

Construction Safety Policy

Habitat for Humanity of the St Vrain Valley

1. Scope

This policy covers all aspects of safety of construction operations at any site operated by Habitat for Humanity of St Vrain Valley.

2. Document Hierarchy

This policy is subordinate to the overall Safety Policy of Habitat for Humanity of St Vrain Valley (HFHSVV). Construction is a portion of the overall HFHSVV program – which includes office operations, ReStore operations and construction operations.

Subordinate to this HFHSVV Construction Safety Policy are;

- a. Construction Health and Safety Plan
- b. Construction Hazard Communications Plan (hazardous materials)
- c. Construction Accident Records
- d. Construction Material Safety Data Sheet (MSDS) Files
- e. Individual Activity Risk Mitigation Methods

These may be created by the Safety Coordinator or those working under his authority. Such procedures will convey the objectives of this policy in checklists, signage or other forms easily used by construction site leaders.

3. Policies

a. Priority of Safety

Safety is 1st priority in all we do. Construction is inherently a risky activity. It is made more risky by the use of inexperienced volunteers. All construction activities will be planned so that best industry practices are employed to maximize worker safety.

Production and cost control are very important and get a large amount of attention in the organization. Anything that takes attention away from production and cost control is naturally considered a problem and a distraction. In this policy, specific safeguards are put in place so that safety is treated as the highest priority, that safety issues get timely action and are properly funded.

b. OSHA Based

Habitat For Humanity of the St Vrain Valley Construction Safety Policy

HFHSVV policies, procedures and other construction risk management will be based on OSHA 29 CFR 1926 construction safety standards as published at osha.gov. In some cases, OSHA rules are stated in the context of a consistent work force as you would find in a normal for-profit builder. HFHSVV will make some adaptation to the volunteer environment. These adaptations shall carry forward the intent of the rules.

- c. Authority to Stop Work or direct safety oriented action is organized according to type and severity of event or risk.
 - i. Organization Level Events
 - a) Safety audit by governmental agency shows non-compliance
 - i. Executive Director is informed
 - ii. As necessary, safety experts are engaged to design the response and corrective action
 - iii. Work stopped or other compliance actions taken to minimize fines or other compliance difficulty
 - b) Accident occurs. Investigation shows no lack of compliance to OSHA standards
 - i. Findings reported to Executive Director
 - ii. Activity put on watch list requiring specific and frequent monitoring, looking for true root cause or mitigation method
 - iii. Summary of on-going watch-list activity reported to Executive Director.
 - iv. At end of watch list period (typically 3 months), close-out action reported to Executive Director.
 - c) Audit (or accident) show medium or higher risk and lack of compliance with standards
 - i. Executive Director notified of risk and that mitigation and solution work is started
 - ii. Interim risk mitigation in place before the next time work-day involving that risk
 - iii. If simple solution
 - a) Final corrective action to be done in 2 weeks. Failure to complete corrective action escalated to Executive Director
 - a) If no extension by Executive Director, work involving that risk suspended

- b) If extension granted by Executive Director, risk and extension reported to BOD
 - c) Failure to complete corrective action during this extension escalated to Board of Directors
 - d) If no additional extension by Board of Directors, work involving that risk suspended.
 - iv. If solution is not readily evident and requires considerable investigation and analysis;
 - a) Final corrective action done within 3 months
Failure to complete corrective action escalated to Executive Director
 - i. If no extension by ED, work involving that risk suspended
 - ii. If extension granted by ED, risk and extension reported to BOD
 - iii. Failure to complete corrective action during this extension escalated to BOD
 - iv. If no further extension by BOD, work involving that risk suspended.
- d) Audit (or accident) shows low risk and lack of compliance with standard
 - i. Interim risk mitigation in place within 2 months
 - ii. If simple solution
 - a) Final corrective action to be completed in 4 months. Failure to complete corrective action is escalated to Executive Director
 - i. If no extension by ED/BOD, work involving that risk suspended
 - ii. If extension granted by ED, risk and extension reported to BOD
 - iii. Failure to complete corrective action during this extension escalated to BOD
 - iv. If no additional extension by BOD, work involving that risk suspended.
 - ii. If solution is not readily evident and requires considerable investigation and analysis;

- a) Final corrective action done within 6 months. Failure to complete corrective action escalated to ED
 - i. If no extension by ED, work involving that risk suspended
 - ii. If extension granted by ED, risk and extension reported to BOD
 - iii. Failure to complete corrective action during this extension escalated to BOD
 - iv. If no further extension by BOD, work involving that risk suspended.

