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Common Hazards in Facilities Management

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- Traffic-Related Hazards
- Electrical Hazards
- Storage and Stacking Hazards
- Fall from Height
- Slips, Trips and Fall
Fall from Height

Fall from heights is one of the leading accident types. Accidents and near-misses often involve the improper use of ladders.

DO

- Wear proper footwear
- Use the correct ladder for the job
- Ensure the ladder is securely lashed or firmly held by buddy before climbing
- Keep 3 points of contact with the ladder at all times
- Set up a barrier around the ladder during work
  (e.g. set up a barrier 2m around a 2m tall ladder)
Fall from Height

DO NOT

• Use the ladder on uneven ground
• Use a partially extended ladder
• Use defective ladder (bent ladder, missing step, missing spreaders, spreaders without locking device)
• Carry any tools or materials in hands when climbing a ladder
Fall from Height

A scaffold / platform is recommended to provide better access and also a more stable platform to work on.

DO

• Ensure the scaffold/platform has been examined by a qualified inspector or authorised examiner before use
• Only set up on level and stable ground
• Fully extend outriggers to enhance stability
• Wear helmet, safety harness with lanyard & safety shoes

DO NOT

• Overload the scaffold / platform
Electrical Hazard

Electricity is such a common part of life that it is easy to forget the dangers associated with its use. Working with electrical equipment carries a risk of electrocution, burns and even death.

**DOs**

- Report any damaged wiring found
- Replace/isolate the damaged equipment
- Switch off and unplug equipment when not in use
- Put electrical cords away neatly
- Keep cords, sockets and the area around clean

**DON’T**

- Overload an electrical point
- Used damaged electrical equipment
- Repair damaged equipment if not qualified to do so
Electrical Hazard

Unsafe distribution boards

No intermediate barrier

Intermediate barrier with gaps/ openings
Electrical Hazard

Safe distribution board
Electrical Hazard

Unsafe electrical wires, cables & joints

Exposed insulated wire

No tapped twisted joint is allowed.
Slips, Trips and Falls

Slips, Trips and Falls is a frequently occurring accident type, leading to minor injuries (sprains, bruises) as well as major injuries (fractures, head injuries). Their causes include insufficient lighting, poor housekeeping, wet and slippery floors, lack of handrails on staircases and/or carelessness.

DOs

- Practice good housekeeping daily
- Wear anti-slip shoes if floor is usually slippery
- Report any damaged flooring
- Put up warning signs for:
  - wet floors
  - raised flooring
  - damaged flooring
Traffic-related Hazard

Workplace traffic management is an integral part of operation for many industries. Established Traffic Management Plan would mitigate risk of vehicles damaged as well as fatalities and/or serious injuries in the workplace.

Dos

• Proper traffic layout including clear demarcation for traffic and pedestrian
• Install traffic and warning signages prominently
• Ensure driveway and pedestrian walkway are free from obstruction
• Install convex mirror to all blind spot areas
• Provide adequate lighting
Storage and Stacking Hazards

Safe use of storage racks should include the following:

• Design consideration, which should include the weight, volume, shape, dimensions, environment to be used in, etc.
• Proper procedures for safe use, including safe stacking methods (heavier items are stored lower) and that weights do not exceed safe working loads.
• Adequate maintenance and inspection regime.

A WSH Circular was published in May 2015 to address this.
Noise

Dos
• Place a noise warning sign at the entrance of the area or room with noise environment
• Provide the appropriate hearing protector
• Conduct noise monitoring if necessary
• Implement job rotation for excessive noise exposure
**Fire**

**Dos**
- Display signage on location of fire extinguisher and fire hose reel prominently.
- Ensure the means of extinguishing fire are annually examine and service.

**Don’t**
- Accumulate flammable substances or materials at common corridors or staircases.
- Obstruct common passageway or means of escape.
- Blocked accessibility to fire extinguisher and hose reel.
Case 1: Accident Description

The Deceased and his co-worker commenced to paint the facade of the Occupier’s 2-storey office building. To carry out the painting work at height, the Deceased had stood within a tower platform and was raised to height by a co-worker using a forklift.

During the lifting process, the Deceased’s neck was caught between the top rail of the said platform and the underside of the building’s roof fascia. He was later pronounced dead by attending paramedics.
Findings

- A forklift and a self-fabricated tower platform were used for painting at height. The forklift operator was trained.
Findings

- While the supervisor went to toilet, they decided to continue with the painting work. The platform (with the Deceased standing inside it) was lifted by the forklift in accordance to the Deceased’s verbal instruction to the forklift operator.
Findings

- When he realised that he could not raise the platform any further and there was still no instruction from the Deceased to stop, he halted the forklift operation.

- He saw the Deceased’s neck caught between the top guard-rail of the platform and the underside of the office building’s roof fascia, which was about 6.75m from the ground.

- The Deceased was subsequently pronounced dead at about an hour later by the paramedics. The cause of death was certified as “blunt force trauma to the neck”.
Findings

- Investigation revealed that no risk assessment was conducted for the facade painting work at the workplace.

- The company failed to ensure the safe use of forklift. It had allowed the use of forklift to lift the tower platform with the Deceased standing inside it to carry out work.

- SS573:2012 – Code of Practice for Safe Use of Powered Counterbalanced Forklifts, clearly states, “Passengers shall not ride on forklifts or forks. Forklifts shall not be used for lifting any person by any means at all times. No man cage or such shall be used on forklifts”.
Lesson Learnt

- Conduct risk assessment prior to carry out work activity to eliminate or mitigate the risk

- Identified the appropriate equipment or machinery for the work to be carried out. Use the equipment according to manufacturer’s intended purposes.

- Established safe work procedures (SWP) to guide workers on the safe manner of work.
Case 2: Accident Description

A team of sub-contractor workers (including the Deceased and 2 co-workers) were tasked to carry out programming work on the touch panel in the Audio Video control room. When internet connection was unable to obtain, the occupier’s assistant manager brought the Deceased and a co-worker to the roof level to check on a Junction Box located at the catwalk.

While the manager was checking the Junction Box, the Deceased fell over the guard-rail and landed on the second level terrace. The Deceased was pronounced dead at the scene.
Findings

Overview of the rooftop area

- Steel Trusses
- Roof catwalk
- Aluminium panels covering the rooftop area
- Guardrails
Findings

Junction Box was facing away from the catwalk

Asst Manager position squatted on the metal beam

The positions of the Deceased and Asst Manager just prior to the accident
Other Findings

- Occupier had a procedure to restrict access to the roof catwalk. External personnel including contractors who needed access to the roof catwalk have to apply a permit to work (“PTW”) for work at height.

- Upon approval of the PTW, obtain the key of the roof access door from security counter. Employees of the Occupier also need to inform and obtain the key from the security. The security will then disengaged the alarm to the roof access door.

- However, this procedure was not effectively implemented at the workplace. The PTW for work at height at the roof catwalk was not applied.
Other Findings

- Investigations revealed that the door was not locked on the day of the accident and the alarm was disengaged since the last event, which was 3 days before the accident.

- A roof entry requirement (standing order) displayed on the roof access door stated all personnel entering the roof area to wear safety helmet and safety belt at all times. None of the workers were wearing the required PPE.
Lesson Learnt

- Determine a safe working environment for those carrying out maintenance, even if its ad-hoc work.

- Ensure safe access is provided to any work areas. If possible, eliminate the risk of unsafe access. E.g. work at height by working at ground level.

- Implement and enforce the control measures that had been decided through the risk assessment conducted to eliminate or mitigate the risk.
Thank you