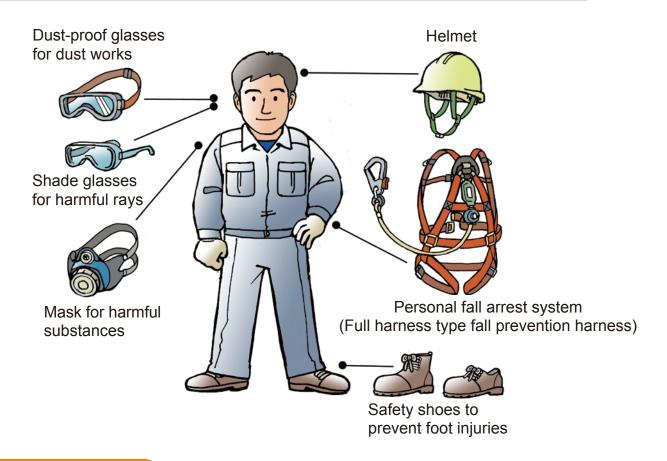


"Roofing work"

The important points for Safety and health

Prevention measures from the roof

(1) Safety helmet, safety shoes



- 1. A helmet must be worn correctly.
- 2. The chinstrap of a helmet must be securely tightened.
- 3. Wear safety shoes that are not slippery or bend easily.
- 4. Wear safety shoes that protect your toes from falling down of materials, etc.

(2) Personal fall arrest systems (Full harness type fall prevention harness)

Personal fall arrest systems (Full harness type fall prevention harness)

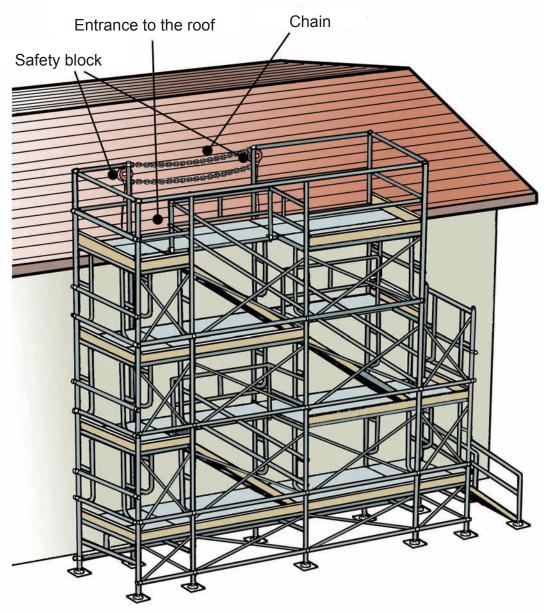
This is a highly secured safety belt that distributes the impact of stopping the crash to multiple body parts such as thighs, shoulders, and waist of a body, by reducing the burden on the body.



- 1. When it is difficult to set up a work platform with a height of 2m or more, the "Safety and health special education" is required to use a personal fall arrest system (full harness type fall prevention harness).
- 2. Use a torso belt type (single suspension type) for a height 5m or less.
- 3. Let's attach it securely.

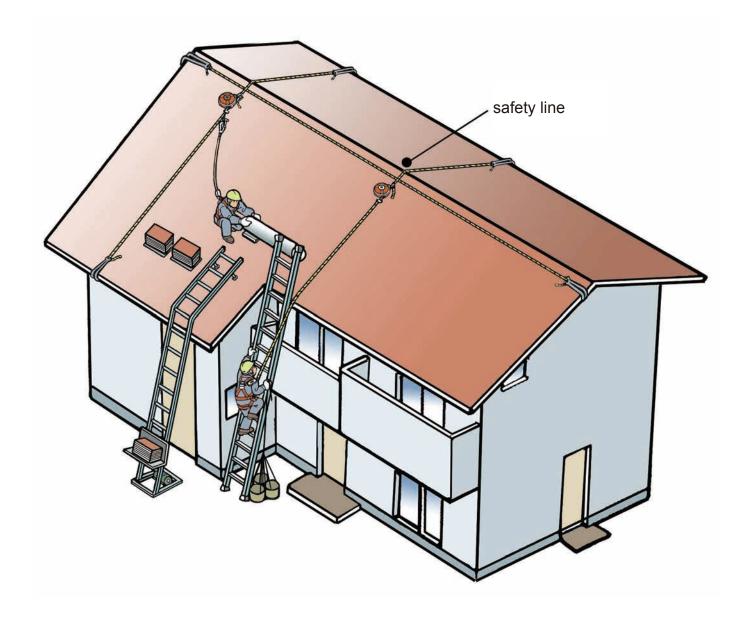
(3) Use of scaffolds

Depending on site conditions and the type of construction, scaffolds are used for going up and down. In a passage of the scaffold, handrails and horizontal middle bars are installed.



