

Chatham Habitat Construction Safety Manual

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Worksite Analysis

- All work areas and job sites need to be inspected on a regular basis to ensure safe work practices and safe and healthy conditions. For the most part, these inspections are to be conducted on build workdays by the House Leader / Construction Site Supervisor or his/her qualified and designated Safety person. Build workday inspections are required to be formal (written) and completed on the Safety Checklist form each work day filed on-site in a safety binder and turned over to the Construction Director at the end of the project.
- This includes the purchase of new equipment or tools, or the re-working or retrofitting of workstations or equipment so as to ensure that safety and health is considered.
- If approached by workers who appear to have a true concern regarding a safety or health issue, Crew Leader / House Leader / Construction Site Supervisor needs to act accordingly and give attention to the matter.
- All incidents (this includes property damage, equipment damage, incidents involving injury or illnesses, and near-miss type incidents) need to be investigated. In most cases, the House Leader / Construction Site Supervisor will complete this investigation. The Construction Director will be involved as necessary or when requested.
- Incidents that involve injury and illnesses will be evaluated and analyzed for trends, common causes, and patterns so as to prevent further incidents.
- Necessary forms, including the safety checklist are located at the end of the manual.

Hazard Prevention and Control

- For onsite hazards, engineering controls will be used first, rather than immediately providing Personal Protection Equipment (PPE). Safe work practices will be developed as needed and workers will be trained on using these safe work practices to avoid injury and illnesses. This may include the implementation of task or job hazard analyses.
- PPE will be provided as necessary, and its use enforced by Crew Leader / House Leader / Construction Site Supervisor.
- If feasible, administrative controls, such as reducing the duration of exposure can be implemented.
- Equipment, tools, machines, trucks, vehicles, etc., need to be maintained in good working order by a continued preventative maintenance process.
- All workers will be made aware of workplace emergency procedures. Training on this process will begin at orientation. Drills will be conducted periodically to assist in making all workers aware of the procedures in the event of an emergency such as fire or bad weather.

First Aid & Medical Assistance

There will be adequate first aid supplies and /or an adequate first aid kit available at each workplace. Where required, or in the case of an emergency where the workplace is located in a remote location and emergency medical assistance cannot arrive within a few minutes, there will be a designated certified first aid and CPR trained person who can assist in first aid emergency cases. Employees and

or volunteers who receive work related injuries or illnesses will be given immediate attention in regards to the nature of their injury or illness.

The newest ANSI/ISEA standard introduces two classes of first aid kits: Class A and Class B. Class A kits are designed to deal with the most common types of workplace injuries. Class B kits are designed with a broader range and quantity of supplies to deal with injuries in more complex or high-risk environments.

Below is a table listing the minimum required components for both Class A and Class B kits. The assortment and quantity of supplies included in the kits were chosen based on reviews of workplace incidents requiring first aid treatment, similar international standards, and current injury treatment practices. The quantity and size specifications given are the minimum necessary to comply with the 2015 standard. Based on the current needs of the Construction environment and a number of

current employees and volunteers, the safety committee has determined that a class B first aid kit is sufficient to satisfy adherence to ANSI Z308.1-2015.

ANSI Z308.1-2015, TABLE 1: CLASSES OF FIRST AID KITS & REQUIRED SUPPLIES				
First Aid Supply	Minimum Quantity		Minimum Size or Volume	
	Class A Kits	Class B Kits	(U.S.)	(Metric)
Adhesive Bandage	16	50	1 x 3 in.	2.5 x 7.5cm
Adhesive Tape	1	2	2.5 yd. (total)	2.3m
Antibiotic Application	10	25	1/57 oz.	0.5g
Antiseptic	10	50	1/57 oz	0.5g
Breathing Barrier	1	1		
Burn Dressing (Gel Soaked)	1	2	4 x 4 in.	10 x 10cm
Burn Treatment	10	25	1/32 oz.	0.9g
Cold Pack	1	2	4 x 5 in.	10 x 12.5cm
Eye Covering (with Means of Attachment)	2	2	2.9 sq. in.	19 sq. cm
Eye/Skin Wash	1 fl. oz. total			29.6 mL
		4 fl. oz. total		118.3 mL
First Aid Guide	1	1	N/A	N/A
Hand Sanitizer	6	10	1/32 oz.	0.9 g
Medical Exam Gloves	2 pair	4 pair	N/A	N/A
Roller Bandage (2 inch)	1	2	2 in. x 4 yd.	5 cm x 3.66 m
Roller Bandage (4 inch)	0	1	4 in. x 4 yd.	10 cm x 3.66 m
Scissors	1	1	N/A	N/A
Splint	0	1	4.0 x 24 in.	10.2 x 61cm
Sterile Pad	2	4	3 x 3 in.	7.5 x 7.5 cm
Tourniquet	0	1	1 in. (width)	2.5 cm (width)
Trauma Pad	2	4	5 x 9 in.	12.7 x 22.9 cm
Triangular Bandage	1	2	40 x 40 x 56 in.	101 x 101 x 142 cm

Incident Investigation

Incident Investigation Procedures

The Crew Leader at the location where the incident occurred will perform an incident investigation. Incidents can include property damage, near misses and workplace injuries and illnesses. These investigations are to assess the nature and the cause of the incident, not to place blame on personnel. House Leaders need to investigate incidents using procedures that include:

- Implement temporary control measures to prevent any further injuries to employees and or volunteers or damage to equipment or property or the public.
- Review the equipment, operations, and processes to gain an understanding of the accident situation.
- Identify and interview each witness and any other person who might provide clues to the causes.
- Investigate causal conditions and unsafe acts; make conclusions based on existing facts.
- Complete the incident investigation report.
- Provide recommendations for corrective actions.
- Indicate the need for additional or remedial safety training, if needed.
- Communicate lessons learned to staff and volunteers via email

Incident investigation reports must be submitted to the volunteer program manager(for volunteers) or HR(for employees) as soon as possible after the incident.

Incident Report Form

The incident report form should be a simple format for the supervisor to complete in a timely manner. It can be similar to the OSHA 301 “Injury and Illness Incident Report” form. To correctly assess the nature and causes of the incident, the form should contain questions such as

- What was the employee / volunteer doing just prior to the incident?
- Were there any witnesses? What were their names? Did the witnesses provide statements of the incident?
- What happened? (“Ladder kicked out and employee fell to floor”, “forklift struck wall, wall collapsed.”)
- What part of the body was affected by the incident? (eye, arm, leg, fingers, hand, etc.) And what was the nature of the injury? (Object in eyes, fractured arm, sprained leg, lacerated finger, cut in right hand, etc.).
- What was the object or substance that directly harmed the employee (if substance/object is known)
- What Emergency Services were required, and what were the results?
- Was the injury fatal?
- Necessary forms are located at the end of the manual.

Record Keeping Procedures

Chatham Habitat will control and maintain all employee / volunteer accident and injury records. Records are maintained for a **minimum of seven (7) years** following the end of the year to which they relate. The data on the Injury and Illness log and posting of the Summary of Work-related injuries and illnesses will be in accordance with government regulations. The following will be included in the record keeping process:

- Log of Work-related Injuries and Illnesses (OSHA form 300)
- Summary of Work-related Injuries and Illnesses (OSHA form 300A)
- Incident investigation reports (OSHA form 301 or similar)
- Workers' Compensation Notice of Injury

Safety & Health Training

Safety and Health Orientation

Workplace safety and health orientation begins before you actually report to the work site. Each employee & volunteer should have access to a copy of the written safety program for review and future reference. House Leaders / Construction Site Supervisors should brief workers and should answer their questions to ensure knowledge and understanding of safe work practices, policies, and job-specific procedures. All Managers are responsible to inform all workers that compliance with the safe work practices is required.

Job-Specific Training

- Crew Leader / House Leader / Construction Site Supervisor should receive basic safety and health training as it relates to their positions.
- House Leaders will initially train workers on how to perform assigned job tasks safely.
- House Leaders will carefully review with each worker any specific safe work practices, policies, and procedures that are applicable.
- House Leaders will observe workers performing the work. If necessary, the House Leader will provide a demonstration using safe work practices, or remedial instruction to correct training deficiencies before the worker is permitted to do the work without supervision.
- All workers will receive safe operating instructions on seldom-used or new equipment before using the equipment.
- House Leaders will review safe work practices with workers before permitting the performance of new, non-routine, or specialized procedures.

Periodic Retraining of Employees / Volunteers

All employees & volunteers will be retrained periodically on safe work practices, policies and procedures. Safety briefings are to be held every morning for new volunteers/employees, when there is new equipment introduced to the site, or when new safety protocols are enacted.

If necessary, individual employees & volunteers will be retrained after the occurrence of a work-related injury caused by an unsafe act or work practice, or when a Crew Leader / House Leader /

Construction Site Supervisor observes employees and or volunteers displaying unsafe acts, practices, or behaviors.

General Job Site Rules

- Do not walk under partially demolished walls or floors.
- Stop working outdoors and seek shelter during lightning storms.
- Drink plenty of water during your breaks. During summer months, additional cooling measures such as frozen pops and cooling towels will be in place.
- Do not use a metal ladder within 20 feet of electrical power lines.
- Do not block the walking surfaces of elevated working platforms, such as scaffolds, with tools or materials that are not being used.
- Do not stand on sinks, buckets or cabinets; use a step ladder.
- Stand clear of floor openings if guardrails or covers are removed or displaced.
- Seek first aid immediately if bitten or stung by wasps or insects.
- Report all injuries or illnesses to your house leader, no matter how small.
- Use sunscreen when possible to prevent sunburn.
- When crossing vehicle pathways or passing through loading areas, keep clear of all moving forklifts, trucks, cars or jobsite equipment.
- When performing work from a ladder, face the ladder and do not lean backward or sideways from the ladder.
- Stack heavy or bulky storage containers on middle and lower shelves of the storage rack.
- Do not block your view by carrying large or bulky items; get assistance from someone else.
- Obey all posted safety and danger signs.
- Watch your step at all times.
- Use good housekeeping skills to help prevent trip hazards.
- Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.
- Follow all other rules that are specific in nature that are located within this document.
- Follow all rules for safe handling and usage of materials based on their manufacturer's instructions.

