivity and data accuracy within the automobile and truck manufacturing industries. Suppliers have the responsibility to provide bar code labels that meet the specifications of this document and those of the Bar Code Print Quality Guideline ANSI X3.182. It is recommended that verification audits be used in conjunction with statistical process control techniques to assure shipping label quality. The thermal printing method of bar coding generation is preferred by MLNA/MLMX due to the format flexibility and image quality.

### 18.3 Label, Size, Material, and Special Requirements

#### 1. Label Size

The recommended label size is 1 inch high by 3 ½ inches wide.

#### 2. Materials


The label paper should be white with black printing. Adhesive labels can be pressure sensitive or dry gummed as long as adherence to the part is assured and application is wrinkle-free.

#### 3. Part Size Limitations

If the recommended 1 inch high by 3 ½ inch wide label cannot be adhered to the part due to the size, the part has to be tagged with the bar coded label or bagged with the bar coded label attached to the bag.

#### 4. Individually Boxed Part

If a part is individually boxed, it is not necessary to place a 1-inch high by 3½-inch wide label on the part in addition to the box label. This individual piece part barcode information can be incorporated into the box label for individually boxed piece parts. The bar code specifications and

	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 22 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

human readable information (ref 17.3.1 Data Areas) must be included on each box label for parts individually packaged.

5. Standard Packs

For those parts **MLNA/MLMX**, distributes as a standard pack of greater than one, a bar code label will be required on the packaging for these parts and not on each individual part.

**18.4 Label Information**

1. Data Areas

The part number shall be displayed in both human readable characters and bar code symbols. The part description shall be displayed in human readable characters only. Human readable data characters shall be a minimum of 0.1” high. The part description shall be displayed above the bar code and the part number below the bar code (see examples in section 17.6).

2. Part Number

Part numbers shall be the same part numbers designated on the **MLNA/MLMX**’s Purchase Order/Scheduling Agreement or Material Release Authorization.

**MLNA/MLMX**’s *Proprietary part number format (Note: ‘\_’ denotes a space required in the bar code)*

Alpha Numeric Characters: 592704311-PDC

No Alpha Characters: 134142010

The maximum length of the part number shall be fifteen (15) alphanumeric characters.

3. Country of Origin

The country of origin must be clearly displayed on each label (as pictured) to meet custom requirements for international trade.


**18.5 Bar Code Symbology**

Bar Codes shall be the 3-of-9 (Code 39) type as specified by the TMC (RP801C).

1. Code Configurations

The four (4) characters (\$,/+,%) of the 3-9 symbology shall not be used in the barcode labels.

2. Code Density and Dimensions

	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 23 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

The bar heights shall be a minimum of 3/16". For each bar code symbol, the average width of narrow elements shall be within the range of 0.013 to 0.017 inches. The ratio of nominal width of the wide elements to the nominal width of the narrow elements shall be 2:1.

### 3. Check Digits

Check digits shall not be used in the bar codes.

### 18.6 Approval of Bar Code Label by MLNA/MLMX

Prior to implementation of the bar coding requirement, the bar code shall be approved by MLNA/MLMX. Please submit a sample of each format you will be using to your Supplier Quality Engineer. When making a new PPAP submission, a full sized label is required with the submission.

### 19.0 New Product and Part Changes

#### 19.1 Trial Parts


During the development process and ongoing product validations trial parts will be shipped from one location to another. For the reason to ensure that the parts get to the correct party, when shipping Trial Parts and parts for testing, the LM 799 (Exhibit P) form shall be used. Tags are to be on blue paper or labels. On boxes the labels are to be on all six sides of the box, like a dice. When the trial parts are being shipped as a pallet, the top five sides require the Trial parts label. When utilizing labels, all of the same information and format is required; the minimum size is 4"x5".

#### 19.2 PPAP Samples

When shipping PPAP samples the PPAP Sample Tags LM 791. (Exhibit Q) Tags are to be printed on yellow paper or yellow labels. On boxes the labels are to be on all six sides of the box, like a dice. When the PPAP samples parts are being shipped as a pallet, the top five sides require the PPAP Sample parts label. When utilizing labels, all of the same information and format is required; the minimum size is 4"x5".


