

CHAPTER

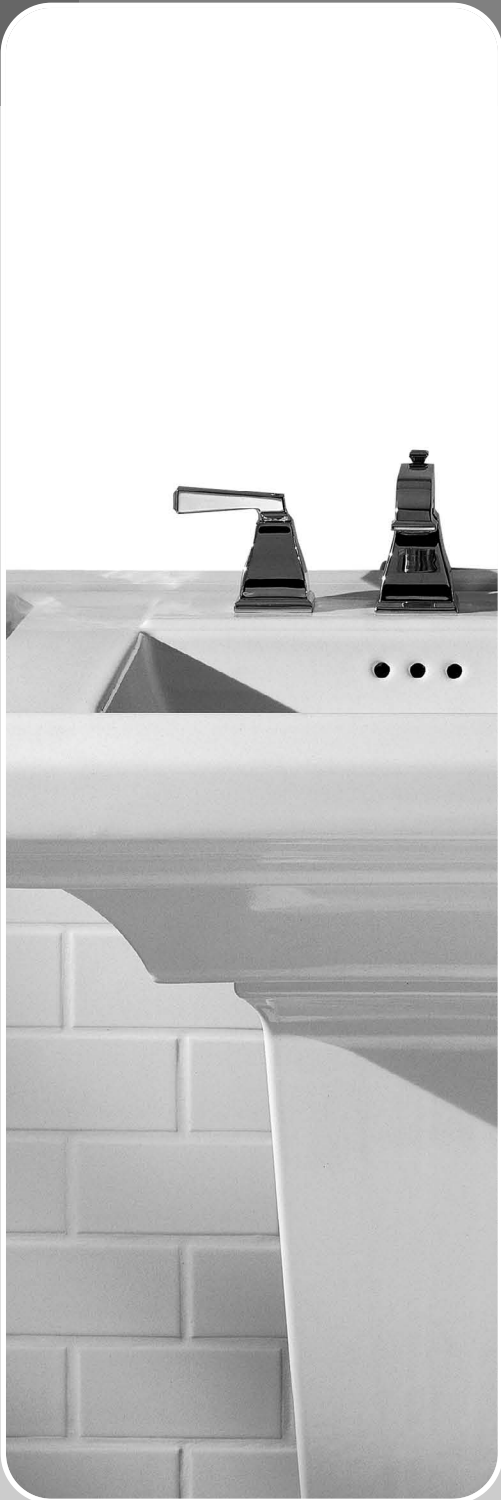
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Pre-Planning, Productivity, and Profitability

LEARNING OBJECTIVES

The student will:

- ✦ Explain the importance of pre-planning.
- ✦ Describe the concept of prefabrication.
- ✦ List opportunities that save the company money.



TAKING OWNERSHIP AND RESPONSIBILITY

In order for companies to survive in today's market, they must be able to produce a quality product at a reasonable profit. For that, they need employees who take pride in their work and promote the company in a positive manner. In many cases, you, the worker, will represent the face of the company and your actions will be the basis of the customer's opinion of the company. If you, the worker, show up when expected and present yourself as a well-organized professional, the customer will be more trusting and view your professionalism as an added value. If you cannot be on time, call ahead and inform the customer of the delay. This shows respect for the customer's time.

A company with a good reputation does not have to have the lowest prices. People are willing to pay a little extra for a reputable company with a history of fair dealings. In fact, lowering bid prices to obtain work or the promise of future work is probably the worst course of action. Satisfied customers will tell a few of their friends and family about the good service they received, but unhappy customers will tell everyone about a bad experience.

PRE-PLANNING

As a valued employee, you must perform your work as quickly and professionally as possible. The best way to do this is to pre-plan your work. If you don't attend the pre-construction meetings, then discuss what was covered with your supervisor. Discuss the work before the job begins and "brainstorm" with co-workers on how to approach the job. Review plans to see if there are any conflicts with the other trades and identify any changes that might be beneficial to your company.

