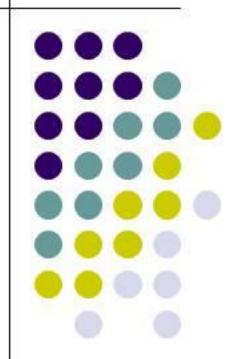
Hierarchy of Fall Protection in context of Legal Liabilities

Site Safety Focus Seminar Hong Kong Housing Authority 22 June 2009



Prevention of Falls



CSSR-38B states "a contractor shall take

adequate steps to prevent any person on

site from falling from a height of 2M or more"

Adequate Steps



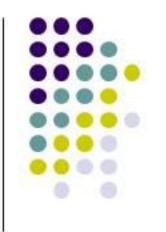
Working platform

• Guar frails, Larriers and Kn

Covering the exing

Gangways and runs

CSSR-38H - Defences to CSSR-38B

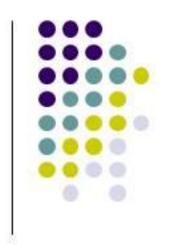


1. Onus of proof on defendant that adequate

steps were impracticable, and,

2. Safety belts and safety nets are provided

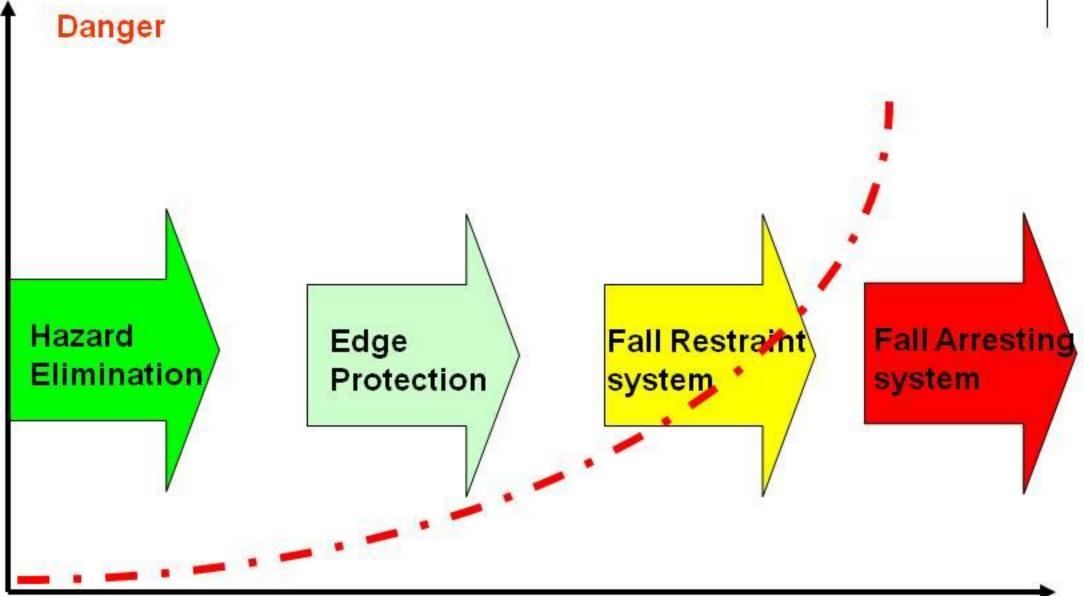
Safety Belts



- Safety belts attached continuously to a suitable
 & secure anchorage, and,
- 2. Safety belts and its fittings are maintained, and,
- Have taken all reasonable steps to ensure proper use of safety belts provided