2. Routine workday events

The Safety Coordinator, Construction Manager, Site Supervisor, Executive Director, others they appoint and ANY volunteer have the authority to immediately stop work on a project if they judge the equipment or individuals involved pose an unreasonable risk. Nothing is more important than safety.

Volunteer Stop Works will be evaluated by the HFHSV authority and upheld or negated based on OSHA standards as applied in HFHSV safety policies and procedures and his/her judgment.

d. Workday Hazard Communications

At the beginning of every work day, the site supervisor will give a safety briefing. This will draw attention to the top safety risks of the day and urge volunteers to follow safety instructions and use common sense.

Each crew leader will give a tool and task specific briefing at the beginning of each team's activity. These briefings are the primary mechanism for ensuring safety.

e. Volunteer Self-Select Out

HFHSV shall communicate to volunteers at the beginning of each work day that if they are ever uncomfortable with a specific job due to safety to see the site supervisor immediately.

f. Age Restrictions

Policy No. 21 of HFH's U.S. Affiliated Organization Policy Handbook provides restrictions for youth involvement on worksites based on safety considerations and federal child labor law requirements. In

general, (a) no one under the age of 16 is allowed on a construction site while construction is ongoing and (b) no one under the age of 18 should be allowed to do any ultra-hazardous activities (which include the use of power tools or motor vehicles, demolition, roofing or working from a height of six feet or more, or excavation operations).

The policy includes that, consistent with applicable federal regulations, 14- and 15-year-old children could be permitted to participate in painting or landscaping activities, provided that no construction is taking place and that adequate precautions are taken to ensure the safety of the worksite for such activities (e.g., all holes are covered, any tools and materials that could fall and cause injury are removed from the area of work, etc.). Under no circumstances should children under the age of 14 be permitted on the worksite.

The affiliate should ensure that all children under the age of 18 have permission from a parent or guardian to participate in the activity and that the parent or guardian has signed an appropriate Release and Waiver.

g. Red Tag

HFHSVV will always have a supply of red tags to be used to mark a tool as unsafe or otherwise needing repair. Such tools will be moved to a “to be repaired” section of the tool storage trailer. Similarly, Red Tags may be used to lock-out/tag-out electric circuits or other “do not enter/do not touch” areas

h. Material Safety Data Sheets

Material Safety Data Sheets (MSDS) will be kept on hand in an easily accessible binder.

i. Personal Protection Equipment (PPE)

During work days, eye protection, ear protection and dust masks will be kept in containers near where the opening, meetings and meals are held. The objective is that a person needing this equipment should be encouraged to use it rather than discouraged because he has to search for it.

Safety glasses are required for all volunteers. They will be available at the same location as the safety briefing to encourage volunteers to use them.

Hard hats are required whenever a person's working outside

Several types of gloves will be supplied. General work gloves will be supplied for handling lumber, digging, etc. Tight fitting latex gloves

will be supplied to protect hands from adhesives, solvents, caulk, expanding foam and similar.

Close toed shoes are required at all times. Volunteers may not be on site without close toed shoes.

Dust masks are highly recommended for installing insulation and other tasks that pose respiratory risks. Ear plugs are highly recommended for sustained power tool usage.

Clothing must be comfortable and allow freedom of movement without being so baggy as to constitute a risk of being caught in saws, framing members, pipes, rebar, etc. For similar reasons, watches and other jewelry is discouraged.

If special PPEs are required for special tools or special tasks, HFHSV shall investigate this requirement and provide them before the work is assigned to any volunteer.

j. Fire Extinguisher

The construction site shall have a fire extinguisher sufficient for fires that might occur due to the diesel fueled heater, electric spark, soldering torches or similar. During the heating season, this fire extinguisher shall be in the same room as the heater. The location of this extinguisher shall be clearly marked.

k. Heat Exhaustion

The daily safety briefing shall urge everyone to take sufficient breaks and, especially in the summer, to drink large amounts of water.

Water cooler with cups shall be kept near all areas of work. If work is spread across several houses, more than one water cooler may be required. During hot summer days, the water cooler(s) will be iced.

l. Power Tools

The Safety Coordinator will arrange for periodic safety check of all power tools. The check interval shall be short enough to reasonably prevent tools needing repair from staying in use and putting users at risk.

m. Lifting

Volunteers should be cautioned to avoid straining themselves when lifting or moving material.

n. Clean worksite

Worksite shall be cleaned at the end of each day to improve safety. Work areas shall be cleaned periodically to reduce the chance of injury throughout the work day.

o. Extension Cords

Outlets on temporary power poles shall be GFI protected.

