

Inbound Shipping Guideline for FRIB Users

This guideline has been established to aid in maintaining the integrity and quality of shipment(s) of product to FRIB in a safe manner. Listed below are the minimum requirements and recommendations for the packaging and shipment of product, along with contact information that will be needed throughout the process.

Shipping Address:

Facility for Rare Isotope Beams
Michigan State University
640 S Shaw Lane
East Lansing, MI 48824

Hours of Operation:

Monday – Friday
8:00 am – 3:30 pm
Standard loading dock

1. Inbound shipments to FRIB (Commercial and Scientific Users)

1.1. General Requirements

A. Approvals or Advance Notice

- 1) Provide advanced notice of when equipment is going to ship to FRIB along with the following four (4) items:
 - (a) Schedule (time-frame equipment will be at FRIB, duration of experiment)
 - (b) Tracking number
 - (c) Hard copy bill of lading (BOL) must be present with shipment upon arrival (electronic copy on a phone will not be accepted)
 - (d) Packing list

B. Pallet Size and Construction

- 1) North American Standards:
 - (a) A 45 in. (1143 mm) x 48 in. (1219 mm) x 5 in. (127 mm) pallet has 45 in. (1143 mm) stringers, 48 in. (1219 mm) deck boards and the top of the deck is 5 in. (127 mm) above the floor. For the four – way entry pallet, the primary (easy entry) opening is across the 48 in. (1219 mm) width.
 - (b) Non-reversible four-way entry stringer wood pallets, with 3.5 in. (89 mm) minimum primary opening height are required. Two-way entry may be used on 32 in. (812 mm) x 30 in. (762 mm) pallets.
- 2) Non-standard pallets require advanced approval.
 - (a) If equipment is over standard pallet size (45” x 48”), rough weights and dimensions must be provided.
 - (b) All shipments must have fork lift accessibility from a loading dock.

C. Hazardous Material

- 1) The shipper is responsible for assuring shipment of hazardous materials are compliant with all government regulations or any other relevant international, federal, state, provincial or local requirement.
- 2) The shipper is responsible for informing FRIB of any packaging that contains materials that may render the packaging “hazardous” as defined by the laws of the country or countries where the packaging is to be used.

D. Packaging and Transport

- 1) Shipment should be packaged and dock ready upon arrival.
- 2) Small package shipment specifications
 - (a) Small packages weigh less than 150 lbs. and generally have a value of less than \$10,000.



- (b) Small packages can be shipped via FedEx Express, FedEx Ground, UPS Ground, or DHL.
- (c) Do not use Small Package providers to ship palletized freight, or any items weighing over 150 lbs.
 - i LTL or Air Freight services should be used for larger items worth more than \$10,000.
- 3) Less than truckload freight shipping (LTL) shipment specifications
 - (a) Weight: greater than 150 pounds and less than 10,000 lbs. (Individual components in excess of 5,000 lbs. should be considered Specialized Equipment due to LTL carrier forklift limitations)
 - (b) Shipments greater than 5,000 lbs. must be approved prior to shipment.
 - (c) Length: Less than 15 linear feet (Shipments over 15 linear feet are defined as Truckload (TL).
- 4) Container Securement (Unitization)
 - (a) All containers shipped on pallets must be adequately secured to the pallets.
 - i Nails, metal staples, glue or PVC film to secure loads to pallets are prohibited.
 - ii The following are acceptable methods for securing cartons to a pallet:
 - (1) Metal
 - » Metal strapping, metal clips or banding buckles
 - » All wooden containers must be screwed shut, not nailed.
 - (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.
 - (3) Stretch film
 - » Stretch film must be linear low-density polyethylene (LLDPE) and clear in color.
 - » A minimum of two 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.
- 5) Transport
 - (a) Box trucks or semi-trailers are the preferred method of transit.
 - (b) If other methods are desired, they must be preapproved (vans, etc.).
 - (c) If shipments originates outside the US, the following documentation must be provided in advance of the shipment:
 - i BOL
 - ii Packing list
 - iii Commercial invoice
 - iv Importer Security Filing (ISF) form information (if sent via vessel) – Contact FRIB (1.2) for information needed to complete form.

1.2. Contacts

A. Please contact the receiving dock employees if you have any questions

- 1) Tyler Schmitt - receiving@frib.msu.edu, (517) 908-7551
- 2) Chris Giddings - receiving@frib.msu.edu, (517) 908-7551

2. Bringing equipment on-site by way of own means (personal vehicle, rental vehicle, etc.)

2.1. Provide advanced notice of when equipment is going to ship to FRIB along with the

- 1) Schedule (time-frame equipment will be at FRIB, duration of experiment).

2.2. Follow guidelines in sections 1.1.B and 1.1.C.

2.3. Container Securement (Unitization)

- 1) All items must be palletized and adequately secured.
- 2) All containers must be appropriately packaged to be unloaded at dock or in high bay.
- 3) Non-standard packaging requires advanced approval.