#### 19.3 Safe Launch

Safe Launch applies to all production material suppliers. Safe Launch is to assure a smooth startup of a new part or modified process or new supplier. Safe Launch is required for all of the product prior to and through the first 30 days after MLNA/MLMX's SOP at a minimum. In the event that a supplier utilizes batch production and a single batch run when the batch run size exceeds 30 calendar days of demand; the first two batches require Safe Launch. **The supplier inspection requirements are to conform with**

	<p>MEKRA Lang North America, LLC  101 Tillessen Boulevard  Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b>  <b>Rev 7</b>  Page 24 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING  REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir  Revised By: Mauricio Alvarez  Released By: Renee Tuttle  Release Date: 2/22/2024</p>

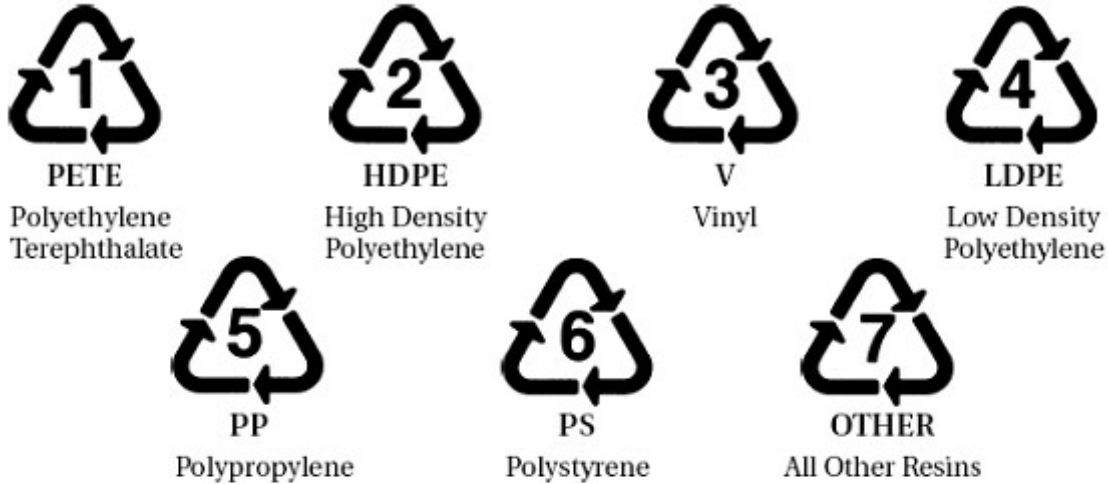
**MLNA/MLMX standard packaging and labeling General Practices.** If defects are discovered, the safe launch must reset to zero until zero defects are discovered. The intent is 30 days or two batches defect free to stop safe launch. For labeling, safe launch tags LM 798 (Exhibit R) are printed on green paper to be placed beside the bar code labels as shown in Exhibits C and L. When utilizing labels, all the same information and format is required; the minimum size is 4”x5”.



	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p>SD 7.4-51 Rev 7 Page 25 of 42</p>
<p>Support Document</p>	<p>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>


**20.0 Exhibits**

**EXHIBIT A, PLASTICS RECYCLING SYMBOLOGY**

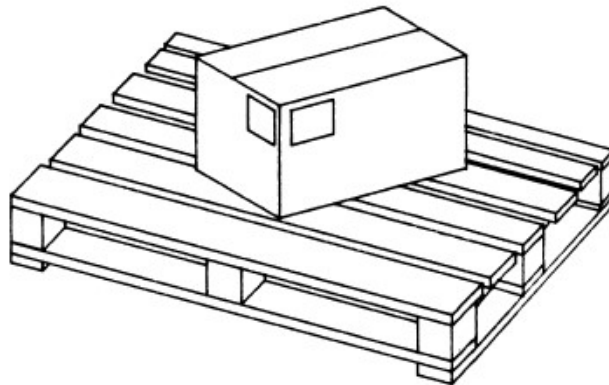


**EXHIBIT B, CERTIFICATE OF BOX MANUFACTURER**

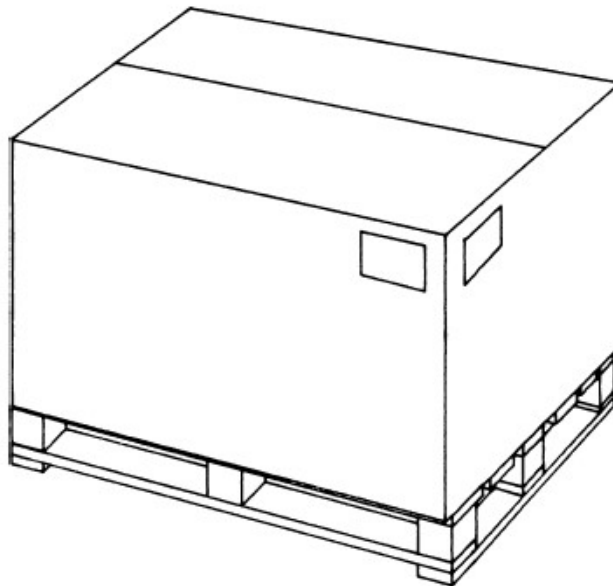


	<p>MEKRA Lang North America, LLC  101 Tillessen Boulevard  Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b>  <b>Rev 7</b>  Page 26 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING  REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir  Revised By: Mauricio Alvarez  Released By: Renee Tuttle  Release Date: 2/22/2024</p>


