# Horizontal Lifeline Fall Arrest System

Prepared
By
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### Background

- Avoid Fall Incidents
- Prevent workers from falling, esp. on rainy days and/or slippery surfaces e.g.
  - A commercial building at North Point from canopy
  - A hospital building at Chai Wan from access ladder
- Reduce injuries and fatalities
- Avoid litigation and claims
- With no accident occurring, no interruption to daily work

#### Stakeholders

- Owner of Premises
- Management Company
- Employer of Workers
- Labour Department
- Tenants
- Workers
- Passers by

## Merits of Horizontal Lifeline System

#### Past application proves that:

- Simple installation on surfaces ⇒ No major structural alteration
- Possibly extended to other applications and/or locations e.g. M&I works on roof
- No need to disengage the anchorage frequently ⇒ Workers put to little inconvenience
- Easy to use without help from another worker
- User-friendly even for non-skilled workers

#### Related Standards

- BS EN 795: Protection against falls from height Anchor Devices – requirements & testing
- BS EN 354: Lanyards
- BS EN 355: Energy Absorbers
- BS EN 261: Full Body Harness
- BS EN 362: Connectors
- BS EN 364: Test Methods
- BS EN 365: General Requirements for instructions for use and marking
- BS EN 7883: Code of Practice for use of anchor device

#### Individual Components

- 1. End Brackets/End Anchor plates
- 2. Energy Absorbers
- 3. Intermediate brackets
- 4. Stainless Steel Cables
- 5. Shuttles
- 6. Lanyards
- 7. Body Harness

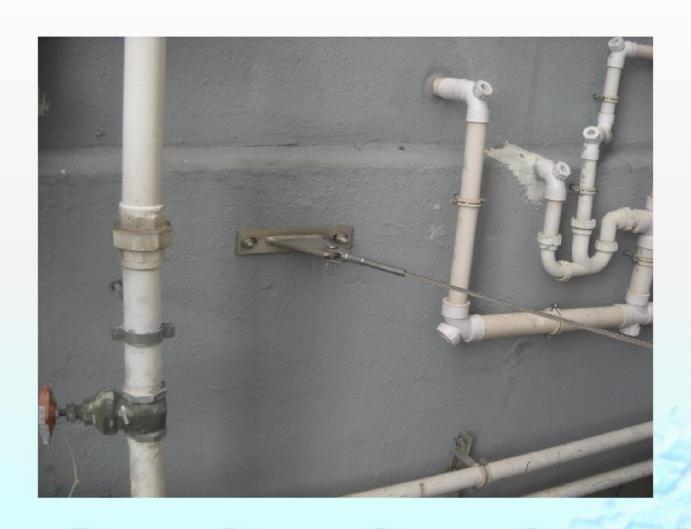
#### Typical features



施工跟程序 意外可消除

Strictly Follow Work Procedures

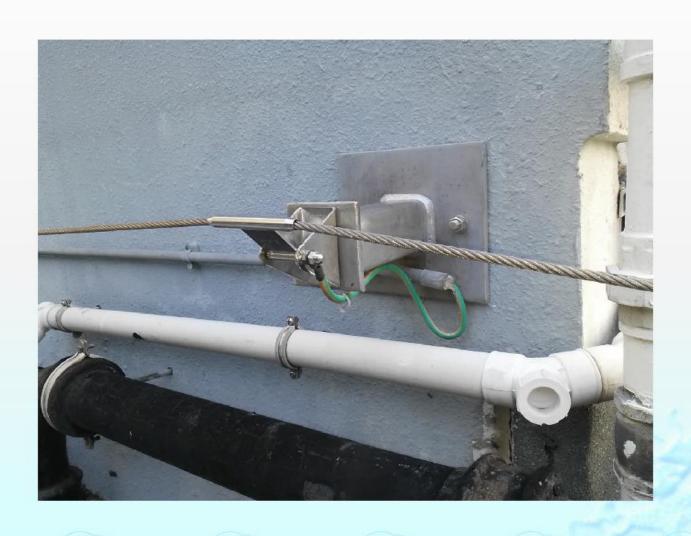
## End Bracket/End Anchor Plate



## Energy Absorber



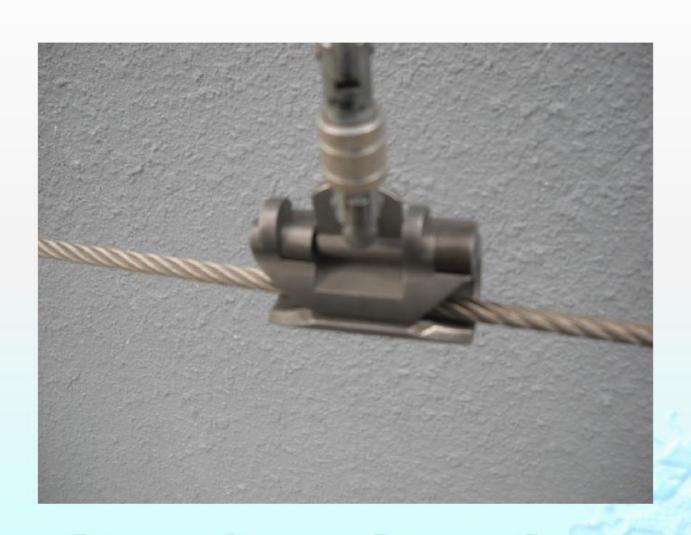
#### Intermediate Bracket



#### Stainless Steel Cable



#### Shuttle



## Lanyard



#### **Body Harness**





#### Important Considerations

- Annual inspection by trained competent person of specialist contractor
- Ad-hoc inspection after fall accident
- Training of maintenance/cleansing workers
- Use of genuine parts
- After a fall incident, need to replace appropriate components recommended by the specialist contractor

#### Experience Sharing

A successful horizontal lifeline system requires:

- All stakeholders' contribution
- Always select the most risky location first for implementation
- Before works, good communication with tenants required
- Adoption of well proven system and use of genuine parts
- Regular maintenance is a must!