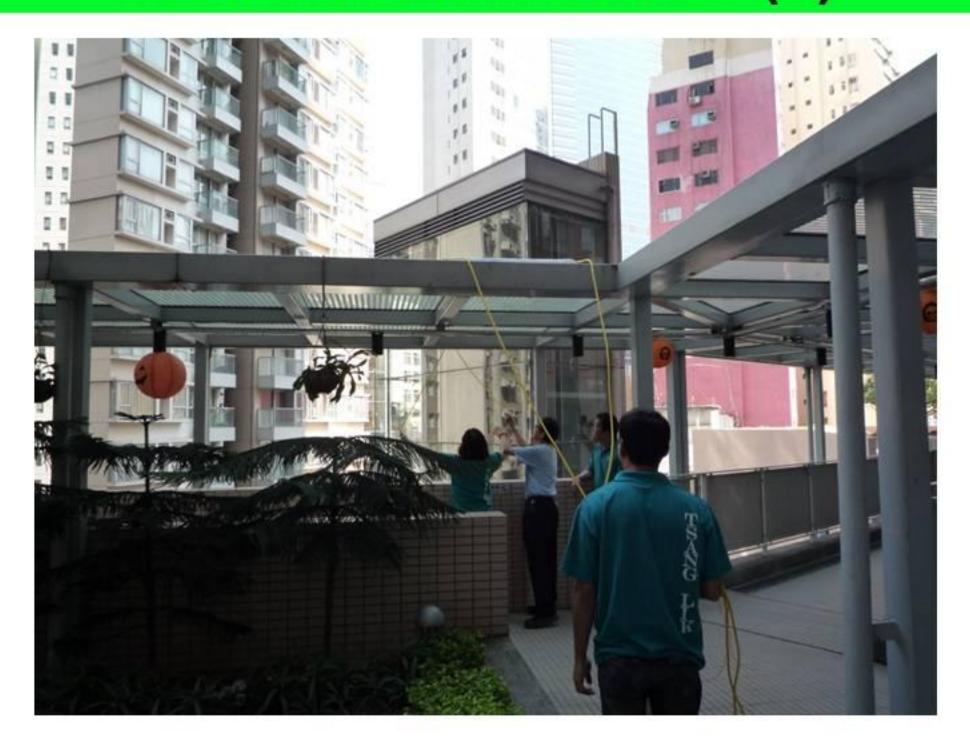
Hierarchy of Fall Protection



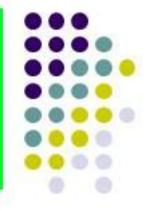


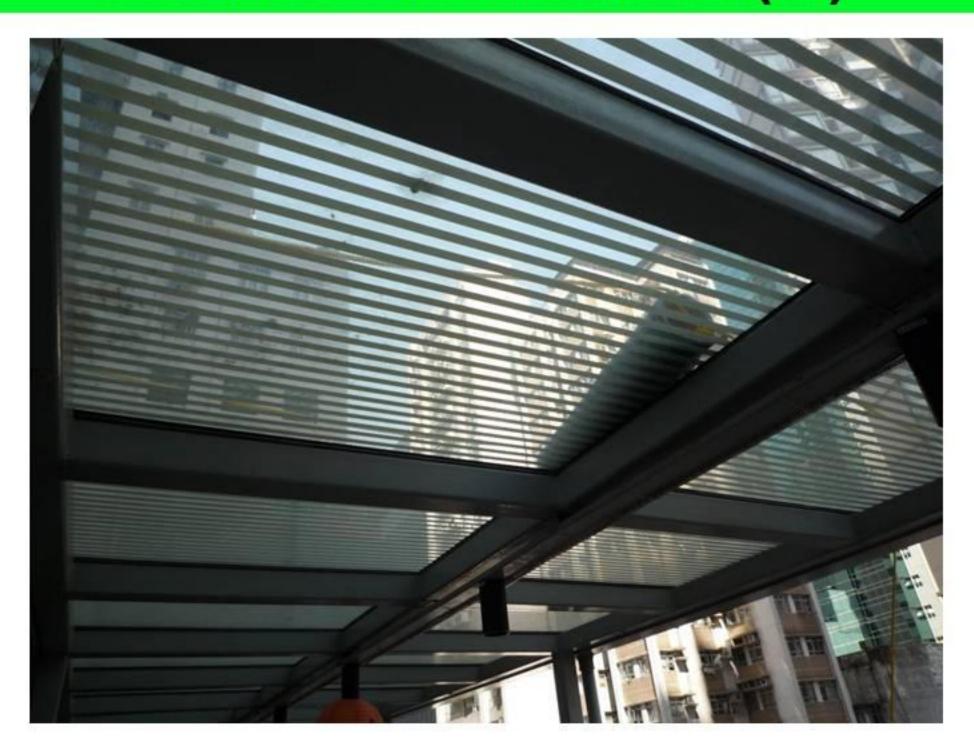
Hazard Elimination (II)





