



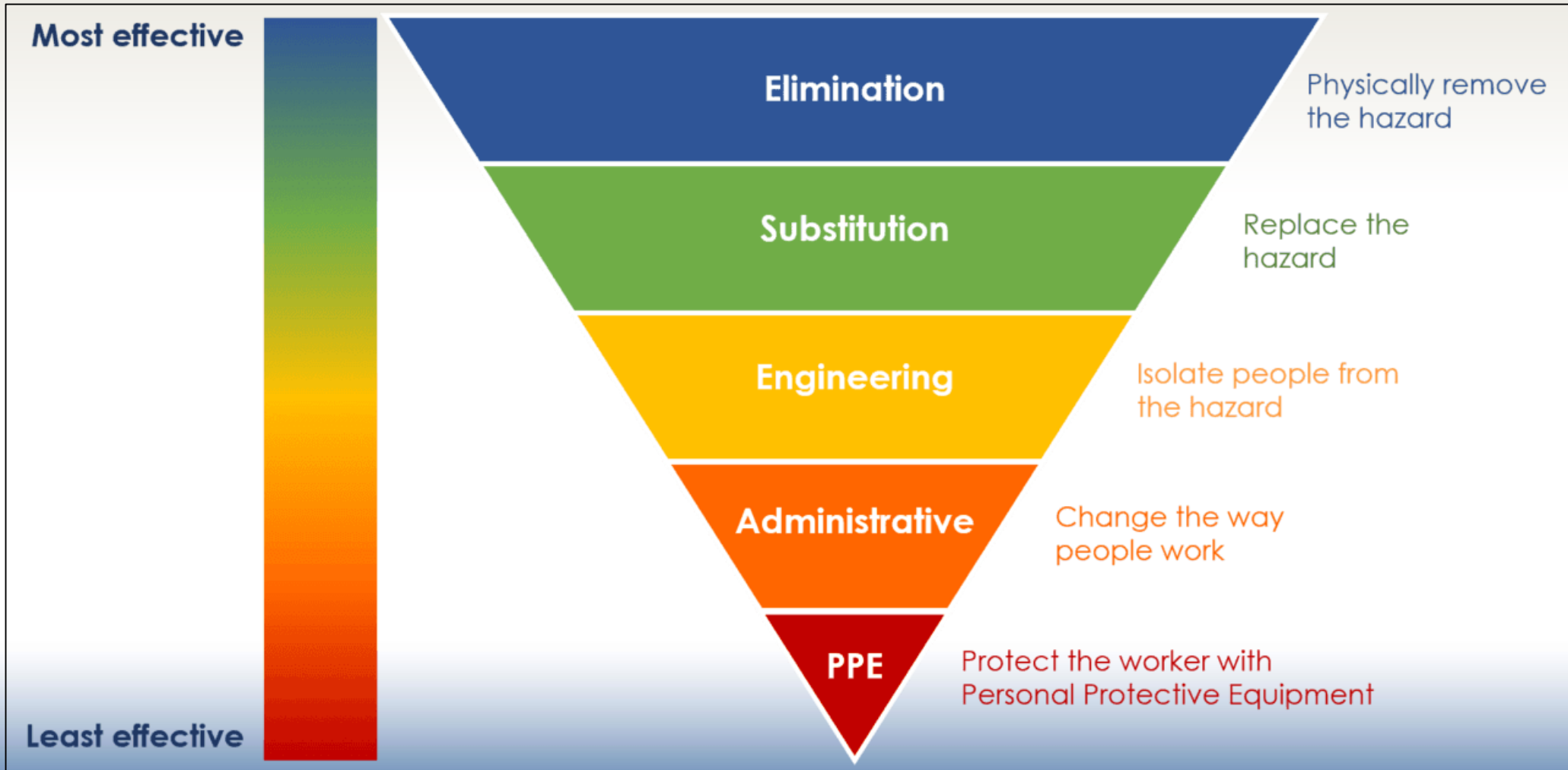
# Lighthouse Safety

Specialists in Fall Protection, Rescue and Confined Spaces

## Fall Protection

PROJECT DETAILS

# Hierarchy of Controls



# Risk Assessment Matrix

| CONSEQUENCE (see pages below for further explanation) |              |                                  |                            |                 |                 | INCREASING LIKELIHOOD >>>  |                      |   |   |  |
|---|--------------|----------------------------------|----------------------------|-----------------|-----------------|----------------------------|----------------------|---|---|--|
| SEVERITY  |              | PEOPLE                           | ENVIRONMENT                | ASSETS          | REPUTATION      | 1                          | 2                    | 3   | 4   | 5  |
|   |              |                                  |                            |                 |                 | Rare                       | Unlikely             | Possible  | Likely  | Almost   |
|   |              |                                  |                            |                 |                 | Never heard of in industry | Heard of in industry | Has happened in the organisation or more than once per year in industry | Has happened at the location or more than once per year in the organisation | Has happened more than once per year in the location |
| 1   | Slight       | Slight injury or health effect   | No or minimal consequences | Slight damage   | Slight impact   | LOW                        | LOW                  | LOW   | LOW   | LOW  |
| 2   | Minor        | Minor injury or health effect    | Minor effect               | Minor damage    | Minor impact    | LOW                        | LOW                  | LOW   | MEDIUM  | MEDIUM   |
| 3   | Moderate     | Major injury or health effect    | Moderate effect            | Moderate damage | Moderate impact | LOW                        | LOW                  | MEDIUM  | MEDIUM  | HIGH   |
| 4   | Major        | Permanent Total Disability (PTD) | Major effect               | Major damage    | Major impact    | LOW                        | MEDIUM               | MEDIUM  | HIGH  | HIGH   |
