075. SAFETY REQUIREMENTS FOR POWERED PLATFORMS FOR BUILDING MAINTENANCE (7-1-97)

01. Scope: (7-1-97)

a. Powered platforms for building maintenance shall conform to all other applicable requirements of this standard, as well as the following provisions. Nothing in this standard shall be construed to prohibit better or otherwise safer conditions than specified herein. (7-1-97)

b. This section covers powered platform installations permanently dedicated to interior or exterior building maintenance of a specific structure or group of structures. Building maintenance includes, but is not limited to, such tasks as window cleaning, caulking, metal polishing and reglazing. (7-1-97)

02. Definitions: For definitions of other terms used in this section, see sub-section 010 of this standard.
a. Anemometer is an instrument for measuring wind velocity. (7-1-97)

b. Angulated Roping is a system of platform suspension in which the upper wire rope sheaves or suspension points are closer to the plane of the building face than the corresponding attachment points on the platform, thus causing the platform to press against the face of the building during its vertical travel. (7-1-97)

c. Babbitted Fastenings is the method of providing wire rope attachments in which the ends of the wire strands are bent back and are held in a tapered socket by means of poured molten babbitt metal. (7-1-97)

d. Brake-Disc is a brake in which the holding effect is obtained by frictional resistance between one or more faces of discs keyed to the rotating member to be held and fixed discs keyed to the stationary or housing member (pressure between the discs being applied axially). (7-1-97)

e. Brake-Self-Energizing Band Type is essentially an unidirectional brake in which the holding effect is obtained by the snubbing action of a flexible band wrapped about a cylindrical wheel or drum affixed to the rotating member to be held, the connections and linkages being so arranged that the motion of the brake wheel or drum will act to increase the tension or holding force of the band. (7-1-97)

f. Brake-Shoe Type is a brake in which the holding effect is obtained by applying the direct pressure of two or more segmental friction elements held to a stationary member against a cylindrical wheel or drum affixed to the rotating member to be held. (7-1-97)

g. Building face rollers is a specialized form of guide roller designed to contact a portion of the outer face wall structure of the building, and to assist in stabilizing the operator's platform during vertical travel. (7-1-97)

h. Building Maintenance are operations such as window cleaning, caulking, metal polishing, reglazing, and general maintenance on building surfaces. (7-1-97)

i. Cable is a conductor, or group of conductors, enclosed in a weatherproof sheath, that may be used to supply electrical power and/or control current for equipment or to provide voice communication circuits. (7-1-97)

j. Carriage is a wheeled vehicle used for the horizontal movement and support of other equipment. (7-1-97)

k. Certification is a written, signed and dated statement confirming the performance of a requirement of this section. (7-1-97)

l. Combination Cable is a cable having both steel structural members capable of supporting the platform, and copper or other electrical conductors insulated from each other and the structural members by nonconductive barriers. (7-1-97)
m. Continuous Pressure is operation by means of buttons or switches, any one of which may be used to control the movement of the working platform or roof car, only as long as the button or switch is manually maintained in the actuating position. (7-1-97)

n. Control is a system governing starting, stopping, direction, acceleration, speed, and retardation of moving members. (7-1-97)

o. Controller. A device or group of devices usually contained in a single enclosure, which serves to control in some predetermined manner the apparatus to which it is connected. (7-1-97)

p. Davit is a device, used singly or in pairs, for suspending a powered platform from work, storage, and rigging locations on the building being serviced. Unlike outriggers, a davit reacts its operating load into single roof socket or carriage attachment. (7-1-97)

q. Design Factor is the ratio of the rated strength of the suspension wire rope to the rated working load, and shall be calculated using the following formula:

\[
F = \frac{S(N)}{W}
\]

Where: 
- \(F\) = Design Factor
- \(S\) = Manufacturer's Rated Strength of one Suspension Rope
- \(N\) = Number of Suspension Ropes Under Load
- \(W\) = Rated Working Load on all Ropes at Any Point of Travel

(7-1-97)

r. Electrical ground. A conducting connection between an electrical circuit or equipment and the earth, or some conducting body which serves in place of the earth. (7-1-97)

s. Ground rigging is a method of suspending a work platform starting from a safe surface to a point of suspension above the safe surface. (7-1-97)

t. Ground rigged davit is a davit which cannot be used to raise a suspended working platform above the building face being serviced. (7-1-97)

u. Guide button is a building face anchor designed to engage a guide track mounted on a platform. (7-1-97)

v. Guide roller is a rotating, bearing-mounted, generally cylindrical member, operating separately or as part of a guide shoe assembly, attached to the platform, and providing rolling contact with building guideways or other building contact members. (7-1-97)

w. Guide shoe is an assembly of rollers, slide members, or the equivalent, attached as a unit to the operator's platform, and designed to engage with the building members provided for the vertical guidance of the operator's platform. (7-1-97)
x. Hoisting machine is a device intended to raise and lower a suspended or support unit. (7-1-97)
y. Hoist rated load is the hoist manufacturer's maximum allowable operating load. (7-1-97)
z. Installation is all the equipment and all affected parts of a building which are associated with the performance of building maintenance using powered platforms. (7-1-97)

aa. Interlock is a device actuated by the operation of some other device with which it is directly associated, to govern succeeding operations of the same or allied devices. (7-1-97)

bb. Intermittent stabilization is a method of platform stabilization in which the angulated suspension wire rope(s) are secured to regularly spaced building anchors. (7-1-97)

cc. Lanyard is a flexible line of rope, wire rope, or strap which is used to secure the body harness to a deceleration device, lifeline, or anchorage. (7-1-97)

dd. Lifeline is a component of fall protection consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage. (7-1-97)

ee. Live load is the total static weight of workers, tools, parts, and supplies that the equipment is designed to support. (7-1-97)

ff. Obstruction Detector is a control that will stop the suspended or supported unit in the direction of travel if an obstruction is encountered, and will allow the unit to move only in a direction away from the obstruction. (7-1-97)

gg. Operating Device is a push-button, lever, or other manual device used to actuate a control. (7-1-97)

hh. Outrigger is a device, used singly or in pairs, for suspending a working platform from work, storage, and rigging locations on the building being serviced. Unlike davits, an outrigger reacts its operating moment load as at least two (2) opposing vertical components acting into two or more distinct roof points and/or attachments. (7-1-97)

