South Carolina Department of Labor, Licensing and Regulation Division of Labor

Office of Occupational Safety and Health Columbia, South Carolina 29211

OSH Program Directive Number 86-1910.66-1 (REVISED)

Subject: Building Anchors Used for Intermittent Stabilization of a

Suspended Powered Platform in Window Washing Operations and

Light Building Maintenance.

Standard: Subarticle 6, Section 1910.66 (b) (3), Rules and Regulations,

Commissioner of Labor, State of South Carolina.

Cross Reference to

Federal Standards: 29 CFR 1910.66 (b) (3).

Purpose: This directive provides guidance to ensure appropriate

enforcement of certain requirements pertaining to powered platforms for exterior straight face building maintenance. (THIS DIRECTIVE DOES NOT APPLY TO CONSTRUCTION NOR TO TWO-POINT SUSPENSION SCAFFOLDS USED IN

GENERAL INDUSTRY. REQUIREMENTS FOR SCAFFOLDS

USED IN CONSTRUCTION ARE CONTINED IN

SUBARTICLE 7, SECTION 1926.451, AND GENERAL INDUSTRY APPLICATION OF TWO-POINT SCAFFOLDS ARE CONTAINED IN SUBARTICLE 6, SECTION 1910.28.)

Background: In many high-rise buildings constructed prior to passage of the

Federal Occupational Safety and Health Act (OSHA) of 1970, building face guiding members were not installed for powered platforms intended to be used for exterior building maintenance, which included window washing. In addition, some newly constructed buildings, because of the design, types of materials used for exterior walls and the aesthetics, are not constructed with

building face guiding members. In situations where it is not

practical to install the building face guides as required in Subarticle 6, Section 1910.66 (b) (3), powered platforms installed and used in

a safe manner as described in this directive will provide an

alternative safe system.

Guidelines:

- a) Intermittent Tie-in Stabilization System. The building anchor system will be installed as described herein.
- 1. The building anchors will be located in vertical rows, with an attachment of maximum elevation at every third floor

(approximately 45 feet) and spaced horizontally to allow a stabilization attachment for each of the two platform suspension wire ropes. The minimum tensile strength of the anchor bolt shall be 600 pounds.

- 2. As the suspended platform descends past the elevation of each anchorage, each of the two platform occupants will secure a "quick connect quick disconnect stabilizer-tie" between a suspension wire rope and a building anchor. Each stabilizer-tie will contain an adjustable lanyard to allow positioning each suspension wire rope vertically at a predetermined angulation that will provide at least 10 pounds of pressure against the building at the lowest point of the tie-in span. The process will be repeated as each elevation of tie-in anchorage is reached during the descent of the platform.
- 3. This process will be reversed, that is, the stabilizers will be removed as each elevation of the stabilization tie-ins is reached as the platform ascends. Said removal is ensured in that the platform will be provided with electrical interlocks to interrupt power to its hoists in the event either interlock contacts a stabilizer during the ascent of the platform.
- 4. The intermittent stabilization system including its building anchor shall have a safety factor of 4 and the suspension wire ropes shall have a safety factor of 10 against failure.
- 5. The engineering analysis documented by a professional engineer will substantiate the method of intermittent stabilization for a suspended powered platform system. Further, such design and method shall provide a condition for employment that will be as safe and healthful as required by the referenced standard.
 - (a) <u>Platform.</u> The platform will be provided with a taut 5/16-inch diameter horizontal galvanized wire rope static line secured to a structural member at both ends of the platform and at the mid-point of the rear guardrail system so that each section of the wire rope static line acts as an independent wire rope lifeline to support
 - (b) <u>Employee Training.</u> Operators of powered platforms shall have the knowledge and training to operate equipment in accordance with manufacturer's recommendations and to perform all operations of the intermittent stabilization system.
 - (c) <u>Additional Employer Responsibilities.</u> The employer shall comply with all provisions contained in this instruction and with all other applicable provisions of 29 CFR 1910.66, such as

- requirements for emergency communications, maintenance inspections and tests, etc.
- (d) <u>Procedures.</u> The employer shall ensure that all procedures required for the proper and safe functioning of the intermittent stabilization system are carried out.

Effective Date:

This instruction is effective upon receipt and will remain in effect until cancelled or superseded by amendment to the Rules and Regulations.

William M. Lybrand January 22, 1986