Specific Safety Rules (*Alphabetical*):

Chains, Slings & Rope

- Do not shorten slings or chains by using makeshift devices such as bolts or knots.
- Protect slings from the sharp edges of their loads by placing pads over the sharp edges that are being loaded.
- Inspect rigging hardware daily for kinks, frays, cracks, cuts, punctures, broken stitching, etc. If damaged or worn, take out of service and tag “do not use.”
- Do not use hooks unless safety latches are installed and operational.
- Lifting manufactures tag must be attached to rope. Do not exceed the lifting limits as posted on the manufacture tag.
- Never shock-load any lifting hardware.
- Follow manufactures rigging inspection procedures.
- Remove wire rope from service when any of the following conditions exist:
 - Twelve broken wires in 1 lay of the hoist cable
 - Four broken wires in a strand in 1 lay of the hoist cable
 - Ten broken wires in a strand in 1 lay of a cable sling
 - “Bird caging” is present
 - Excess corrosion is present on the cable

Chainsaws

- Wear safety goggles, gloves, hearing protection, a hard hat, chaps and safety shoes while operating a chain saw.
- When transporting a chain saw in a vehicle, keep the chain and the bar covered with a guard and secure the saw by tying it down with rope to prevent fuel spillage and damage.
- When transporting a chain saw by hand, stop the engine, grip the saw handle, place the muffler at the side away from your body, and position the guide bar to the rear.
- Do not remove the chain brake or alter handles, chain brake, chain or cover.
- Always start a chain saw with a 10-inch or larger bar on the ground. Engage the chain brake, place one foot through the bottom handle, hold the top handle and pull starter rope.
- Do not place a chain saw on your knee when starting it.
- Always use both hands to maintain control of the chain saw.
- When moving from tree to tree or cut to cut, activate the chain brake, remove your finger from the trigger and keep the bar away from your body.
- Do not operate a chain saw above your shoulder height.
- Keep the nose of the bar clear of other nearby objects during cutting to prevent kickback.
- Do not set a saw down while the blade is engaged.
- Stop the engine and turn the switch to “Off” when the chain saw is to be left unattended.
- Tag damaged chain saws “Out of Service” to prevent accidental use.
- Do not pour fuel into the tank of a running engine of a chain saw.
- Do not smoke while servicing, using, or refueling a chain saw.
- Keep your body parts and clothing away from the running engine and the cutting blade.
- Allow the engine to cool before performing maintenance or before fueling.
- Stop the engine and disconnect the spark-plug wire before cleaning, inspecting, adjusting, or repairing anything driven by the engine.

Chemicals, Handling

- Do not use gasoline for cleaning parts.
- Follow the instructions on the label and in the corresponding Material Safety Data Sheet (MSDS) for each chemical product used in your workplace.
- Use personal protective clothing or equipment such as neoprene gloves, rubber boots, shoe covers, rubber aprons and protective eyewear, when using chemicals labeled “Flammable,” “Corrosive,” “Caustic,” or “Poisonous.”
- Do not use protective clothing or equipment that has split seams, pinholes, cuts, tears, or other visible damage.
- Each time you use your gloves, wash your gloves before removing them using cold tap water and normal hand-washing motion. Always wash your hands after removing the gloves.
- Do not drag containers labeled “Flammable.”
- Follow the instructions on the label and in the corresponding Material Safety Data Sheet (MSDS) for each chemical product used.
- Before pouring, dispensing or transferring any liquid from a bulk **container labeled “Flammable,”** observe the following safety procedure:
 - **Only use red color-coded metal containers** for transferring the liquid.
 - Electrically ground and bond the containers as follows:
 - i. You must make contact between the two surfaces (fuel can / fuel tank). This contact between the two surfaces is known as “bonding” which will eliminate static charge build-up as the pouring process continues.
 - ii. Attach the clip at one end of the grounding wire to the rim of the dispensing container and then attach the clip at the other end of the grounding wire to a ground source, such as a ground-driven steel stake.
 - iii. Attach the clip at one end of the bonding wire to the rim of the dispensing container and then attach the clip at the other end of the bonding wire to the rim of the receiving container.
 - iv. You are now ready to dispense the liquid from the bulk container into the open receiving container.
 - v. Upon completion, replace the lid on the receiving container and remove the bonding wire.
- Do not perform “hot work,” such as welding, metal grinding or other spark-producing operations, within 50 feet of containers labeled “Flammable” or “Combustible.”
- Do not use chemicals from unlabeled containers and unmarked cylinders.
- Do not smoke while handling chemicals labeled “Flammable.”
- Do not use flammable liquids such as gasoline, acetone or paint thinner for cleaning floors.
- Use only metal receptacles labeled “Oily Rags Only” for disposal of oily rags including linseed oils.

Chemicals, Storage

- Follow the safe handling instructions listed on the label of the container or listed on the corresponding Material Safety Data Sheet when handling each chemical stored in the stockroom or cabinet(s).
- Do not smoke while handling chemicals labeled “Flammable.”
- Do not store chemicals labeled “Flammable” near sources of ignition such as space heaters and sparking tools.
- Do not handle or load any containers of chemicals if the containers are cracked or leaking.

- Do not store chemicals labeled “Flammable” near sources of ignition such as space heaters and sparking tools.
- If stored flammable liquid exceed 25 gallons, they must be stored in approved cabinets, rooms or buildings labeled “Flammable Storage.”
- Do not store these products near exits, exit paths including stairways.

Crane Truck / Boom Truck / Conveyor Truck

- Only trained personnel are permitted to operate any crane truck or boom / conveyor.
- Park on firm level surface, place the vehicle in neutral and apply the emergency brake.
- If the truck is equipped with an audible back-up warning device, engage the alarm before backing into a location.
- If the truck is equipped with mechanical, hydraulic, or pneumatic jacks, outriggers, engage such, prior to engaging the swing conveyor.
- Do not engage the swing conveyor if there are overhead obstructions in the way. Allow sufficient distance for wind gust that would cause the conveyor to contact power lines.
- Never climb the conveyor to gain access to the roof, use a ladder.
- Do not load supplies onto a roof if there are unguarded openings such as skylights.
- Keep clear of power lines by 15 feet or more. If this is not possible, have the power company de-energize the lines and visibly ground them. If this is not possible, have the

power company wrap the live lines with insulation blanks for a safe distance of 15 feet or more from worker exposure & equipment.

- Lift the load from the center or throat of the hook, and test your load for balance, do not exceed 1 – 2 feet during testing.
- Have a written “lift plan” in place before lifting begins; i.e. max load weights, sling selections & limits of slings, operator inspection sheets, distance to power lines noted, are tag lines necessary, designated rigger & lift person, etc.
- Install a safety barricade around the lifting equipment & material lift area that will clearly keep unauthorized workers out of the lift area.
- NEVER lift materials over any person (public or private).

Cranes – Ground Crew

- Train ground crews for safe rigging operations.
- Do not touch the truck when the crane is in operation or is near energized lines.
- Stay outside the barricades of the posted swing radius.
- Wear high visibility vests before working as a signalman and use the standardized hand signals as suggested by Federal OSHA or Crane Association. Only one person will be designated to give hand signals to the truck operator.
- Use tag lines to control the load when materials are hoisted.
- Do not place your hands between the sling and the load when the sling is being tightened around the load.
- Wear proper gloves (normally leather) when handling rough, sharp-edged or abrasive material such as chains, cables, ropes or slings.

Drills

- Always disconnect the power before installing a drill bit.
- Do not use dull, cracked or bent drill bits.
- Physically check the security of the drill bit or cutting tool within the chuck prior to operation.
- Keep your hands away from rotating parts.
- Do not wear loose clothing or jewelry.
- If you can use the “leverage handle” while using the drill, then do so. Do not remove the leverage handle except in tight places.

Electrical Cords

- Use only 3-wire type cords that are rated “heavy duty”.
- All cords must be 14 AWG or greater in size (preferably 12 AWG).
- Do not use cords that have splices, exposed wires or cracked, frayed ends or bad strain relief on either end of the plug caps.
- Do not remove the ground prong from electrical cords. Ground prong must be continuously connected and in good working condition.
- Do not use an adapter such as a cheater plug that eliminates the ground.
- Do not plug multiple electrical cords into a single outlet.
- Use approved 3-ways power splitters only when necessary.
- Keep cords out of water, and out of direct walkways.
- **Do not** suspend cords by any form of metal, i.e. nails, wire, etc.

- ALL cords must be used on a Ground Fault Circuit Interrupter (GFCI). Either on a GFCI circuit breaker, external GFCI or GFCI receptacle.
- Keep cords protected from pinch points i.e. doorways, windows, driveways, etc. use blocking to protect the cords from pinch points.

Electrical Powered Tools

- Do not use power equipment or tools on which you have not been trained.
 - Keep power cords away from the path of drills, saws, vacuum cleaners, floor polishers, mowers, slicers, knives, grinders, irons and presses.
 - Do not use cords that have splices, exposed wires, cracked, frayed ends or bad strain reliefs.
 - Do not carry plugged-in equipment or tools with your finger on the switch.
 - Do not carry equipment or tools by the cord.
 - Disconnect the tool from the outlet by pulling on the plug, not the cord.
 - Turn the power switch of the tool to “Off” before plugging or unplugging it.
 - Do not leave tools that are “On” unattended.
 - Do not handle or operate electrical tools when your hands are wet or when you are standing on wet floors.
 - Do not operate spark-inducing tools such as grinders, drills or saws near containers labeled “Flammable” nor in an explosive atmosphere such as paint spray finishing areas.
 - Turn the power switch of electrical tools to “Off” and then unplug from the outlet before attempting repairs or service work. Tag the tool “Out of Service.”
 - Do not use extension cords or other three-pronged power cords that have a missing prong.
- NOTE: some tools are considered “double insulated” and do not contain a ground pin.

Look on the UL Label for the word double insulated or look for a Square with a capital D which stands for double insulated.

- Do not remove the ground prong from electrical cords.
- Do not use an adapter such as a cheater plug that eliminates the ground.
- Do not plug multiple electrical cords into a single outlet.
- Do not run extension cords through doorways, through holes in ceilings, walls or floors.
- Do not drive over, drag, step on or place objects on a cord.
- Do not stand in water or on wet surfaces when operating power hand tools, or portable electrical appliances.
- Do not use a power hand tool to cut wet or water-soaked building materials or to repair pipe leaks.
- Do not use a power hand tool while wearing wet gloves of any type.
- Do not operate a power hand tool or portable appliance while holding a part of the metal casing or while holding the extension cord in your hand. Hold all portable power tools by the plastic handgrips or other nonconductive areas designed for gripping purposes.
- Never use a power tool in wet locations.
- Do not use an electrical tool if its housing is cracked.
- Do not use electrical tools while working from a metal ladder unless the ladder has rubber feet.
- Turn the tool off before plugging or unplugging it.
- Do not leave tools unattended that are “On.”

Excavation and Trenching

- Before excavating or digging a trench, determine where underground installations, such as sewer lines, electrical lines, gas lines, communications, etc. are and the exact location(s) are clearly marked.
- Do not start work until barricades, barrier logs, or warning signs have been installed to isolate and alert others of the possible hazard.
- Do not walk under platforms that bridge a trench.
- Do not enter a trench unless you have been given permission by the competent person. Seek out and identify the designated “Competent Person” for the excavation site.
- Trenches 4 feet or greater, use ladders, structural ramps, or stairways as means of access or egress, do not climb the shoring structure. Egress must be provided & not to exceed 25 feet horizontally.
- Do not climb a ladder unless it extends at least three 3 feet or three rungs beyond the edge of the trench.
- Never enter a trench that contains standing water or a muddy floor. This must be dried out before work continues and the competent person has determined it as safe.
- Trenches greater than 5 feet must be properly protected by; slope, benching, or shielding / shoring. NOTE: the competent person may decide to provide protection less than 5 foot.