ii. Poured Socket is a method of providing wire rope terminations in which the ends of the rope are held in a tapered socket by means of poured spelter or resins. (7-1-97)

jj. Power Platform is equipment to provide access to the exterior of a building for maintenance, consisting of a suspended power-operated working platform, a roof car, or other suspension means, and the requisite operating and control devices. (7-1-97)

kk. Primary Brake is a break designed to be applied automatically whenever power to the prime mover is interrupted or disconnected. (7-1-97)
II. Prime Mover is the source of mechanical power for a machine. (7-1-97)

mm. Rated Load is the combined weight of employees, tools, equivalent, and other material which the working platform is designed and installed to lift. (7-1-97)

nn. Rated Strength is the strength of wire rope, as designated by its manufacturer or vendor, based on standard testing procedures or acceptable engineering design practices. (7-1-97)

oo. Rated Working Load is the combined static weight of men, materials, and suspended or supported equipment. (7-1-97)

pp. Relay, Direction is an electrically energized conductor responsive to an initiating control circuit, which in turn causes a moving member to travel in a particular direction. (7-1-97)

qq. Relay, Potential for Vertical Travel is an electrically energized conductor responsive to initiating control circuit, which in turn controls the operation of a moving member in both directions. This relay usually operates in conjunction with direction relays, as covered under the definition "relay, direction". (7-1-97)

rr. Roof Car is a structure for the suspension of a working platform, providing for its horizontal movement to working positions. (7-1-97)

ss. Roof-Powered Platform is a powered platform having the raising and lowering mechanism located on a roof car. (7-1-97)

tt. Roofed Rigged Davit is used to raise the suspended working platform above the building face being serviced. This type of davit can also be used to raised a suspended working platform which has been ground rigged. (7-1-97)

uu. Rope is the equipment used to suspend a component of an equipment installation, i.e., wire rope. (7-1-97)

vv. Safe Surface is a horizontal surface intended to be occupied by personnel which is so protected by a fall protection system that it can be reasonably assured that the occupants will be protected against falls. (7-1-97)

ww. Secondary Brake is a brake designed to arrest the descent of the suspended or supported equipment in the event of an over speed condition. (7-1-97)

xx. Self-powered platform is a powered platform having the raising and lowering mechanism located on the working platform. (7-1-97)

yy. Speed Reducer is a positive type speed reducing machine. (7-1-97)

zz. Safety Factor is the ratio of the stabilizing moment to the overturning moment. (7-1-97)
aaa. Stabilizer Tie is a flexible line connecting the building anchor and suspension wire rope supporting the platform. (7-1-97)

bbb. Supported Equipment is building maintenance equipment that is held or moved to its working position by means of attachment directly to the building or extensions of the building being maintained. (7-1-97)

ccc. Suspended Equipment is building maintenance equipment that is suspended and raised or lowered to its working position by means of ropes or combination cables attached to some anchorage above the equipment. (7-1-97)

ddd. Suspended Scaffold (swinging scaffold) is a scaffold supported on wire ropes or other ropes, used for work on, or for providing access to, vertical sides of structures on a temporary basis. Such scaffold is not designed for use on a specific structure or group of structures. (7-1-97)

ee. Tail Line is the non-supporting end of the wire rope used to suspend the platform. (7-1-97)

fff. Tie-In Guides is the suspended or supported unit during its vertical travel on the face of the building. (7-1-97)

ggg. Traction Hoist is a type of hoisting machine that does not accumulate the suspension wire rope on the hoisting drum or sheave, and is designed to raise and lower a suspended load by the application of friction forces between the suspension wire rope and drum or sheave. (7-1-97)

hhh. Transportable Outriggers are outriggers designed to be moved from one work location to another. (7-1-97)

iii. Traveling cable is a cable made up of electrical or communication conductors or both, and providing electrical connection between the working platform and the roof car or other fixed point. (7-1-97)

jjj. Trolley Carriage is a carriage suspended from an overhead track structure. (7-1-97)

kkk. Weatherproof is equipment so constructed or protected that exposure to the weather will not interfere with its proper operation. (7-1-97)

lll. Winding Drum Hoist is a type of hoisting machine that accumulates the suspension wire rope on the hoisting drum. (7-1-97)

mmm. Working Platform is the suspended structure arranged for vertical travel which provides access to the exterior of the building or structure. (7-1-97)

nnn. Wrap is one complete turn of the suspension wire rope around the surface of a hoist drum. (7-1-97)
Yield Point is the stress at which a material exhibits a permanent set of zero-point-two (0.2) percent. (7-1-97)

Zinced Fastenings are a method of providing wire rope attachments in which the splayed or fanned wire ends are held in a tapered socket by means of poured molten zinc. (7-1-97)

**03. General Requirements:** (7-1-97)

a. This section applies to all powered platforms installed subsequent to August 27, 1971. (7-1-97)

b. All new powered platforms for exterior building maintenance purchased and used after August 27, 1971 shall meet all of the design, construction, installation, and maintenance requirements of Part II and III of the American National Standard Safety Requirements for Powered Platforms for Exterior Building Maintenance ANSI A 120.1 and of these subsections. (Reference shall be made to appropriate parts of ANSI A120.1 for detail specifications for equipment and special installations.) (7-1-97)

c. The requirements of this section applies only to electric powered platforms. It is not the intent of this section to prohibit the use of other types of power. Installation of powered platforms using other types of power is permitted, provided such platforms have adequate protective devices for the type of power used, and otherwise provide for reasonable safety of life and limb to users of equipment and to others who may be exposed. (7-1-97)

d. Building owners with powered platforms shall inform employers and/or their employees before each use in writing that the installation meets the requirements of this section and for employees not covered by this standard 29 CFR 1910.66. (7-1-97)

e. Building owners with powered platforms shall inform employers and/or their employees in writing that the installation has been inspected, tested, and maintained in compliance with the requirements of this section and for employees not covered by this standard 29 CFR 1910.66. (7-1-97)

f. The employer shall not permit employees to use a powered platform prior to receiving the assurances required in sub-sections 074.03.d. and 074.03.e. of this section. (7-1-97)

