Information

for

Direct Shipments

to

Physics Research Building
(PRB)

Prepared by
Facility Engineering
Overview

This document describes the various features, attributes, and limitations of the Physics Research Building (PRB) to groups who may be planning direct shipments of specialized equipment. Additionally, this document identifies the limited services that are available within the Physics Department to support such deliveries.

General Principles

As mentioned in the University Receiving departments "Direct Shipments to Departments" policy, it is recommended that specialized equipment be received at the University Receiving Department and not here at the PRB.

Said policy is shown here for reference:

*If a shipment is made directly to a department and it is not specified in the purchase order, it should be refused by the department. The carrier should be directed to Receiving for the delivery to be completed. Acceptance of this type of shipment places full responsibility for all receiving, claims processing, and payment liability on the individual who accepts the shipment. Since the condition of the shipment would not be known by Receiving, we cannot effectively represent the University if problems arise.*

*It is not uncommon that items can inadvertently be shipped directly to the Requesting Department. To provide for timely invoice payment and to avoid unnecessary delivery follow-up effort, it is essential that deliveries destined for Receiving be received at 2650 Kenny Road. Departments should advise suppliers to not make direct shipments to the Requesting Department when the purchase order calls for delivery to Receiving. In the event a delivery does bypass Receiving, and cannot be redirected, the department must notify Receiving at the earliest convenience so that document processing will be completed promptly. Receiving will note that the items were not processed internally and the specifications were verified only by the Requesting Department.*

*If items are intentionally shipped to departments or are picked up by department personnel, as in a case of an emergency, Receiving should be notified promptly in order to properly document the circumstances and prevent any delays in payment.*

It is understood that direct shipments to the PRB are sometimes unavoidable. However, direct shipment should not be made to the PRB only for convenience, or speed of arrival, or lack of awareness of the limitations. When a direct shipment is necessary or unavoidable, the purchase order must include delivery and handling instructions as shown in the following section.
Special Instructions on Purchase Order

When a direct shipment to the PRB is planned, the following text should be added as a minimum to the body of the purchase order. Additional special instructions that may be relevant to a specific piece of specialized equipment should also be developed by the initiating group and added.

**Special shipping instructions:**

1. *The Physics Research Building, 191 W. Woodruff Ave, Columbus, Ohio 43210 has off-loading limitations that require specific truck sizes and other delivery constraints as outlined in these special instructions. These instructions must be rigidly followed.*

2. *The maximum height for trucks is 12 feet 6 inches (12.5 ft.) for all deliveries.*

3. *The maximum length for trucks is 42 feet for all deliveries.*

4. *Deliveries must be not exceed 3000 pounds per item.*

5. *Deliveries must be palletized or configured in such a way to allow lifting from below using standard pallet jacks and pallet stacking machines. Exposed equipment frames or other exposed equipment edges or surfaces are not acceptable.*

6. *Deliveries are accepted only Monday through Friday and between the hours of 7:30am-11:30am and 1:30pm-3:30pm and with prior notification as listed in item 7.*

7. *Deliveries are accepted only with prior notification a minimum of 48 hours before arrival. Contact one of the following Physics Department Staff to complete this requirement:*  
   - Mark Reed - Building Coordinator  
     PH: 614.292.6090  
     e-mail: reed@mps.ohio-state.edu  
   - or  
   - Phil Davids - Facility Engr Mgr.  
     PH: 614.292.0207  
     e-mail: davids@mps.ohio-state.edu

**Physics Department Support for Deliveries**

The department has very limited staff and capacity to accept specialized equipment deliveries. Consequently, it is important for those groups who have initiated the purchase of such equipment to take full responsibility for the detailed planning required to insure a safe and well coordinated delivery. Items that can be arranged by the department are as follows:

- Operation and use of scissor lift to off-load trucks small enough to back into the dock area
- Operation and use of pallet trucks for palletized equipment.
- Operation and use of electric forklift
Physics Department Equipment

Fork Lift: Equipment details are shown below. Mark Reed is the one approved operator of this device. Lift is fitted with interior-grade wheels and is therefore limited to interior use or in the loading dock area when no dirt or stone grit is present.

Manufacturer: Crown
Model No.: 30WRTT-S
Type: Walk-Reach (WR) Stacker
Capacity: 3000 pounds
(at 24” load center)
Drive: Electric battery
Lifting Height: 152"
Horiz. Reach: 24 inches

Scissor Lift: Device details shown below. Lift is operated by a push-button inside the locked cabinet behind the lift.