Files

- Do not use a file as a pry bar, hammer, screwdriver or chisel.
- Only use a file or rasp that is properly secured in to a handle designed for the tool.
- When using a file or rasp, grasp the handle in one hand and the toe of the file in the other.
- Do not hammer on a file.

Gas Generators

- Always follow the manufacturers operating instructions.
- Some generators have a built-in Ground Fault Circuit Interrupter (GFCI) system. The user of the generator must determine if an additional ground rod must be installed. See manufactures book for details.
- Other generators do not provide GFCI systems and an external GFCI must be used. The user of the generator must determine if an additional ground rod must be installed. See manufactures book for details.
- Whichever system you are using, all GFCI's must be tested before further use to see if they are working properly (trip and reset).
- Keep generators downwind to help eliminate Co poisoning or sickness.
- Keep generators away from flammable / combustible materials.
- Do not fuel a generator when it's running or hot. Allow several minutes for cool down before refueling.
- When fueling a generator keep a 20B fire extinguisher nearby, not to exceed 50 feet.
- Keep generators away for open trenching as Co gas can accumulate within the trench and cause poisoning and or sickness.
- Do not place a hot generator into storage. Allow cool down time.
- **NEVER** use a generator in a closed location. All generators must be used outdoors and away from windows and doors, etc.
- Always point the exhaust away for openings and workers.

Grinders

- Do not use grinding wheels that have chips, cracks or grooves.
- Do not use the grinding wheel if it wobbles. Tag it "Out of Service."
- Do not try to stop the wheel with your hand, even if you are wearing gloves.
- Prior to installing a new grinding wheel, inspect the wheel for cracks or other visible damage. Tap the wheel gently with a plastic screwdriver handle to detect cracks that are not visible. If the wheel has a dead sound rather than a ringing sound, do not use the wheel.
- Do not install a grinding wheel whose labeled RPM speed is lower than the rated speed of the grinder.
- Do not grind on the side of an abrasive wheel labeled "Type 1."
- Do not clamp a portable grinder in a vise to use it as a bench grinder
- Use the grinder with the guard in place. Only remove the guard if the job or type of stone requires guard removal, i.e. flat grinding with a diamond grinder on a flat surface.
- Use the leverage handle when using a grinder, unless the work area is too tight to operate the grinder.
- Always use proper Personal Protective Equipment (PPE) such as gloves, eyewear, face shield, respirator or dust mask, long sleeves, hearing protection, etc.

Hammers

- Use a claw hammer for pulling nails.
- Use safety glasses.
- Do not strike nails or other objects with the cheek of the hammer.
- Do not strike one hammer against another hammer.
- Do not use a hammer if your hands are oily, greasy or wet.
- Do not use a hammer as a wedge or a pry bar.
- Do not use a hammer if the handle becomes damaged or cracked.

Hand Tools

- Carry all sharp tools in a sheath or holster.
- Tag worn, damaged or defective tools “Out of Service” and do not use them. Remove them from the area too.
- Do not use a tool if its handle has splinters, burs, cracks, splits or if the head of the tool is loose.
- Do not use impact tools such as chisels, punches or steel stakes that have mushroomed heads.
- When handing a tool to another person, direct sharp points and cutting edges away from yourself and the other person.
- When using knives, shears or other cutting tools, cut in a direction away from your body.
- Do not chop at heights above your head when you are working with a hand axe.
- Do not carry sharp or pointed hand tools such as screwdrivers, scribes, aviation snips, scrapers, chisels or files in your pocket unless the tool or your pocket is sheathed.
- Do not perform “makeshift” repairs to tools.
- Minimize carrying tools in your hand when you are climbing. Carry tools in tool belts or hoist the tools to the work area using a hand line.
- Do not throw tools from one location to another, from one employee to another, from scaffolds or other elevated platforms.
- Transport hand tools only in toolboxes or tool belts. Do not carry tools in your clothing.

Housekeeping

- Follow the instructions on the label and in the corresponding Material Safety Data Sheet (MSDS) for each chemical product you use when cleaning.
- Utilize buckets to control liquids and water needs.
- When cleaning floors, wet only a small area of the floor at one time and dry mop it before cleaning another section.
- Use caution signs or cones to barricade slippery areas such as freshly mopped floors.
- Do not use flammable liquids such as gasoline, acetone or paint thinner for cleaning.
- Do not place material such as boxes or trash in walkways and passageways. Do not store or leave items on stairways. Do not block or obstruct stairwells, exits or access to safety and emergency equipment such as fire extinguishers.
- Follow this procedure before picking up any trash bags: Grab the top of the bag above the tie-off with two hands and hold the bag away from your body. Sharp objects could poke through the bag and injure you.
- Return tools to their storage places after use.
- Dispose of oily rags in the container labeled “Oily Rags Only.” Use only metal receptacles labeled “Oily Rags Only” for disposal of oily shop-rags. Keep the lid tightly closed to prevent a fire from occurring.
- Store liquid containers labeled “Flammable” only in cabinets or areas marked “Flammable Storage.”
- Also see Chemical Storage section located within the document.

Knives

- When handling knife blades and other cutting tools, direct sharp points and edges away from you.
- Cut in the direction away from your body when using knives.
- Store knives in knife blocks or in sheaths after using them.
- Do not use a knife that has a dull blade.
- Do not use honing steels that do not have disc guards.
- Do not attempt to catch a falling knife.
- When opening cartons use the safety box cutters. Do not cut with the blade extended beyond the guard.
- Do not use knives that have broken or loose handles.
- Do not use knives as screwdrivers, pry bars, can openers or ice picks.
- Do not pick up knives by their blades.
- Carry knives with their tips pointed toward the floor.
- Do not carry knives, scissors or other sharp tools in your pockets or an apron unless they are first placed in their sheath or holder.

Ladder Usage

- Do not use ladders that have loose rungs, cracked or split rails, missing rubber pads, or are otherwise visibly damaged.
- Keep ladder rungs clean and free of grease. Remove buildup of material such as dirt or mud.
- Do not place ladder in a passageway or doorway without posting warning signs or cones that detour pedestrian traffic away from ladder. Lock the doorway that you are blocking and post a sign.
- Allow only one person on the ladder at a time.
- Face the ladder when climbing up or down.
- Maintain three points of contact by keeping both hands and one foot or both feet and one hand on the ladder at all times when climbing up or down.
- Do not stand on the top two rungs of a stepladder.
- When performing work from a ladder, face the ladder and do not lean backward or sideways from the ladder.
- Do not stand on a ladder that wobbles or leans to the left or right.
- When using an extension ladder, extend the top of the ladder at least 3 feet above the edge of the landing when exiting from the ladder to an upper level.
- Secure the ladder in place by tying it off.
- Do not place ladders on boxes, concrete blocks, steps, or other unstable bases.
- Do not try to “walk” a ladder by rocking it. Climb down the ladder and then move it.
- Do not move a ladder while someone is on top of the ladder.
- Stepladders must be fully open, with spreader bars locked in place before use.
- All ladders must be placed on solid, level surface before use.
- Swivel feet on the extension ladder must have good rubber pads placed on hard solid surfaces, but the spikes of the swivel feet should be used on soil or gravel surfaces.
- Tie off the base of an extension ladder if the base could slide if the surface is slippery.
- Never sit on the top of a stepladder.
- Never allow anyone to climb on the brace side of a stepladder.

- Always inspect a ladder for damage before use. If found defective, then tag the ladder “do not use” and remove it from the work area.
- Never use an aluminum ladder within 20 feet of power lines.
- Workers that perform electrical work are not allowed to use aluminum ladders.
- Anyone using electrical power tools should not be allowed to use aluminum ladders.
- Never exceed the weight limit of a ladder. Type 3 ladders are not allowed on site. See the side labels for rating information.

Masons

- Wear your goggles, safety glasses, or face shields when chipping or cutting concrete blocks.
- Wear safety shoes when working on concrete blocks.
- Do not cause a dust problem of other workers in the area. If necessary, move your work downwind for others.
- Use an appropriate respirator mask if necessary.

Mixers

- Use an appropriate respirator mask if necessary.
- Do not cause a dust problem for other workers in the area. If necessary, move your work downwind for others.
- Use proper Personal Protective Equipment (PPE) i.e. gloves, eyewear, mask, etc.
- Keep hands out of a running mixer. If it is necessary to remove paper from inside the mixer, turn off the mixer first.
- If the mixer needs to be cleaned, first turn it off completely from its power supply.

Painting

- When mixing paint and thinner, wear your face shield and eyewear – both are required.
- Wear your face shield, eyewear and safety gloves when using airless spray guns.
- Wear your protective clothing, read and follow the MSDS sheet for the paint that you are using, as well as read and follow the label on the paint can, before mixing any paint.
- When applying epoxy paint, wear the respirator issued to you.
- Always wash your hands with soap and water after using paint. Do not use mineral spirits, paint thinner, acetone or any other toxic solvents to remove paint from your skin.
- Store rags that have oil or paint on them in closed metal containers labeled “oily rags.”
- Press the pressure relief valve on painting canisters and painting guns prior to disconnecting them.
- Do not store food or eat where spray painting is being performed.
- Close the lids of containers of paint and thinner tightly after each use or when not being used.
- Never use a pressurized sprayer without proper training.
- Do not operate spark-inducing tools such as grinders, drills or saws near containers labeled “Flammable” or in an explosive atmosphere such as paint spray booths or rooms.
- Return containers of thinners, mineral spirits and other liquids labeled “Flammable” to the storage cabinet labeled “Flammable Storage”, when painting is finished.
- Do not point the spray gun toward any part of your body or at anyone else.

Personal Protection

Personal Protection, Hearing

- Wear hearing protectors in work areas posted “Hearing Protection Required” or when your house leader says that you should use it.
- Store hearing protectors in a clean and sanitary location and or case.

Personal Protection, Heat Exhaustion/Sun Exposure

- Keep your skin covered to avoid dehydration and sunburn.
- Drink plenty of clear liquids during your breaks.
- Take breaks in shaded areas.
- Use sunscreen when possible.
- Go to your house leader and request medical help if you feel sick, dizzy, etc.