Extension cords shall be high quality, construction grade. Site Supervisors should give oversight so that cords are not overloaded and that high amp tools use high amp cords.

p. Ladders

Ladders should be periodically inspected for damage. Those that are damaged are to be discarded.

Ladders must be set on level surfaces. Using lumber or other shims to level a ladder will not be done. Instead, the ground is to be dug out under the high leg(s). The leveling and setting of the ladder should be good enough to not require someone steadying it. But, if there is a special case involving lifting, reaching or stepping onto roofs, a volunteer should ask the assistance of another to steady the leader. The volunteer doing the steadying must not be distracted. Ladders should be set up to resist lateral movement.

Step ladders are to only be used in the open position. The feet on step ladders do not work properly when propped against a wall in the closed position.

Extension ladders are to be set on a 1 to 4 angle – 1 ft of horizontal run for every 4 ft of vertical rise. Any ladder used to get onto a roof must extend 3 ft or more above the roof edge.

q. Roof Work

The first course of roof sheathing shall be installed from within the roof by standing on the bottom chord of the trusses. Those standing on the roof to do the remainder of the sheathing shall wear fall arrest harnesses. The harness shall be fitted, secured and adjusted per the manufacturer's instructions. The tie-point shall be installed per the manufacturer's instructions. Competent staff or volunteers will audit those using harnesses.

Anyone on the roof after sheathing to do other tasks will similarly wear a fall arrest harness and use it as described above.

r. Scaffolding

Scaffolding setups will include all necessary safety equipment, including mud sills, leveling jacks and toe board. Only planking supplied by the scaffolding companies will be used (no 2x12s or other ad-hoc planking will be used). All scaffolds setups over 6' high will be fully planked. Any scaffold over 6' high will have appropriate guard rails to prevent falls. Scaffolding will not be used within 10' of power lines. No other means (ladders, buckets, etc) will be used to raise the working height. The scaffold will not be overloaded.

Scaffolding erection and dismantling will be supervised by a competent person, familiar with the hazards of erection, tear down and safe use.

s. Nail Guns

All nail guns shall be configured in safe mode. This means the foot must be set before trigger will cause nail to be shot.. "Bump fire" guns will not be allowed on site. Volunteers who will be using nail guns will be specifically trained on safe use by their experienced team leader prior to allowing them use.

t. Special Tools

Occasionally, special work requires special tools. Examples include fork lifts, jack hammers, etc. There is a tendency for many volunteers to want to "play" with the new tool. The Site Supervisor will ensure that only select, experienced volunteers are allowed to use this tool and that before anyone uses it, there is a reasonable review of usage guides and safety guides.

u. Openings

Guard rails shall be installed at approximately 21" and 42" around stair openings until permanent walls are installed surrounding the stair openings are sets. After permanent walls are installed, guard rails shall be reinstalled until drywall is installed.

Second floor walls framed at 24" OC and open to the exterior shall have a guard rail at 21" and 42" until shaft liner is installed.

A cover shall be secured to the crawlspace access with hinges while work is in progress.

Windows less than 39" from the floor shall have a guard rail installed at approximately 42".

v. Emergency Response

i. Major Injury

Staff and volunteers shall give life saving first aid. That typically means stop major bleeding and insure respiration. With that exception, staff and volunteers shall not attempt treatment of significant injuries. 911 shall be called. Treatment shall be given by trained emergency responders.

The Executive Director will be called after 911 is called. If the executive director is unavailable, the President of the Board shall function in his/her place.

Any communications to the press will be done by the Executive Director or his/her designee. Protection of the injured person's privacy and the protection of HFHSVV's public relations demands that communications be well managed.

ii. Training

Those who typically serve as site supervisors shall have OSHA training, currently known as the "OSHA 30 hour" supervisor training.

Those who typically serve as site supervisors shall have current Red Cross individual 1st aid certification.

iii. First Aid Equipment

Equipment: At each work site, HFHSVV will keep a 1st aid kit containing a reasonable assortment of bandages, disinfectants, etc. These will be kept in containers near where opening meetings and meals are held.

w. Reporting

Any significant injury, work shutdowns, safety problem or other notable incident shall be reported using the HFHSVV incident report. Incident reports may also be filed for significant problems with volunteers, neighbors, contractors, theft, etc.

It is very important that information is retained on who was involved in the incident, contact information for those parties, the cause of the incident and HFHSVV's response to the incident.

