

Site Specific Fall Protection Plan for Residential Construction

(Insert Company Name)

This Fall Protection Plan Is Specific For The Following Project:

Location of Job _____

Date Plan Prepared or Modified _____

Plan Prepared By _____

Plan Approved By _____

Plan Supervised By _____

The following Fall Protection Plan is a sample program prepared for the prevention of injuries associated with falls. A Fall Protection Plan must be developed and evaluated on a site by site basis. It is recommended that builders discuss the written Fall Protection Plan with their OSHA Area Officer prior to going on a jobsite.

I. Statement of Company Policy

(Your company name here) is dedicated to the protection of its employees from on-the-job injuries. All employees of *(Your company name here)* have the responsibility to work safely on the job. The purpose of the plan is to supplement our existing safety and health program and to ensure that every employee who works for *(Your company name here)* recognizes workplace fall hazards and takes the appropriate measures to address those hazards.

This Fall Protection Plan addresses the use of conventional fall protection at a number of areas on the project, as well as identifies specific activities that require non-conventional means of fall protection. During construction of residential buildings under 48 feet in means protection systems at specific areas or for specific tasks. The areas or tasks may include, but are not limited to:

- | | |
|---|-----------------------------|
| _____ Setting & bracing of roof trusses and rafters | _____ Erecting scaffolding |
| _____ Installation of floor sheathing & joists | _____ Erecting guard rails |
| _____ Roof sheathing operations | _____ Providing safety nets |
| _____ Erecting exterior walls | _____ Personal fall arrests |

1.

***Denote above whether “F” Feasible or “U” Unfeasible**

“Infeasible” means that it is impossible to perform the construction work using a conventional fall protection system (i.e. ,guardrail system, safety net system, or personal fall arrest system) or that it is technologically impossible to use any one of these systems to provide fall protection.

MIOSHA presumes that it is feasible and will not create a greater hazard to implement conventional fall protection

Each employee will be trained in these procedures and will strictly adhere to them when doing so would expose the employee to a greater hazard. If, in the employee’s opinion, this is the case, the employee is to notify the “Competent Person” of their concern and have the concern addressed before proceeding.

It is the responsibility of the (*name of competent person*) to implement this Fall Protection Plan. Continual observational safety checks of work and the enforcement of this safety policy and procedures shall be regularly enforced. The crew supervisor or foreman (*insert name*) is responsible for correcting any unsafe practices or conditions immediately.

It is the responsibility of the employer to ensure that all employees understand and adhere to the procedures of this plan and to follow the instructions of the crew supervisor. It is also the responsibility of the employee to bring to management’s attention any unsafe or hazardous conditions or practices that may cause injury to either themselves or any other employees. Any changes to the Fall Protection Plan must be approved by (*name of qualified person*).

II. Fall Protection Systems To Be Used On This Job

Installation of roof trusses/rafters, exterior wall erection, roof sheathing, floor sheathing and joist/truss activities will be conducted by employees who are specifically trained to do this type of work and are trained to recognize the fall hazards. The nature of such work normally exposes the employee to the fall hazard for a short period of time. This plan details how (*Your company name here*) will minimize these hazards.

Compliant Feasible Options for Fall Protection

- Grab rope Roof kickers at edge Luminant caution tape at eaves
- Safety monitor (Competent person) Slide guards

Check applicable “Feasible” options to be used.

Controlled Access Zones

When using the Plan to implement the fall protection options available, workers must be protected through limited access to high hazard locations. Before any non-conventional fall protection systems are used as part of the plan, a controlled access zone (**CAZ**) shall be clearly defined by the competent person as an area where a recognized hazard exists. The demarcation of the CAZ shall be communicated by the competent person in a recognized manner, either through signs, wires, tapes, ropes or chains.

(Your company name here) shall take the following steps to ensure that the CAZ is clearly marked or controlled by the competent person:

- All access to the CAZ must be restricted to authorized entrants.
- All workers who are permitted in the CAZ shall be listed in the appropriate sections of the Plan (or be visibly identifiable by the competent person) prior to implementation.
- The competent person shall ensure that all protective elements of the CAZ be implemented prior to the beginning of work.

Installation Procedures for Roof Truss and Rafter Erection

During the erection and bracing of roof trusses/rafters, conventional fall protection may present a greater hazard to workers. On this job, safety nets, guardrails and personal fall arrest systems will not provide adequate fall protection because the nets will cause the walls to collapse, while there are no suitable attachment points for guardrails or personal fall arrest systems.

On this job, requiring workers to use a ladder for the entire installation process will cause a greater hazard because the worker must stand on the ladder with his back or side to the front of the ladder. While erecting the truss or rafter the worker will need both hands to maneuver the truss and therefore cannot hold onto the ladder. In addition, ladders cannot be adequately protected from movement while trusses are being maneuvered into place. Many workers may experience additional fatigue because of the increase of overhead work with heavy materials, which can also lead to a greater hazard.

Exterior scaffolds cannot be utilized on this job because the ground, after recent backfilling, cannot support the scaffolding. In most cases, the erection and dismantling of the scaffold would expose workers to a greater fall hazard than then erection of the trusses/rafters.

On all walls eight feet or less, workers will install scaffolds along the interior wall below the location where the trusses/rafters will be erected. "Sawhorse" scaffolds constructed of 46 inch sawhorses and 2x10 planks will often allow workers to be elevated high enough to allow for the erection of trusses and rafters without working on the top plate of the wall.

