

## CONSTRUCTION SAFETY MANUAL

### **Introduction**

Thank you for committing to volunteer with San Gabriel Valley Habitat for Humanity (SGVHFH)! Safety is everybody's concern and is always an important consideration at any construction site. Building construction can be one of the most dangerous occupations. Since SGVHFH work crews normally have a high proportion of inexperienced people, everyone must pay particular attention to safety. Try to be conscious of the safety of others as well as yourself. An observer can often see danger better than the worker involved in the project. Be cautious at all times and ask questions.

Safety is based on knowledge, skill and an attitude of care and concern. Supervisors should instruct each worker about the correct and proper procedures for performing each task. This should familiarize the worker with the potential hazards of doing the tasks and advise him or her as to how such hazards can be minimized or eliminated. It is very important that everyone knows about safe work practices and follows them.

### **Basic Safety Guidelines**

- ✓ Before beginning a task, take a moment to think and to be aware of your surroundings
- ✓ If you are uncertain about how to do a task or how to operate a power tool, ask a supervisor
- ✓ Do not attempt a task if you are physically unable to do so or if you are uncertain how it is done
- ✓ Eliminate distractions so you can concentrate on the task at hand
- ✓ Inspect all power tools, hand tools, ladders and scaffolding before use
- ✓ Make sure you know where the first-aid kit is located and how to get emergency help
- ✓ Immediately notify a site supervisor of any unsafe tool or condition or of an emergency

### **Personal Protection**

Clothing is as essential to safety as the selection and use of tools. Wear clothes and gloves that are appropriate for the work and weather conditions. Loose clothing is dangerous around power tools. Workers should wear boots or thick-soled shoes at all times when on a construction site. Open-toed

shoes or other inappropriate footwear is not permitted on site. Obtain updated vaccinations such as tetanus shots.

Hard hats are to be worn while doing demolition work, during the framing phase of construction or when required by a supervisor, and are to be made available to workers on each job site at all times.

Protective glasses will be available for every construction worker and must be worn when operating a power tool or when instructed by site supervisor.

Dust masks will be available for every construction worker and must be worn when installing insulation, sanding or when instructed by site supervisor.

Ear plugs will be available for every construction worker and must be worn when using a power tool for a prolonged period of time or when instructed by site supervisor.

### **Electrical Equipment**

A power tool should not be used without proper instruction on its use and on what can happen if the tool is used improperly. The instruction should be done by a qualified person and should be given to all workers; even experienced do-it-yourselfers should receive instructions. The trainee should use the power tool under supervision until the instructor is satisfied that the trainee can use the power tool properly.

Never lower or carry a power tool by its cord. The electrical power cords should be kept off the ground as much as possible. Power tools should be cleaned and inspected daily. Defective tools should not be used and should be immediately reported to a supervisor or labeled and brought to the tool storage unit for repair.

Ensure that the ground fault circuit interrupter (GFCI) is in place before plugging in electrical power cords. To avoid electrical shock, a three-pronged plug must be used on all electric power tools. Extension cords must not have frayed insulations,

be fastened with staples, hung from nails or suspended from wires. All temporary lights must be equipped with non-conductive guards.

### **Hand Tools**

Always select the correct type and size of tool for the task and be sure it is sharp and properly adjusted. Do not use any tool that has a loose handle, is dirty, has a dulled edge or is generally in poor condition. Edged tools should be held in both hands with the cutting action away from yourself. Avoid using your hand or fingers as a guide to start a cut. Use tools only for their intended purpose.

Tools should be handled with care. Keep edged and pointed tools turned downward. Carry only a few tools at one time unless they are mounted in a special holder or carried in a tool belt. Anyone working with a hammer at height should wear a hammer loop or tool belt; when not in use, the hammer should be kept in the loop or belt. Do not carry sharp tools in your pockets. When not in use, tools should be kept in special storage.

Do not bind the blade of a saw. Wood wedges or shim shingles may be used to spread the saw cut instead. Maintain the blade guard and make sure to repair the guard should it become bent. Never tie the guard back. Ensure proper support before you operate the saw to avoid tilting or falling.

### **Ladders**

Before use, inspect the ladder for wear and tear, loose rungs or other defects. Move your ladder as you move with the work. An extension ladder should reach three feet above the work level. If both shoulders are extended outside the ladder while working, you are reaching too far. When using an extension ladder, use the "4-to-1" rule: for every four feet of height, the ladder should be moved one foot away from the wall. A ladder is pitched at a safe angle if you can grasp a rung at shoulder height. Place the ladder on solid footing. If there is a danger that the ladder will move or be hit while working, tie down or barricade the ladder. If the ground is not level, use the claw of a hammer to dig under the foot of the ladder to even it out.

When climbing, always face the ladder and carry materials in proper carrying devices to keep your hands free. Never use an aluminum ladder in the vicinity of electrical lines or during inclement weather or windy days. Use ladders only for the

purposes for which they were designed. Do not use for other purposes such as skids, braces or work platforms.

### **Scaffolding**

All scaffolding elevated ten or more feet must be equipped with safety railing and a toe board. A scaffold must be designed to support four times the weight of the workers and materials resting on it.

Scaffolding should be inspected daily. Never use damaged, rusted or defective equipment. When erecting scaffolding, provide adequate sills for the posts and use base plates. Use the adjusting screws when on uneven grade. Make sure to plumb and level scaffolding; do not force end braces.

Use only properly guarded and inspected lumber for planking. Inspect planking daily for splits and knots; remove defective or damaged planking.

### **Clean Up**

A clean work place is a safe work place. Cleanliness on site contributes to the efficiency of the worker and is important in preventing accidents.

Building materials and supplies should be kept in neat piles to allow aisles and walkways. Clean up rubbish and scrap materials on a daily basis. Keep tools and equipment that are not being used in storage areas. Never leave a work site unguarded unless all tools and materials have been secured.

### **Toxic Substances**

The toxic substances most often found on a work site are asbestos, lead oxides, solvents and animal feces. Special care must be taken when you come in contact with these or other unfamiliar substances. Contact a site supervisor immediately of any asbestos or lead-painted substances. Do not attempt to remove the asbestos. Masks are the best protection against breathing air-borne toxins.

### **Emergency Medical Care**

If someone is injured on the site, immediately notify a supervisor and summon any needed medical help. Use supplies located in the first-aid kit to stabilize the injury as much as possible. Supervisors are trained in first-aid and will help any injured worker. Insurance forms with the necessary emergency medical care information are located in every first-aid kit.