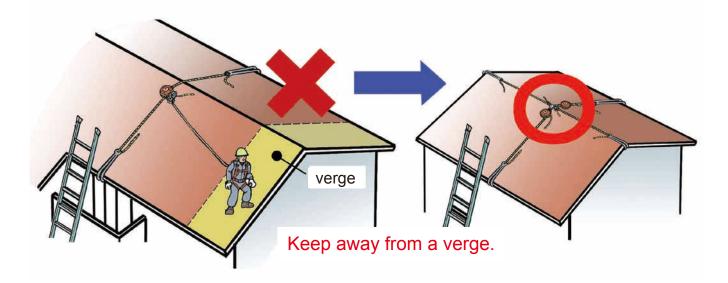
A scaffold for the roof used for going up and down

(4) The installation method of vertical safety lines (main line) 1



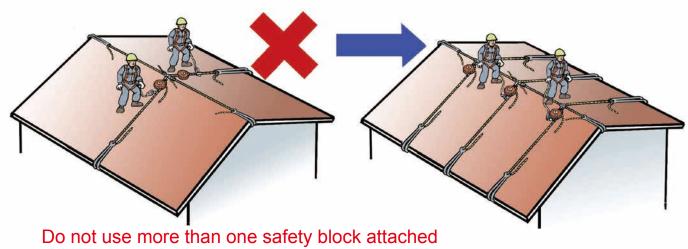
- 1. Let's use the one that satisfies the strength complied to the Japanese Industrial Standards.
- 2. Make sure to connect tightly to the supports without looseness.
- 3. Use a single safety line by a single person, and avoid using it by a plurality of persons at the same time.

(5) The installation method of vertical safety lines (main line) 2



Matters to follow

When approaching the vicinity of a verge, it is necessary to reinforce a main rope or additional vertical master ropes with a fixing rope, so that it does not move horizontally.



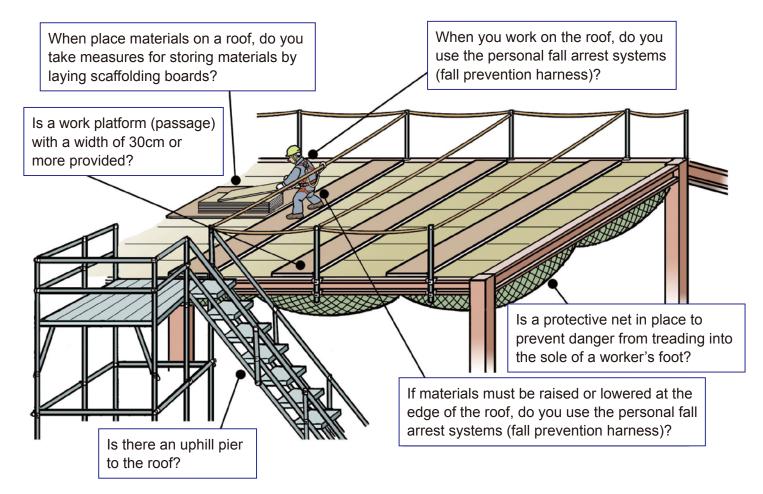
to a main rope (vertical safety rope).

Matters to follow

When a plurality of persons works on the roof at the same time, it is necessary to add vertical safety lines on the roof according to the number of workers.

(6) Safe way to work on a roof

Important points to prevent crash accident



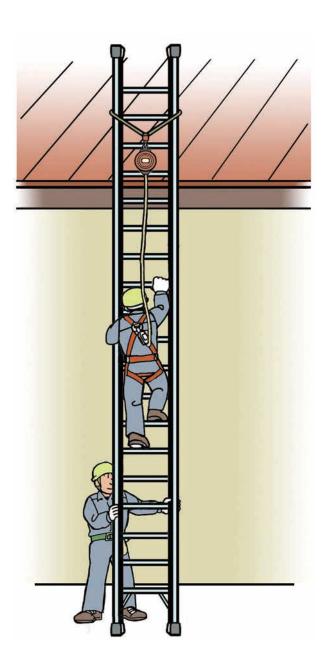
- 1. Take measures such as installing a work platform and a fencing.
- 2. Let's use the personal fall arrest systems (fall prevention harness).
- 3. Follow foreman's instructions when getting on a wet roof during rain or snow.
- 4. Let's secure a safe passage.

(7) When using a moving ladder to get off the roof

Matters to follow

When working on a roof and using a moving ladder to get off the roof, be aware of the followings:

- 1. When descending the roof from an upper end of the ladder at an eave, be careful to stay within the range of the certain area above the upper end of the ladder (within 1m width).
- 2. Descend the ladder by applying a fall prevention harness to a safety block installed at the top of the ladder.



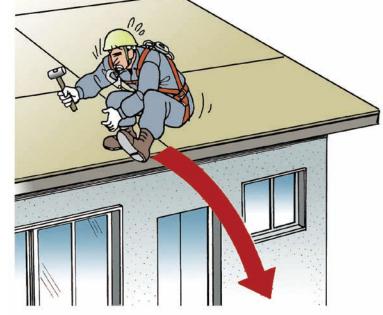
(8) There are many such accidents

Accident case 1

The victim was installing sheathing roof boards on a roof of a two storied timber house, stepped off and fell to the ground.

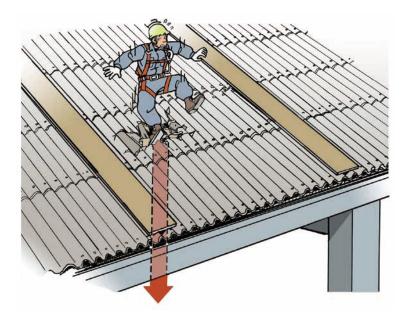
(Matters to follow)

- 1. Let's install scaffolds around the building.
- 2. Let's install a safety line and use the personal fall arrest systems (fall prevention harness).



Accident case 2

While moving on a slate roof in a warehouse roof construction, the victim trod into the sole of his feet and fell, hit his head on a concrete floor.



- 1. When you work on a slate roof, provide a "load board" to prevent treading into the sole of your feet.
- 2. When working on slates, use a personal fall arrest system (fall prevention harness) with a protective net and a safety line.