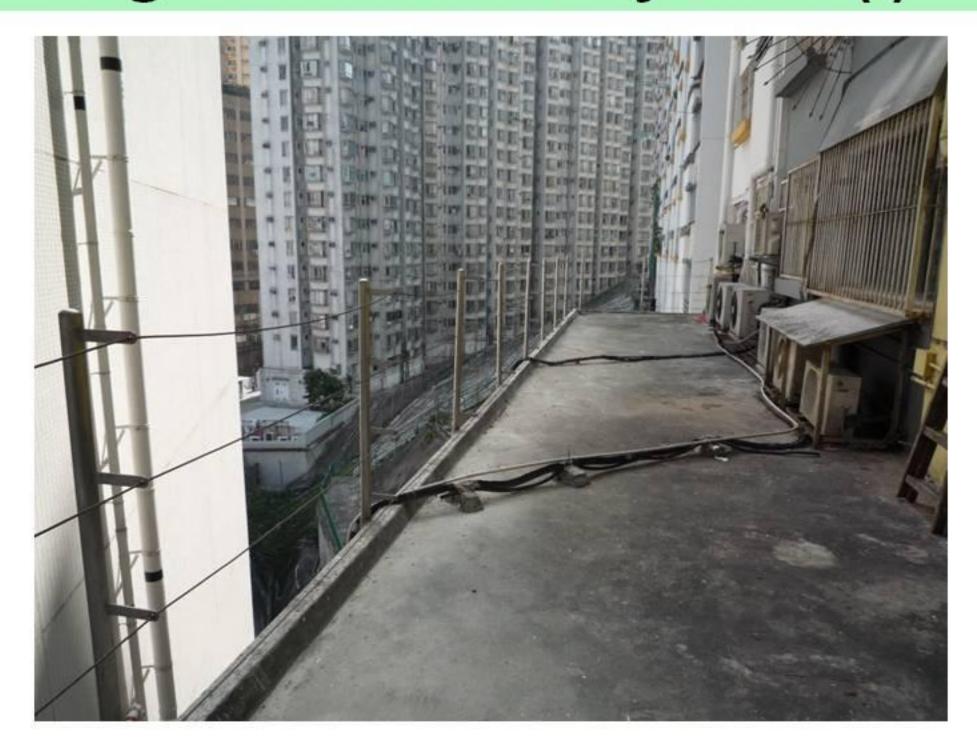
Hazard Elimination (III)





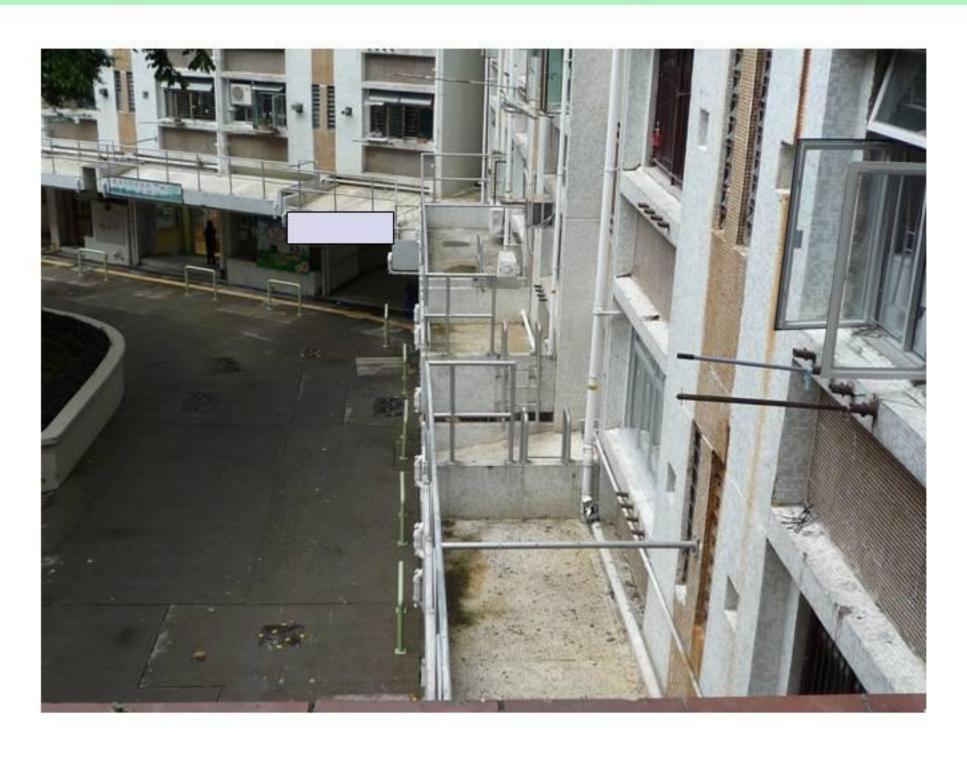
Edge Protection System (I)