**04. Powered Platform Installations:** (7-1-97)

a. This sub-section applies to affected parts of buildings which utilize working platforms for building maintenance. (7-1-97)

b. Structural supports, tie downs, tie in guides, anchoring devices, and any affected parts of the building included in the installation shall be designed by or under the direction of an Idaho licensed engineer experienced in such design. (7-1-97)

c. Exterior installations shall be capable of withstanding prevailing climatic conditions. (7-1-97)
d. The building installation shall provide safe access to, and egress from, the equipment and sufficient space to conduct necessary maintenance of the equipment. (7-1-97)

e. The affected parts of the building shall have the capability of sustained all the loads imposed by the equipment. (7-1-97)

f. The effected parts of the building shall be designed so as to allow the equipment to be used without exposing employees to a hazardous condition. (7-1-97)

g. The exterior of each building shall be provided with tie in guides unless the following conditions are met: (7-1-97)

h. When angulated rope is employed, tie in guides may be eliminated for not more than seventy-five (75) feet of the uppermost elevation of the building, if infeasible due to exterior building design, provided an angulation force of at least ten (10) pounds is maintained under all conditions of loading. (7-1-97)

i. Tie in guides required in this sub-section may be eliminated if an intermittent stabilization system is used. The system shall keep the equipment in continuous contact with the building facade, and shall prevent sudden horizontal movement of the platform. The system may be used together with continuous positive building guide systems using tie in guides on the same building, provided the requirements for each system are met. The maximum vertical interval between building anchors shall be three (3) floors or fifty (50) feet whichever is less. Building anchors shall be located vertically so that attachment of the stabilizer ties will not cause the platform suspension ropes to angulate the platform horizontally across the face of the building. The anchors shall be positioned horizontally on the building face as to be symmetrical about the platform suspension ropes. Building anchors shall be easily visible to employees and shall allow a stabilizer tie attachment for each of the platform suspension ropes at each vertical interval. If more than two suspension ropes are used on a platform, only the two building side suspension ropes at the platform ends shall require a stabilizer attachment. Building anchors which extended beyond the face of the building shall be free of sharp edges or points. Where cables, suspension wire ropes and lifelines may be in contact with the building face, external building anchors shall not interfere with their handling or operation. The intermittent stabilization system building anchors and components shall be capable of sustaining without failure at least four (4) times the maximum anticipated load applied or transmitted to the components and anchors. The minimum design wind load for each anchor shall be three-hundred (300) pounds, if two anchors share the wind load. The building anchors and stabilizer ties shall be capable of sustaining anticipated horizontal and vertical loads from winds specified for roof storage design which may act on the platform and wire ropes if the platform is stranded on a building face. If the building anchors have different spacing than the suspension wire rope or if the building requires different suspension spacing on one (1) platform, one (1) building anchor and stabilizer tie shall be capable of sustaining the wind loads. (7-1-97)

j. Tie in guides required in this subsection may be eliminated if a button guide stabilization system is used. Guide buttons shall be coordinated with platform mounted equipment. Guide buttons shall be located horizontally on the building face so as to allow engagement of each of
the guide tracks mounted on the platform. Guide buttons shall be located in vertical rows on the building face for proper engagement of the guide tracks mounted on the platform. Two (2) guide buttons shall engage each guide track at all times except for the initial engagement. Guide buttons which extend beyond the face of the building shall be free of sharp edges or points. Where cables, ropes, and lifelines may be in contact with the building face, guide buttons shall not interfere with their handling or operation. Guide buttons, connections and seals shall be capable of sustaining without damage at least the weight of the platform, or provision shall be made in the guide tracks or guide track connectors to prevent the platform and its attachments from transmitting the weight of the platform to the guide buttons, connections and seals. In either case, the minimum design load shall be three-hundred (300) pounds per building anchor. (7-1-97)

k. Tie in guides required in this subsection may be eliminated if a system utilizing angulated roping and building face rollers are used. The system shall keep the equipment in continuous contact with the building facade, and shall prevent sudden horizontal movement of the platform. This system is acceptable only where the suspended portion of the equipment in use does not exceed one-hundred-thirty (130) feet above a safe surface or ground level, and where the platform maintains no less than ten (10) pounds angulation force on the building facade. (7-1-97)

l. Tie in guides for building interiors (atriums) may be eliminated when an Idaho licensed engineer determines that an alternative stabilization system including systems in sub-sections 075.09.i., 075.09.j., and 075.09.k. of this section, or a platform tie off at each work station will provide equivalent safety. (7-1-97)

m. Employees working on roofs while performing building maintenance shall be protected by a perimeter guarding system which meets the requirements of section 074 of this standard. (7-1-97)

n. The perimeter guard shall not be more than six (6) inches inboard of the inside face of a barrier, i.e. the parapet wall, or roof edge curb of the building being serviced; however, the perimeter guard location shall not exceed an eighteen (18) inch setback from the exterior building face. (7-1-97)

o. Operational areas for trackless type equipment shall be provided with structural stops, such as curbs, to prevent equipment from traveling outside its intended travel areas and to prevent a crushing or shearing hazard. (7-1-97)

p. Means shall be provided to traverse all carriages and their suspended equipment to a safe area for maintenance and storage. (7-1-97)

q. An elevated track system which is located four (4) feet or more above a safe surface, and traversed by carriage supported equipment, shall be proved with a walkway and guardrail system; or the working platform shall be capable of being lowered, as part of its normal operation, to the lower safe surface for access and egress of the personnel and shall be provided with a safe means of access and egress to the lower safe surface. (7-1-97)
r. Imbedded tie down anchors, fasteners, and effected structures shall be resistant to corrosion. (7-1-97)

s. Hanging lifelines and all cables not in tension shall be stabilized at each two-hundred (200) foot interval of vertical travel of the working platform beyond an initial two-hundred (200) foot distance. Hanging cables, other than suspended wire ropes, which are in constant tension shall be stabilized when the vertical travel exceeds an initial six-hundred (600) foot distance, and at further intervals of six-hundred (600) feet or less. (7-1-97)

t. A written emergency action plan shall be developed and implemented for each kind of working platform operation. This plan shall explain the emergency procedures which are to be followed in the event of a power failure, equipment failure or other emergencies which may be encountered. The plan shall also explain that employees inform themselves about the building emergency escape routes, procedures, and alarm systems before operating a platform. Upon initial assignment and whenever the plan is changed the employer shall review with each employee those parts of the plan which the employee must know to protect themselves in the event of an emergency. (7-1-97)

