



Work Crew Safety Manual

For Habitat KC Volunteers



Building homes, building hope

Habitat for Humanity Kansas City

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.

Youth on the construction site

Construction is a hazardous occupation. Under Federal laws, children under the age of 16 are not allowed to work at a construction site, and children under the age of 18 are not allowed to engage in hazardous activities such as roofing or using power tools. On a Habitat for Humanity construction site, children under the age of 18 are not allowed to engage in any activities deemed hazardous by the Habitat for Humanity construction staff.

Release and Waiver of Liability

Volunteers are required to sign a Release and Waiver of Liability before volunteering with Habitat for Humanity. Volunteers under 18 years of age are required to provide a Release and Waiver of Liability signed by their parents.

Medical liability insurance coverage

HFHKC carries a medical liability insurance policy on volunteers on the jobsite. Coverage is provided for any out-of-pocket expenses or deductibles a volunteer may incur due to an injury on the jobsite.

If the volunteer does not have medical insurance coverage, our policy will cover the medial expense limited to the injuries sustained on the jobsite and by the waiver signed by the volunteer.

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

1. **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, open toed shoes or other types of inappropriate footwear shall not be permitted to remain at a construction site.
2. **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.
3. **Protective eyewear** will be available onsite. A worker must wear protective glasses any time he or she is operating a power tool or when determined necessary by a Habitat supervisor.
4. **Dust masks.** Each worker must wear a dust mask when installing insulation, sanding or when instructed by a supervisor.
5. **Earplugs** must be worn when using a power tool for a prolonged period of time or when instructed by a Supervisor. Earplugs are available on sites.

Power tools and other electrical equipment

1. **Wait for proper instruction.** A power tool should not be used without proper instruction on its use and instruction 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.
2. **Check for defects.** Power tools should be checked for defective switches, cords, plugs and proper grounding. Pay special attention to blade guards to make sure they operate correctly. Under no circumstances should you ever disable a blade guard. Defective tools should either be reported to the supervisor immediately. (Do not wait until the end of the day.)
3. **Examine extension cords.** 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

1. **Select the proper tool.** Always select the correct type and size of tool for your work and be sure it is sharp and properly adjusted.
2. **Check the condition of the tool.** 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.
3. Hold tools correctly. 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.
4. **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

5. **Use extreme caution with saws.** Don't bind the blade of any saw. When cutting long panels, the blade may bind, and the sawmill 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

1. **Inspect a ladder before use.** 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.

2. **Use ladders of proper length.** An extension ladder should reach three feet above the work level. Move your ladder with your work.

3. **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.

4. **Set your ladder at the proper angle.** 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.

5. **Be cautious with aluminum ladders.** 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

1. **Use the proper scaffolding.** All scaffolding that is elevated 10 feet or more must be equipped with a safety railing. All scaffolds must be equipped with a toeboard 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 be mixed.

2. **Inspect scaffolding every day.** 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.

3. **Many scaffolding accidents are caused by defective walk boards.** Use only properly graded and inspected lumber for planking. Inspect planking daily for splits and knots, and remove defective or damaged planking.

Construction Vehicles

Many of the trucks and equipment used in construction have limited visibility when backing up. People who are not used to working around such equipment frequently assume the operator of the vehicle will see and yield to the pedestrians. On a construction site such assumptions can be dangerous. Additionally, some vehicles, such as a bobcat operate differently than a car, including the ability to turn, or spin in place. Please give such vehicles a wide berth.

Clean job site

1. **Maintain a clean job 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.
2. **Clean up all rubbish and scrap as you go.** 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.
3. **Keep tools and equipment that are not being used and return them to the tool container.** 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 millwork 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).

Bloodborne pathogens

What are bloodborne pathogens? Bloodborne pathogens are viruses or bacteria present in human blood and bodily fluids, which can infect and cause disease in humans. The two most notable of these are Human Immunodeficiency Virus (HIV), the virus that causes AIDS, and Hepatitis B Virus (HBV).

HIV is a virus that attacks a certain type of white blood cell, the T-cell, which is a vital part of the body's immune system. HIV infects the T-cells, multiplies inside them and eventually destroys them.

HBV causes the Hepatitis B infection. The incubation period of Hepatitis B ranges from 45 to 160 days. The onset of the acute disease occurs gradually and is discovered in the patient only after the illness has become fully involved.

The two most common ways bloodborne pathogens are spread are through sexual transmission or IV drug use. However, **any contact with infected blood or body fluids carries the risk of potential infection.**

How to protect yourself from bloodborne pathogens

1. Protect yourself first...treat the victim **SECOND**.
2. Treat all blood and body fluid spills as if they are infectious.
3. Wear appropriate personal protective equipment. Most accident responses will require only gloves for adequate protection; however, other protection may include gowns, face shields, facemasks and eye protection.

First aid and emergency 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.

We invite all volunteers who are trained or certified in first aid and CPR to identify themselves.

Do **NOT** attempt to treat anyone unless you are trained medical staff.

1. Get help. Notify the Habitat construction staff immediately.
2. Get help. If you are hurt and can walk, notify the construction staff immediately.
3. Get help. If you see someone hurt, notify the construction staff immediately.

First aid kits are located on the jobsite and in Habitat vehicles.

Volunteer responsibility

I am volunteering to work at Habitat for Humanity Kansas City's build site at my own risk after reading the HFHKC work crew safety manual.

If for any reason I believe that my working at the build site might endanger myself or others, I must report this to the site supervisors immediately. This might include, among other things, communicable diseases, physical impairments and medication (prescription and otherwise that might impair my judgment).

If I encounter an injured person at the build site, I should not attempt to provide medical attention unless I am a licensed medical professional.

If I encounter an injured person at the build site, I must notify the site supervisors immediately.

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