Incident reports are to be promptly reviewed by the construction committee and the Executive Director to determine if changes to safety practices are required

Accidents shall be summarized into OSHA 300 logs and posted per OSHA requirements.

4. Responsibilities

a. Board of Directors

The Board's annual calendar shall include a "Protection of Assets" review. Along with evaluating ReStore, Office and other liabilities, the review will include an evaluation of insurance coverage for construction and construction's safety policies.

b. Executive Director

The Executive Director shall insure that the affiliate carries sufficient insurance and insurance information is well understood by staff. The Executive Director shall insure funding and other provisions are made for sufficient safety training of staff. The Executive Director shall periodically review safety incidents, procedures and related logs to insure that safety is being given sufficient attention.

c. Construction Safety Coordinator

- i. The Construction Safety Coordinator is responsible for this policy and for all procedure documents subordinate to this policy. The Safety coordinator will collaborate with the Construction Manager to insure these policies and procedures are implemented at the construction site.
- ii. From time to time, special construction situations will arise that are not explicitly covered by these policies and procedures. In such cases, the Construction Manager and Safety Coordinator will collaborate on safety decisions related to this special problem.
- iii. The Safety Coordinator will make announced and unannounced audits of construction site, document findings and insure corrective actions is taken per the time limits outlined above.

d. Construction Manager

- i. The Construction Manager or those working under his/her direction shall provide Site Supervisors with procedures, or other documents that make it easy for the policies to be deployed to the volunteers.
- ii. The Construction Manager, or those working under his/her direction, shall give oversight to the Site Supervisors and ensure that the policies and practices are being followed.

The Construction Manager shall hold quarterly meetings to discuss job site safety with Construction Staff.

- iii. The Construction Manager shall determine when the scope of a work day contains unusually high risks. In those cases, the Construction Manager shall collaborate with the Safety Coordinator to establish special safety action during that day.
 - iv. The Construction Manager, or those working under his/her direction, shall give oversight to ensure that home designs, schedules and other factors are managed so that volunteers are not asked to perform work that requires the skill of trained, experienced professionals
 - v. The Construction Manager, or those working under his/her direction, shall repair and replace tools and cover other safety related expenses
- e. Site Supervisor
 - i. The Site Supervisors shall be trained in the requirements of this policy and equipped with suitable information to run the day to day work in conformance to this policy.
 - ii. The Site Supervisor shall perform the safety briefing at the beginning of each work day. This briefing will be done in a way that holds the attention of the volunteers and conveys that safety is the 1st priority of the program. The briefing will be done following a script supplied by the Safety Coordinator.
 - iii. In the on-going supervision done by the Site Supervisor, over the course of the day, reasonable review will be done of the adequacy of the safety of each work team. If unsafe practices are observed, the supervisor will give instruction. If instruction is insufficient, stop work. In the extreme, volunteers who refuse to follow safety instruction will be directed to leave the work site.
- f. Crew Leaders

At the start of the day, crew leaders will present tool specific and task specific safety briefings to all working under their guidance for the day. The briefing will be done per a defined script supplied by the Construction Safety Coordinator.
- g. Volunteers

Volunteers shall work according to safety direction given by Site Supervisors and Crew Leaders. Since no supervision can be so specific as to cover every aspects of work, Volunteers are

expected to use good reasoning as they evaluate the risks inherent in a task.

Revision	Change Information	By	Date
0.1	Initial Draft	Ed Mohrman	9/25/07
0.2	Review comments by Dan Northcraft	Dan Northcraft	9/28/07
0.3	Incorporated changes by Dan Northcraft	Ed Mohrman	10/8/07
1.0	1 st release	Ed Mohrman	10/9/07
1.1	Incorporate changes per Emerson & Weyerman review	Ed Mohrman	11/12/07
2.0	Approval by Northcraft & Emerson	Dan Northcraft	11/26/07
2.1	Changes by Northcraft	Dan Northcraft	04/16/09
3.0	2 nd Release	Dan Northcraft	6/3/09
3.1	Changes by Northcraft	Dan Northcraft	1/23/10
3.2	Reworded age requirement per HFHI	Ed Mohrman	1/23/12
3.3	Revised concerning fall arrest, nail guns;	Ed Mohrman	6/4/12
3.4	Added Safety Coordinator role	Dan Northcraft	1/3/13
4.0	Revised footer, define Safety Coordinator role. Add specific work stoppage rule	Ed Mohrman	5/13/13