u. Repairs or major maintenance of those building portions that provide primary support for the suspended equipment shall not affect the capability of the building to meet the requirements of this section. (7-1-97)

v. General building electrical installations shall comply with section 150 of this standard. (7-1-97)

w. The building electrical wiring shall be of such capacity that when full load is applied to the equipment power circuit not more than a five (5) percent drop from building service vault voltage shall occur at any power circuit outlet used by equipment regulated by this section. (7-1-97)

x. The equipment power circuit shall be an independent electrical circuit that shall remain separate from all other equipment within or on the building, other than power circuits used for hand tools that will be used in conjunction with the equipment. If the building is provided with an emergency power system, the powered platform power circuit shall also be connected to this system. (7-1-97)

y. The power circuit shall be provided with a disconnect switch that can be locked in the "OFF" and "ON" positions. The switch shall be conveniently located with respect to the primary operating area of the powered platform to allow the operators of the equipment access to the switch. (7-1-97)

z. The disconnect switch for the power circuit shall be locked in the "ON" position when the powered platform is in use. (7-1-97)

aa. An effective two (2) way voice communication system shall be provided between the equipment operators and persons stationed within the building being serviced. The
communications facility shall be operable and shall be manned at all times by persons stationed within the building or building complex whenever the powered platform is being used. (7-1-97)

05. Powered Platform Equipment: (7-1-97)

a. Equipment shall be designed by or under the direction of an Idaho licensed engineer experienced in such design. (7-1-97)

b. The design shall provide for a minimum live load of two-hundred-fifty (250) pounds for each occupant of a suspended or supported platform. (7-1-97)

c. Powered platforms that are exposed to wind when not in service shall be designed to withstand forces generated by winds of at least one-hundred (100) miles per hour at thirty (30) feet above grade. (7-1-97)

d. Powered platforms that are exposed to wind when in service shall be designed to withstand forces generated by winds of at least fifty (50) miles per hour for all elevations. (7-1-97)

e. Bolted connections shall be self locking or shall otherwise be secured to prevent loss of the connections by vibration. (7-1-97)

f. Elevated building maintenance equipment shall be suspended by a carriage, outriggers, davits, or an equivalent method. (7-1-97)

g. Carriages used for suspension of elevated building maintenance equipment shall comply with the following: the horizontal movement of a carriage shall be controlled so as to ensure its safe movement and allow accurate positioning of the platform for vertical travel or storage; powered carriages shall not exceed a traversing speed of fifty (50) feet per minute; the initiation of a traversing movement for a manually propelled carriage on a smooth level surface shall not require a person to exert a horizontal force greater than forty (40) pounds; structural stops and curbs shall be provided to prevent the traversing of the carriage beyond its designed limits of travel. (7-1-97)

h. Traversing controls for a powered carriage shall be of a continuous pressure weatherproof type; multiple controls when provided shall be arranged to permit operation from only one (1) control station at a time; an emergency stop device shall be provided on each end of a powered carriage for interrupting power to the carriage drive motors. (7-1-97)

i. The operating control(s) shall be so connected that in the case of suspended equipment traversing of a carriage is not possible until the suspended portion of the equipment is located at its uppermost designated position for traversing, and is free of contact with the face of the building or building guides. In addition, all protective devices and interlocks are to be in the proper position to allow traversing of the carriage. (7-1-97)

j. Stability for underfoot supported carriages shall be obtained by gravity, by an attachment to a structural support, or by a combination of gravity and structural support. The use of following
counterweights to achieve stability is prohibited. The stability factor against overturning shall not be less than two (2) for horizontal traversing of the carriage, including the effects of impact and wind. The carriages and their anchorages shall be capable of resisting accidental over tensioning of the wire ropes suspending the working platform, and this calculated value shall include the effect of one and one-half (1 1/2) times the stall capacity of the hoist motor. All parts of the installation shall be capable of withstanding without damage to any part of the installation the forces resulting from the stall load of the hoist and one-half (1/2) the wind load. Roof carriages which rely on having tie down devices secured to the building to develop the required stability against overturning shall be provided with an interlock which will prevent vertical platform movement unless the tie down is engaged. (7-1-97)

k. An automatically applied braking or locking system, or equivalent, shall be provided that will prevent unintentional traversing of power traversed or power assisted carriages. (7-1-97)

l. A manual or automatic braking or locking system or equivalent, shall be provided that will prevent unintentional traversing of manually propelled carriages. (7-1-97)

m. A means to lock out the power supply for the carriage shall be provided. (7-1-97)

n. Safe access to and egress from the carriage shall be provided from a safe surface. If the carriage traverses an elevated area, any operating area on the carriage shall be protected by a guardrail system in compliance with the provisions of this sub-section. Any access gate shall be self closing and self latching, or provided with an interlock. (7-1-97)

o. Each carriage work station position shall be identified by location markings and/or position indicators. (7-1-97)

p. The motors shall stall if the load on the hoist motors is at any time in excess of three (3) times that necessary for lifting the working platform with its rated load. (7-1-97)

q. Transported outriggers may be used as a method of suspension for ground rigged working platforms where the point of suspension does not exceed three-hundred (300) feet above a safe surface. Tie in guide system(s) shall be provided which meet the requirements of this section. (7-1-97)

r. Transportable outriggers shall be used only with self powered, ground rigged working platforms. (7-1-97)

s. Each transporting outrigger shall be secured with a tie down to a verified anchorage on the building during the entire period of its use. The anchorage shall be designed to have a stability factor of not less than four against overturning or upsetting of the outrigger. (7-1-97)

t. Access to and egress from the working platform shall be from and to a safe surface below the point of suspension. (7-1-97)
u. Each transportable outrigger shall be designed for lateral stability to prevent roll over in the event an accidental lateral load is applied to the outrigger. The accidental lateral load to be considered in this design shall be not less than seventy (70) percent of the rated load of the hoist. (7-1-97)

v. Each transportable outrigger shall be designed to support an ultimate load of not less than four (4) times the rated load of the hoist. (7-1-97)

w. A transportable outrigger shall be tied back to a verified anchorage on the building with a rope equivalent in strength to the suspension rope. (7-1-97)

