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

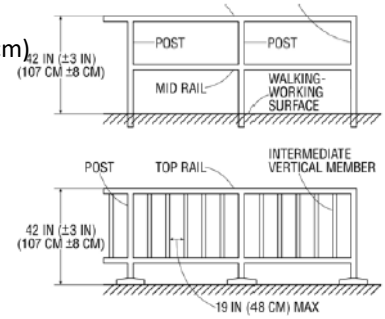
Vertical Lifeline**:** Minimum breaking strength 5000lbs (2268 kg)

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