

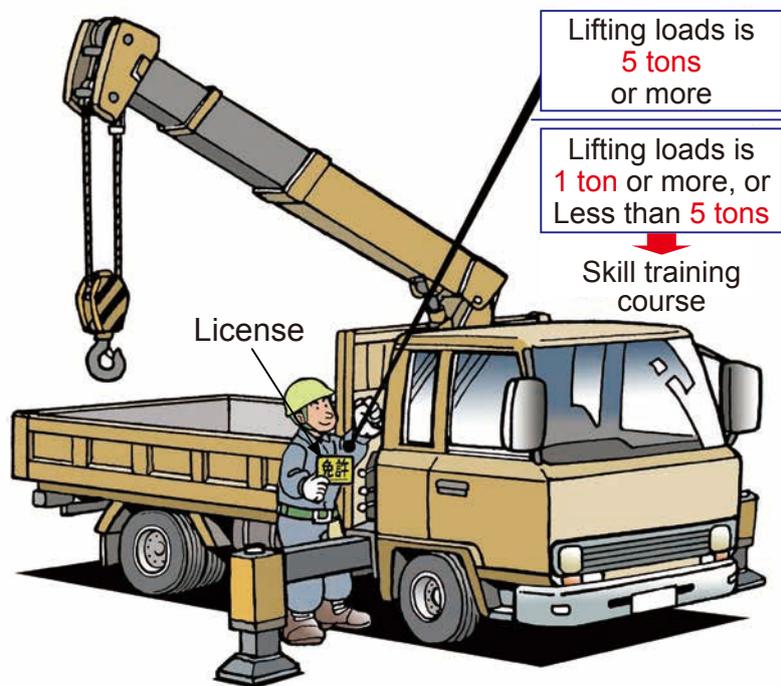
# “Roofing work”

## The important points for Safety and health

### Crane work, slinging

#### (1) Crane work

Operation of a mobile crane can only be performed by those who have a qualification corresponding to the lifting loads.



#### (Requisite qualifications)

	License	Skill training course	Special education
Operation of mobile cranes with the lifting loads is 5 tons or more	○		
Operation of mobile cranes with the lifting loads is 1 ton or more, or less than 5 ton	○	○	
Operation of mobile cranes the lifting loads is less than 1 ton	○	○	○

## (2) Elongate outriggers to the maximum



### Matters to follow

1. The ground must be cured where outriggers are applied.
2. Outriggers should be elongated to the maximum.
3. Pay attention to the operating radius when turning.
4. Lifting of a load at the side of a vehicle is prohibited, lift the load at the rear side of the vehicle.

## (3) Do not enter under a suspended load during a crane work



### Matters to follow

1. Keep workers away from a suspended load.
2. Make sure not to enter under a suspended load when slinging and unslinging.
3. If danger is expected due to strong winds, etc., stop the work.

## (4) Pay attention to the work area when turning

When loading/unloading using a backhoe shovel, a truck crane, etc., do not enter into the turning radius.



