

Envelope Maintenance Systems - Manually Based

The Problem/Challenge

Cleaning glazing to elevations at **high level and in difficult locations**.

The Risks

Falls from height due to inappropriate work systems, poorly designed fabric or operative error.

The Solution

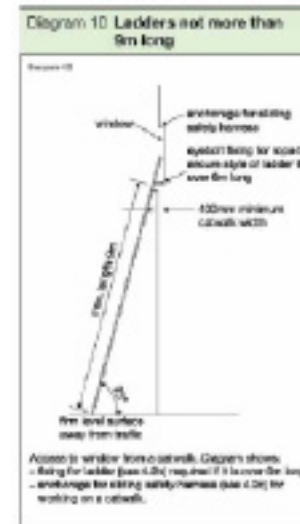
Early design consideration of cleaning options. Relatively low technology and low cost techniques to be considered, more reliant on manual efforts than mechanical assistance. Ladders, opening windows, long water – fed pole, reach and wash and roped access systems **all rely on trained operators and good management control systems** for their safety. All are inherently safe in the appropriate situations and when implemented correctly. **Limitations of use to be fully understood.**

The Benefits

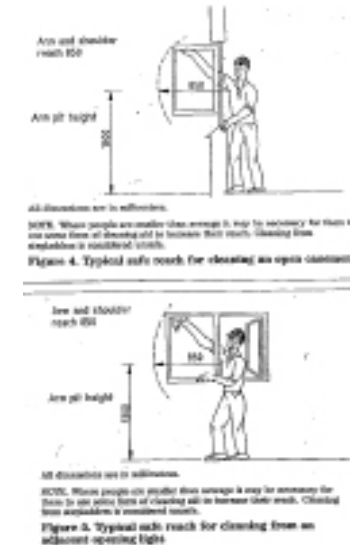
Allows **economies of scale** to be proportionately applied to all building types. Enables **quicker and more immediate** response to cleaning demands. Roped access allows work positioning to **difficult undercuts and geometrically intricate areas**.

Key Points

Careful consideration of all relevant associated legislation is necessary especially the Working at Height Regulations to determine the most appropriate system or combination of systems for each building design. Large, flat and high elevations are less suited to these systems.



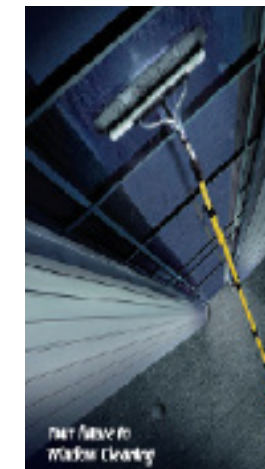
Ladder Limitations



Opening Window Criteria



Special roped access areas



Water-fed pole