



WORK CREW SAFETY MANUAL

Introduction

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 Habitat 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. Do not go ahead with a task if you are uncertain how it is done or if you are unable to do it.

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 we at Habitat know about safe work practices and follow them.

Guidelines for a Safe Attitude

1. THINK before you do your work or task.
2. If you are uncertain about how to do a task or how to operate a power tool—ASK A SUPERVISOR.
3. Concentrate on your task and eliminate distractions.
4. Know where the first aid kit is located and how to get emergency help.
5. Inspect all power tools, hand tools, ladders and scaffolding on a daily basis.
6. Advise your supervisor IMMEDIATELY of any unsafe or hazardous tool or condition.

Proper Safety Equipment

Proper clothing is as essential to safety as the proper 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 shall wear work boots and thick-soled shoes at all times when on a construction site. Any worker wearing sandals or other types of inappropriate footwear shall not be permitted to remain at a construction site.

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.

Proper Safety Equipment (continued)

Protective glasses will be available for every construction worker. A worker must wear protective glasses any time he or she is operating a power tool or when instructed by a supervisor.

Each worker must wear a dust mask when installing insulation, sanding or when instructed by a supervisor.

Earplugs must be worn when using a power tool for a prolonged period of time or when instructed by a supervisor. Earplugs are to be made available to workers on each job site at all times.

During warm weather, please bring extra beverages (bottled water, Gatorade, etc.) to prevent dehydration.

Power Tools and Other Electrical Equipment

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

Never lower or carry a power tool by its cord. Clean tools daily. Power tools should be checked for defective switches, cords, plugs and proper grounding. Defective tools should be reported to the supervisor or labeled and put aside for repair immediately. (Do not wait until the end of the day.)

To avoid electrical shock, the following rules must be obeyed:

1. A three-pronged plug must be used on all electric power tools.
2. Extension cords must not have frayed insulation or be fastened with staples, hung from nails or suspended from wires.
3. All temporary lights must be equipped with non-conductive guards.

Hand Tools

Always select the correct type and size of tool for your work and be sure it is sharp and properly adjusted. Guard against using any tool if the handle is loose or in poor condition. Dull tools are hazardous to use because excessive force must be used to make them cut. Oil or dirt on a tool may cause it to slip and cause an injury. When using tools, hold them correctly. Most 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.

Handle and carry tools 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 a height should wear a hammer loop or tool belt, and when not in use, the hammer should be kept in the loop or belt and not placed on a sloping surface or in a precarious position. Do not carry sharp tools in your pockets. When not in use, tools should be kept in special boxes, chests or cabinets.

A Special Word on Saws

1. Don't bind the blade of any saw. When cutting long panels, the blade may bind and the saw mill will catch and kick back toward the operator. Use small wood wedges or shim shingles to spread the saw cut as you go along.
2. Maintain the blade guard. A spring-actuated blade guard often can become bent and won't slide quickly, or the spring can become stretched so the return is slow. Repair any damage to the guard as soon as it happens, and NEVER attempt to cut something that could tilt or fall and cause the saw to slip.
3. Support what you are working on properly. Never attempt to cut something that could tilt or fall and cause the saw to slip.

Ladders

Inspect a ladder before you use it. If the ladder is unsafe, don't use it. Look for wear and tear, loose rungs and defects.

Use a ladder that will reach the work. An extension ladder should reach three feet above the work level. Move your ladder with your work. If both of your shoulders are extended outside the ladder while you are working, you are reaching too far. When using an extension ladder, use the "4-to-1" rule: for every four feet of height, move the bottom of the ladder one foot away from the wall. A ladder is pitched at the proper, safe angle if you can grasp a rung at shoulder height.

Place your ladder on solid footing. If there is a danger of the ladder moving while you work, tie it down. If there is a danger that the ladder will be hit, barricade it. If the feet of the ladder are not level, dig the ground out under one foot with the claw of a hammer rather than one foot with blocks.

Never use an aluminum ladder in the vicinity of electrical lines and never use a ladder outdoors during inclement weather or on very windy days.

Carry tools and materials in proper carrying devices and keep your hands free for climbing. When climbing, always face the ladder.

Scaffolding

All scaffolding that is elevated 10 feet or more must be equipped with a safety railing. All scaffolds must be equipped with a toe board to eliminate the possibility that tools or debris will be kicked or pushed onto people below. A scaffold must be designed to support four times the weight of the workers and the materials resting on it. Scaffolding components that are not designed to be compatible should not be mixed.

