

Window Washing/Suspended Maintenance Safety Regulations, Guidelines and Inspection Requirements

Occupational Safety And Health Administration (Osha) Regulations

Prior to October 25, 2001 the duties and responsibilities for owners of buildings to ensure that the health and safety of all workers performing suspended maintenance operations was solely regulated by The Occupational Safety and Health Administration (OSHA). Suspended maintenance operations include window cleaning, caulking, metal polishing, reglazing and general maintenance on building surfaces.

In the OSHA Code of Federal Regulations, the subject of fall protection is covered by four main standards:

- Part 1910.21, Subpart D (Walking -Working Surfaces)
- Part 1910.66, Subpart F (Powered Platforms)
- Appendix C to Part 1910.66, Personal Fall Arrest System (Section I-Mandatory)
- Part 1926.50, Subpart M (Fall Protection)

OSHA enforces the issue of fall protection using the General Industry and Duty Clause, Section 5(a)(1) of the OSH Act of 1970 and will support the enforcement by citing fall protection requirements using any one of the above labor standards contained in CFR 29 relating to fall arrest equipment.

The ANSI/IWCA I-14.1 Window Cleaning Safety Standard

In an effort to raise the standards for life safety in the window washing industry and develop a consistent and comprehensive national safety standard for window cleaning operations, the International Window Cleaning Association (IWCA) has developed a safety standard. On October 25, 2001, the American National Standards Institute (ANSI) approved the IWCA I-14.1 Window Cleaning Safety draft standard for publication as an American National Standard.

The intent of the ANSI/IWCA I-14.1 Window Cleaning Safety Standard is to provide minimum requirements that are recommended for use by persons in the window cleaning trade, persons who provide window cleaning supplies or equipment to the trade and persons who employ or contract window cleaning contractors. One of the most important provisions of the I-14 Standard is that of shared responsibility between the window cleaning contractor and the building owner and/or their operating agent. The window cleaning contractor must provide the building owner

with the assurance that all work will adhere to applicable codes, standards, laws and licensing requirements; that their workers are properly trained; and that any equipment provided by the contractor is properly designed, maintained and inspected. The building owner must provide the window cleaning contractor with the assurance that the installation of the structure has been inspected, tested and maintained according to the Standard and that all equipment dedicated to the building meets the requirements of the Standard.

Although OSHA regulations continue as the present governing regulations on suspended maintenance operations, the I-14 Standard includes and expands upon all of the OSHA regulations. Therefore, if a building is compliant with the I-14 Standard, the building is also compliant with OSHA regulations. The I-14 Standard recommends that:

- Window cleaning contractors and building owners and managers review the contents of the Standard as to how it affects each. Contractors should be aware of the worker's requirements and building owners and managers should be aware of the site requirements. This mutual awareness should be developed within a year of the first publication of the Standard.
- Final implementation of the methods, techniques and equipment described within the Standard should be accomplished in a period not to exceed 5 years from the date of first publication of the Standard.

Although ANSI Standards do not have the force of law, they are cited in court as the standard of care any reasonable business would use in conducting its affairs. In addition, it is likely that OSHA will review and adopt the standard, although in the meantime; OSHA can and will reference an industry standard if they uncover a dangerous situation at a workplace. Since the I-14 Standard is a standard that affects life safety and may be used to identify potential liability, many building owners are wisely seeking full compliance with the new Standard.

OSHA Inspection Requirements

Building owners of all installations, new and existing, where suspended scaffold, rope descent system (RDS) or similar single-point suspension equipment are to be used for suspended maintenance operations shall inform the maintenance contractor that the suspended maintenance installation (anchors, etc) has been inspected, tested (if necessary) and maintained in compliance with OSHA requirements.

In addition, all anchorages to which personal fall arrest equipment is attached shall be capable of supporting at least 5,000 pounds per employee attached, or shall be designed, installed, and used

as part of a complete personal fall arrest system which maintains a safety factor of at least two, under the supervision of a qualified person.

