# Warehousing Materials

Crew Leader

Learning Objectives

By attending this session, participants will be able to:

* State methods of efficient warehouse design and organization.
* Describe effective truck and trailer storage options.
* Explain the criteria and cost benefits of purchasing in bulk versus ordering small quantities.
* Summarize order points in relation to job scheduling.

Key Terminology

First-In, First-Out (FIFO) system

Gross vehicle weight (GVW)

Order point

Shelf life

Supplemental Materials

Handouts & Resources

Job Scheduling Exercise

Job Scheduling Exercise Key

Order Point List

Classroom Props & Activities

**Warehouse Organization Exercise (30 minutes)**

Divide the class into groups of three or four, and have each group design and produce a set of drawings for an effectively organized weatherization warehouse. (The drawing does not have to be to scale.)

Have each group draw a basic rectangle and sketch in specific storage areas for different types of materials, drawing from some of the ideas presented in the previous slides on warehouse organization.

The warehouse should include:

* Overhead delivery door
* Access door
* Washroom
* Main storage areas for bulky items such as lumber, parts bins, and shelving
* Receiving area
* Anything else they choose to include

Encourage students to have fun and be creative. Have them hand in their drawings and discuss some of the ideas people came up with. The instructor can recreate some of the ideas on the white board.

**Job Scheduling Exercise (30 minutes)**

Divide students into pairs. Try to pair people who don’t know each other.

1. Provide each team with the Job Scheduling Exercise worksheet.
2. Based on the information provided about the jobs and estimated time to complete them, ask the pairs to insert the job numbers into the workdays for the month. Allow one day during the month for training or maintenance. Use any combination of jobs and days to fill up the monthly schedule. Don’t scatter the jobs. Each job should be scheduled from start to finish on successive days.
3. Go over the correct results with the class using the Job Scheduling Exercise Key.

**Order Point Exercise (15 minutes)**

Have the class work together to answer the following questions while you do the math on the white board or flip chart:

1. An agency installs roughly 150 bags of cellulose per week and it takes two weeks to receive a new shipment of cellulose. Add at least one week’s worth of a material to be kept on hand as a buffer. What’s the appropriate order point?

*Answer*:

150 bags per week x (2 weeks to receive new shipment + 1 week buffer) = 450 bags

1. A truckload of insulation contains 900 bags of cellulose. Roughly, how often should a truckload be received?

*Answer*:

900 bags per truckload/150 bags per week = 6 weeks per truckload. A truckload should be received every six weeks.

**Class Overview**

* Use the presentation, discussion, and handouts to introduce students to the key elements of material accountability and tracking.
* Let students put the principles of warehousing to work designing a warehouse with the Warehouse Organization Exercise. Put their organizational abilities to the test with the Job Scheduling Exercise. Finally, have students practice making sure the crews have adequate materials to complete those jobs with the Order Point Exercise.