Inspect all scaffolding each day before using it. Never use damaged or defective equipment and avoid rusted parts since their strength is unknown. When erecting scaffolding, provide adequate sills for the scaffold posts and use base plates. Use adjusting screws, not blocks, when on an uneven grade. Make sure to plumb and level scaffolding and do not force end braces when constructing the scaffolding. Many scaffolding accidents are caused by defective planking. Use only property graded and inspected

lumber for planking. Inspect planking daily for splits and knots and remove defective or damaged planking.

Rooftop Safety Tips

When standing and working on a roof, safety harnesses must be worn and properly secured. You will be given proper wearing and use instructions prior to the start of that day's task.

Personal fall arrest systems are a way to protect workers from falling. In general, workers must have fall protection whenever there is the possibility of falling 6 feet or more. OSHA requires workers to wear a full body harness connected to an individual lifeline (which is part of the personal fall arrest system) when they are working more than 10 feet above the ground. There are three main components of a personal fall arrest system: anchorage connector, a safety rope and lanyard and a full body harness.

- Roof sheathing should not be cut on the roof. It is much safer to send down measurements and have the sheets cut on the ground. No materials should be stored on the roof.
- Always keep track of where you are in relationship to the edge of the roof.
- Avoid laying tools and other items that are not in use on the roof. Unless secured they will slide down the roof and can hit someone on the ground.
- Some tasks near the edge of the roof are easier and safer if done from a ladder instead of the roof.
- Sawdust makes the roof sheathing very slippery. Sawdust needs to be broomed off periodically.
- Do not work on the roof when the surface is wet.
- If possible, secure the ladder to the edge of the roof with rope, nails or wire to prevent the ladder from moving or sliding.
- Do not throw items from the roof unless someone on the ground declares the landing area "all clear" and prevents others from entering the area until the thrown item has landed.
- Avoid wearing leather-soled, slippery-soled shoes when working on the roof.

A house roof can be a safe working environment, if you wear appropriate footwear, feel comfortable working on the roof or ladder and have adequate fall protection. Use extreme caution and follow the rules above.

Nail Gun Safety Tips

Nail guns are extremely dangerous tools. While volunteers should be able to enjoy their time on the worksite, they should take safety precautions extremely seriously. The best way to prevent injury is through educating workers and through supervision. Please adhere to the following when using nail guns:

- Always read and understand the manufacturer's manual.
- Nail guns should only be used by those crew members who have been trained by construction staff members.
- Always wear safety glasses.
- Always keep your finger off the trigger when the gun is not in use.
- Never assume the tool is empty.
- Never point the tool at anyone, even if it is empty or disconnected from the air supply.

- Keep your free hand out of the line of fire.
- Keep others out of the line of fire.
- Keep extremities away from the business end of the nailer.
- Never try to nail beyond your reach—take time to get a ladder
- Never support or back up a work piece temporarily with a foot or knee.
- Always disconnect the tool before clearing jams or performing other maintenance. Maintenance should only be performed by the experienced members of the group.
- Use sequential trip nail guns when possible and coil types only when a safe record of use and experience with the tool has been developed.
- Never leave a nail gun unattended where an inexperienced crew member or minor could access it.

Clean Work Site

A clean work place is a safe work place. This refers to the neatness and good order of the construction site. Maintaining good housekeeping contributes to the efficiency of the worker and is important in preventing accidents.

Position building materials and supplies in carefully laid out piles to allow adequate aisles and walkways. Clean up all rubbish and scrap materials on a daily basis. Do not permit blocks of wood, nails, bolts, empty cans, pipe, wire or other materials to accumulate on the work site. They interfere with work and can constitute a hazard. Keep tools and equipment that are not being used in chests, panels or tool boxes. This protects the tools and the workers. Never leave a work site unguarded unless all tools and materials have been properly secured.

Poisons and Toxic Substances

The poisons and toxic substances that can be found most often on a work site are asbestos, lead oxides, solvents and animal feces. Special care must be taken when you come in contact with any of these substances or any unfamiliar substance.

If you discover asbestos fiber being used as pipe, boiler or heating duct insulation, contact your supervisor immediately. **DO NOT ATTEMPT TO REMOVE THE ASBESTOS FIBER ON YOUR OWN.**

Scraping exterior woodwork, demolishing lead-painted walls and stripping old mill work are the principal ways that workers can be exposed to lead chips, dust and particles. Contact your supervisor immediately if you discover any lead-painted surfaces.

Masks are the best protection against breathing germs that can be borne in dust containing animal feces (such as rodent droppings).

Emergency Medical Care

If someone is injured on the job, contact your supervisor immediately and summon any needed medical help.