x. The tie back rope shall be installed parallel to the centerline of the outrigger. (7-1-97)

y. Every davit installation, fixed or transportable, rotatable or non-rotatable shall be designed and installed to ensure that it has a stability factor against overturning of not less than four. (7-1-97)

z. The following requirements apply to roof rigged davit systems: access to and egress from the working platform shall be from a safe surface. Access or egress shall not require persons to climb over a building's parapet or guard railing; and the working platform shall be provided with wheels, casters, or a carriage for traversing horizontally. (7-1-97)

aa. The following requirements apply to ground rigged davit systems: (7-1-97)

i. The point of suspension shall not exceed three-hundred (300) feet above a safe surface; (7-1-97)

ii. Guide system(s) shall be provided which meet the requirements of this section; (7-1-97)

iii. Access and egress to and from the working platform shall only be from a safe surface below the point of suspension. (7-1-97)

bb. A rotating davit shall not require a horizontal force in excess of forty (40) pounds per person to initiate a rotating movement. (7-1-97)

cc. The following requirements shall apply to transportable davits: (7-1-97)

i. A davit or part of a davit weighing more than eighty (80) pounds shall be provided with a means for its transport, which shall keep the center of gravity of the davit at or below thirty-six (36) inches above the safe surface during transport; (7-1-97)

ii. A davit shall be provided with a pivoting socket or with a base that will allow the insertion or removal of a davit at a position of not more than thirty-five (35) degrees above the horizontal, with the complete davit inboard of the building face being serviced; (7-1-97)

iii. Means shall be provided to lock the davit to its socket or base before it is used to suspend the platform. (7-1-97)
06. Hoisting Machines: (7-1-97)

a. Raising and lowering of suspended or supported equipment shall be performed only by a hoisting machine. (7-1-97)

b. Each hoisting machine shall be capable of arresting any over speed descent of the load. (7-1-97)

c. Each hoisting machine shall be powered only by air, electric, or hydraulic sources. (7-1-97)

d. Flammable liquids shall not be carried on the working platform. (7-1-97)

e. Each hoisting machine shall be capable of raising or lowering one-hundred-twenty-five (125) percent of the rated load of the hoist. (7-1-97)

f. Moving parts shall be enclosed or guarded in compliance with sub-section 250.04 of this standard. (7-1-97)

g. Winding drums, traction drums, and sheaves and directional sheaves used in conjunction with hoisting machines shall be compatible with, and sized for, the wire rope used. (7-1-97)

h. Each winding drum shall be provided with a positive means of attaching the wire rope to the drum. The attachment shall be capable of developing at least four (4) times the rated load of the hoist. (7-1-97)

i. Each hoisting machine shall be provided with a primary brake and at least one (1) independent secondary brake, each capable of stopping and holding not less than one-hundred-twenty-five (125) percent of the lifting capacity of the hoist. (7-1-97)

j. The primary brake shall be directly connected to the drive train of the hoisting machine, and shall not be connected through belts, chains, clutches, or set screw type devices. The brake shall automatically set when power to the prime mover is interrupted. (7-1-97)

k. The secondary brake shall be an automatic emergency type of brake that, if actuated during each stopping cycle, shall not engage before the hoist is stopped by the primary brake. (7-1-97)

l. When a secondary brake is actuated, it shall stop and hold the platform within a vertical distance of twenty-four (24) inches. (7-1-97)

m. Any component of a hoisting machine which requires lubrication for its protection and proper functioning shall be provided with a means for that lubrication to be applied. (7-1-97)

07. Suspended Equipment: (7-1-97)
a. Each suspended unit component, except suspension ropes and guardrail systems, shall be capable of supporting, without failure, at least four (4) times the maximum intended live load applied or transmitted to that component. (7-1-97)

b. Each suspended unit component shall be constructed of materials that will withstand anticipated weather conditions. (7-1-97)

c. Each suspended unit shall be provided with a load rating plate, conspicuously located, stating the unit weight and rated load of the suspended unit. (7-1-97)

d. When the suspension points on a suspended unit are not at the unit ends, the unit shall be capable of remaining continuously stable under all conditions of use and position of the live load, and shall maintain at least a one-point-five (1.5) to one (1) stability factor against unit upset. (7-1-97)

e. Guide rollers, guide shoes, or building face rollers shall be provided, and shall compensate for variations in building dimensions and for minor horizontal out of level variations of each suspended unit. (7-1-97)

f. Each working platform of a suspended unit shall be secured to the building facade by one or more of the following methods, or by an equivalent method: (7-1-97)

i. Continuous engagement to building anchors; (7-1-97)

ii. Intermittent engagement to building anchors; (7-1-97)

iii. Button guide engagement; (7-1-97)

iv. Angulated roping and building face rollers as provide for in this section. (7-1-97)

g. Each working platform of a suspended unit shall be provided with a guardrail on all sides which shall meet the following requirements: (7-1-97)

i. The system shall consist of a top guardrail, midrail, and a toe-board; (7-1-97)

ii. The top guardrail shall not be less than thirty-six (36) inches high and shall be able to withstand a one-hundred (100) pound force in any downward or outward direction; (7-1-97)

iii. The midrail shall be able to withstand at least seventy-five (75) pound force in any downward or outward direction; (7-1-97)

iv. The areas between the guardrail and toe board on the ends and outboard side, and the area between the guardrail and toeboard on the inboard side, shall be closed with a material that is capable of withstanding a load of one-hundred (100) pounds applied horizontally over any area of one (1) square foot. The material shall have all openings small enough to reject passage of life lines and potential falling object which may be hazardous to persons below; (7-1-97)
v. Toe-boards shall be capable of withstanding, without failure, a force of at least fifty (50) pounds applied in any downward or horizontal direction at any point along the toeboard; (7-1-97)

vi. Toe-boards shall be four (4) inches minimum in length from their top edge to the level of the platform floor; (7-1-97)

vii. Toe-boards shall be securely fastened in place at the outermost edge of the platform and have no more than one-half (1/2) inch clearance above the platform floor; (7-1-97)

viii. Toe-boards shall be solid or with an opening not over one (1) inch in the greatest dimension. (7-1-97)

