Sandtown Habitat for Humanity®

Safety Manual

- ☑ **Follow instructions given by house leaders**
- ☑ **No horse playing on the construction site**
- ☑ **Keep work area free of debris**
- ☑ **Inspect worksite prior to beginning work**
- ☑ **Do not use broken equipment**
- ☑ **Use common sense**
- ☑ **Take your time**
- ☑ **Wear hard soled shoes/boots and other necessary protective gear such as hard hats, dust masks, safety glasses and ear plugs**

Habitat's Safety Policy: Zero Accidents!

Safety First!

At Sandtown Habitat we take safety issues very seriously. Since Habitat work crews normally have inexperienced volunteers, everyone must pay particular attention to safety. Be conscious of the safety of others as well as yourself. 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.

Supervisors should instruct each worker about the correct and proper procedures for performing each task. It is very important that people know about safe work practices and follow them.

Guidelines for a Safe Attitude:

- **THINK** before you do your work or task.
- **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.
- **KNOW** where the first-aid kit is located and how to get emergency help.
- **ASK** if you are uncertain about how to do a task or how to operate a power tool.
- **CONCENTRATE** on your task and eliminate distractions.
- **CONTACT** any Habitat construction staff member in the event of injury or illness.

Proper Safety Equipment:

- Wear clothes and **gloves** that are appropriate for the work and weather conditions. However, work gloves should not be worn when using most power and hand tools. Loose clothing is dangerous around power tools.

- **Work boots** or thick-soiled shoes should be worn at all times when on a construction site. Any worker wearing sandals or other types of inappropriate footwear will not be permitted to remain on the 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.

- **Safety 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.

- **Dust masks** should be worn 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 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 electrical 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 an injury. When using the 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.

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.

Circular Saw Safety:

- Keep the power cord free of the cutting path of the saw. Be sure to have a firm, well-balanced stance. Allow the blade to reach full speed before cutting. If the saw binds, release the switch.

- After finishing a cut, let the guard close and the blade stop before moving to another position.

- ***NEVER*** put your hands below the wood that's being cut. Be sure the wood is well supported, parallel to the direction of the cut. Wear safety glasses and ear protection.

Chop Saw Safety:

- Set up the saw on a sturdy surface and secure it. Keep hands away from the cutting area.

- Make sure that all guards are in place and functioning. Wear safety glasses and ear protection.

Floors:

- The integrity of floors should always be questioned. The housing stock in Sandtown is between 60 and 150 years old, so time has taken its toll on the structural integrity of the floors in these buildings.

- Many large holes may exist in these homes, especially during the demolition and structural replacement phases of construction. Always look before you step.

- Unsecured lumber may create the illusion that a sturdy floor exists, when in fact the ends of the lumber are unsupported. Always construct safety railing around large holes and always look before you step.

- Cover all holes in floors and block off doorways where stairs have been removed.

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 (3') above the work level.
    - Move the 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.
    - 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 the 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.

Roofs:

- Like floors, the integrity of roofs should always be questioned.
    - Always inspect the underside of the roof to determine the integrity of structural members and sheathing before going on a roof.
    - Take care when walking around the roof.
    - Sweep periodically to remove loose gravel and debris.

- Most roofs in Sandtown are flat roofs, so pitch is normally not a huge concern.
    - However, falls can happen, especially when working near the end of the roof.
    - Never hang over the edge of the roof to accomplish a task.
    - Work from an extension ladder.

- Always be conscious of the location of the edge of the roof.
    - Do not step back to admire your work! Be aware of your surroundings.
    - Be aware of those working on the ground and be careful of where things are placed. A hammer, utility knife or square can easily slide off.

Loose Brick:

- Many of the houses Sandtown Habitat for Humanity owns and works on contain brick, especially around chimneys and above windows and doors. Use extreme caution when working in these areas.
- Always inspect these areas for loose brick before working. Do not hang out windows or rely on bricks on sills to hold your weight.

Task Specific Safety:

Nailing Safety:

- Hold the nail until it is firmly started in the wood; otherwise it could suddenly fly out and hit someone.
- Wear safety glasses.
- Be aware of the surroundings. Do not start swinging without checking to be sure you will not catch someone on the "back swing."

Screw Gun Safety:

- Start the screw gun slowly while holding onto the screw to avoid a painful burn.
- Screws being removed can also be very hot.
- Do not stand on things like an empty bucket that can turn over easily.

Framing Safety:

- Watch for pipes that may be protruding from the floor slab or deck.
- Remove all nails from discarded lumber.
- Watch out for wall bracing to avoid head collisions.
- When carrying 2" x 4"s, do not make sudden turns without checking behind you.

Siding Safety:

- Review ladder or scaffold safety.
- Review circular saw safety if being used.
- Use safety glasses when cutting with power tools and nailing.

Insulation and Drywall Safety:

- Utility knives are very sharp – keep your hands out of the path of the blades. Always retract the blade or install guard when not in immediate use.
- Fiberglass particles can be particularly harmful. When handling insulation, wear sturdy, loose, long sleeved clothing, gloves and goggles (even glasses are inadequate protection), face mask, a respirator and a hat.
- If particles get on your skin, do not scratch. Shower as soon as possible.

- Drywall is very heavy. Stack drywall materials so that they are stable and secure. Do not ever pull a stack away from the wall as many bones have been broken by shifting stacks.
- Safety glasses and masks help prevent drywall dust from getting in your eyes and lungs, especially when working on the ceiling.

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.
  - 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.