Personal Protection, Lifting Procedures

- Plan the move before lifting; remove obstructions from your chosen pathway.
- Test the weight of the load before lifting by pushing the load along its resting surface.
- If the load is too heavy or bulky, use lifting and carrying aids such as hand trucks, dollies, pallet jacks and carts, or get assistance.
- Raising walls, truss erection and handling material that exceeds 30 lbs. are generally performed by “team lifts.” This activity will be coordinated by the crew leader.
- If assistance is required to perform a lift, coordinate and communicate your movements with those of your co-lifters.
- Position your feet 6 to 12 inches apart with one foot slightly in front of the other.
- Face the load.
- Bend at the knees, not at the back.
- Keep your back straight.
- Get a firm grip on the object with your hands and fingers. Use handles when present.
- Never lift anything if your hands are greasy or wet.
- Wear protective gloves when lifting objects with sharp corners or jagged edges.
- Hold objects as close to your body as possible.
- Perform lifting movements smoothly and gradually; do not jerk the load.
- If you must change direction while lifting or carrying the load, pivot your feet and turn your entire body. Do not twist at the waist.
- Set down objects in the same manner as you picked them up, except in reverse.
- Do not lift an object from the floor to a level above your waist in one motion. Set the load down on a table or bench and then adjust your grip before lifting it higher.
- Slide materials to the end of the tailgate before attempting to lift them off a pick-up truck.
- Do not lift over the walls or tailgate of the truck bed.

Personal Protection, Respiratory Protection

- Do not perform operations requiring respirators, unless you have been approved, fitted, and trained for the use of respirators.
- Inspect respirators for cracked or worn parts before and after each use and after cleaning.

- Do not work in an area that requires the use of respiratory equipment if you fail to obtain a tight seal between the respirator and your face.
- Do not wear a respirator if facial hair prevents a tight seal between the respirator and your face.
- Clean and sanitize respiratory equipment according to manufacturer recommendations after each use.
- Store respiratory equipment in a clean and sanitary location.
- Contact lenses may become an issue when wearing a respirator.

Personal Protection, Work Clothing and PPE

- Wear a face shield over your goggles or safety glasses during open furnace, welding, soldering or gas cutting operations.
- Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.
- Wear a welding helmet or welding goggles during welding operations.
- Wear dielectric gloves when working on electric current.
- Wear earplugs or earmuffs in areas posted “Hearing Protection Required” or when told to do so by your crew leader.
- Safety goggles must be worn while welding or cutting metal.
- Do not wear long-sleeved shirts that do not have button-down cuffs.
- Do not wear jewelry or coats with metal zippers to work.

Pesticide and Fertilizer

- Do not handle or spray pesticides if you have open cuts or scratches on exposed skin surfaces on your arms or hands.
- Visually inspect the area to be sprayed for trip hazards, low branches, and clotheslines before beginning the job. Avoid these hazards as you spray.
- Keep containers labeled “Pesticides” tightly closed when you have finished using them.
- Do not transfer pesticides or fertilizers into an unmarked or unlabeled container.
- Do not transport a pesticide container in the cab of a service vehicle.
- Always spray downwind; do not stand downwind when others are spraying.
- Do not smoke or carry smoking materials while handling or spraying from containers labeled “Pesticide” or “Fertilizer.”
- Wash pesticide-contaminated clothes separately from other clothing.
- Carry fresh water and soap when you are spraying pesticides
- Remove work clothes immediately whenever clothing becomes soaked or wet with liquids from containers labeled “pesticide.”
- Do not use empty or washed containers labeled “Pesticide” as eating or drinking containers.

Pliers

- Do not use pliers as a wrench or a hammer.
- Do not slip a pipe over the handles of pliers to increase leverage.
- Use pliers with an insulated handle for electrical work.
- Do not use pliers that are cracked, broken or sprung.
- When using diagonal cutting pliers, shield the loose pieces of cut material from flying into the air by using a cloth or your gloved hand.

Pneumatic Tools

- Do not point a compressed air hose at bystanders or use it to clean your clothing.
- Attach the pressure-reducing nozzle that is labeled “Reduces Pressure to 30 psi” to the air hose when using compressed air to clean.
- Wear safety goggles when using compressed air.
- Do not pass air-powered tools by the hose from one worker to another.
- Disconnect the tool from the air line before making any adjustments or repairs to the tool.
- Turn the tool to the “Off” position and let it come to a complete stop before leaving it unattended.
- Do not use compressed air for comfort cooling.
- Nail guns are only allowed for usage by properly trained workers.
- Keep your hands well clear of the power nailer plunger head and the hammer.
- Do not use a steel hammer to strike the power nailer.
- Always wear your safety glasses when nailing.

Restoration:

Restoration, Asbestos Suspected:

- Do not perform asbestos-removal operations unless you have been trained, qualified and certified in asbestos removal procedures.
- Use the respirator that has been fit tested and assigned to you by your supervisor.
- Always assume materials used prior to 1976, such as plaster and blown insulation contain asbestos.
- Do not use sanders or power devices that may create dust or airborne particles.
- Do not dry scrape, bead blast or mechanically pulverize any existing plaster or blown insulation.

Restoration, Removal of Floors and Walls:

- First verify that the materials are asbestos & lead free.
- Verify electrical power is turned off or disconnected. Test before proceeding.
- Do not work under area where walls or floors are being removed unless a safety net is in place to catch falling objects.
- Begin demolition of walls and floors at the top of the structure and continue downward.
- Do not enter under an area where floor arches or walls are being removed.
- Do not start demolition on floor arches until at least 20 feet surrounding the floor area has been cleared of debris

- Remove structural or load support members after the entire floor has been demolished and removed.
- Do not drop debris through floor openings unless the area below has been barricaded at least 6 feet out from all edges of the opening.
- Do not throw debris outside the barricaded area.
- Do not begin working on the next lower level of the structure until all debris has been removed from the level you are currently working on.

Roofing

- Only the workers that have been properly trained in fall protection safety as it relates to their assigned working conditions will be allowed to perform roof work activities.
- A competent person will be assigned to oversee the roof work safety and its related requirements, i.e. Installation of fall protection equipment, overall surface strength for safe working, monitoring of workers safety, etc.
- Power line safety must be considered when power lines are active or live. Generally, if the voltage is 300 volts or less a worker can get within 3 feet of the line. If work requires a

closer distance than the lines can be de-energized & grounded or covered with power line insulation blanks (see power company provider for help).

- Proper roof access must be overseen. Normally an extension ladder is used. If this is the case, make sure you follow safe ladder safety procedures. Remember, aluminum ladders are not allowed near power lines.
- Scaffolding is the primary fall protection provided at Chatham Habitat. See Scaffolding section for more information.

Routers

- Turn the router off and unplug it from the power source when changing the bit.
- Point the router away from yourself and others, and perform a test run to make sure the bit is secure.
- Secure the material to be routed to a flat surface with clamps.
- Hold the router with both hands when cutting the material.
- Use proper Personal Protective Equipment (PPE), i.e. gloves, eyewear, hearing protection, etc.

Saws

Saws, General

- Wear safety goggles, a dust mask and hearing protection when operating a power saw.
- Do not wear loose clothing or jewelry.
- Always disconnect the power source before performing any work or adjustments to the saw and or blade.
- Never remove or alter the saw guard. Verify that the guard is working properly before beginning your work.
- Clean any residue from the blade or cutting head before making a new cut with the power saw.
- Do not use a power saw that has cracked broken or loose guards, or other visible damage.
- Remove all nails from the stock before using the power saw to cut the stock.
- Do not make measurements to the stock while the power saw is running. Make the measurements before turning the power switch to the “On” position.
- Keep your hands away from the exposed blade.
- Never let your hand, finger or thumb cross the cutting line.
- When using the power saw, do not hold the work piece against your body when making the cut.
- Operate the saw at full cutting speed.
- Do not alter the anti-kickback device or blade guard.
- Do not perform cutting operations with the power saw while standing on a wet or slippery floor.
- When using the power saw, do not reach across the cutting operation.
- Cut away from your body and below your shoulder level when using a power saw.
- Use the pusher stick to guide materials through the power saw when cutting short stock.
- Turn the power switch of the saw to the “Off” position and allow the blade to stop before attempting to pull out an incomplete cut.
- Do not feed the material faster than the power saw can cut it.

Saws, Chop Saws

- Do not use the saw if the lower portion of the blade hood is not adjusting itself to the thickness of the material being cut as the blade passes through the material.
- Allow the saw to return to its stored position before removing the cut material from the table.
- Lay the material squarely and solidly down before sawing it.
- Use a clamp to secure cylindrical materials to the saw “table” before cutting it.

Saws, Circular Saws

- Disconnect the plug from the power supply when the circular saw is not being used, before changing blades, when making cutting depth or bevel adjustments, or when inspecting or cleaning the saw.
- Do not use the circular saw if the lower guard does not close briskly and completely cover the saw blade.
- Do not wedge or tie the retractable guard of the circular saw “open.”
- When pocket cutting, raise the retractable guard of the circular saw by pulling the retracting lever.
- Finger-tighten the depth and bevel adjustments before using the circular saw.
- Do not use a washer or bolt to adjust the arbor size of the blade of the circular saw.
- Grip the circular saw only by its handles when operating or transporting the saw.
- Only trained workers are allowed to use any type of power saw.
- Use appropriate Person Protective Equipment (PPE) i.e. proper gloves, eyewear, etc.

Saws, Hacksaws

- When cutting sheet metal, use strong steady strokes directed away from your body.
- Use the entire length of the blade in each stroke.
- Use appropriate Personal Protective Equipment (PPE) i.e. proper gloves, eyewear, etc.

Saws, Hand Saws

- When starting a cut:
 - Hold the rip saw at a 60-degree angle with the board; hold the crosscut saw at a 40-degree angle.
 - Place your fingers to the left of the cut mark with your thumb upright and pressing against the blade.
 - Pull upward until the blade bites.
- Once the work is started with a partial cut, remove your fingers and thumb from the saw blade, then set the saw to your desired angle.
- Keep control of the saw by releasing downward pressure at the end of the stroke.
- Do not use an adjustable blade saw such as a hacksaw, coping saw or keyhole saw if the blade is not taut.
- Do not use a saw that has a dull saw blade.
- Do not carry a saw by the blade.
- Use appropriate Personal Protective Equipment (PPE) i.e. proper gloves, eyewear, etc.

Saws, Masonry Saws

- Wear the prescribed personal protective equipment such as goggles, gloves, dust masks and hearing protection when operating masonry saws to cut brick, block or stone.
- Turn off the saw before making measurements, adjustments or repairs.
- Keep hands away from the exposed blade.
- Operate the saw at full cutting speed with a sharp blade to prevent kickbacks.
- If the saw becomes jammed, turn off the power before pulling out the incomplete cut.
- Do not alter the blade guard.

Saws, Table Saws

- Always disconnect the power source before performing any work or adjustments to the saw and or blade.
- Set the saw blade high enough to cut the stock and no higher.
- Do not use the table saw to cut long work pieces unless a coworker is standing at the output end of the table saw to catch long work pieces as they leave the saw.
- Do not use a table saw blade or cutting head that has missing teeth or cracked.
- Keep your hand out of the line of the cut when feeding the work piece into the table saw.
- Use the push stick to guide the stock when there is not enough room for hand movement between the rip fence and the table saw blade.
- Use anti-kickback “dog fingers” when a work piece is being ripped.
- Use the spreader when ripping to prevent the wood from immediately coming back together and binding the blade.
- Position the spreader directly in line with the blade.