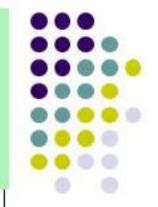


Edge Protection System (II)





Edge Protection System (III)





Fall Restraint System (I)





Fall Restraint System (II)



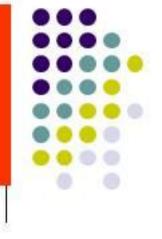


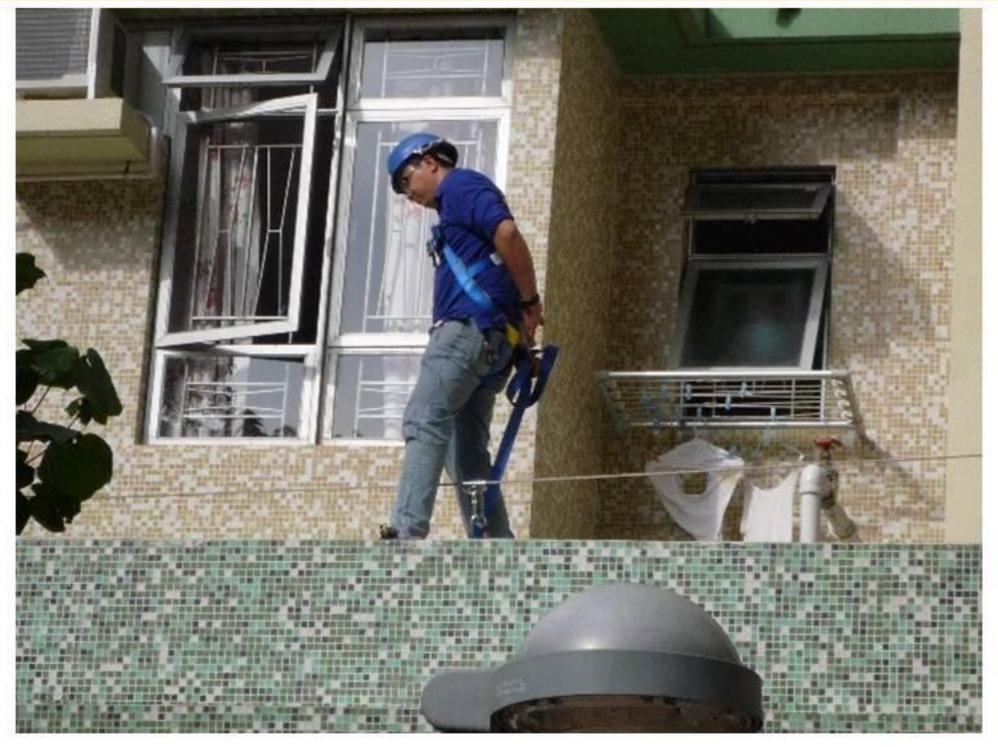
Fall Restraint System (III)



