Working at Heights Policy

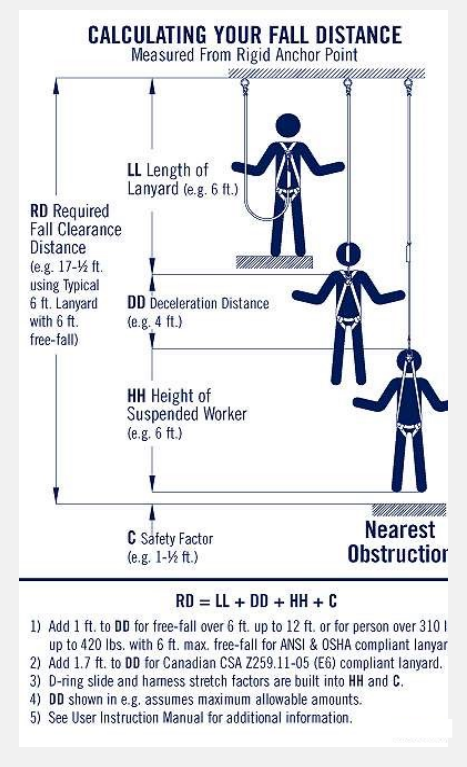
Health and Safety FCX-HS02 | Release 03/2018 | Version 1

POTENTIAL FATAL RISKS

Fall from Heights
Falling Objects

CRITICAL CONTROLS

- Fall Protection System
- Fixed Work Platform
- Mobile Work Platform
- Leading Edge/Open Hole Protection
- Scaffold
- Barriers and Segregation
- Integrity of Overhead Structures
- Securing Devices
- Work Area Management



TRAINING REQUIREMENTS

SFT_FCX1012C, Initial, Refresher, and Remedial as necessary

POLICY

OVERVIEW

Fall protection/prevention (personal fall arrest systems or guardrails) is required 100% of the time whenever persons are exposed to a fall hazard (including wall and floor openings) that could reasonably result in an injury, including:

- Any unguarded walking/working surface either horizontal or vertical that is 4ft (1.2m) above a lower level. If a ladder with a cage is used for access and work is not being performed from ladder, it is exempt.
- Work/Walking 4ft (1.2m) above potential hazards.
- Work from a ladder at any height, including levels below 4ft (1.2m) if a person's center of gravity is near the ladder rail or requires them to lean backwards.
- Ensure proper equipment: shock absorbing lanyards (see diagram) or retractable lanyards.

ACTIONS TO STAY SAFE

- Inspect fall protection equipment prior to using. Key items include:
  - Braids, webbing and stitching, fall/wear indicators
  - Condition of grommets, buckles and hardware, anchor points
- Have rescue plan and rescue capabilities available.
- Complete risk assessment prior to work (i.e. JSA).
- Use fall protection systems work inside guardrails and follow manufacturers' requirements for mobile work platforms.
- Secure tools and material when working above ground level.
- Include areas above and below work area in workplace exams and inspections.
- Prior to creating openings in walls or walking/working surfaces, install appropriate temporary barriers.
- Flag lower levels, install fences and toe boards as necessary to guard against falling objects; Reference Flagging and Barricading, FCX-19.
- Permanently installed fall protection systems must be labeled to prevent being used as a lifting device.

Ladders

- Persons may climb a ladder that is 20ft (6.1m) or less w/o fall protection if 'three points of contact' are used.
- Tie off or secure ladders prior to use.
- Ladders must extend 3ft (1m) beyond the access point.
- Never use the top two steps of stepladders.
- Do not reach outside the plane of the ladder to prevent tipping.
- Use 4 –to-1 principal for extension ladders.
- Hot work from a ladder is not permitted without a variance.

Fall Hazard (open hole/leading edge) Management

- When flooring or handrails are removed for work, or openings are created in walls or walking/working surfaces reference the Working at Heights Technical Supplement.