In structures that have higher than eight feet and where the use of scaffolds and ladders would create a greater hazard, safe working procedures will be utilized when working on the top plate and will be monitored by the crew supervisor. During all stages of truss/rafter erection the stability of the trusses/rafters will be ensured at all times.

(Your company name here) shall take the following steps to protect workers who are exposed to fall hazards while working from the top plate installing trusses/rafters:

Only the following trained workers will be allowed to work on the top plate during roof truss or rafter installation:

- Workers shall have no other duties to perform during truss/rafter erection procedures
- All trusses/rafters will be adequately braced before any worker can use the truss/rafter as a support
- Workers will remain on the top plate using the previously stabilized truss/rafter as a support while other trusses/rafters are being erected
- Workers will leave the area of the secured trusses only when it is necessary to secure another truss/rafter
- The first two trusses/rafters will be set from ladders set from side walls at points where the walls can support the weight of the ladder, and
- A worker will climb onto the interior top plate via a ladder to secure the peaks of the first two trusses/rafters being set.

The workers responsible for detaching trusses from cranes and/or securing trusses at the peaks traditionally are positioned at the peak of the trusses/rafters. There are also situations where workers securing rafters to ridge beams will be positioned on top of the ridge beam.

Only the following trained workers will be allowed to work at the peak during roof truss or rafter installation:

- Once truss or rafter installation begins, workers not involved in that activity shall not stand or walk below or adjacent to the roof opening or exterior walls in any area where they could be struck by falling objects.
- Workers shall have no other duty than securing/bracing the trusses/ridge beam
- Workers positioned at the peaks or in the webs of trusses or on top of the ridge beam shall work from a stable position, either by sitting on a “ridge seat” or other equivalent surface that provides additional stability or by positioning themselves in previously stabilized trusses/rafters and leaning into and reaching through the trusses/rafters
- Workers shall not remain on or in the peak/ridge any longer than necessary to safely complete the task.

Roof Sheathing Operations

Workers typically install roof sheathing after all trusses/rafters and any permanent truss bracing is in place. Roof structures are unstable until some sheathing is installed, so workers installing roof sheathing cannot be protected from fall hazards by conventional fall protection systems until

it is determined that the roof system can be used as an anchorage point. At that point, employees shall be protected by a personal fall arrest system.

Trusses/rafters are subject to collapse if a worker falls while attached to a single truss with a belt/harness. Nets could also cause collapse, and there is no place to attach guard rails.

All workers will ensure that they have secure footing before they attempt to walk on the sheathing, including cleaning shoes/boots of mud or other slip hazards.

To minimize the time workers must be exposed to a fall hazard, materials will be staged to allow for the quickest installation of sheathing..

(Your company name here) shall take the following steps to protect workers who are exposed to fall hazards while installing roof sheathing:

- Once roof sheathing installation begins, workers not involved in that activity shall not stand or walk below or adjacent to the roof opening or exterior walls where they could be struck by falling debris
- The competent person shall determine the limits of this area, which shall be clearly communicated to workers prior to placement of the first piece of sheathing
- The competent person may order work on the roof to be suspended for brief periods as necessary to allow other workers to pass through such areas when this would not create a greater hazard.
- Only qualified workers shall install roof sheathing
- The bottom row of roof sheathing may be installed by workers standing in truss web
- After the bottom row of roof sheathing is installed, a slide guard extending the width of the roof shall be securely attached to the roof. Slide guards are to be constructed of no less than nominal 4" height capable of limiting the uncontrolled slide of workers. Workers should install the slide guard while standing in truss webs and leaning over the sheathing.
- Additional rows of roof sheathing may be installed by workers positioned on previously installed rows of sheathing. A slide guard can be used to assist workers in retaining their footing during successive sheathing operations and
- Additional slide guards shall be securely attached to the roof at intervals not to exceed 13 feet as successive rows of sheathing are installed. For roofs with pitches in excess of 9/12, slide guards will be installed at 4 foot intervals
- When wet weather (rain, snow or sleet) are present, roof sheathing operations shall be suspended unless safe footing can be assured for those workers installing the sheathing
- When strong winds (above 40 mile per hour) are present, roof sheathing operations are to be suspended unless wind breakers are erected.

Installation of Floor Joists and sheathing

During the installation of floor sheathing/joists (leading edge construction), the following steps shall be taken to protect the workers:

Only the following trained workers will be allowed to install floor joists or sheathing:

- Materials for the operations shall be conveniently staged to allow for easy access to workers
- The first floor joists or trusses will be rolled into position and secured either from the ground, ladders or sawhorse scaffolds
- Each successive floor jist or truss will be rolled into place and secured from a platform created from a sheet of plywood laid over the previously secured floor joist or truss
- Except for the first row of sheathing which will be installed from ladders or the ground, workers shall work from the established deck
- Any workers not assisting in the leading edge construction while leading edges still exist (e.g. cutting the decking for the installers) shall not be permitted within six feet of the leading edge under construction.\

Erection of Exterior Walls

During the construction and erection of exterior walls, employers 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
- Workers constructing exterior walls shall complete as much cutting materials and other preparation as possible away from the edge of the deck.

III. Enforcement

Constant awareness of and respect for fall hazards, and compliance with all safety rules are considered conditions of employment. The crew supervisor or foreman, as well as individuals in the Safety and Personnel Department, reserve the right to issue disciplinary warnings to employees, up to and including termination, 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 an employee 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 jobsite.

Fall protection systems have come a long way since Part 45- Fall Protection took effect back in 1995. There are now so many new products that have been developed and marketed for almost every construction activity.

The new instruction also revised the definition of “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-frame 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.

Additional resources are available at www.michigan.gov/miosha