08. Two and Four Point Suspended Working Platforms: (7-1-97)

a. Two (2) and four (4) point suspended working platforms shall not be less than twenty-four (24) inches wide and shall be provided with a minimum of a twelve (12) inch wide passage at or past any obstruction on the platform. (7-1-97)

b. The flooring shall be of a slip resistant type and shall contain no opening that would allow the passage of life lines, cables, and other potential falling objects. If a larger opening is provided, it shall be protected by placing a material under the opening which shall prevent the passage of life lines, cables and potential falling objects. (7-1-97)

c. The working platform shall be provided with a means of suspension that will restrict the platforms inboard to outboard roll about its longitudinal axis to a maximum of fifteen (15) degrees from a horizontal plane when moving the live load from the inboard to the outboard side of the platform. (7-1-97)

d. Any cable suspended from above the platform shall be provided with a means for storage to prevent accumulation of the cable on the floor of the platform. (7-1-97)

e. All operating controls for the vertical travel of the platform shall be of the continuous pressure type, and shall be located on the platform. (7-1-97)

f. Each operating station of every working platform shall be provided with a means of interrupting the power supply to all hoist motors to stop any further powered ascent or decent of the platform. (7-1-97)

g. The maximum rated speed of the platform shall not exceed fifty (50) feet per minute with single speed hoists, or seventy-five (75) feet per minute with multi speed hoists. (7-1-97)

h. Provisions shall be made for securing all tools, water tanks, and other accessories to prevent their movement or accumulation on the floor of the platform. (7-1-97)

i. Portable fire extinguishers shall be provided and securely attached on all working platforms. (7-1-97)
j. Access to and egress from a working platform, except for those that land directly on a safe surface, shall be provided by stairs, ladders, platforms and runways conforming to this standard. Access gates shall be self closing and self latching. (7-1-97)

k. The means of access to or egress from a working platform which is forty-eight (48) inches or more above a safe surface shall be provided with a guardrail system or ladder that conform to the provisions of this standard. (7-1-97)

l. The platform shall be provided with a secondary wire rope suspension system if the platform contains overhead structures which restrict the emergency egress of employees. A horizontal lifeline or a direct connection anchorage shall be provided, as part of a fall arrest system which meets the requirements of section 074 of this standard. (7-1-97)

m. A vertical lifeline shall be provided as part of a fall arrest system which meets the requirements for fall protection for each employee on a working platform suspended by two (2) or more wire ropes, if the failure of one (1) wire rope or suspension attachment will cause the platform to upset. If a secondary wire rope or suspension is used, vertical lifelines are not required for the fall arrest system, provided that each employee is attached to a horizontal lifeline anchored to the platform. (7-1-97)

n. An emergency electric operating device shall be provided on rooftop powered platforms near the hoisting machine for use in the event of failure of the normal operating device located on the working platform, or failure of the cable connected to the platform. The emergency electric operating device shall be mounted in a secured compartment, and the compartment shall be labeled with instructions for use. A means for opening the compartment shall be mounted in a break glass receptacle located near the emergency electric operating device or in an equivalent secure and accessible location. (7-1-97)

09. Single Point Suspended Working Platforms: (7-1-97)

a. The requirements of sub-sections 075.08.a. through 075.08.m of this section shall also apply to a single point working platform. (7-1-97)

b. Each single point suspended platform shall be provided with a secondary wire rope suspension system, which will prevent the working platform from falling should there be a failure of the primary means of support, or if the platform contains overhead structures which restrict the egress of the employees. A horizontal life line or a direct connection anchorage shall be provided, as part of a fall arrest system which meets the requirements of section 074 of this standard, for each employee on the platform. (7-1-97)

10. Ground Rigged Working Platforms: (7-1-97)

a. Ground rigged working platforms shall comply with all the requirements of sub-sections 075.08.a. through 075.08.m of this section. (7-1-97)
After each day's use, the power supply within the building shall be disconnected from a ground rigged working platform, and the platform shall be either disengaged from its suspension points or secured and stored at grade. (7-1-97)

**11. Intermittently Stabilized Platforms:** (7-1-97)

a. Intermittently stabilized working platforms shall comply with all the requirements of subsections 075.08.a. through 075.08.m of this section. (7-1-97)

b. Each stabilizer tie shall be equipped with a quick connect - quick disconnect device which cannot be accidentally disengaged, for attachment to the building anchor, and shall be resistant to adverse environmental conditions. (7-1-97)

c. The platform shall be provided with a stopping device that will interrupt the hoist power supply in the event the platform contacts a stabilizer tie during its ascent. (7-1-97)

d. Building face rollers shall not be placed at the anchor setting if exterior anchors are used on the building face. (7-1-97)

e. Stabilizer ties used on intermittently stabilized platforms shall allow for the specific attachment length needed to effect the predetermined angulation of the suspended wire rope. The specific attachment length shall be maintained at all building anchor locations. (7-1-97)

f. The platform shall be in continuous contact with the face of the building during ascent and descent. (7-1-97)

g. The attachment and removal of stabilizer ties shall not require the horizontal movement of the platform. (7-1-97)

h. The platform mounted equipment and its suspension wire ropes shall not be physically damaged by the loads from the stabilizer tie or its building anchor. The platform, platform mounted equipment and wire ropes shall be able to withstand a load that is at least twice the ultimate strength of the stabilizer tie. (7-1-97)

**12. Button Guide Stabilized Platforms:** (7-1-97)

a. Button guide stabilized working platforms shall comply with all the requirements of subsections 075.08.a. through 075.08.m of this section. (7-1-97)

b. Each guide track on the platform shall engage a minimum of two (2) guide buttons during any vertical travel of the platform following the initial button engagement. (7-1-97)

c. Each guide track on a platform that is part of a roof rigged system shall be provided with a storage position on the platform. (7-1-97)
d. Each guide track on the platform shall be sufficiently maneuverable by platform occupants to permit easy engagement of the guide buttons, and easy movement into and out of its storage position on the platform. (7-1-97)

e. Two (2) guide tracks shall be mounted on the platform and shall provide continuous contact with the building face. (7-1-97)

f. The load carrying components of the button guide stabilization system which transmit the load into the platform shall be capable of supporting the weight of the platform, or provision shall be made in the guide track connectors or platform attachments to prevent the weight of the platform from being transmitted to the platform attachments. (7-1-97)

