Working at height: risk of falling



Date 1° issue	16/03/2012
Date of last change	23/03/2022

1	PURPOSE	2
2	SCOPE	2
3	DEFINITIONS	2
4	REGULATION	
4.1	Personal fall protection	
4.2	Entering roofs	
4.3	Requirements when using a ladder	3
4.3.1	Requirements for the arrangement of the ladder	3
4.3.2	Requirements for work on a ladder	4
4.4	Use of a passenger hoisting bucket	

Working at height: risk of falling



1 PURPOSE

A fall hazard risk inventory must be drawn up which is evaluated every year in accordance with legal aspects and the GHS standard.

In case there is a risk of falling of \geq **1.8 meters** during work, protective measures must be taken. When taking measures, one should always first look for ways to eliminate the danger, then for collectieve protection (e.g. temporary handrail) and at a last step for personal fall protection.

2 SCOPE

The requirements of this safety regulation apply to Nyrstar Belgium's premises.

3 DEFINITIONS

There is a risk of falling if a normal handrail is missing or if, due to the nature of the works (e.g. working on an oblique tank slope), the handrail does not provide sufficient protection. If during the work there is always at least 4 meters horizontally between the edge of the risk of falling (e.g. the eaves) and the person, then there is no risk of falling. The risk of falling is assessed for the presence of a person exposed to the fall hazard, the nature of the work does not play a role.

4 **REGULATION**

4.1 Personal fall protection

The following requirements apply in case of use of personal fall protection:

- The user must be properly instructed in the use of the fall protection. (theoretical and practical training)
- A harness belt should always be fitted with straps (suspension trauma straps)The total weight of the person with tools should not exceed 140 kg.
- The length of the lanyard must be adapted to the current situation. Preferably, a fall arrest device is used. The free fall should always be limited to a maximum of 1.8 meters.
- In some works, a distance restriction can be used so that the user can go far enough to reach the unprotected edge, but not far enough to fall off. The line must be attached to an anchor point (min 500 kg) or a lifeline.
- Material must be inspected in accordance with Belgian legislation and inspected in advance by the user.
- One must be able to hook oneself to a point with more than sufficient carrying capacity. The lanyard may not be wrapped around installation parts (such as parapet) because of the risk of damage (if necessary, use a sling to which can be hooked). One needs a minimum carrying capacity of 1000 kg.

Working at height: risk of falling



- Before the start of the work, the possibility of rescue of the person after a fall must be assessed. If the rescue is not possible within a period of 10 minutes, a manhandler with 2° man should be used where possible (to be viewed in Risk Analysis).
- After a fall, the harness belt and lanyard must be destroyed.

4.2 Entering roofs

In the case of work on flat roofs, the following requirements apply:

- The load-bearing capacity of the roof structure must be assessed as sufficient for the weight of the persons, equipment and material.
- For work between 2 and 4 meters from the edge of the roof, a warning tape must be placed 2 meters from the edge.
- For work less than 2 meters from the edge of the roof, a (temporary) handrail must be placed. If that is not possible, personal fall protection (or walking restriction) must be worn. Only to get to and from a ladder leading to the roof, one may be within 2 meters of the eaves.
- A prevention plan has been drawn up (unloading of material, roof access, evacuation plan in case of falls(always using footstraps or a work positioning harnass))

Access to freely accessible unshielded roofs must be closed by means of a lock, the key of which is kept by the owner of the installation.

In the case of work on the roofs of buildings or tanks, a risk analysis must be carried out in advance in which the measures for overcoming the risk of falling are identified.

4.3 Requirements when using a ladder

4.3.1 Requirements for the arrangement of the ladder

The ladder must be inspected (maximum 3 months ago) and checked for visible defects before commissioning by the user.

- The maximum height is 7 meters
- There must be sufficient space for the ladder to be properly positioned: suitable surface, suitable supports, free of accessible electrical components and as far as possible removed from the edge of railings.
- Ladders should be set up at an angle of 75° between ladder and bottom.
- Ladders must be equipped with non-slip shoes at the top and bottom.
- A ladder that leads to a higher level must always extend 1 meter above the surface.
- Fastening a ladder is the most effective means of ensuring stability. If the ladder has > 25 rungs, this is mandatory.
- In electrolysis, the use of metal ladders is strictly prohibited.

Working at height: risk of falling



4.3.2 Requirements for work on a ladder

Ladders are primarily intended to go to a higher or lower plane. Carrying out work from a ladder is only permitted if:

- it is short-term work,
- no great force is required
- one always has three support points (e.g. 2 feet and 1 hand on the ladder)
- no powered machines (e.g. grinding machine) are used;
- one does not have to work outside the reach of an arm

4.4 Use of a passenger hoisting bucket

The use of a passenger hoisting bucket is only permitted if it is demonstrated that there is no other possibility, the whole has been inspected in conjunction and there is a formal agreement from the Nyrstar prevention advisor about the submitted risk inventory and evaluation (RIE). Checklist voor aanvraag werken met personenhijsbak <u>XF-452-FCH-0-01003</u> (Dutch application form)