| 5   | Catastrophic | One or more Fatalities (F)       | Massive effect             | Massive damage  | Massive impact  | MEDIUM                     | MEDIUM               | HIGH  | HIGH  | HIGH   |
| CONSEQUENCE (see pages below for further explanation) |              |                                  |                            |                 |                 | INCREASING LIKELIHOOD >>>  |                      |   |   |  |



# Hatch & Skylight Fall Protection

- OSHA 1910.28(b)(3)(i)
  - Each employee is protected from fall through any hole (including skylights) that is 4 feet or more above a lower level by one more of the following: covers, guardrail systems, travel restraint systems, or personal fall arrest systems.
- OSHA 1910.28(b)(3)(ii)
  - Each employee is protected from tripping into or stepping into or through any hole that is less than 4 feet above a lower level by covers or guardrail systems.
- OSHA 1910.28(b)(3)(v)
  - Each employee is protected from fall through a hatchway and chutefloor hole





# Hatch & Skylight Fall Protection Examples





# Hatch & Skylight Fall Protection Examples



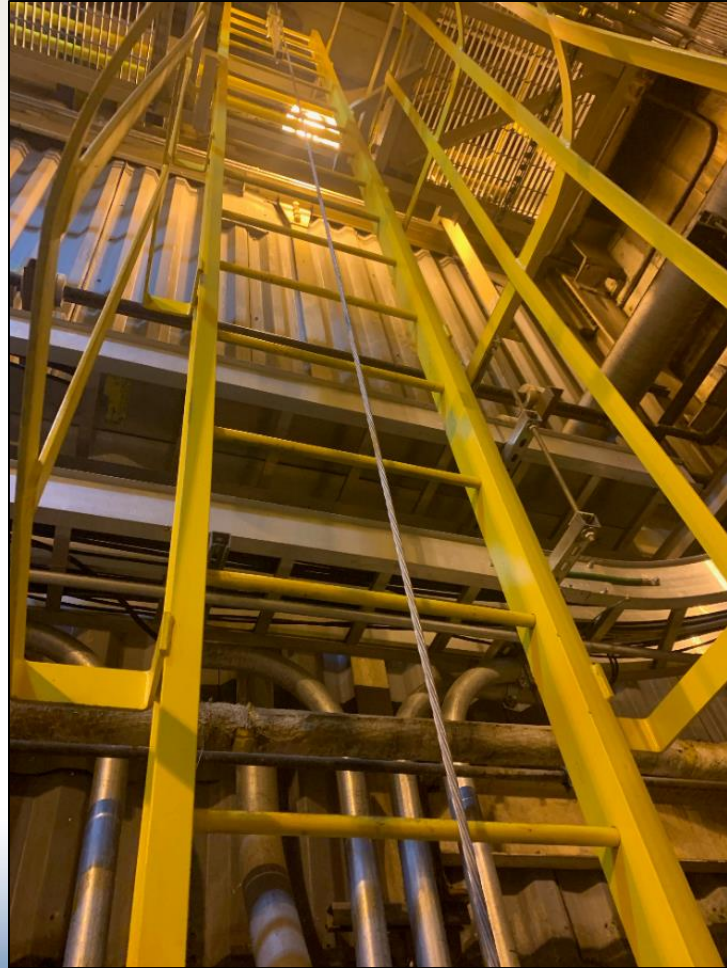
# Ladder Fall Protection

- OSHA 1910.28(b)(3)(iv)
  - Each employee is protected from falling into a ladderway floor hole or ladderway platform hole by a guardrail system and toeboards erected on all exposed sides, except at the entrance to the hole, where a self-closing gate must be used.
- OSHA 1910.28(b)(9)
  - For fixed ladders that extend more than 24 feet above a lower level, the employer must ensure: (A) Each fixed ladder installed before November 19, 2018 is equipped with a personal fall arrest system, ladder safety system, cage, or well; (B) Each fixed ladder installed on or after November 19, 2018 is equipped with a personal fall arrest system or ladder safety system; (C) When a fixed ladder, cage, or well, or any portion of a section thereof, is replaced, a personal fall arrest system or ladder safety system is installed in at least that section of the fixed ladder, cage, or well where the replacement is located; and (D) On and after November 18, 2036, all fixed ladders are equipped with personal fall arrest systems or ladder safety systems.