Scaffolding

- A competent scaffold person must oversee the building and usage of all scaffolds.
- The competent person must perform daily inspections and re-inspect after bad weather conditions.
- Never use a scaffold that has ice or snow buildup on the decking.
- Follow the manufacturer's instructions when erecting the scaffold.
- Do not work on scaffolds outside during stormy or windy weather.
- Do not climb on scaffolds that wobble or lean to one side.
- Initially inspect the scaffold prior to mounting it. Do not use a scaffold if any pulley, block, hook or fitting is visibly worn, cracked, rusted or otherwise damaged.
- Do not use any scaffold tagged "Out of Service."
- Do not use unstable objects such as barrels, boxes, loose brick or concrete blocks to support scaffolds or planks.
- Do not work on platforms or scaffolds unless they are fully planked.
- Do not use a scaffold unless guardrails and all flooring are in place.
- Level the scaffold after each move. Do not extend adjusting leg screws more than 12 inches.
- Do not walk or work beneath a scaffold unless a screen mesh has been installed between the midrail and the toeboards or planking. Workers are instructed to place hand tools and other small objects away from the edge of the surface from which they may fall.
- Do not climb the cross braces for access to the scaffold. Use the ladder.
- Do not jump from, to, or between scaffolding.
- Keep both feet on the decking. Do not sit or climb on the guardrails.
- Do not lean out from the scaffold. Do not rock the scaffold.
- Keep the scaffold free of scraps, loose tools, tangled lines and other obstructions.
- Do not throw anything "overboard" unless a spotter is available.
- The first step on a scaffold cannot exceed 24".

Scaffolding, Mobile

- Remove all loose materials from the scaffold before moving it.
- Do not move a mobile scaffold with anyone on the scaffold.
- Get assistance to move the scaffold.
- Chock the wheels of the rolling scaffold, using the wheel blocks, and lock the wheels by using your foot to depress the wheel lock, before using the scaffold.
- Mobile scaffolds must be protected from falling into a hole or drop off an edge.

Screwdrivers

- Always match the size and type of screwdriver blade to fit the head of the screw.
- Do not hold the work piece against your body while using a screwdriver.
- Do not put your fingers near the blade of the screwdriver when tightening a screw.
- Do not force a screwdriver by using a hammer or pliers on it.
- Do not use a screwdriver as a punch, chisel, pry bar or nail puller.
- Use a screwdriver that has an insulated handle for electrical work.
- Use a drill, nail, or an awl to make a starting hole for screws.
- Do not carry a screwdriver in your pocket.
- Do not use a screwdriver if your hands are wet, oily or greasy.

- When using the spiral ratchet screwdriver, push down firmly and slowly.

Stairways, Floors and Openings

- Do not work on open-sided floors, elevated walkways or elevated platforms if there are no guardrails in place when a fall of 6 foot is present.
- Stand clear of floor openings if guardrails or covers are removed or displaced.
- Openings must be covered when not necessary to be open. Openings or holes are anything 2" x 2". Items of that size could fall to the lower level so protection is required.
- Covers must be able to withstand 2 x's the maximum load that could be applied upon it.
- Covers must be secured from accidental movement including uplift from wind (screws, nails, or cleats).
- Covers must have the word "hole / cover" painted on it. When a cover is too small for wording, the cover must be painted with highly visible paint.
- Stairway opening must have a guardrail system installed around all sides, including the passage opening. This passage opening can be designed with a 90-degree offset or have a self-closing spring gate.
- Stairways may need to have toe-boards installed on sides to where materials could be accidentally kicked to a lower level.
- All floor must be maintained free of materials that could create a trip hazard. Good housekeeping is important.
- All stairways must be built within 1/4" of uniformity on riser height. Including temporary steps.
- When you have 4 steps or a height of 30" a railing system must be installed.
- Stairways leading to a second floor must contain a temporary handrail installed between 36" – 37" when measured vertically from front edge of tread.
- Temporary handrails must have 3" of clearance from wall.
- Handrails must be free of defects that could cause injury to hand or snag clothing.

Trailer

- Only trained and authorized employees may pull a trailer.
- Read and follow the manufacturer's speed recommendations.
- Inspect tire pressure and bearings prior to pulling a trailer.
- Secure tie downs by hooking them to each side of the trailer and tightening the strap as necessary on open trailers.
- Set the parking brake in the towing vehicle and use wheel blocks to chock the wheels of the trailer before connecting the trailer.
- Secure equipment to vehicle with chains or straps to eliminate or minimize load shifting.
- No one is permitted to ride in the trailer.
- Take slow, wide turns when towing trailers.
- Do not exceed the load capacity as posted on the trailer door of the trailer.
- Do not place all the heavy equipment on one side of the trailer.
- Use ramps to load and unload objects from the trailer

Vehicles/Driving

Vehicle damage claims and driver injuries are two of the largest loss items for Habitat affiliates. Vehicle safety is critical to maintaining an effective and profitable ReStore. Vehicle safety depends

on a number of components being maintained and functioning fluidly together; from management, to schedulers, to drivers and mechanics, vehicle safety requires everyone's diligence and dedication.

Vehicles: Driver Guidelines

- Be at least 18 years of age
- Have a valid license, CDL if required
- Have NO Type A violations in the last 5 years
- Have no license suspension or revocation in the last 3 years
- Have no more than a total of 3 Type B violations in the last 3 years
- Have no more than a total of 3 accidents (regardless of fault) in the last 3 years
- No more than a combination of 4 accidents and Type B violations in the last 3 years
- If the driver is a new hire to the risk, training must be provided and documented that the driver is prepared to drive the vehicle

Vehicles: Driving Hazards

Safe vehicle operation requires drivers that are aware of and able to spot a number of driving hazards and have the skills to quickly and appropriately avoid them. The following is a list of some common driving hazards.

- Reckless drivers
- Distracted drivers
- Road rage
- Fatigue
- Poor vehicle condition
- Drivers under the influence of drugs or alcohol

There are also a number of dangerous conditions that can constitute a driving hazard

- Bad weather (rain, Snow, sleet, severe winds, fog)
- Road condition (poor lighting, glaring sun, low-light environments, heavy traffic, busy intersections, accidents, shifting cargo)

Vehicles: Be a Defensive Driver (proactive rather than reactive)

- Recognize hazardous driving situations and take steps to avoid them
- Always assume that drivers around you will make mistakes
- Make adjustments as a hazard develops (i.e. if the person in front of you is driving erratically, take steps to distance yourself from that driver before an accident occurs)
- Never take actions that escalate developing hazards (i.e. if the person in front of you is driving erratically, DON'T tailgate them in hope for a chance to pass)
- Look ahead for approaching hazards
- Remember to scan for vehicles behind and to the side.
- Scan the road around you before changing direction
- ALWAYS use your turn signals
- Drive with your lights on at all times

Vehicles: Get Plenty of Rest and Avoid Fatigue

Maintaining positive sleep habits is part of every good drivers job. Even a well-rested driver can become drowsy under certain conditions. There are some steps that can be taken to avoid the onset of fatigue.

- Avoid “screen time” for at least 30 minutes prior to bed time
- Avoid caffeinated beverages for at least three hours prior to bedtime
- Keep the cab of your vehicle well ventilated
- Avoid over warming the cab of the vehicle

Vehicles: Seat Belts Save Lives

It is estimated that in the 25 years since states began to mandate seat belt use, over 126,000 lives have been saved. Seat belt use is mandatory in all Habitat vehicles. Below are some of the ways seat belts contribute to safe driving.

- Prevent contact with the dashboard in the event of an accident
- Keep you inside the vehicle in the event of an accident
- Help you maintain control during sudden turns and during accidents

Vehicles: Pre-Drive Inspection

It is crucial that every Habitat vehicle be inspected for safety each day before it put in service. Below is a list of things that must be checked.

- Horns, lights and turn signals
- Clean windows, mirrors, and lights
- Tire treads and PSI
- Check for leaks under vehicle
- Brakes & Steering

Vehicles: Cargo Security

- Cargo must be properly distributed and secured
- Re-Check after each stop, before starting for the next stop.

Vehicles: Vehicle Maintenance

Vehicle maintenance is critical to safe driving. The vehicle manager will ensure that a regular maintenance schedule is developed and implemented to include but is not limited to:

- Regular tune-ups
- Oil and fluid changes
- Regular brake service
- Tire changes

All service intervals will be based on the vehicle manufactures suggested schedule for commercial use.

Vehicles: Backing

The majority of vehicle property claims occurred while a vehicle is backing up. That is why a safe backing procedure must be adhered to EVERY time a habitat vehicle is used. Listed below are the steps to safe backing.

- Walk around the vehicle before backing up
- Adjust mirrors as needed
- Remember “When in doubt put your partner out”. If you aren’t sure about clearance or obstacles behind you then ask a partner to spot you while you begin backing.
- NEVER begin backing with a spotter until you can clearly see them in your mirrors.
- Always sound the horn before shifting into reverse

Vehicles: Fueling

When fueling a Habitat vehicle NEVER:

- Smoke or expose an open flame
- Fuel vehicle while it is running
- Begin dispensing fuel until the nozzle is in full contact with the vehicles filler neck.

Vehicles: Right of Way

Yield right of way whenever:

- Entering traffic
- Merging with traffic
- Turning
- Pedestrians **ALWAYS** have the right of way
- Never force another driver to brake or change direction
- Always assume that another driver cannot see you
- Move your vehicle only after right of way has been obtained

Vehicles: Negotiating Curves

- Understand why rollover accidents happen
 - NHTSA data show that **95%** of single-vehicle rollovers are what are known as **Tripped Rollovers**. This happens when a vehicle leaves the roadway and slides sideways, digging its tires into soft soil or striking an object such as a curb or guardrail. The high tripping force applied to the tires in these situations can cause the vehicle to roll over.
- Reduce speed **before** entering a curve
- Stay off the shoulder
- Ensure that cargo is secure at all times (a top heavy load or a sudden cargo shift could be the straw that broke the camel’s back in a potential rollover situation)

Vehicles: Railroad Crossing

Railroad crossings, especially in rural areas, are potential hazardous. Following the procedure below, each and every time you cross a railroad track will ensure that you remain safe.

- Stop 15 to 50 feet from the railroad tracks
- Stop & look both ways
- Advance slowly, but steadily across the railroad tracks when deemed safe to do so.

Vehicles: Passing Vehicles

Passing unsafe or slow moving vehicles is sometimes necessary, but any time you pass especially into an opposing lane, you take certain risks. Using good judgment to determine whether it is safer to stay where you are or attempt to pass, is the first step to safe passing.

Here are some additional things to consider when passing another vehicle.

- Make certain that no one is attempting to pass you.
- **ALWAYS** signal that you are about to pass
- Watch the driver (not the car) you are attempting to pass.
- Watch out for vehicles entering the roadway
- Watch approaching traffic
- **NEVER** get into a race

Vehicles: Pedestrians

When dealing with pedestrians in or around a roadway, one must be especially vigilant and alert.