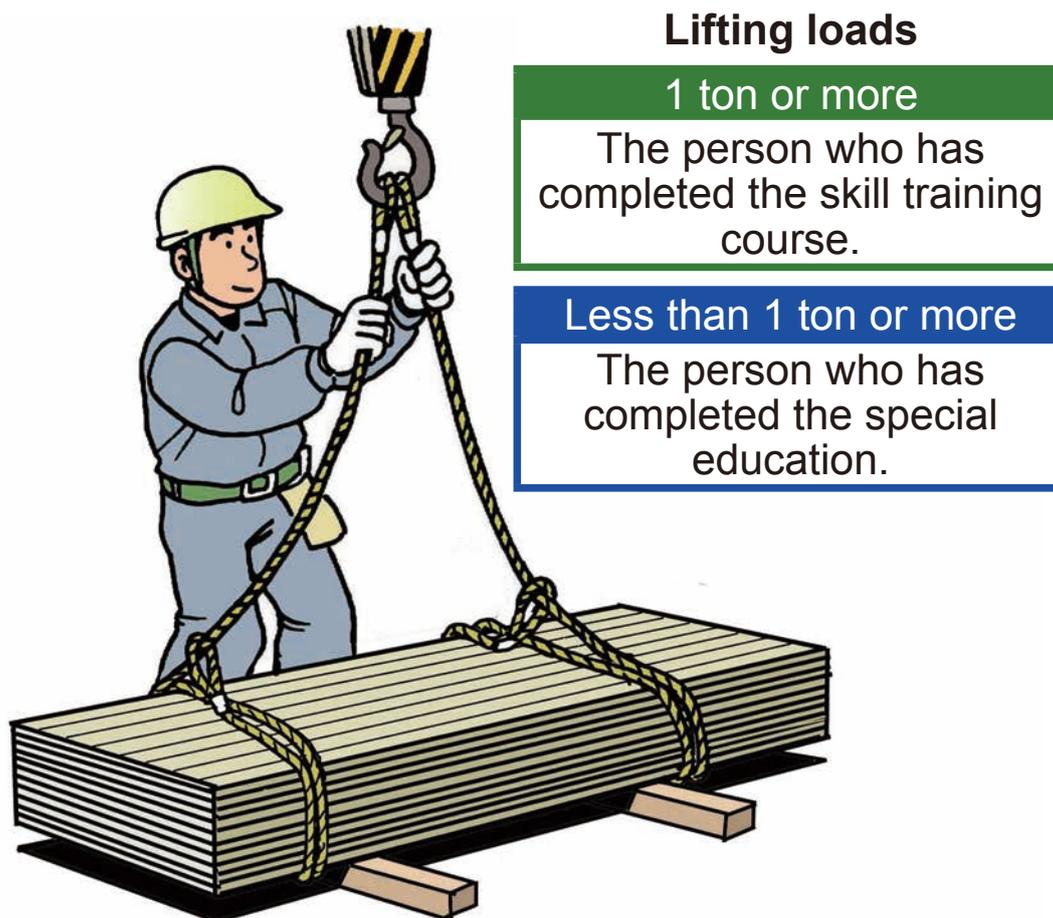
### Matters to follow

1. Keep out of the operating radius.
2. Let's secure safe passages.

## (5) Qualifications for slinging works

The following qualifications are required when performing sling works.

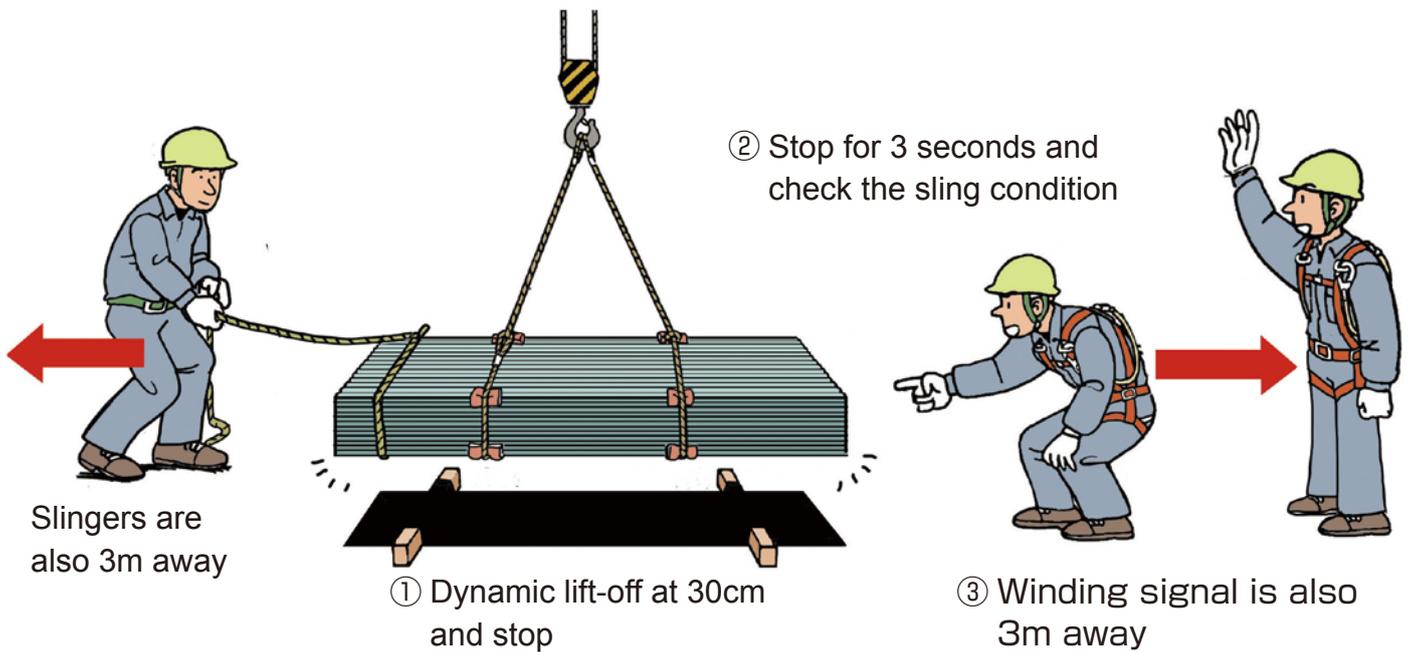
	Skill training course	Special education
Operation of a mobile cranes with lifting loads of 1 ton or more	○	
Operation of a mobile cranes with lifting loads of less than 1 ton	○	○



