

Construction Safety Manual

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

THINK before you do your work or task

If you are uncertain about how to do a task or how to operate a power tool – ASK A SUPERVISOR.

Concentrate on your task and eliminate distractions.

Know where the first-aid kit is located and how to get emergency help.

Inspect all power tools, hand tools, ladders and scaffolding on a daily basis.

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 or 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.

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.

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

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 not be used and should either be reported to the supervisor or labeled and brought to the tool room for repair immediately. (Do not wait until the end of the day).

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

A three-pronged plug must be used on all electric power tools.

Extension cords must not have frayed insulation or 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 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 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, but if it is necessary, use extreme caution.

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:

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.

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 tie the guard back out of the way.

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 3 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 4 feet of height, move the bottom of the ladder 1 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 raise 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.

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 properly graded and inspected lumber for planking. Inspect planking daily for splits and knots, and remove defective or damaged planking.

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 material 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, 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. You also should use the supplies located in the first-aid kit to stabilize the injury as much as possible until medical help arrives. Your supervisor is trained in first-aid and will help any injured worker. Insurance forms necessary to obtain emergency medical care are located in every first-aid kit.