Manufacturer: Advance Lifts
Model No.: 3300
Type: Scissor
Capacity: 10000 pounds
(to match freight elevator)
Drive: Hydraulic Cylinder
Length: 138 inches (3500 mm)
Width: 96 inches (2440 mm)

Pallet Jack: Multiple standard pallet jacks are available for use by anyone with nominal pallet-handling experience.
Sample of Delivery Support Items Not Available from the Physics Department

Although the department fully supports the growth of research programs through the acquisition of new equipment, it is important for research groups who plan direct shipments to the department to recognize and adequately plan for the inherent limitations of the off-loading equipment. Items that are frequently requested but not supported are as follows:

- Off-loading of tractor-trailer rigs above 12.5 feet height and without drop-gates. (see section on delivery truck access limitations below) Such rigs cannot back up to the scissor lift area and therefore cannot be off-loaded. If the trailer is too tall, but has a drop gate, then it can be unloaded in the street using a standard pallet jack.

- Off-loading of equipment that is not palletized. Such equipment often must be lifted by slings from above using jib cranes or other such vertical lifting devices. Only items that are palletized, or able to be lifted as a palletized skid would be, can be handled.

- Off-loading of equipment weighing more than 3000 pounds.

- Off-loading of equipment with CG (center of gravity) far outside of any lifting points below the CG (top-heavy, side heavy, etc.). We can only lift upward and cannot suspend from above.

- Receiving inspection is not done by facility support staff. This staff does not have access to the original purchase orders and/or purchase specifications and are therefore unable to render any appropriate inspection or to accept responsibility for the accuracy, suitability, and completeness of the delivery. Research groups who have arranged for direct shipments must be on hand at the time of delivery to perform receiving inspection and must be aware that they are taking responsibility for the completeness of the delivery.

Other Considerations

Direct shipments that are arranged to coincide with the arrival of factory technicians or commissioning engineers must be very closely coordinated to insure that the item is delivered on a truck that can be off-loaded. It can happen that the commissioning engineer is delayed by equipment redirected to University Receiving for off-loading and secondary intra-campus transport. Such a condition will likely result in additional start-up costs and should be avoided by arranging for the arrival of equipment some days before arrival of equipment start-up technicians.

The fork-lift can only be operated by the Building Coordinator. Consequently, any unscheduled/randomly-timed delivery that arrives during a period when the Building Coordinator is not available or not in the facility cannot be off-loaded by forklift.

An improperly planned and coordinated direct shipment to the PRB may result in additional costs that will be assigned to the initiating group. Consequently, groups planning direct shipments are encouraged to review plans with the Facility Engineering group for how such deliveries are foreseen to be handled. Special notes in the body of the purchase order are required to insure delivery is done in such a way that off-loading can be achieved within the constraints of the department capabilities.
Delivery Truck Access Limitations

Due to grade elevations of the loading dock relative to the grade elevation of the street, semi-trailers above 12'-6" cannot back up and reach the loading dock and scissor lift area. Consequently, deliveries made with trucks of this type must be re-routed to the University Receiving area for off-loading.

View of interference point as truck backs into loading dock area

Photo shows height limitation of the dock for large trucks. The apron slopes downward, but as the truck backs up, a point is reached where the geometry of the truck makes the trailer tilt upwards due to the opposing slope of the street. This upward tilt causes the interference shown and is clarified by the indicated contact point and the red-shaded triangles highlighting the two sloping surfaces.

In the past, such deliveries were off-loaded in the street and were only possible by borrowing the fork-lift from the Mechanical Engineering department. Relying on favors and borrowed equipment to off-load Physics deliveries is an unworkable long-term solution for both groups.

Compounding this situation has been a frequent tendency for large deliveries to arrive unannounced at noon when no support staff are available. The driver typically expects to be off-loaded immediately so that he can continue his route. This leads to a disorganized rush to locate a colleague in Mechanical Engineering, hope that he can be found, and hope that he is willing to do drop whatever he is doing and help with the unloading. Rushed efforts of this type lead to a high probability of equipment damage.

Consequently, any direct delivery in a truck that is unannounced and/or too large to fit below the ceiling of the loading dock and back up to the scissor lift will be redirected to University receiving. Groups who have initiated the purchase will be responsible for any costs and or coordination efforts needed to get the item from University receiving back to the PRB. Please note this change in receiving procedures related to such deliveries which is now in place.
Facility Locations

The Physics Research Building is located at 191 W. Woodruff Ave. The building and its relative location within Campus are shown below.

Position of PRB within Campus
Delivery Truck Routing to PRB Loading Dock

The loading dock is positioned on the southern end of the PRB and is accessed by one-way traffic westbound on 19th Ave which is reached from College Rd. A traffic attendant monitors the gated entrance of vehicle traffic onto 19th. Consequently, drivers must have their delivery papers on hand to show the attendant in order to pass through the gate.

Access to PRB Loading Dock via College Rd. to W. 19th Ave.