

**This document is currently under review**

For accurate detailed information regarding the Fall Prevention and Roof Safety Program for PW&S Managed Facilities, please contact **Ted McLeod, Manager of Risk Management** at **873-7028** or [Ted.McLeod@gov.nt.ca](mailto:Ted.McLeod@gov.nt.ca).



# PW&S WORKPLACE HEALTH & SAFETY PROGRAM

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## FALL PREVENTION AND ROOF SAFETY PROGRAM



## FOR PW&S MANAGED FACILITIES

*Prepared by:*

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# FALL PREVENTION AND ROOF SAFETY PROGRAM

## 1. Introduction

The Government of the Northwest Territories (GNWT) Department of Public Works and Services (PW&S) has implemented the following Fall Prevention and Roof Safety Program. This program has been developed to prevent hazard conditions that could result in fall accidents from elevated work areas. Elevated areas include work locations that are greater than 3 metres (10 feet) above grade (ground/floor) or pit/shaft base.

This program shall apply to all persons working for or on behalf of PW&S (GNWT) and applies to all *in-service facilities* (buildings) that require access to roofs and elevated areas by PW&S employees or contracted service providers. This program does not apply to construction or renovation projects.

## 2. Definitions

### *In-service facilities*

*In-service facilities* are buildings that have been completed and occupied by GNWT departments and agencies, and newly constructed or renovated buildings, where a certificate of substantial completion has been issued.

### *Control zone*

The *control zone* is the area included between the edge of a roof or platform and two metres from this edge. This zone includes not only areas at the eaves, but also surrounding shafts, pits, hatch entries, etc. This zone is greater than two metres if the surface is slippery from wet / iced conditions or roofing material.

### *Safe zone*

The *safe zone* is the area located inside the control zone clearly defined in a manner that is visible to all persons / workers accessing the roof (as indicated in the attached drawings).



## 3. Responsibilities

1. PW&S shall provide a safe working environment for all PW&S staff working on roofs and elevated areas.
2. PW&S shall ensure that all staff and contracted service providers that work on roofs and elevated areas are aware of procedures for roof safety.
3. All PW&S employees and contracted service providers working on behalf of PW&S who require access to roofs and elevated areas shall:
  - be cognizant of and adhere to safety procedures for accessing and working on roofs and elevated areas;
  - use required safety equipment in a proper manner;
  - maintain work areas that are free of snow, ice, and materials / tools not required for the immediate work to prevent slip, fall, or trip hazards; and
  - immediately report or correct faulty equipment, maintenance and repair concerns regarding surfaces, and hazardous conditions.

## 4. General Requirements

All buildings with dedicated roof access shall be maintained such that the access to the roof is clear of obstructions and is in good repair.

PW&S shall require that the design and construction of all buildings shall provide for:

- safe access by personnel to roof areas;
- the ability to load materials onto roof / elevated areas;
- locating access to roof-mounted equipment within the safe zone, or installing permanent fall safety protection equipment;
- permanent fall safety equipment for all sloped roofs or elevated areas;
- a raised warning line around the control zone, or a permanent path and rail for the equipment on elevated areas of major buildings that require routine maintenance; and
- fixed anchor points where required by the Workers' Compensation Board (WCB).

*“Fall Protection is Our Duty”*

## 5. Safety Procedures

1. No person shall work alone on roofs or elevated areas above 3 metres (10 feet) in height without being in regular contact with other employees through a communications system. Direct visual contact is preferred.
2. Workers who have a need for occasional short term access to roofs and accessories (including conducting roof inspections and routine maintenance of mechanical equipment) shall work while maintaining direct contact with another employee and shall use appropriate fall protection (as required by the *NWT Consolidation of General Safety Regulations*) if the work is:
  - within the control zone; or
  - on a sloped surface.
3. Workers using ladders to gain access to an elevated area shall maintain a 3-points-of-contact rule at all times. This means that both hands and one foot, or both feet and one hand, shall be in contact with the ladder at all times. Equipment, parts, supplies and tools are not to be hand carried. A rope or hoist can be used to raise or lower materials. A suitable backpack can be used for materials up to 6 kilograms.
4. Workers using a portable single or extension ladder shall ensure that:
  - the ladder is placed so the horizontal distance from its base to its vertical plane of support is about ¼ of the ladder length between supports;
  - the lower end of the side rails rests on a firm and level base, and the upper end of the side rails rests on a bearing surface of sufficient strength to support the applied load;
  - the ladder is of sufficient length to project about one metre (3 feet, 3 inches) above the upper landing to which it provides access;
  - the ladder is equipped with a non-slip base or is held, tied or otherwise secured to prevent slipping; and
  - they do not work from the top two rungs of the ladder or the top two steps of a stepladder.