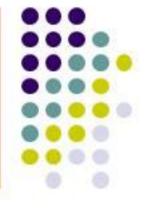


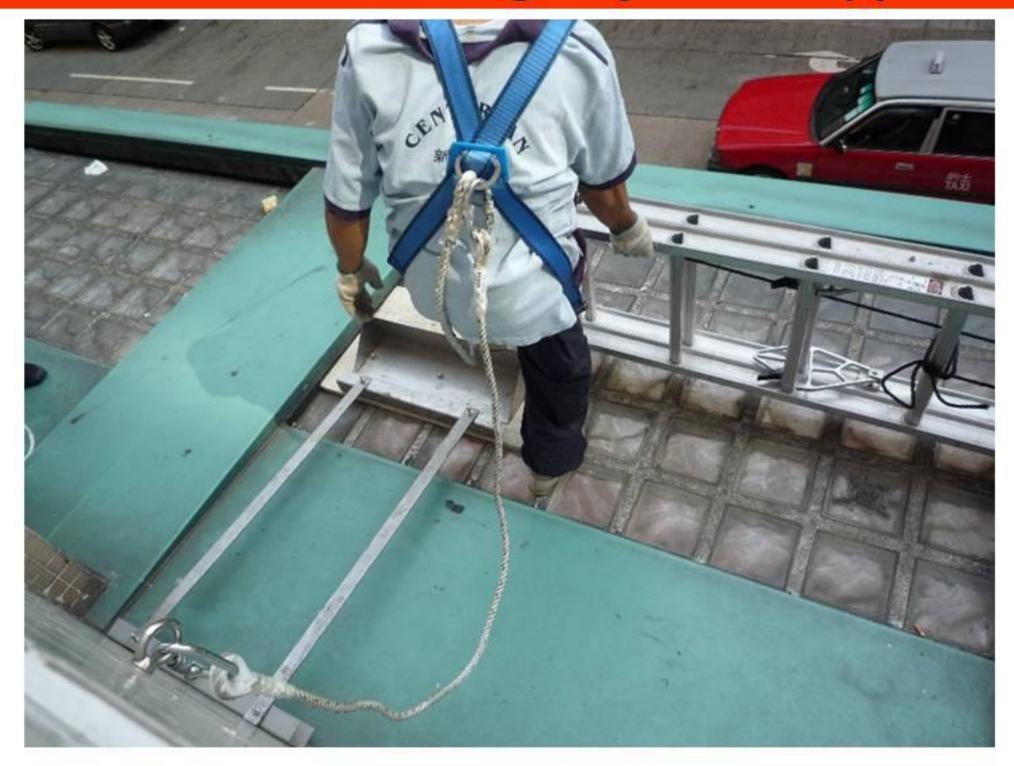
Fall Arresting System (IV)

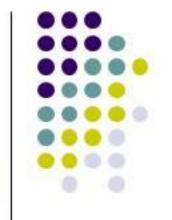




Fall Arresting System (I)







Division of Responsibilities

Person responsible for a workplace

Employer

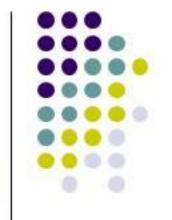
Occupier

OCCUPATIONAL SAFETY AND HEALTH ORDINANCE



Employers to ensure OSH of employees

S.6(2)(a) Every employer must provide or maintain plant and systems of work that are, so far as reasonably practicable, safe and without risks to health.



Division of Responsibilities

Person responsible for a workplace

Employer

Occupier

OCCUPATIONAL SAFETY AND HEALTH ORDINANCE



Occupier of premises to ensure OSH of persons employed at those premises

S.7(1) If an employee's workplace is located on premises that are not under the control of the employee's employer, the occupier of the premises must ensure that (i) the premises, (ii) the means of access to and egress from the premises; and (iii) any plant or substances kept at the premises, are, so far as reasonably practicable, safe and without risks to health.

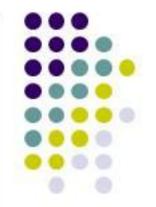
Practicable and Reasonably Practicable



"practicable" means ignores the cost implication but recognizes possible limitation of current technical knowledge

"reasonably practicable" implies a balance of degree of risk against the cost of overcoming it