Here is a not exclusive list of things to think about whenever pedestrians are around.

- Expect the unexpected
- Pedestrians have difficulty estimating vehicle speed
- Pedestrians assume that you see them
- ALWAYS give pedestrians the right of way
- ALWAYS be aware of tail swing, especially when pedestrians are standing at the corner

Vehicles: Reduced Traction

Inclement weather, oil leaks, and other chemical spills can all result in reduced traction driving environments. Keep these tips in mind when faced with these hazardous driving conditions.

- Gradually increase following distance
- Reduce your speed
- Apply brakes gently and steer smoothly
- Your brakes are more likely to lock up in reduced traction environments (especially if lightly loaded)
- If you find yourself skidding, always turn the wheel in the direction the rear of the vehicle is sliding, turn into the skid.

Vehicles: Reduced Visibility

Certain conditions (usually weather related) can result in a reduced visibility driving scenario. Knowing what to do is important and can even save your life.

- SLOW DOWN
- Watch out for stopped vehicle in front of you
- Turn on fog lamps and or emergency flashers
- Always keep lights and windows clean
- Get off the road and wait for conditions to improve

Vehicles: Emergency Stopping

Breakdowns, flat tires, weather conditions, fatigue, you name it... drive commercially long enough and you will find yourself having to make an emergency stop. The following steps are in place to keep you safe during an emergency stop.

- Turn on emergency flashers and coast to the shoulder of the road
- Set up emergency warning device (road flares, strobes or reflective triangles)
 - Set up 1st device 10 feet from the driver's side rear of the vehicle toward approaching traffic
 - Set up 2nd device 100 feet from the center rear of the vehicle
 - Set up 3rd device 200 feet from the right rear of the vehicle
 - Never attach a flare to a vehicle

Vises

- When clamping a long work piece in a vise, support the far end of the work piece by using an adjustable pipe stand, sawhorse or box.
- Position the work piece in the vise so that the entire face of the jaw supports the work piece.
- Do not use a vise that has worn or broken jaw inserts, or has cracks or fractures in the body of the vise.
- Do not slip a pipe over the handle of a vise to gain extra leverage.

Wheelbarrows

- Wear leather gloves when using a wheelbarrow.
- Do not use a wheelbarrow with a wobbly or loose wheel.
- Do not stand on a wheelbarrow or use it as a work platform.
- Do not transport anyone in a wheelbarrow.
- Do not push wheelbarrow with handles in an upright position.

Wrenches

- Use box or socket wrenches on hexagon nuts and bolts as a first choice, and open-end wrenches as a second choice.
- Do not use wrenches that are bent, cracked, badly chipped or that have loose or broken handles.
- When using an adjustable wrench, turn the wrench so that the fixed jaw, not the adjustable jaw, provides positive pressure in the item to be turned.
- Do not slip a pipe over a single-head wrench handle for increased leverage.

- Size the adjustable wrench to fit the nut before turning.
- Use a split box wrench on flare nuts.
- Do not use a wrench with broken or battered points.

Emergency Action Plan

Scope

The following Emergency Action Plan applies to all situations where a particular OSHA Standard specifies that a plan be established.

Elements

A. Emergency Escape Procedures and Gathering Point.

Emergency escape procedures and gathering point assignments have been posted in the work area and all employees & volunteers have been trained by management in the correct procedures to follow. New employees & volunteers are trained when assigned to the work area.

In the event of an emergency on a roof or scaffold, an attempt will not be made to lower a victim from the roof or scaffold. Instead, 911 will be called, and the victim will be stabilized on scaffold (or stabilized in place if back or neck injury is suspected) until emergency services arrive to take over. If needed, CPR will be administered to victim by trained staff or volunteer(s) until emergency services arrive. If a victim is dangling from a rope, scaffolding will be erected below the victim to rescue them.

B. Employee Accountability Procedures After Evacuations

Each job site House Leader is responsible for accounting for all their assigned employees & volunteers by the designated Crew Leader at a predetermined, designated gathering point for head count. Each assigned employee & volunteer will be accounted for by name. All Crew Leaders are required to report their head count (by name) to the House Leader. A summary of the evacuation gathering points and the Crew Leader and their assigned employees & volunteers who must report to the designated gathering point is

attached. Cell phone numbers may need to be included on the daily sign-in sheet to help further locate a missing person during head count at the assigned gathering point.

C. Rescue and Medical Duties

Medical duties should be assigned to designated 1st Aid / CPR trained individuals. These individuals should receive special instructions to properly carry out these assignments. Typically this is the house leader on site.

D. Preferred Means of Reporting Fire and Emergencies

All fires and emergencies will be reported by:

Emergency and Fire Protection Coordinator

The Emergency and Fire Protection Plan Coordinator:

Name	Title
------	-------

Department: _____

Telephone No.: _____

The Coordinator may be contacted for further information or explanation of the Emergency and Fire Protection Plans.

E. Alarm System

Employee alarm systems for notifying all employees in case of an emergency are:

On active construction sites, most cases will be by verbal communications.

However, if a site is too large for everyone to be quickly notified then an air horn will be used to indicate an emergency._

- A non-stop blasting of the air horn will be used to indicate a fire and everyone will report to the “fire” gathering point.
- A 2 second blast, followed by a 1 second rest, repeated over & over will indicate severe weather. And everyone will report to the “weather shelter” gathering point.

F. Fire Protection and Prevention Assignments

Appropriate personnel have been trained in proper fire extinguisher selection & usage.
Fire prevention equipment must be routinely inspected and tested.

Employee Accountability Following an Emergency Evacuation

Post for everyone to read

Each CHFH House Leader is responsible for accounting for each of his or her assigned employees & volunteers following an emergency evacuation. This will be accomplished by following the procedures shown below.

Employee Accountability

1. Gathering points have been established for all construction sites. These points are to be posted for everyone to see.
2. All work area Crew Leaders, employees and volunteers must report to their designated gathering point immediately following an evacuation.
3. Each employee & volunteer is responsible for reporting to his or her supervisor so an accurate headcount can be made. Crew Leader will check off all those reporting and report those not checked off as missing to the House Leader.
4. The House Leader will follow up with all Crew Leaders to ensure everyone is accounted for.
 - A. Primary Location:

 - B. Secondary Location:

5. The House Leader will determine the method that will be utilized to locate missing personnel. Such a method could be calling the missing person on their cell phone. Cell phone numbers would be required to be listed during the morning signing process for each employee & volunteer.

Emergency Escape Procedures & Escape Route Assignment

Post for everyone to read

WORKAREA:

SKETCH:

Crew Leader, Employee & Volunteer Gathering Points

SPECIAL INSTRUCTIONS:

House Leader:_____

Signature:_____ Date:_____

Appendix A: Employee Alarm System Requirements

REF: OSHA Standard 1910.165

Requirement	Reference	Meets the
Requirement	1910.165	
1. Provides warning for safe escape	(b)(1)	_____
2. Can be perceived by all employees	(b)(2)	_____
3. Alarm is distinctive and recognizable	(b)(3)	_____
4. Employees / volunteers properly trained	(b)(4)	_____
5. Emergency telephone numbers posted.	(b)(4)	_____
6. Emergency alarms have priority	(b)(4)	_____
7. Alarm procedures established.	(b)(5)	_____
8. All alarm components are approved.	(c)(1)	_____
9. Alarms restored promptly after testing.	(c)(2)	_____
10. Spare alarm devices available.	(c)(2)	_____
11. Alarm system maintained properly.	(d)(1)	_____
12. Effective alarm tests conducted every 2 months	(d)(2)	_____
13. Power supplies maintained and back-ups provided.	(d)(3)	_____
14. Supervised systems prove positive notification of any defect and are tested annually.	(d)(4)	_____
15. Alarms maintained properly by trained personnel.	(d)(5)	_____
16. All manually operated devices must not be obstructed but readily accessible.	(e)	_____

Note: The above requirements apply to all emergency employee alarms installed to meet a particular OSHA standard.

Appendix B: Daily Safety Checklist

Daily Safety Checklist House # _____ Date _____ Site representative _____

- **Personally walk job site** and visually observe site conditions; noting any trip hazards and fall conditions, weather related issues, break-ins, missing equipment or materials and initiating needed corrective action.
- Check and verify that all **Scaffolding** is set properly with safety guardrails and walk boards in place.
- Inspect and run **Electrical Cords** to temporary power source insuring cords are free of cuts, frays, and broken prongs; safely route the cords, including ground fault protection to central location that prevents tripping or hazard conditions; none smaller than 14 gauge.
- Check and verify **Emergency Protocol Sheet; First Aid Kit and Fire Extinguishers** are available and their location clearly identified.
- Check and verify **Fresh Drinking Water** is available and ice during hot weather.
- Check and verify quantities of **Personal Safety Protection and Equipment** are available for scheduled volunteer group size i.e. hardhats, gloves, dust mask, eye, and ear protection. Hard hats required until drywall is hung, and at all times while working on and around scaffolding.
- Check and verify that all volunteers have signed a **Volunteer Release and Waiver of Liability, and Signed-In** form providing a phone number in case of emergency.
- Verify that all **volunteers meet the age requirements**; must be at least 16 years old; those under 18 years of age will not be allowed to use power tools.
- **House Leader Circle volunteers for CHFH Introduction and Safety Orientation Talk.** Be sure to highlight those items that may be pertinent for today's activities:
 - **Proper and Appropriate Clothing for Construction**
 - **Trips and Falls**; uneven ground, avoid backing up, communicating
 - **Lifting**; knees not your back. No twisting when lifting. Carry long objects with a partner.
 - **Power Tools**; demonstrations, eye protection required & ear recommended
 - **Hand Tools**; dropping of tools, utilizing the correct tool for the job
 - **Housekeeping**; keeping a clean & safe worksite
 - **Ladder Safety**; correct size for the job and properly set up to ensure stability
 - **Scaffolds and Roof Safety**; fall protection; don't leave tools or materials near edges or on ladders where they can fall
 - **Electrical Protection**; ground fault protection
 - **Dehydration and Fatigue**; take frequent water breaks
 - **First Aid & Accident Reporting**; kit location
- **Introductions including identifying point person in case of emergency (typically the Site Supervisor / House Leader).** Her/his name and cell number should be clearly posted.
- **Today's Work Schedule/Breaks/Lunch/Cleanup and Closing Circle**
- **House Leader Announce Today's Work Activities, Crew leaders and Planned Task.** Volunteers are asked to select tasks that fit their conditioning, abilities and skill levels.
- **Following the Volunteer Task Assignments**, continually monitor the worksite, volunteers and subcontractors so as to reinforce the importance of safety with particular emphasis on today's planned work activities.