*“Safety is not a matter of being able to afford it or not afford it, it is a moral issue.”*

5. PW&S shall implement and enforce a control zone for all work performed on roofs and elevated areas. When workers are within the safe zone, no other fall protection need be used.

The control zone shall:

- be at least 2 metres (6½ feet) from the edge of the roof or platform;
  - be expanded during adverse conditions, such as when the roof surface is slippery; and
  - be clearly defined in a manner that is visible year round. A raised warning line is the recommended PW&S standard. A ¼-inch (6.5 mm) yellow polypropylene rope suspended between orange pylons is sufficient.
6. Unless the access is within the safe zone, sufficient permanent guardrails must be provided to allow workers to access the roof or platform and to enter the control zone.
  7. Workers performing tasks within the control zone or on an elevated surface shall do so only if:
    - the work is minor in nature and duration; or
    - a trained safety monitor has a direct field of vision of up to a maximum of four workers at any one time. The safety monitor must not be involved in any duties other than the monitoring of the workers;
    - no individual, other than workers required to conduct the work, are inside the control zone;
    - toe holds / kick boards are used in work area;
    - workers are secured to a lifeline or lanyard and body harness attached to a permanent anchor; or
    - a temporary or permanent guardrail is provided at the edge of the control zone, hatch entries, and entrances to shafts and pits.



## 5. Safety Procedures (cont.)

8. Workers performing repair or upgrade to roofs and accessories shall:
  - work while in direct contact with another employee;
  - work with appropriate fall protection;
  - demark the control zone with a temporary raised line (pylons with rope supported at one metre above the roof surface can be used to mark the safe work area outside the control zone), if a permanent guard rail is not installed;
  - clear the work area and adjacent work area of snow and ice and non-secured materials; and
  - clearly identify locations of all roof accessories including parapets, hatches, vents, chimneys, skylights, etc.
9. If permanent lighting is not available, temporary lighting shall be installed in the repair or upgrade work areas and along the access path to work areas, if warranted.
10. Workers shall not work in elevated areas during adverse weather conditions.

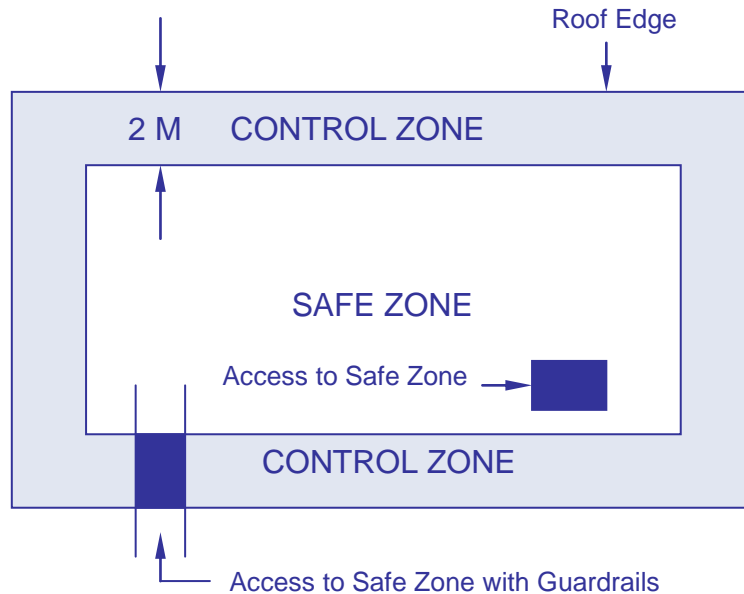
## 6. Standards and References

This program is intended to supplement existing standards, including but not limited to:

- Canadian Standards Association
- *NWT Consolidation of General Safety Regulations*
- *NWT Occupational Health and Safety Regulations*
- *NWT Fall Protection Code of Practice (currently in draft form)*

References include:

- WCB legislation, *NWT Safety Act*
- CAN/CSA-Z259.1-95, *Safety Belts and Lanyards*
- CAN/CSA-Z259.2-M1979, *Fall-Arresting Devices, Personnel Lowering Devices, and Life Lines*
- CAN/CSA-Z259.10-M90, *Full Body Harnesses*
- CAN/CSA-Z259.11-M92, *Shock Absorbers for Personal Fall Arrest Systems*
- Canadian Centre for Occupational Health and Safety (<http://www.ccohs.ca/oshanswers/legisl/>)



**Roof Plan – Control and Safe Zones**