\* **“Lifting loads”** is not the weight of the suspended loads, but the lifting loads of a crane or a mobile crane used.

## (6) The 3-3-3 campaign for slinging works

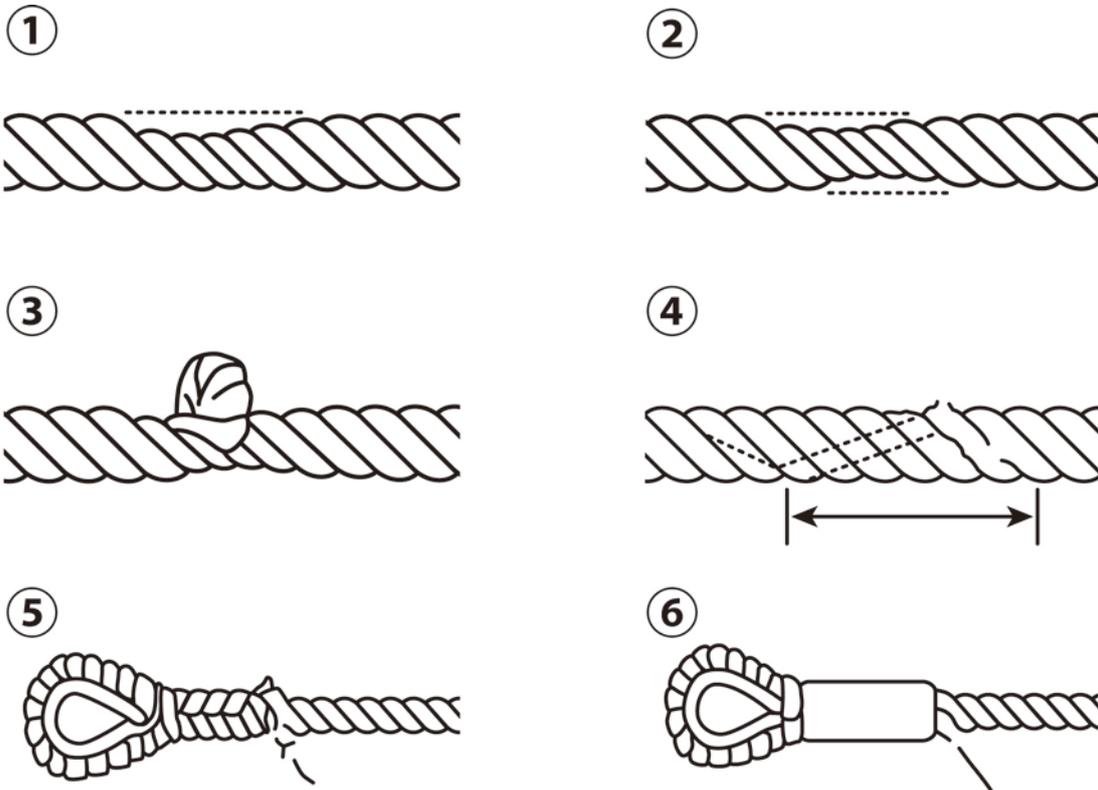
### Complete dynamic lift-off **The 3-3-3 campaign**



### Matters to follow

1. Lift-off 30cm and check the suspended load balance.
2. Stop a suspended load for 3 seconds and check the sling status.
3. Slingers should be 3 meters away from the suspended load while lifting up.