**EXHIBIT C, TYPES OF EXPENDABLE CONTAINERS**



**Hand-Handled Container**




**Mechanically-Handled Container**

	<p style="text-align: center;">MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 27 of 42</p>
<p>Support Document</p>	<p style="text-align: center;"><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

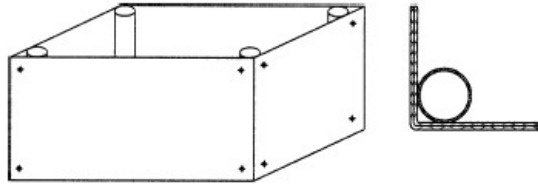
**EXHIBIT D, FIBERBOARD BOX SPECIFICATIONS**

Maximum Weight Box/Contents (lbs.)	Maximum Outside Dimension (L+W+D)	Minimum Burst Test Single Wall, Double Wall, or Solid Fiber Board (lbs. per sq. in.) or Minimum Puncture Test Triple Wall Board (in oz. per in. tear)	Minimum Combined Weight of Facings, Including Center Facing(s) of Double Wall and Triple Wall Board or Minimum Combined Weight of Plies, Solid Fiberboard (lbs per 1000 sf)	Minimum Edge Crush Test (lbs per in width)
<b>SINGLE WALL CORRUGATED FIBERBOARD BOXES</b>				
20	40	125	52	<b>23</b>
35	50	150	66	<b>26</b>
50	60	175	75	<b>29</b>
65	75	200	84	<b>32</b>
80	85	250	111	<b>40</b>
95	95	275	138	<b>44</b>
120	105	350	180	<b>55</b>
<b>DOUBLE WALL CORRUGATED FIBERBOARD BOXES</b>				
80	85	200	92	<b>42</b>
100	95	275	110	<b>48</b>
120	105	350	126	<b>51</b>
140	110	400	180	<b>61</b>
160	115	500	222	<b>71</b>
180	120	600	270	<b>82</b>
<b>TRIPLE WALL CORRUGATED FIBERBOARD BOXES</b>				
240	110	700	168	<b>67</b>
260	115	900	222	<b>80</b>
280	120	1100	264	<b>90</b>
300	125	1300	360	<b>112</b>
<b>SOLID FIBERBOARD BOXES</b>				
20	40	125	114	<b>N/A</b>
40	60	175	149	<b>N/A</b>
65	75	200	190	<b>N/A</b>
90	90	275	237	<b>N/A</b>
120	100	350	283	<b>N/A</b>

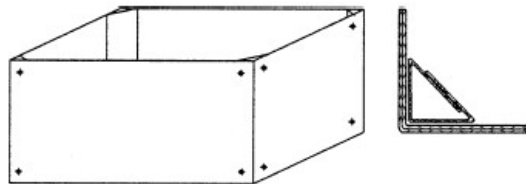
	<p>MEKRA Lang North America, LLC  101 Tillessen Boulevard  Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b>  <b>Rev 7</b>  Page 28 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir  Revised By: Mauricio Alvarez  Released By: Renee Tuttle  Release Date: 2/22/2024</p>

**EXHIBIT E, BULK CONTAINER CONSTRUCTION**

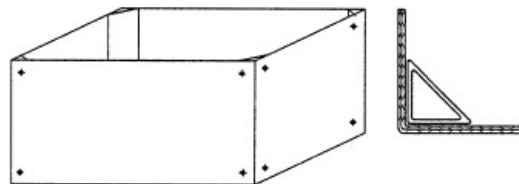
The Fiber Corner Supports are Designed for Recyclability



Spiral Wound Tube

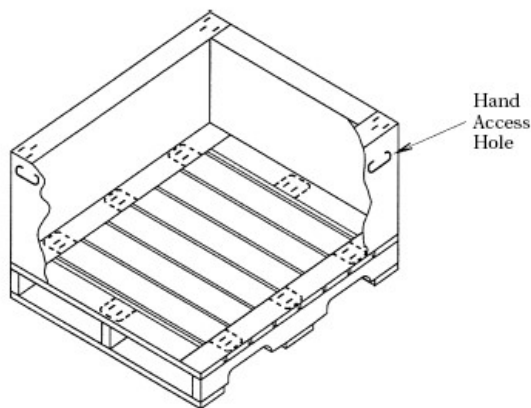


Corrugated Insert




Preformed Fiber Inserts

**Break-Away Feature for Bulk Containers**



The carton is attached to the pallet by stapling within the perforated areas as shown. When disassembled, the carton easily separates from the pallet at the perforations.