TECHNICAL SUPPLEMENT

WORKING AT HEIGHTS FCX-HS02 |FALL PREVENTION SYSTEMS | RELEASE 03/2018 | VERSION 1

Component	Fall Restraint Specification	Positioning Device Specification	Fall Arrest Specification
Harness	Full body Body belt permitted only if there is no potential for a fall	Full body Body belt permitted only if there is no potential for a fall	Full body harness Body belt **not** permitted
Anchorage	Support 1000lbs (454 kg) 2x maximum force to restrain the fall	Support 3000lbs (1361 kg) 2x impact load of a fall of person	Support 5000lbs (2268 kg) Safety factor of 2 for the maximum possible load
Lanyard	Must be a fixed length Deceleration devices and self-retracting life-lines not permitted	Must limit free fall to 2ft (0.6m) or less	Includes deceleration device Maximum arrest force 1800lbs (817 kg) Once device per system Maximum free fall distance of 6ft (2m)
Limitation	Working surface at or less than 4:12 slope	Not acceptable for work on horizontal surfaces	Anchorage location should be above the walking level

FALL PROTECTION ANCHORAGE

- Designed, installed and tested under supervision of qualified person
- Independent of other anchorage points (platforms, hoists etc.)

Sites should establish regular inspection and preventative maintenance for permanently installed fall protection systems

LIFELINES

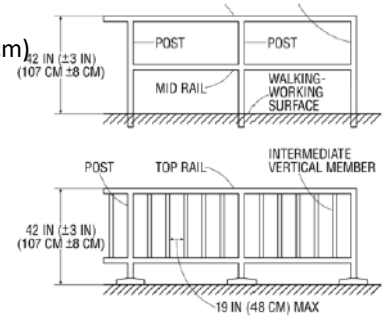
Vertical Lifeline**:** Minimum breaking strength 5000lbs (2268 kg)

Horizontal Lifelines**:**

- Follow manufacturer recommendations, or design, build and install under competent person.
- Safety Factor of two
- Tagged with maximum number of persons permitted on each end

GUARDRAIL REQUIREMENTS - temporary barriers must meet this criteria for fall prevention

- Install nets or other barriers to prevent falling objects when necessary, and able to withstand 150lbs (68 kg) of force
- 39-45in (99-115 cm) from the walking surface to the top of the rail; not deflect lower than 39in (99 cm)
- Able to withstand 200lbs (91 kg) of force in a downward/outward direction
- Midrail installed halfway between top rail and walking surface
- Vertical members every 8ft (2.6m) on center
- Intermediate vertical members every 19in (48 cm) on center when installed
- Toe boards a minimum of 4in (10 cm) nominal height, able to withstand 75lbs (34 kg) of force outward, and no more than ¼in (0.64 cm) gap between surface and lower edge of toe board
- Stair rail systems must be 42in (107 cm) from the leading edge of the stair to the top of the rail
- Guardrails around ladderways: self-closing gate that slides or swings away from the hole and top rail/midrail that meets guardrail requirements (unless opening is offset)



Floor holes must be covered:

- Secured from accidental displacement
- Able to support at least 2x's expected load (employees and material)
- Marked with "HOLE" or "COVER"

Every floor hole into which persons cannot accidentally walk (on account of fixed machinery, equipment, or walls) shall be protected by a cover that leaves no openings more than 1in (2.5 cm) wide.

Floor Opening: An opening 12 in (0.3m) or more in its least dimension, in any floor, platform, pavement, or yard, through which persons may fall.

Wall opening: a gap or open space in a wall, partition, vertical walking/working surface, or similar, at least 30 inches (76 cm) high and at least 18in (46 cm) wide, through which an employee can fall to a lower level

Hole: a gap or open space in a floor, roof, horizontal walking/ working surface or similar surface that is at least 2in (5cm) in its least dimension

FIELD APPLICATION CONSIDERATIONS: Nature of environment (corrosive, weather, etc); Nature of work being performed (electrical, welding, etc); Accessibility for inspection and preventative maintenance