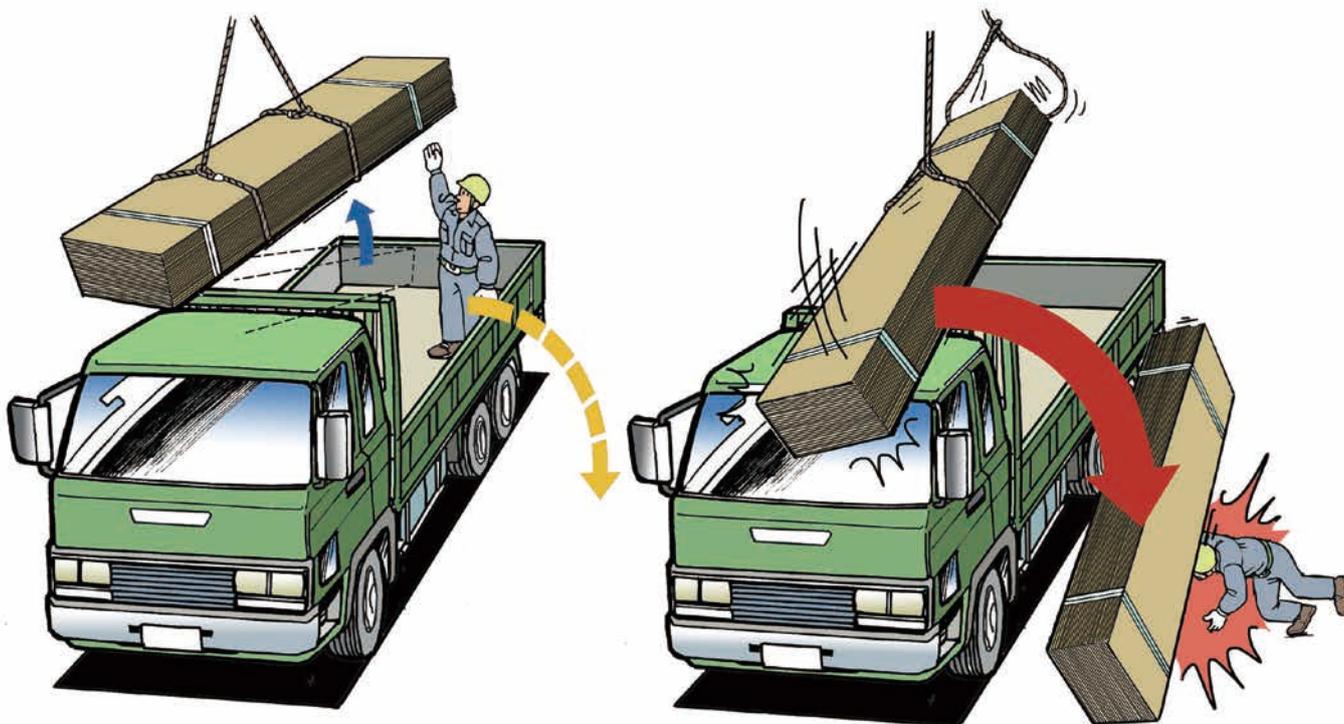
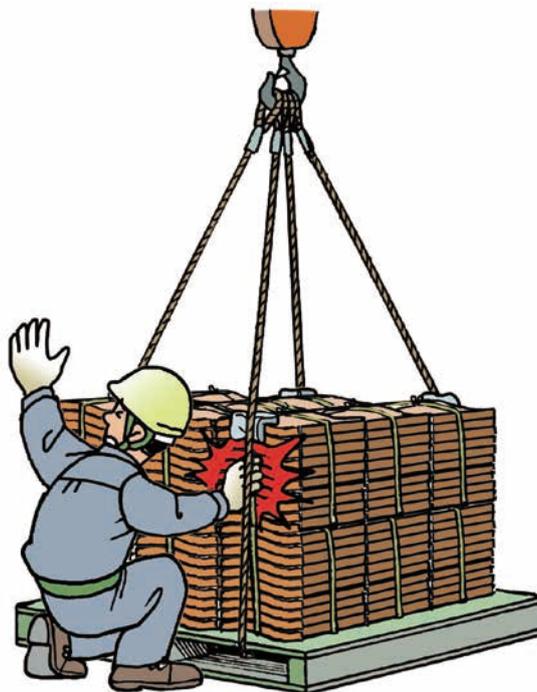
## (7) Prohibition of using such wire ropes



### Following wire ropes are prohibited.

1. A strikingly crushed wire rope.
2. The diameter has decreased by more than 7% of the nominal diameter.
3. Those with a kinking.
4. 10% or more of the strand is broken within one lay of the rope.
5. A rope that the eye splice braid part is loosened.
6. A damaged wire rope at the swaged sleeve of an eye.

## (8) Slinging works



When hanging a suspended load with two wire ropes and tried to lift it.

Judging that the suspended load was imbalanced and dangerous, the hoisting was stopped, but the slate plates came off the wire rope and hit the victim.