Cost Analysis



Metal Fixed Guardrails

Fall Arresting Anchorage







* 3 years warranty on initial installation

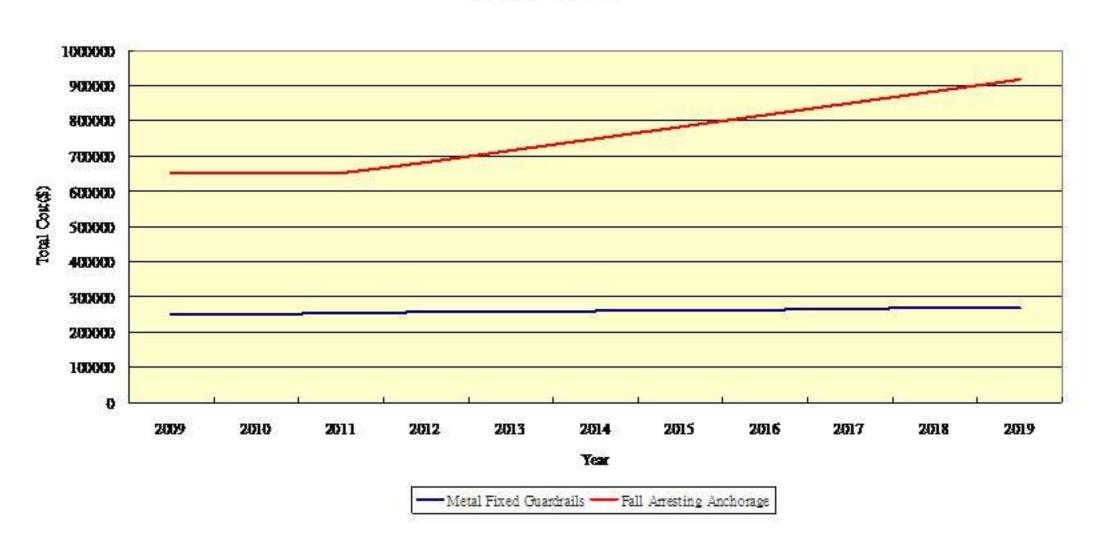
Presumption:

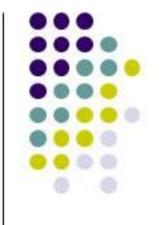
- Length = 1000M
- Period = 10 years
- Anchorage distance = 3M
- Projection of initial installation + annual maintenance





Total Costs





Civil and Criminal Laws

Standard of proof

 Criminal – Beyond all Reasonable Doubts

Civil – on Balance of Probability

Negligence



Broadly defined as a careless conduct causing damage or injury to another





Elements to establish a case in negligence:

- There is a duty of care owed by one party to the other
- There has been a breach of that duty
- The breach of duty has resulted in damage





In Donoghue v. Stevenson, it is defined as:

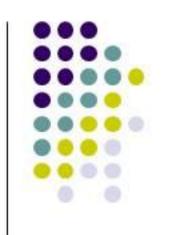
"you must take reasonable care to avoid acts or omissions which you can reasonably foresee would be likely to injure your neighbour."





"Neighbours" is defined as:

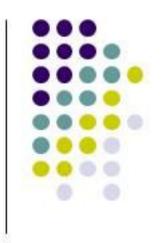
"Person who are so closely and directly affected by my act that I ought reasonably to have them in contemplation as being so affected when I am directing my mind to the acts or omissions which are called in question."



謹慎責任

鄰人: "那些會受我們的行為直接或 密切影響到的人,而當我們有意識地作 出引致問題之作為或不作為時,理應深 思熟慮到他們將會受到該等直接或密切 之影響"





4 indicators:

- foresight of damage
- proximity of the defendant to the plaintiff
- public policy
- whether it is just and reasonable to impose a duty

Practical Discussions (I)







Practical Discussions (II)







Practical Discussions (III)







Practical Discussions (IV)





Practical Discussions (V)











Practical Discussions (VI)







Normative References



- A Guide to the Provisions for Safe Places of Work under Part VA of the Construction Sites (Safety) Regulations
- A Guide to the Occupational Safety and Health Ordinance (Section 6 & 7) - General Duties of Employers / Occupiers
- A Guide to Safe Systems of Work

Normative References



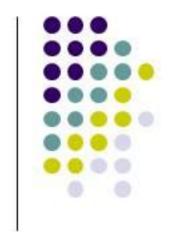
 BS EN 795:1997 – Protection against falls from a height – Anchor devices – requirements and testing

 BS 7883:2005 – Code of Practice for the design, selection, installation, use and maintenance of anchor devices confirming to BS EN 795

A Question Asking Yourself



Do I have sufficient competence and confidence in directing my mind to reject the erection of guardrails for protection of my neighbours while they are working at such dangerous workplaces???



~ END ~