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The Purpose of this Course

In this course you will learn about the methods of carpet installation. We will also review the procedure for removing old carpet taking into consideration the various methods used to install it. This will be followed by discussions of carpet reinstallation, and repairs. You will learn about the fiber types used in carpet manufacture as well as the fibers and materials used in the manufacture of carpet cushion. We will also discuss the tools and products used for reinstalling and repairing carpets.

Safety procedures will be stressed in all discussions as they apply. A review of safety procedures will be presented at the end of the course. You will also learn about MSDS (Material Safety Data Sheets) for hazardous materials, and OSHA rules that apply to the carpet industry.

Carpet and Rug Institute (CRI) standards CRI 104 for commercial carpet installations and CRI 105 for residential carpet installations will be described as they apply to your work. Recommendations from the Carpet Cushion Council will be reviewed as will current clean air and environmental standards. A short list of industry resources will be provided so you can easily keep current.

Tool maintenance suggestions will be discussed along with the use of and requirement for the Material Safety Data Sheets binder.

Correct working procedures, attitudes, dress, and client relations will be discussed to help you be a more successful carpet industry professional. Included in this discussion will be receipt and report writing, and basic record keeping stressing their value in your work.

This manual is written with the assumption that you are not just a carpet installer, but a one-person company who gets called by a potential client, goes to the job site to do the initial measuring and testing, plans the job, and then works the project.

Chapter 1 Getting Ready

Getting Ready for a carpet installation, removal, reinstallation, or repair requires time from a few hours to several days depending upon the type of situation you encounter.

1.1 Initial Contact

During the initial contact with the client you will need to get a variety of information, not all of it is obvious. For example: you might need to get two or three different names and two addresses. Write this information neatly and clearly for quick reference. A sample job order form is on the next page.

1.1.1 Name of customer

This might be the person who owns the carpet or it might be an entirely different person such as an insurance company representative or an interior decorator. Be sure to find out if this is the person who is paying for the work, and find out who will be making decisions for this project.

1.1.2 Billing address

The billing address may or may not be the same as the job site address so be sure to ask for them separately.

1.1.3 Client and phone number

Ask for the phone number of the person who makes decisions and agrees to the work plan and schedule. This may be the same person as the customer, but it might be the client of the customer. The client might also be someone like a job foreman for a construction company or the project supervisor for the interior decorator.

1.1.4 Job site address

The job site address is where the carpet will be installed. Be sure to get the name of cross roads and clear directions from a known corner or landmark to the job site. You don't want to show up late because you got lost.

1.1.5 Job description

A detailed job description is needed to help you prepare for the project. Find out what is involved in the project so that you will be able to take the correct test materials and the right amount of them with you when you make your initial visit to the job site. Write this information completely and verify it with the client when you are at the job site to avoid misunderstandings.

1.1.6 Appointment time and date

Carefully write down the time and date of your appointment for and estimate or for work. Write the name of the client you will be seeing. Be sure to repeat this information to the customer so there will be no confusion. Visiting the job site before you accept a big project may save you from having to back out of a project you are simply not equipped to handle.

Sample Order Form

Estimate Appointment Time and Date:

Work Appointment Time and Date

Job Site Address:

Cross Streets:

Ask to See:

Client / Decision Maker Name and Phone Number:

5. Job Description:

Name of Caller:

Billing Name and Address:

It is probably best to wait until you have seen the job site before you accept the job or agree to a price.

1.2 Visit the Job Site

The purpose of visiting the job site at the date and time of your appointment is to verify that the information you have written as a job description is valid. You never know, the person who called you with the job order may not have known about the damp broken concrete floor. If you work in an area where old houses are being refurbished, the floor might be partially rotted wood with torn linoleum. The job site might also be larger or smaller than you were expecting.

During any visit to the job site, it is important that you make a good impression. The entire work crew must be neat, clean, well mannered, and polite. In addition to good work, a good impression will help you get repeat and referral business.

1.2.1 Measure and Test

While at the job site, measure the areas to be carpeted, sketch the floor plan and record the measurements and the seam layouts for both carpet and cushion as needed. Discuss the seam layout with the client at this time or wait if there is any testing to be done. Set up any needed moisture and alkalinity tests as recommended in CRI 104 or CRI 105. This is the time to set an appointment for picking up the test materials.

When you return to pick up the test materials, take along a copy of the floor plan showing carpet seams and carpet cushion seams so the client can accept the seam layout or request changes. If the testing determines that everything is all right for carpet installation, give the project schedule of beginning and ending dates to the client for discussion and approval. Once you have agreed upon the schedule for the project, you will need to discuss responsibilities for removing furniture and the amount of time that people and furniture should stay off the carpet after installation. The selling part of the project is over so now is a good time to give basic carpet care information to the client.

1.2.2 Bad News

A floor must be clean, dry, smooth, and sound for a successful carpet installation. If the floor is unsuitable for the installation, it is your responsibility to make that fact known so the owners, customers, or clients can get the problems solved before you attempt to install the carpet. It makes no sense to install carpet when you know the installation will fail. Being honest with your customers in preventing future problems will insure that you have a good reputation in the carpet industry. Being honest is also a good way to get repeat and referral business.