	<p>MEKRA Lang North America, LLC  101 Tillessen Boulevard  Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b>  <b>Rev 7</b>  Page 29 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir  Revised By: Mauricio Alvarez  Released By: Renee Tuttle  Release Date: 2/22/2024</p>

**EXHIBIT F, TYPES OF WOOD PALLETS**

**Notched Stringer Design—Flush Type**

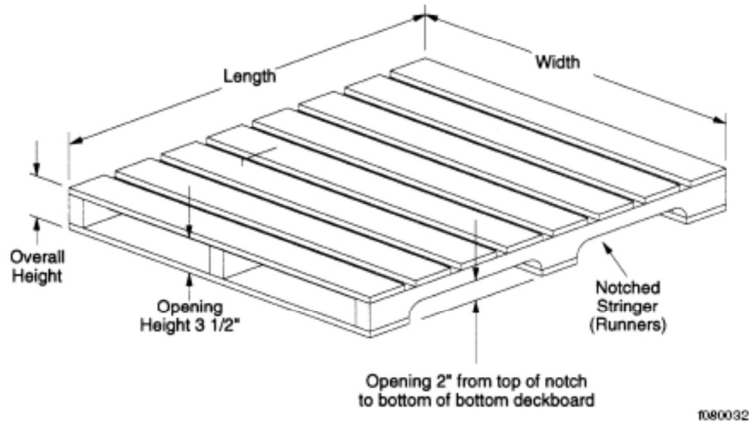



Exhibit G - Removed

	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 30 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

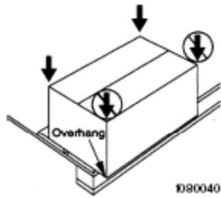
**EXHIBIT H, STRENGTH OF CORRUGATED CARTONS**

These examples demonstrate the potential loss in top-to-bottom compression strength when corrugated cartons are stacked improperly or under adverse conditions.

% Loss in Compression Strength

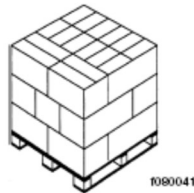
Pallet/Carton Overhang

Up to 32%



Interlocked Stacking Pattern

Up to 50%



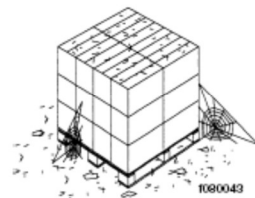
Carton Misalignment

Up to 30%



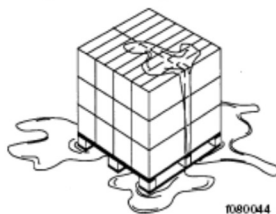
Long-Term Storage


Up to 50%



High Humidity (90% RH)

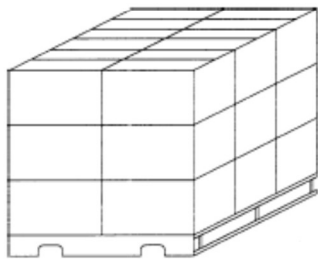
Up to 60%



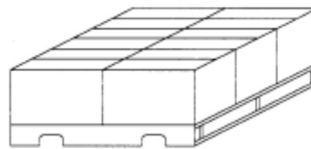
	<p>MEKRA Lang North America, LLC  101 Tillessen Boulevard  Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b>  <b>Rev 7</b>  Page 31 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir  Revised By: Mauricio Alvarez  Released By: Renee Tuttle  Release Date: 2/22/2024</p>