For example, the engineer may not have laid out the piping in the most efficient manner. Remember to keep a record of any changes so they can be added to the drawings when the job is completed. When you understand the full scope of a project, you can devise a cost-saving plan that will reduce or eliminate delays.

Think about the job and list the steps necessary to complete it. Include materials needed, safety and power equipment, and the coordination with other trades. Determine how much of your work will depend on the work of other trades already being in place. On some large jobs, or jobs that are not well engineered, there may be overlaps in responsibilities. For example, if the roofing contractor is responsible for all roof penetrations, approach him early on with the locations you would prefer.

Material Handling

By pre-planning a job, you know how much materials are needed and when. Make sure you have in writing where and when you can store your materials on the jobsite. This will prevent a memory-challenged general contractor from forcing you to move materials before you're ready to use them. Remember, there is a cost every time a worker has to pick up a piece of material. If the general contractor has a designated storage area, it must be large enough and secure. If it isn't suitable, try to have your suppliers deliver only certain items and wait on the others. Whatever you save by ordering in bulk is easily consumed by having to spend time moving material to secure locations. If possible, make sure that the material is labeled clearly and organized on pallets; this will allow you to move it in bulk with motorized equipment and you will save on labor costs by not having to rummage through the whole delivery. Also, invest in wheeled and/or motorized carts to move tools and materials around on the jobsite. If you pre-plan, you can figure these carts into the cost of doing business and spend less time carrying items by hand. Figure 1-1 shows a motorized wheelbarrow that can haul heavy loads with minimum effort.



Figure 1-1 Motorized wheelbarrows (sometimes called wheelbarrels) can be a great time-saving tool because they can carry heavy loads with ease.

PREFABRICATION (PREFAB)

As mentioned earlier, time on the jobsite should be spent performing the install, not looking for materials or waiting for others. While pre-planning, you may determine that some of the tasks for the job can be done beforehand. This is referred to as *prefab*. Prefab is when any part of the job can be assembled before its final installation.

Look at the job and identify any tasks that appear to be repetitive, such as installing faucets on lavatories or banking together carriers for urinals or water closets. Small tasks like this can be performed in the shop ahead of time. The shop usually provides better working conditions and allows newer employees to gain hands-on experience. Typically, the work can be performed at a more productive pace because the workspace and all the necessary tools are available. This strategy also allows for the man-hours to be spread out over a longer time frame and reduces the amount of overtime. Figure 1-2 shows a worker installing garbage disposals ahead of time.



Figure 1-2 Here a worker installs garbage disposals in an assembly line fashion. This will be a great time-saver when compared to doing it on the jobsite. Courtesy of Marlin Mechanical Corporation, Phoenix, AZ.

PROFITABILITY

As a third-year apprentice, it is unlikely that you will be selecting who your company performs work with, but you should watch out for companies that want to play only by their rules. The general contractor who changes the rules as he goes along erodes profits by allowing changes in the sequence of construction and the rerouting of systems. In cases like this, you should notify your supervisor as soon as possible. It is likely that your supervisor may ask for a *change order* or some other type of consecution. A change order is when part of the job requirement has been changed from what was originally bid on. Your company may ask for additional payment or some other type of compensation. If the general contractor is unwilling to issue a change order, he may allow a change in another part of the job that could be in your favor. For example, he may be willing to loan you a worker for clean up or provide the equipment for digging a trench. When you ask for compensation, always be prepared with several options that might benefit you. You can't be accused of not being a "team player" if you offer someone choices.

As you progress through the rest of this book, try to use the material learned when out on the job. A good worker should always be looking for ways to improve the quality and efficiency of his work. By staying focused on the task at hand, a worker can complete the job in a professional manner and thereby help assure that the company stays profitable and in business.

REVIEW QUESTIONS

- ❶ What would be a good example of an item that could be prefab?
- ❷ What is a change order?
- ❸ Why notify the customer of a change in a scheduled appointment?