OSHA regulations require that all anchor points and completed equipment installations be inspected by a competent person:

- Before being placed in initial service;
- Following any major alteration to an existing installation;
- At intervals not exceeding 12 months;
- At intervals specified by the manufacturer/supplier, but not exceeding 12 months ; and
- The building owner shall keep a certification record of each inspection and test required. The certification record shall include the date of the inspection, the signature of the person who performed the inspection, and the number, or other identifier, of the building support structure and equipment which was inspected. This certification record shall be kept readily available for review by the Assistant Secretary of Labor or the Assistant Secretary's representative and by the employer.

Prior to the approval of ANSI/IWCA I-14.1, typical annual inspections of existing anchor points and completed equipment installations were commonly performed according to OSHA 1910.66(g)(2)(ii) which requires that, "All parts of the equipment including control systems shall be inspected to determine that they are in safe operating condition". These annual inspections were typically performed under the assumption that the anchorages were initially designed and inspected for compliance to applicable OSHA requirements. The inspections consisted of a visual condition assessment to determine that the anchorages had not worn to such an extent as to affect the safe operation of the installation.

ANSI Inspection & Certification Requirements

The ANSI/IWCA I-14.1 Standard contains inspection and certification requirements similar to the OSHA regulations. However, as stated above, the ANSI/IWCA I-14.1 Standard includes and expands upon the OSHA inspection requirements. The following inspection requirements for permanently dedicated equipment are stated in the ANSI/IWCA I-14.1 Standard:

- Anchorages shall be certified before initial use and shall be provided with a rated load and initial certification by the manufacturer;
- Anchorages shall be inspected annually by a qualified person;
- Anchorages shall be inspected at intervals specified by the manufacturer (not to exceed 12 months);
- Anchorages shall be inspected by a competent person before each use;

- Anchorages shall be re-certified during re-roofing, renovating (pertinent to the window cleaning system) or at periods not to exceed 10 years;
- Certification and re-certification of anchorages shall be performed under the supervision of a registered professional engineer; and
- A record of all inspections and certifications shall be documented in a dedicated log book.

The ANSI/IWCA I-14.1 Standard requires the building owner to meet applicable inspection provisions of the Standard and to provide the following written assurances to the window washing contractor:

- The installation or structure has been inspected, tested and maintained in compliance with the requirements of the Standard;
- Equipment dedicated to the building meets the requirements of Part B of the Standard;
- Specified load ratings, intended use and limitations for fixtures permanently dedicated to the building;
- Manufacturers instructions for installations, anchorages and fixtures permanently dedicated to the building.

In many cases, the owner of an existing building may not be able to provide these assurances to the window washing contractor. For example, in most cases, specified load ratings which meet the requirements of the ANSI/IWCA I-14.1 Standard are not available. Therefore, inspection procedures must be adapted to provide missing information to the building owner and ultimately the window washing contractor.

Implications of the The ANSI/IWCA I-14.1 Window Cleaning Safety Standard

Since the adoption of the ANSI/IWCA I-14.1 Window Cleaning Safety Standard, it is recommended that annual inspections no longer be performed under the assumption that the anchorages were initially designed and inspected for compliance to applicable OSHA requirements. An “Initial” Inspection of all anchorage locations should be performed unless a building can provide proper documentation of an acceptable prior initial inspection (before being placed into initial service or following any major alteration to an existing installation) and load capacity verification which meets the I-14 criteria.

Ideally, an initial inspection report and load capacity of the equipment is provided by the manufacturer or installer of the equipment. If this information is not available, an “Initial” Inspection should be performed by a licensed professional engineer. The “Initial” inspection should include:

- Collection of pertinent information pertaining to the building.
- Review of applicable drawings, engineering data and other documentation (where available).
- Visual inspection and condition assessment of existing window cleaning/suspended maintenance installations and fall protection systems as installed at a building.
- Structural analysis of existing window cleaning/suspended maintenance installations and fall protection systems as installed at a building (where possible).
- Structural analysis of existing roof parapets and guardrails subjected to the direct loading of suspension lines (where possible).

Where existing window cleaning/suspended maintenance installations, fall protection systems and/or roof parapets and guardrails cannot be certified by review of existing documentation, engineering knowledge, or structural analysis; a detailed on-site technical survey and structural testing may be required.