**EXHIBIT I, LOADING OF CARTONS**

**Examples of Properly Palletized Cartons**



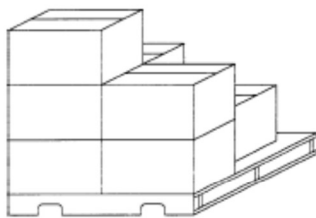
**Acceptable**



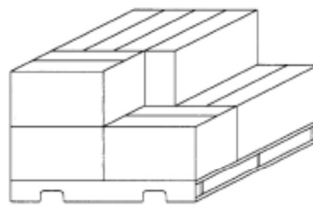
**Acceptable**

1080030

**Examples of "Pyramided" Cartons**




**Unacceptable**



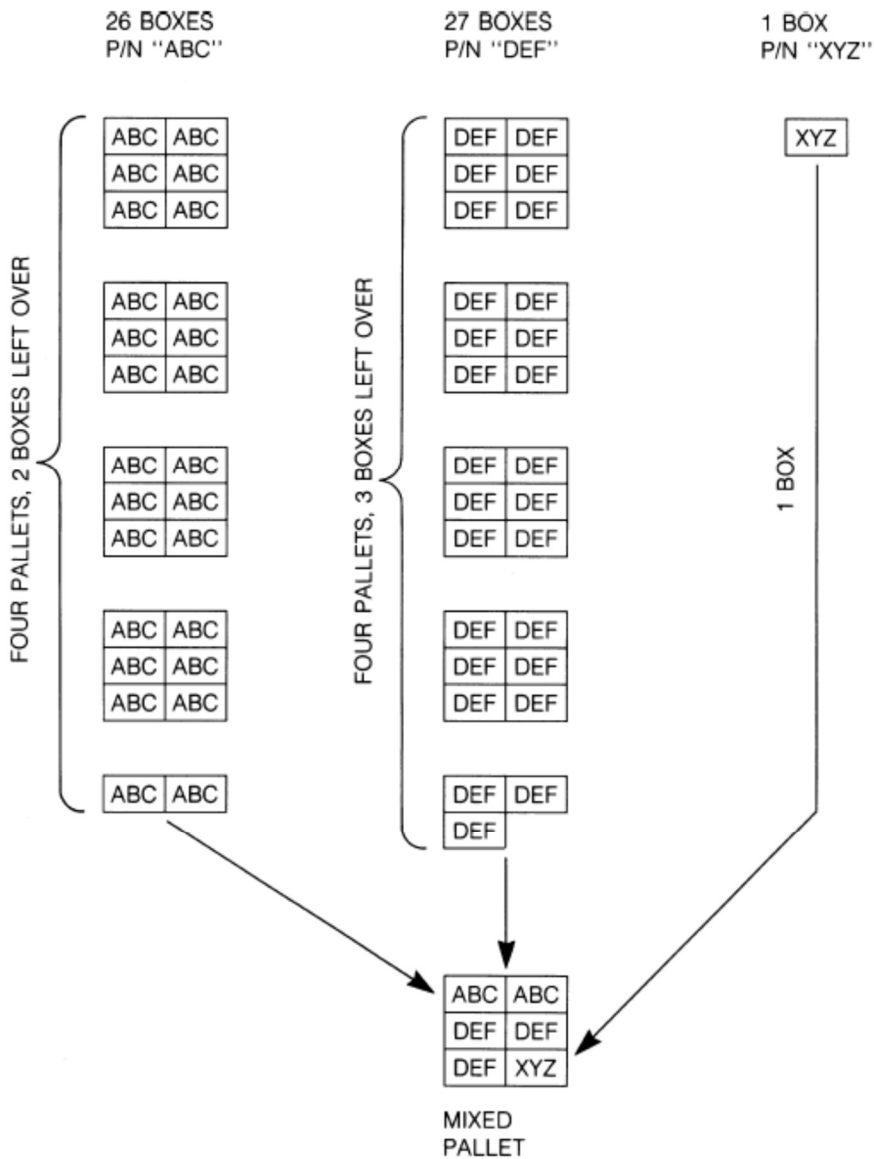
**Unacceptable**

1080031


	<p>MEKRA Lang North America, LLC  101 Tillessen Boulevard  Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b>  <b>Rev 7</b>  Page 32 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir  Revised By: Mauricio Alvarez  Released By: Renee Tuttle  Release Date: 2/22/2024</p>