1.3 Preparation

Now that you have an agreed upon project and schedule, you must get your tools ready and arrange for any helpers you might need to do the job. Verify that all your tools are in proper working order; no missing parts, no dull blades, no missing tools, and no missing safety equipment or information. Tool lists are provided as needed throughout this manual. Safety equipment and procedures are also described throughout this manual.

Truck maintenance is not described in this manual; but keeping it clean, organized, and running properly gives a good first impression of both you and your company.

Chapter 2 Floor Preparation

This chapter describes the procedures for preparing the most common floors for carpet installation. Floor preparation varies with the flooring material. All floors, no matter what materials they are made of, must be clean, dry and sound before carpet can be installed. They should be free of dust and have smooth surfaces.

Adhesives used in carpet manufacture and adhesives used in installation may degrade if solvents, paint, resilient flooring, or chemicals are on the floor surface. These substances can be removed using bead blasting or grinding techniques if no asbestos is present. If asbestos is present in old flooring or adhesives, it is best to bring in professional asbestos removers so that removal will be both safe and legal.

Carpet should not be installed on top of carpet; so, if carpet is present, it must be removed.

2.1 Wood

A wood floor can be in any condition when you first see it, but before you can install carpeting, the floor must be clean, dry, smooth, and sound.

2.1.1 Removing Old Floor Coverings From Wood

If the old carpet was glued down, it must be scraped off the wood floor without damaging the wood. Sometimes the only way to remove glued down carpet is to cut it into strips and pull them out. When all the carpet has been removed, you must remove any left on glue or fibers from the old carpet installation.

If the old carpet was installed with tackless strips and is to be replaced with the same installation method, it is usually a good idea to save the tackless strips if they are not already damaged. Remove the carpet using an awl at the corners and a knee kicker for the edges to lift the carpet from the tackless strips. If the old carpet is not to be reused, it can be cut into pieces that you can easily move out of the work area

without thinking about the seams. If the old carpet is to be reused in some way it may be necessary for you to open the seams carefully in order to move the carpet.

When the carpet installation method is to be changed, then the tackless strips must also be removed along with the carpet cushion. The carpet cushion may have been installed with glue, staples, or a combination of both. The old carpet is unlikely to have been tacked down, but you may run into such a situation in an old house. Before you can proceed with the installation, all glue, staples, nails, and tacks must be removed from the floor.

2.1.2 Cleaning the Wood

If you are extremely lucky, all you will have to do to clean the wood is vacuum up some dust from the surface of the floor. When you are working with new or freshly sanded wood, it must be primed with a latex primer that is compatible with carpeting adhesives. CRI 104 and CRI 105 contain discussions of

2.1.3 Repairing a Wood Floor

Latex patching compounds and primers used when repairing wood floors must be compatible with adhesives used for manufacturing and installing carpets.

2.2 Concrete

If you are installing a carpet on a new concrete floor, it must have been cured for a minimum of 90 days to be properly dry. Concrete floors, even those above grade must be tested for moisture emissions and alkalinity. Adhesives are sensitive to alkalinity. A concrete floor with alkalinity in the range of 5 to 9 in the pH scale is suitable for carpet installation. This can easily be tested with pH test paper.

According to CRI 104 and CRI 105, moisture emissions through a concrete floor of 1000 square feet should not exceed 3 pounds of moisture in 24 hours. If the moisture emission is more than the recommended rate, the floor is not suitable for glue down carpet installation. If the rate is in the range of 3 to 5 pounds of moisture in 24 hours the concrete floor is probably all right for carpets with porous construction. If the concrete emits more than 5 pounds of moisture in 24 hours, it is unsuitable for flooring installation. It is your job to tell the customer the facts.

2.2.1 Removing Old Floor Coverings From Concrete

2.2.2 Cleaning the Concrete

2.2.3 Repairing Damaged Concrete

2.3 Metal

In addition to ships, some large buildings have metal floors or metal strips at the surface level of floors, and elevators that need to be carpeted. In order to have a successful carpet installation on a metal floor, the metal must be free of rust, grease, oil, and dirt. The metal floor should also be level.

2.3.1 Removing Old Floor Coverings From Metal

2.3.2 Cleaning the Metal

When you clean the metal floor, be sure to use cleaners that are compatible with the adhesive you plan to use during carpet installation. Solvents are especially damaging to adhesives. The adhesive container label should provide compatibility information.

2.3.3 Repairing Damaged Metal

2.4 Natural and Manufactured Tile

2.4.1 Removing Old Floor Coverings From Tile

2.4.2 Cleaning Tile

2.4.3 Repairing a Tile Floor and Filling Grout

2.5 Resilient Flooring

2.5.1 Removing old Floor Coverings From Resilient Flooring

2.5.2 Cleaning Resilient Flooring

2.5.3 Preparing a Vinyl Floor for Carpet Installation

2.6 Old Floor Coverings

2.6.1 Asbestos

2.6.2 Old Adhesives

Chapter 3 Cushion Types and Usage

Carpet cushions are divided into two main groupings: commercial and residential. They are well labeled by the Carpet Cushion Council so you can quickly and easily select a carpet cushion that is appropriate for your current installation project. As you read this section, you will notice that commercial carpet cushion classes are labeled with Roman Numerals and residential carpet cushion classes are labeled with Arabic numbers. Generally, a Class I carpet cushion is firmer and stronger than a Class 1 carpet cushion because it is made to be used by heavier than household traffic.