- **Set a good example** – comply with all the safety rules and regulations.
- **Additional comments/ Work Activities:**

Appendix C: HFHI Residential Fall Protection Statement

Fall Protection in Residential Construction

This Statement provides information regarding recent developments relating to fall protection in residential construction. The United States Department of Labor's Occupational Safety and Health Administration (OSHA) has issued a new directive rescinding the Interim Fall Protection Compliance Guidelines for Residential Construction (STD 03-00-001).

Before the issuance of this new directive, employers engaged in certain residential construction activities were permitted to use specified alternative methods of fall protection (e.g., slide guards or safety monitor systems) rather than the conventional fall protection (guardrails, safety nets, or personal fall arrest systems) required by the residential construction fall protection standard (29 CFR 1926.501(b)(13)). Employers could use the alternative measures without first proving that the use of conventional fall protection was infeasible or created a greater hazard and without a written fall protection plan.

Under the new directive, all residential construction employers must comply with 29 CFR 1926.501(b)(13). This means that:

- Residential construction employers generally must ensure that employees working six feet or more above lower levels use guardrails, safety nets, or personal fall arrest systems. A personal fall arrest system may consist of a full body harness, a deceleration device, a lanyard, and an anchor point. (See the definition of "personal fall arrest system" in 29 CFR 1926.500).
 - Other fall protection measures may be used to the extent allowed under other provisions of 29 CFR 1926.501(b) addressing specific types of work. For example, 1926.501(b)(10) permits the use of warning lines and safety monitoring systems during the performance of roofing work on low-sloped roofs.
 - OSHA allows the use of an effective fall restraint system in lieu of a personal fall arrest system. To be effective, a fall restraint system must be rigged to prevent a worker from reaching a fall hazard and falling over the edge. A fall restraint system may consist of a full body harness or body belt that is connected to an anchor point

at the center of a roof by a lanyard of a length that will not allow a worker to physically reach the edge of the roof.

- If the employer can demonstrate that use of conventional fall protection methods is infeasible or creates a greater hazard, it must ensure that a qualified person:
 - Creates a written, site-specific fall protection plan in compliance with 29 CFR 1926.502(k); and
 - Documents, in that plan, the reasons why conventional fall protection systems are infeasible or why their use would create a greater hazard.

The new directive interprets "residential construction" as construction work that satisfies both of the following elements:

- The end-use of the structure being built must be as a home, i.e., a dwelling.
- The structure being built must be constructed using traditional wood frame construction materials and methods. The limited use of structural steel in a predominantly wood-framed home, such as a steel I-beam to help support wood framing, does not disqualify a structure from being considered residential construction.
 - Traditional wood frame construction materials and methods will be characterized by:
 - Framing materials: Wood (or equivalent cold-formed sheet metal stud) framing, not steel or concrete; wooden floor joists and roof structures.
 - Exterior wall structure: Wood (or equivalent cold-formed sheet metal stud) framing or masonry brick or block.
 - Methods: Traditional wood frame construction techniques.

The new residential fall protection guidelines will go into effect June 16, 2011.

Impact on Habitat for Humanity Affiliates

Fall protection has always been a critical component of safety planning for Habitat projects. This new OSHA directive reinforces the need for all affiliates to implement effective fall protection systems for areas where workers can fall 6 feet or more.

All affiliates are expected to comply with OSHA, including the fall protection requirements for workers engaged in construction activity. Affiliates should consider use of OSHA certified subcontractors to perform this work if OSHA compliance is deemed impracticable for affiliate employees or volunteers.

Although compliance with these requirements may seem challenging, it will go a long way toward ensuring the safety of Habitat for Humanity's most important resources—volunteers and staff. Implementing effective fall protection techniques will also help to reduce accidents and insurance

claims, which have caused substantial losses and increased insurance premiums for affiliates in recent years.

If you need assistance in developing or implementing fall protection or have any questions regarding the new OSHA directive, please contact the HFHI Construction Resources Department or the HFHI legal department.

Additional information and resources may be found at:

To see the actual OSHA Standard for full detail

- http://osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1926#1926_Subpart_M

-

Various fall protection tips & topics from OSHA's website

- <http://osha.gov/doc/falls/preventingfalls.html>

-

OSHA News Release; Residential fall protection fatalities

- http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASE&p_id=19005

-

PDF showing a few options of residential fall protection

- http://www.sbcindustry.com/images/publication_images/b11.pdf

-

“HUGS” safety railing system (HFH Affiliates can purchase at discount pricing – Call HFHI U.S. Safety Specialist for details)

- <http://www.hugsafety.com/>

-

Additional safety suppliers of fall protection equipment and more

- <http://peaksupplycompany.com/catalog/product.dT/1022>
- <http://www.fallsafetyusa.com/store/p/6450-ACRO-12070-Residential-Guardrail-System.html>
- <http://dbi-sala-safety.com/catalog/index.php?cPath=16&osCsid=c7bb51f442734f02b51d53772fbbd667>
- <http://www.nationalsafetyinc.com/9794/Anchors.html>
- <http://www.fallprotectionpros.com/equipment/guardrail-systems.html>

Installation Procedures for Roof Truss / Rafter Erection / Roof Sheathing

For greater detailed information and suggests please talk a few minutes to review the following two (2) links, the third (3rd) link is optional reading...

- **Fall Protection & Trusses -**
http://www.sbcindustry.com/projects/woodtruss/images/publication_images/b11.pdf
- **Wood Truss, Sheathing, Bracing Installation**
http://www.sbcindustry.com/projects/woodtruss/images/publication_images/b2.pdf
- **Optional misc. reading of Truss information.**
<http://www.mcvicker.com/twd/gwdi05/page011.htm>

Important Notice: Only qualified workers will perform any roof work activities. The House Leader and or Construction Manager will determine if a worker has the necessary qualifications based upon OSHA's definition; 29 CFR 1926.32(l) states: *"Qualified" means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his or her ability to solve or resolve problems relating to the subject matter, the work, or the project.*

Erection of Exterior Walls

During the construction and erection of exterior walls, HFH Management shall take the following steps to protect workers:

- Only the following trained workers will be allowed to erect exterior walls:
- A painted line six feet from the perimeter will be clearly marked prior to any wall erection activities to warn of the approaching unprotected edge;
- Materials for operations shall be conveniently staged to minimize fall hazards; and
- Workers constructing exterior walls shall complete as much cutting of materials and other preparation as possible away from the edge of the deck.

Roofing Work Including Papering & Shingling

If the roof is 6' or more above lower levels and the slope is 4:12 (vertical to horizontal) or less, than all those options available to commercial roofing operations on a flat roof (CFR 29 1926.501(b)(10)) are applicable. These include the use of guard rails, personal fall arrest systems or safety nets as first line of defense, or a combination of a warning line system (at least 6' from edge) and guardrail system, warning line system and safety net system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system. **NOTE: HFHI does not condone the allowance of the "Safety Monitoring System" on any roof system.**

On roofs that are 6' or more above lower levels and the slope is greater than 4:12 (considered "Steep Slope Roof") the first line of defense is guard rails, personal fall arrest systems or safety nets. Note

that a toe-board must also be installed along the eave edge to prevent objects from falling to the lower level.

For greater detailed information and suggests please talk a few minutes to review the following 1926 Subpart M Appendix's...

Guardrail Systems - Non-Mandatory Guidelines for Complying with 1926.502(b)

- http://osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10924

Personal Fall Arrest Systems - Non-Mandatory Guidelines for Complying with 1926.502(d)

- http://osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10925

Positioning Device Systems - Non-Mandatory Guidelines for Complying with 1926.502(e)

- http://osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10926

Sample Fall Protection Plan - Non-Mandatory Guidelines for Complying with 1926.502(k)

- http://osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10927

General Requirements.

- **Trained Workers Only.**

Only workers who have been trained to be proficient in the alternative methods of fall protection shall be allowed onto the roof. In addition, each affected employee shall be trained to ensure specific awareness of the fall hazards associated with work on roofs with rake edges ("rake edges" are inclined roof edges, such as those on the gable end of a building).

- **Slip Hazards.**

The roof surfaces shall be inspected for slipping hazards. The employer shall either eliminate any such hazards or take effective measures to have workers avoid them. The employer shall have workers wear appropriate footwear to reduce the potential for slipping.

- **Bad Weather.**

When adverse weather (such as high winds, rain, snow, or sleet) creates a hazardous condition, roofing operations shall be suspended until the hazardous condition no longer exists.

- **Roof holes/openings.**

The employer shall have any damaged portions of the roof deck repaired as soon as practicable. Any holes (including skylight openings) or other areas where employees would

not have safe footing shall be covered or surrounded by guardrails that comply with the requirements of 1926.502.

- **Ladders/Scaffolds.**

If ladders or scaffolds are used, they shall be erected and maintained in accordance with the requirements of Subparts X and L of OSHA's construction standards. In addition, employees shall be trained in accordance with the requirements of Subparts X & L.

- **Access To Roof.**

Employers shall not allow workers to ascend or descend the roof's slope within 6 feet of the rake edge except where that limitation would prevent the performance of work.

- **Location of Materials.**

Supplies and materials shall not be stored within 6 feet of the rake edge, or three feet where tile roof systems are being installed.

- **Impalement Hazards.**

The area below the eaves and rakes shall be kept clear of materials and other objects which could pose impalement or other hazards, or properly guarded.

III. Enforcement

Constant awareness of and respect for fall hazards, and compliance with all safety rules are considered conditions of employment / volunteering. The crew leader & house leader, as well as individuals in the assigned as designated safety person and construction manager, reserve the right to issue disciplinary warnings to employees / volunteers, up to and including site removal, for failure to follow the guidelines of this program.

IV. Accident Investigations

All accidents that result in injury to workers, regardless of their nature, shall be investigated and reported. It is an integral part of any safety program that documentation take place as soon as possible so that the cause and means of prevention can be identified to prevent a reoccurrence.

In the event that a worker falls or there is some other related, serious incident occurring, this plan shall be reviewed to determine if additional practices, procedures, or training need to be implemented to prevent similar types of falls or incidents from occurring.