### EXHIBIT J, MIXED LOAD PROCEDURE

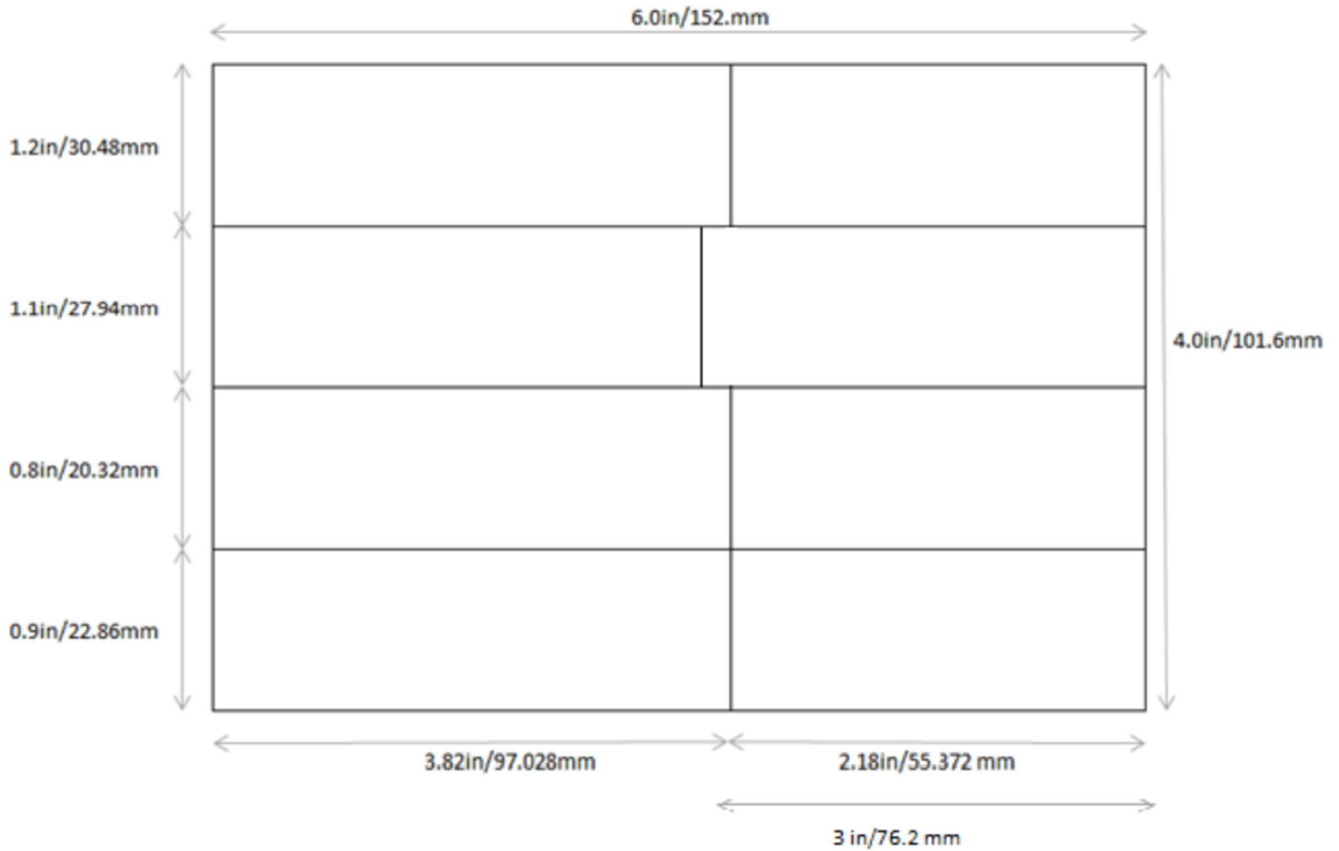
The following example illustrates when it is acceptable to ship different part numbers on the same pallet.






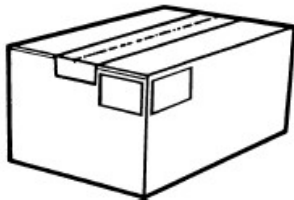
	<p>MEKRA Lang North America, LLC  101 Tillessen Boulevard  Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b>  <b>Rev 7</b>  Page 33 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir  Revised By: Mauricio Alvarez  Released By: Renee Tuttle  Release Date: 2/22/2024</p>

## EXHIBIT K, LABEL DIMENSIONS



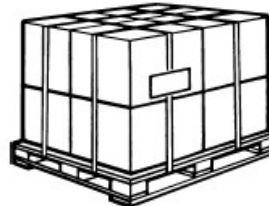
	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 34 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

**EXHIBIT L, LABEL LOCATIONS**



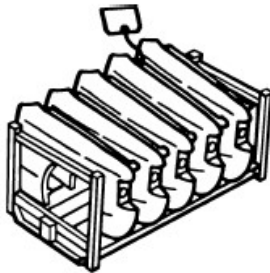
**Box or Carton**

Identical labels should be located on two adjacent sides. (Wrap around label acceptable.) The upper edges of the labels should be as high as possible up to 20" from the bottom of carton.



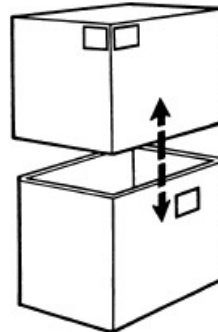
**Cartons on Pallet**

One master label may be used as described in section 16.7.1, or one mixed load label as described in section 16.7.2.



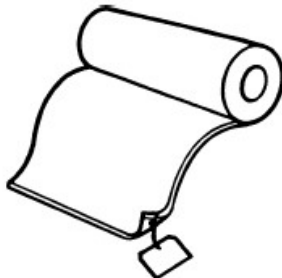
**Rack**

Tag one visible piece near top, or use a label holder.