# Ladder Fall Protection Examples



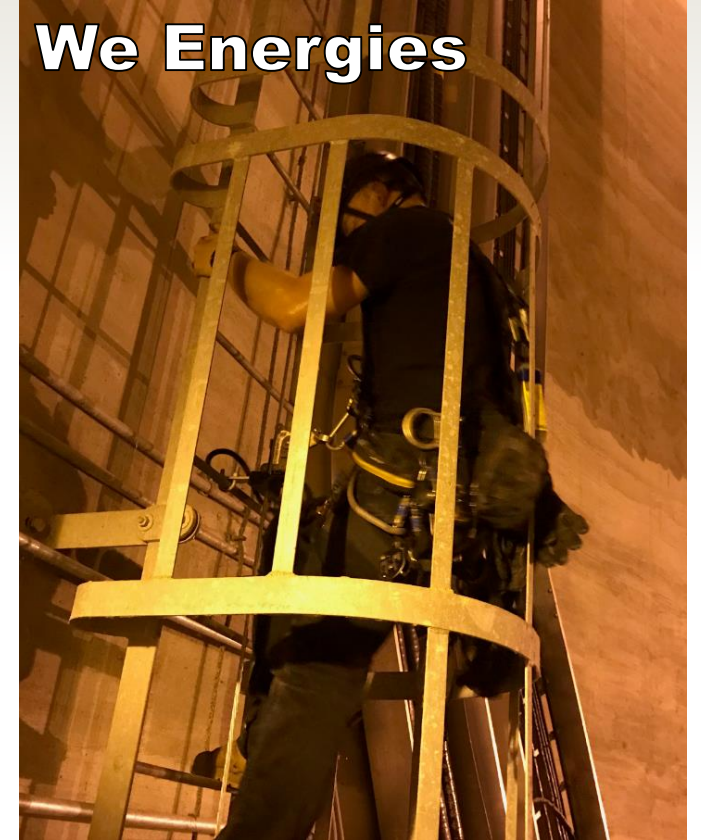


# Ladder Fall Protection Examples

**Sigma Aldrich**



**We Energies**



**Saputo**



**SHINE Medical Technologies**



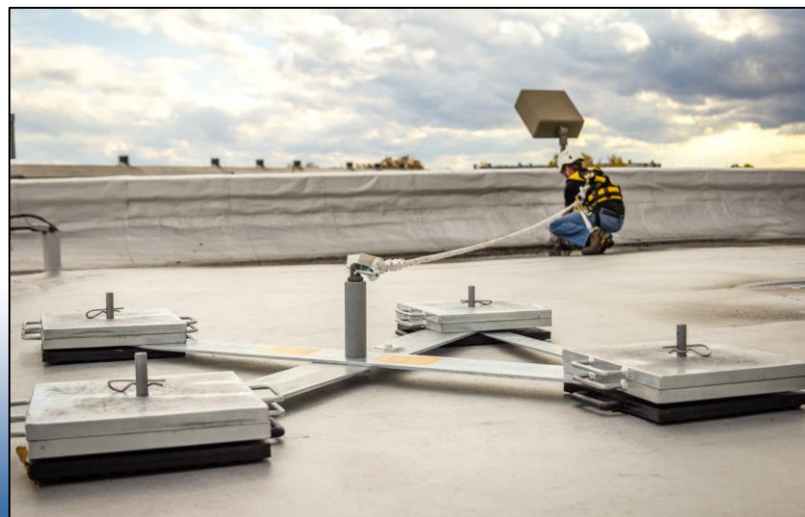
# Rooftop Fall Protection

- OSHA 1910.28(b)(13) Work on Low Sloped Roofs
  - 1910.28(b)(13)(i) When work is performed less than 6 feet from the roof edge, the employer must ensure each employee is protected from falling by using a guardrail system, safety net system, travel restraint system, or personal fall arrest system. The employer may use a designated area when performing work that is both infrequent and temporary.
  - 1910.28(b)(13)(ii) When work is performed at least 6 feet but less than 15 feet from the roof edge, the employer must ensure each employee is protected from falling by using a guardrail system, safety net system, travel restraint system, or personal fall arrest system. The employer may use a designated area when performing work that is both infrequent and temporary.
  - 1910.28(b)(13)(iii) When work is performed 15 feet or more from roof edge, the employer must: (A) Protect each employee from falling by a guardrail system, safety net system, travel restraint system, or personal fall arrest system or a designated area. The employer is not required to provide any fall protection, provided the work is both infrequent and temporary; and (B) Implement and enforce a work rule prohibiting employees from going within 15 feet of the roof edge without using fall protection in accordance with paragraphs (b)(13)(i) and (ii) or this section.





# Fall Protection Examples





# Fall Protection Examples





# Fall Protection Examples





# Lighthouse Safety

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