13. Supported Equipment: (7-1-97)

a. Supported equipment shall maintain a vertical position in respect to the face of the building by means other than friction. (7-1-97)

b. Cog wheels or equivalent means shall be incorporated to provide climbing traction between the supported equipment and the building guides. Additional guide wheels or shoes shall be incorporated as may be necessary to ensure that the drive wheels are continuously held in positive engagement with the building guides. (7-1-97)

c. Launch guide mullions indexed to the building guides and retained in alignment with the building guides shall be used to align drive wheels entering the building guides. (7-1-97)

d. Manned platforms used on supported equipment shall comply with the requirements of sub-sections 075.08.a., 075.08.b., and 075.08.d. through 075.08.k of this section. (7-1-97)

14. Suspension Wire Ropes and Rope Connections: (7-1-97)

a. Each specific installation shall use suspension wire ropes or combination cable and connections meeting the specification recommendation by the manufacture of the hoisting machine used. Connections shall be capable of developing at least eighty (80) percent of the rated breaking strength of the wire rope. (7-1-97)

b. Each suspension rope shall have a design factor of at least ten (10). (7-1-97)

c. Suspension wire rope grade shall be at least improved plow steel or equivalent. (7-1-97)

d. Suspension wire ropes shall be sized to conform with the required design factor, but shall not be less than five-sixteenths (5/16) inch in diameter. (7-1-97)

e. No more than one (1) reverse bend in six (6) wire rope lays shall be permitted. (7-1-97)

f. A corrosion resistant tag shall be securely attached to one (1) of the wire rope fastenings when a suspension wire rope is to be used at a specific location and will remain in that location. This
tag shall bear the following wire rope data: the diameter (inches and/or mm); construction classification; whether non-preformed or performed; the grade of material; the manufacturer's rated strength; the manufacturer's name; the month and year the ropes were installed; and the name of the person or company which installed the ropes. (7-1-97)

g. A new tag shall be installed at each rope renewal. (7-1-97)

h. The original tag shall be stamped with the date of the resocketing, or the original tag shall be retained and a supplemental tag shall be provided when ropes are resocketed. The supplemental tag shall show the date of resocketing and the name of the person or company that resocketed the rope. (7-1-97)

i. Winding drum type hoists shall contain at least three (3) raps of the suspension wire rope on the drum when the suspended unit has reached the lowest possible point of its vertical travel. (7-1-97)

j. Traction drum and sheave type hoists shall be provided with a wire rope of sufficient length to reach the lowest possible point of vertical travel of the suspended unit, and an additional length of the wire rope of at least four (4) feet. (7-1-97)

k. The lengthening or repairing of suspension wire ropes is prohibited. (7-1-97)

l. Babbitted fastenings for suspension wire rope are prohibited. (7-1-97)

15. Control Circuits, Power Circuits, and Their Components: (7-1-97)

a. Electrical wiring and equipment shall comply with section 150 of this standard, except as otherwise required by this section. (7-1-97)

b. Electrical runway conductor systems shall be of a type designed for use in exterior locations, and shall be located so that they do not come into contact with accumulated snow or water. (7-1-97)

c. Cables shall be protected against damage resulting from over tensioning or from other causes. (7-1-97)

d. Devices shall be included in the control system for the equipment which will provide protection against electrical overloads, three (3) phase reversal and phase failure. The control system shall have a separate method, independent of the direction control circuit, for breaking the power circuit in case of an emergency or malfunction. (7-1-97)

e. Suspended or supported equipment shall have a control system which will require the operator of the equipment to follow predetermined procedures. (7-1-97)

f. On installations where the carriage does not have a stability of at least four (4) against overturning, electrical contact(s) shall be provided and so connected that the operating devices
for the suspended or supported equipment shall be operative only when the carriage is located and mechanically retained at an established operating point. (7-1-97)

g. Overload protection shall be provided in the hoisting or suspension system to protect against the equipment operating in the "UP" direction with a load in excess of one-hundred-twenty-five (125) percent of the rated load of the platform. (7-1-97)

h. An automatic detector shall be provided for each suspension point that will interrupt power to all hoisting motors for travel in the "DOWN" direction, and apply the primary brakes if any suspension wire rope becomes slack. A continuous pressure rigging bypass switch designed for use during rigging is permitted. This switch shall only be used during rigging. (7-1-97)

i. Upper and lower directional switches designed to prevent the travel of suspended units beyond safe upward and downward levels shall be provided. (7-1-97)

j. Emergency stop switches shall be provided on remote controlled, roof powered manned platforms adjacent to each control station on the platform. (7-1-97)

k. Cables which are in constant tension shall have overload devices which will prevent the tension in the cable from interfering with the load limiting device required in sub-section 075.15.g of this section, or with the platform roll limiting device required in sub-section 075.15.h. of this section. The setting of these devices shall be coordinated with other overload settings at the time of design of the system, and shall be clearly indicated on or near the device. The device shall interrupt the equipment travel in the "DOWN" direction. (7-1-97)

16. Inspection and Tests: (7-1-97)

a. All completed building maintenance equipment installations shall be inspected and tested in the field before being placed in initial service to determine that all parts of the installation conform to applicable requirements of this standard, and that all safety and operating equipment is functioning as required. A similar inspection and test shall be made following any major alteration to an existing installation. No hoist in an installation shall be subjected to a load in excess of one-hundred-twenty-five (125) percent of its rated load. (7-1-97)

b. Related building supporting structures shall undergo periodic inspection by a competent person at intervals not exceeding twelve (12) months. (7-1-97)

c. All parts of the equipment including control systems shall be inspected, and where necessary, tested by a competent person at intervals specified by the manufacturer/supplier, but not to exceed twelve (12) months, to determine that they are in safe operating condition. Parts subject to wear, such as wire ropes, bearings, gears, and governors shall be inspected and/or tested to determine that they have not worn to such an extent as to affect the safe operation of the installation. (7-1-97)

d. The building owner shall keep a certification record of each inspection and test required under this sub-section. 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 representatives of the Department and by employers that may be required to use the equipment. (7-1-97)

e. Working platforms and their components shall be inspected by the employer for visible defects before every use and after each occurrence which could affect the platform's structural integrity. (7-1-97)