**Telescopic or Set-up Containers**

Identical labels should be located on two adjacent sides of the outer box. Some applications may also require identification of the inner box.




**Roll**

Hand one tag 2" (51 mm) from end of the material.




**Bundle**

Identical tags should be located at each end.

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> <b>Rev 7</b> Page 35 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024


### EXHIBIT M, BAR CODED SHIPPING LABEL

PART NUMBER (P) <b>703HX</b> 	Revision (R) <b>A</b> 
QUANTITY (Q) <b>1 EA</b> 	P.O. (K) <b>210900123456</b> 
SUPPLIER (V) <b>65600</b> 	LOCATION (L) <b>SP-SM-X-6</b> 
SERIAL (S4) <b>881348</b>  SUPPLIER NAME (SN) <b>XYZ SUPPLY</b> CITY / ST / ZIP	SHIP DATE (SD) MFG DATE (MD) Manufacturing Lot No (ML) Country of Origin (CO)

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	SD 7.4-51 Rev 7 Page 36 of 42
Support Document	SUPPLIER PACKAGING AND LABELING REQUIREMENTS	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

### EXHIBIT N, BAR CODED SHIPPING TAG

PART NUMBER (P) <b>703HX</b> 	Revision (R) <b>A</b> 
QUANTITY (Q) <b>1 EA</b> 	P.O. (K) <b>210900123456</b> 
SUPPLIER (V) <b>65600</b> 	LOCATION (L) <b>SP-SM-X-6</b> 
SERIAL (S4) <b>881348</b>  SUPPLIER NAME (SN) <b>XYZ SUPPLY</b> CITY / ST / ZIP	SHIP DATE (SD) MFG DATE (MD) Manufacturing Lot No (ML) Country of Origin (CO)

	<p style="text-align: center;">MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p style="text-align: center;"><b>SD 7.4-51</b> <b>Rev 7</b></p> <p style="text-align: center;">Page 37 of 42</p>
<p style="text-align: center;">Support Document</p>	<p style="text-align: center;"><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p style="text-align: center;">Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

**EXHIBIT O, UNIT OF MEASURE ABBREVIATIONS**

**Code Definition**

**Distance**

DK Kilometers  
MI Miles

**Number of Units**

NB Barge  
NC Car  
NL Load  
NN Train  
NR Container  
NT Trailer  
NV Vehicle  
PC Piece

**Temperature**

CE Centigrade, Celsius  
FA Fahrenheit  
KV Kelvin

**Time**

DA Days  
HR Hours  
LH Labor Hours  
MO Months  
WK Week  
YR Years

**Unit of Sale**

AM Ampoule  
AY Assembly  
BA Bale  
BB Base Box  
BC Bucket  
BD Bundle  
BE Beam  
BF Board Feet  
BG Bag  
BH Brush  
BI Bar  
BK Book  
BL Block  
BN Bulk  
BO Bottle  
BR Barrel  
BT Belt  
BU Bushel  
BX Box  
CA Case  
CB Carboy  
CC Cubic Centimeter  
CF Cubic Feet  
CG Card  
CH Container  
CI Cubic Inches  
CJ Cone  
CK Connector  
CL Cylinder  
CM Centimeter  
CN Can  
CO Coil  
CP Crate

**Code Definition**

**Unit of Sale (Cont.)**

CQ Cartridge  
CR Cubic Meter  
CS Cassette  
CT Carton  
CU Cup  
CV Cover  
CW Hundred Pounds (CWT)  
CY Cubic Yards  
CZ Combo  
DC Disk (Disc)  
DE Deal  
DG Decigram  
DM Decimeter  
DR Drum  
DS Display  
DZ Dozen  
EA Each  
EV Envelope  
FT Foot  
GA Gallon  
GR Gram  
GS Gross  
HD One-Half Dozen  
HU Hundred  
IN Inch  
JB Jumbo  
JO Joint  
JR Jar  
KE Keg  
KG Kilogram  
KH Kilowatt Hour  
KT Kit  
LB Pound  
LC Linear Centimeter  
LF Linear Foot  
LG Long Ton  
LI Linear Inch  
LK Link  
LM Linear Meter  
LN Length  
LO Lot  
LP Liquid Pounds  
LT Liter  
LY Linear Yard  
MA Machine/Unit  
MC Microgram  
MG Metric Gross Ton  
ML Milligram  
MM Millimeter  
MN Metric Net Ton  
MR Meter  
MS Square Millimeter  
MT Metric Long Ton  
MX Mixed  
OL Ounce—Liquid  
OZ Ounce AV  
PA Pail  
PC Piece  
PD Pad  
PE Pounds Equivalent  
PF Pallet (Lift)  
PG Pounds Gross  
PH Pack (PAK)