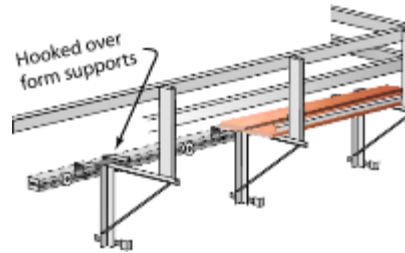
V. Changes to Plan

Any changes to the plan will be approved by (name of the qualified person). This plan shall be reviewed by a qualified person as the job progresses to determine if additional practices, procedures or training needs to be implemented by the competent person to improve or provide additional fall protection. Workers shall be notified and trained, if necessary, in the new procedures. A copy of this plan and all approved changes shall be maintained at the place of all work activities

Form Scaffolds and Carpenters' Bracket Scaffolds

General Requirements

- Each bracket, except those for wooden bracket-form scaffolds, must be **attached to the supporting framework or structure** by one or more of the following:
 - **Nails;**
 - A metal **stud attachment** device;
 - **Welding;**
 - **Hooking** over a secured structural supporting member, with the form wales either:
 - **Bolted to the form,** or
 - **Secured by snap ties or tie bolts** extending through the form, and
 - **Securely anchored;** or
 - (for carpenters' bracket scaffolds only) by a **bolt** extending through to the opposite side of the structure's wall. [1926.452(g)(1)]
- **Wooden bracket-form scaffolds** must be an integral part of the form panel. [1926.452(g)(2)]
- **Folding-type metal brackets**, when extended for use, must be either:
 - **Bolted,** or
 - Secured with a **locking-type pin.** [1926.452(g)(3)]



Non-mandatory Guidelines

- Brackets are **triangular-shaped frames** made of either:
 - **Wood** with a cross-section not less than 2 x 3 inches, or
 - **Structural angle iron** measuring 1-1/4 inch x 1-1/4 inch x 1/8 inch. [1926 Subpart L Appendix A(2)(g)(1)]
- **Bolts** used to attach brackets to structures must not be less than **5/8 inch** in diameter. [1926 Subpart L Appendix A(2)(g)(2)]
- Maximum **bracket spacing** is 8 feet on centers. [1926 Subpart L Appendix A(2)(g)(3)]
- **No more than two employees** may occupy any given 8 feet of a bracket or form scaffold at any one time. [1926 Subpart L Appendix A(2)(g)(4)]
- **Tools and materials** may not exceed **75 pounds** in addition to the employees. [1926 Subpart L Appendix A(2)(g)(4)]



This picture is a side view of a scaffold bracket. This bracket is mounted to the stud and can be hung over a top plate. Two 2 x 10's are placed on the flat section to create a 18 inch walking surface. 2 x 4's are installed on at the vertical uprights to create a top rail and

Appendix D: Construction Volunteer Safety Summary

Volunteer Responsibilities

Each volunteer should:

- Take personal responsibility for their safety and other workers on the site
- Review safety materials provided by CHFH.
- Participate in all safety training activities offered by CHFH, including recommended online safety training modules.
- Be aware of construction safety hazards and comply with all safety rules and regulations.
- Engage only in activities appropriate to his or her skills, abilities and fitness level.
- Report all accidents and injuries immediately to the supervisor in charge.
- Obtain the proper tools and personal protective equipment for the job at hand.
- Report all unsafe conditions to the supervisor in charge and report all unsafe acts (or people) to the supervisor in charge.
- Know the emergency telephone numbers to call in case of fire or an accident (911 might not be available at the time of need). Know the phone number of the Site Supervisor /House Leader in case of an emergency and the location of the emergency action plan.
- Provide current emergency contact information to the designated CHFH staff member at the beginning of the workday.
- Complete the work release waiver for CHFH before entering the project site.
- Help maintain a safe and clean work area.
- Wear appropriate clothing and use all personal protection equipment recommended by CHFH.
- Individuals younger than 16 may not be on any worksite and must be 18 or older to use power or pneumatic tools or work on roofs.

Common Safety Hazards

1. Roof Safety
2. Dropping of tools and supplies
3. Ladder Safety
4. Site Cleanliness
5. Fall Protection
6. Scaffolding
7. Electrical Protection
8. Guarding of Floor and Wall Openings
9. Fire Protection
10. Appropriate Clothing and Personal Protection Equipment

1. Roof Safety

- Volunteers should not work on roofs unless they are comfortable working at the maximum roof height, have been specifically asked to do so by the site supervisor and are familiar with the fall prevention devices provided by CHFH.
- Volunteers under the age of 18 are not allowed on roofs.
- Take precautions when climbing onto or off the roof (this is where many roof related falls occur)
- When roofing, wear shoes with a soft sole with tread
- Loose materials and sawdust should be removed frequently from the roof surfaces
- Never work on a roof alone

2. Dropping of Tools and Supplies

- Avoid tools or personnel sliding off of the roof, install a cleate (a 2x4 or 2x6 nailed to the roof which will act as a stop if a tool or volunteer slips)
- Do not leave tools or other objects on trusses, roofs, ladders or walk-boards
- When raising and placing walls, secure immediately
- When leaning objects, ensure the angle is sufficient to prevent tipping over
- Use tool-belts to secure tools and supplies such as nails

3. Ladder Safety

- Use ladders for the purposes for which they were designed. Do not use ladders for skids, braces or workbenches, etc.

- ❑ Provide a stairway or ladder for any point of access where there is a break in elevation of 19 inches or more.
- ❑ Make sure ladder size meets job demands
- ❑ Do not use step ladders as straight ladders, always open all four feet and lock spreaders in place on a step ladder and place in a level condition
- ❑ Use proper angles when using straight and extension ladders. When using a non-self-supporting ladder use the "four-to-one" rule: for every four feet of height, move the bottom of the ladder one foot from the wall
- ❑ Secure straight and extension ladders by tying off the top or securing the base
- ❑ Top of extension ladders must extend a minimum of three feet beyond the supporting object when used as an access to an elevated work area
- ❑ Before climbing extension ladders, make sure latches are properly engaged
- ❑ Extension ladders must be overlapped a minimum of three rungs
- ❑ Keep body near the middle of the ladder. Avoid leaning off the edge of a ladder. Maintain three points of contact when ascending or descending
- ❑ Do not step on the top 2 rungs or platform of a step ladder
- ❑ On uneven ground dig the high side of the ladder into the ground to even it. Do not level ladders by placing objects under the feet
- ❑ Aluminum ladders must not be used within 20 feet of overhead electric cables

4. Site Cleanliness

- Discarded materials should not be left lying around
- Materials and tools should be stored carefully and secured
- Nails should be removed from boards immediately and not left laying around
- Keep all walkways clear of trash
- Avoid creating trip hazards with electrical cords, air hoses etc.

5. Fall Protection

- Only volunteers who have been trained to be proficient in the alternative methods of fall protection shall be allowed onto the roof. In addition, each affected volunteer shall be trained to ensure specific awareness of the fall hazards associated with work on roofs with

rake edges ("rake edges" are inclined roof edges, such as those on the gable end of a building)

- Roof surfaces should be clear of slipping hazards and volunteers must wear appropriate footwear to reduce the potential for slipping
- Roofing operations will be suspended when adverse weather (such as high winds, rain, snow, or sleet) creates a hazardous condition
- Do not ascend or descend the roof's slope within 6 feet of the rake edge except where that limitation would prevent the performance of work
- Supplies and materials should not be stored within 6 feet of the rake edge, or three feet where tile roof systems are being installed
- The area below the eaves and rakes shall be kept clear of materials and other objects that could pose impalement or other hazards, or properly guarded
- Never walk backwards while on a roof. Always face the direction in which you are moving

6. Scaffolding

- Scaffolding must be erected and inspected daily before work commences by a competent person/site supervisor
- Access to scaffolding should be by an adequate ladder that should be properly positioned and secured to the scaffold
- All walk-boards, toe-boards and handrails must be in place and secure
- Do not leave tools and materials on the scaffold after work has finished. Keep the scaffold as clear of material as possible while work is taking place
- Volunteers should be adequately trained in the use of scaffolding and accessing roofs and all volunteers should ensure that they are fully comfortable working at the required height

7. Electrical Protection

- Only volunteers who have been specifically designated by the site supervisor should work on electrical wiring and issues. Unauthorized volunteers must not interfere with electrical components or access electrical panels
- Do not use frayed or worn electrical cords. Report issues to site supervisor
- Do not use electrical tools that are defective or missing components. Give these to the site supervisor so that they can be taken out of service
- Care should be taken to use the appropriate length cord to avoid the excess cord from creating a tripping hazard. Keep cords out of traffic areas
- Do not use plug if ground prong is broken or cut off
- Never carry or disconnect a power tool by the cord

8. Guarding of Floor and Wall Openings

- Specific rules apply to the guarding openings. The site supervisor will ensure that these protections are in place. Under no circumstances should guard rails or other protections be removed by volunteers without prior authorization
- Volunteers should report any openings which are not guarded to the site supervisor

9. Fire Protection

- A fire extinguisher will be present on every worksite. Volunteers should familiarize themselves with its location
- Any fire hazards or outbreak must be reported immediately to the site supervisor

10. Appropriate Clothing and Personal Protection Equipment

- ☐ No sandals or open-toed shoes may be worn on site, boots are recommended
- ☐ Wear a shirt at all times
- ☐ Shorts are permitted, but long pants are recommended
- ☐ Do not wear dangly jewelry or loose clothing
- ☐ Wear a hard hat when appropriate, or when directed by a leader/supervisor
- ☐ Wear goggles or safety glasses when operating any type of power tool
- ☐ Wear work gloves when carrying building materials etc.
- ☐ No work gloves (except tight fitting gloves) when using power tools
- ☐ Wear a dust mask when working with insulation or using tools causing heavy air borne dust
- ☐ Ear plugs or ear covers should be used when operating saws, pneumatic nailers etc., in a confined area
- ☐ Carry tools, screws, nails etc., in an appropriate tool-belt or nailing pouch. Never put these items in pockets. Do not put tools in a nailing pouch

11. Other Safety Issues

- ☐ Pay attention to all safety talks and advice given by the site supervisor
- ☐ Use safe lifting techniques, have a appropriate number of people to lift/carry an object
- ☐ Use the correct tool for each job. If in doubt ask the site supervisor
- ☐ Never use a tool with which you are unfamiliar and for which you have not had the appropriate training
- ☐ Do not interfere with the safety guards or safety lock mechanism of any tool and report any tool where these are missing or defective
- ☐ Auto or pneumatic nailers and air compressors can be especially hazardous and should only be used by authorized personnel who have had adequate training to use these devices safely.

- When adjusting any tool, reloading or clearing jams, the tool must be disconnected from its power source

12. Blood-borne Pathogens

- All cuts or wounds should be cleaned and bandaged immediately
- An incident report must be filled out at the time of the incident
- Blood on any surface such as tools, drywall, studs, decking, etc must be flushed with chlorine bleach and wiped off immediately
- Disposable gloves should be worn when blood is involved to avoid contact

Incident Report

INCIDENT INFORMATION	<i>Note contributing factors: weather conditions, obstructions, etc</i>
Contact Person:	Email:
Phone:	
Date of Incident:	Time of Incident:
Location of Incident:	
Authority Notified, if any:	
Full Description of What Happened:	

INJURED PARTY	<i>Attach additional page if needed</i>
Name:	Email: Phone:
Complete Address:	<i>circle</i> Male Female
Description of Injury:	
On Site Treatment:	

PROPERTY DAMAGE	<i>If leased obtain name, address and phone of leasing company</i>
Description of Property:	
VIN or serial #:	Lic. Plate #:
Owner Name:	Email: Phone:
Owner Address:	Driver Lic. #:
Description of Damages:	

WITNESS
Name: Email: Phone:
Complete Address:
Name: Email: Phone:
Complete Address:

Signed _____ Date of Report _____

Submit completed form along with photos to the Insurance Administrator