**Code Definition**

**Unit of Sale (Cont.)**

PK Package  
PL Pallet/Unit Load  
PN Pounds Net  
PR Pair  
PT Pint  
PW Pennyweight  
QD Quarter Dozen  
QR Quire  
QT Quart  
RD Rod  
RE Reel  
RL Roll  
RM Ream  
SA Sandwich  
SC Square Centimeter  
ST Set  
SF Square Foot  
SG Segment  
SH Sheet  
SI Square Inch  
SL Sleeve  
SM Square Meter  
SO Spool  
SQ Square  
SR Strip  
SY Square Yard  
TB Tube  
TG Gross Ton  
TH Thousand  
TK Tank  
TN Net Ton  
TO Troy Ounce  
TY Tray  
UN Unit  
WH Wheel  
YD Yard  
ZZ Mutually Defined

**Value**


CS Cost  
LS Lump Sum  
MV Monetary Value

**Volume**

DL Deciliter  
DM Dram  
FO Fluid Ounce  
GA Gallon  
LT Liter  
ML Milliliter  
PT Pint  
QT Quart

**Other**

ZZ Mutually Devined

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> <b>Rev 7</b> Page 38 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

## EXHIBIT P, MASTER LABEL

<h1>MASTER LABEL</h1>	
PART NUMBER (P) <b>703HX</b> 	Revision (R) <b>A</b> 
QUANTITY (Q) <b>1 EA</b> 	P.O. (K) <b>210900123456</b> 
SUPPLIER (V) <b>65600</b> 	LOCATION (L) <b>SP-SM-X-6</b> 
SERIAL (S4) <b>881348</b>  SUPPLIER NAME (SN) XYZ SUPPLY      CITY / ST / ZIP	SHIP DATE (SD) MFG DATE (MD) Manufacturing Lot No (ML) Country of Origin (CO)



	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 39 of 42</p>
<p>Support Document</p>	<p><b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b></p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

EXHIBIT Q, MIXED LOAD LABEL



	<p>MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130</p>	<p><b>SD 7.4-51</b> <b>Rev 7</b> Page 40 of 42</p>
<p>Support Document</p>	<p>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</p>	<p>Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024</p>

**Exhibit P – Form LM 799 Trial Parts Tag**

# Trial Parts

Attn.: \_\_\_\_\_

Part Number \_\_\_\_\_

Revision \_\_\_\_\_

Quantity \_\_\_\_\_


Supplier \_\_\_\_\_

Trial Purpose \_\_\_\_\_

LM 799 Rev 1 – New release  
Cut Here Cut Here Cut Here Cut Here Cut Here Cut Here

To be applied to all six sides of the box and all five showing sides of a pallet  
Cut Here Cut Here Cut Here **PRINT ON BLUE PAPER** Here Cut Here Cut Here Cut Here  
Cut Here



	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> <b>Rev 7</b> Page 41 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

**Exhibit Q – Form LM 791 PPAP Sample Tag**

# PPAP Sample

Attn.:

Part Number

Revision

Quantity

Supplier

---



---



---




---



---

LM 791 Rev 2  
 Cut Here Cut Here Cut Here Cut Here Cut Here Cut Here

To be applied to all six sides of the box and all five showing sides of a pallet  
 Cut Here Cut Here Cut **PRINT ON YELLOW PAPER** Cut Here Cut Here Cut Here Cut Here

	MEKRA Lang North America, LLC 101 Tillessen Boulevard Ridgeway, SC 29130	<b>SD 7.4-51</b> <b>Rev 7</b> Page 42 of 42
Support Document	<b>SUPPLIER PACKAGING AND LABELING REQUIREMENTS</b>	Approved By: Bhuvesh Dhir Revised By: Mauricio Alvarez Released By: Renee Tuttle Release Date: 2/22/2024

**Exhibit R – Form LM 799 Safe Launch Tag**

# Safe Launch Parts

Part Number \_\_\_\_\_

Revision \_\_\_\_\_

Quantity \_\_\_\_\_

Supplier \_\_\_\_\_

Certified By \_\_\_\_\_

Date \_\_\_\_\_

LM 798 Rev. 1  
 Cut Here Cut Here Cut Here Cut Here Cut Here Cut Here  
 To be applied besides Bar Code Label on each box and To be applied besides Master Pallet Label on each pallet  
 Cut Here Cut Here PRINT ON GREEN PAPER Cut Here Cut Here Cut Here Cut Here Cut Here  
 Here Here