f. A maintenance inspection and, where necessary, a test shall be made of each platform installation every thirty (30) days, or where the work cycle is more than thirty (30) days such inspection and/or test shall be made prior to each work cycle. This inspection and test shall follow procedures recommended by the manufacture, and shall be made by a competent person. (7-1-97)

g. Governors and secondary brakes shall be inspected and tested at intervals specified by the manufacture/supplier but not to exceed every twelve (12) months. (7-1-97)

h. The results of the inspection and test shall confirm that the initiating device for the secondary braking system operates at the proper over speed. (7-1-97)

i. The results of the inspection and test shall confirm that the secondary brake is functioning properly. (7-1-97)

j. If any hoisting machine or initiating device for the secondary brake system is removed from the equipment for testing, all reinstalled and directly related components shall be reinspected prior to returning the equipment installed to service. (7-1-97)

k. Inspection of governors and secondary brakes shall be performed by a competent person. (7-1-97)

l. The secondary brake governor and actuation device shall be tested before each day's use. Where testing is not feasible, a visual inspection of the break shall be made instead to ensure that it is free to operate. (7-1-97)

m. Suspension wire rope shall be maintained and used in accordance with procedures recommended by the wire rope manufacturer. (7-1-97)

n. A thorough inspection of suspension wire ropes in service shall be made once a month. Suspension wire ropes that have been inactive for thirty (30) days or longer shall have a thorough inspection before they are placed into service. These thorough inspections of suspension wire ropes shall be performed by a competent person. (7-1-97)

o. Suspension wire rope shall be maintained and used in accordance with procedures recommended by the wire rope manufacturer. (7-1-97)
p. Suspension wire rope shall be inspected by a competent person for visible defects and gross
damage to the rope before every use after each occurrence which might affect the wire rope's
integrity. (7-1-97)

q. The need for replacement of a suspension wire rope shall be determined by inspection and
shall be based on the condition of the wire rope. Any of the following conditions or combination
of conditions will be cause for removal of the wire rope: (7-1-97)

i. Broken wires exceeding three (3) wires in one (1) strand or six (6) wires in one (1) rope lay;
(7-1-97)

ii. Distortion of rope structure such as would result from crushing or kinking; (7-1-97)

iii. Evidence of heat damage; (7-1-97)

iv. Evidence of rope deterioration from corrosion; (7-1-97)

v. A broken wire within eighteen (18) inches of end attachments; (7-1-97)

vi. Noticeable rusting and pitting; (7-1-97)

vii. Evidence of core failure (a lengthening of rope lay, protrusion of the rope core, and a
reduction in rope diameter suggests core failure); (7-1-97)

viii. More than one (1) valley break (broken wire); (7-1-97)

ix. Outer wire wear exceed one-third (1/3) of the original outer wire diameter; (7-1-97)

x. Any other condition which the competent person determines has significantly affected the
integrity of the rope. (7-1-97)

r. Before lowering personnel below the top elevation of the building, the hoist shall be tested
each day in the lifting direction with the intended load to make certain it has sufficient capacity
to raise the personnel back to the boarding level. (7-1-97)

17. Maintenance: (7-1-97)

a. All parts of the equipment affecting safe operating shall be maintained in proper working
order so that they may perform the functions for which they were intended. The equipment shall
be taken out of service when it is not in proper working order. (7-1-97)

b. Control or power conductors and relays shall be kept clean. (7-1-97)

c. All other parts shall be kept clean if their proper functioning would be affected by the presence
of dirt or other contaminants. (7-1-97)
d. Hoisting ropes utilizing poured socket fastenings shall be resocketed at the non-drum ends at intervals not exceeding twenty-four (24) months. In resocketing the ropes, a sufficient length shall be cut from the end of the rope to remove damaged or fatigued portions. (7-1-97)

e. Resocketed ropes shall conform to the requirements of sub-section 075.19 of this section. (7-1-97)

f. Limit switches affected by resocketed ropes shall be reset, if necessary. (7-1-97)

g. The hoisting ropes shall be reshackled at the non-drum ends at intervals not exceeding twenty-four (24) months. When re-shackling the ropes, a sufficient length shall be cut from the end of the rope to remove damaged or fatigued portions. (7-1-97)

h. Roof track systems, tie downs, or similar equipment shall be maintained in proper working order so that they perform the function for which they were intended. (7-1-97)

i. "T" rails, indented mullions, or equivalent guides located in the face of a building shall be maintained in proper working order so that they perform the functions for which they were intended. Brackets for cable stabilizers shall similarly be maintained in proper working order. (7-1-97)

j. No person shall render a required safety device or electrical protective device inoperative, except as necessary for tests, inspections, and maintenance. Immediately upon completion of such tests, inspections and maintenance, the device shall be restored to its normal operating condition. (7-1-97)

**18. Training:** (7-1-97)

a. Working platforms shall be operated only by persons who are proficient in the operation, safe use and inspection of the particular working platform to be operated. (7-1-97)

b. All employees who operate working platforms shall be trained in the following: (7-1-97)

i. Recognition of, and preventive measures for, the safety hazards associated with their individual work tasks; (7-1-97)

ii. General recognition and prevention of safety hazards associated with the use of working platforms, including the provisions in the section relating to the particular working platform to be operated; (7-1-97)

iii. Emergency action plan procedures required in sub-section 075.04.t. of this section; (7-1-97)

iv. Work procedures as required by sub-section 075.18.d. of this section; (7-1-97)

v. Personal fall arrest system inspection, care, use, and system performance. (7-1-97)
c. Training of employees in the operation and inspection of working platforms shall be done by a competent person. (7-1-97)

d. Written work procedures for the operation, safe use, and inspection of working platforms shall be provided for employee training. Pictorial methods of construction, may be used, in lieu of written work procedures, if employee communication is improved using this method. The operating manuals supplied by manufacturers for platform system components can serve as the basis for these procedures. (7-1-97)

19. Use: (7-1-97)

a. Working platforms shall not be loaded in excess of the rated load, as stated on the platform load rating plate. (7-1-97)

b. Employees shall be prohibited from working on snow, ice, or other slippery material covering platforms, except for the removal of such materials. (7-1-97)

c. Adequate precautions shall be taken to protect the platform, wire ropes, and life lines from damage due to acids or other corrosive substances, in accordance with the recommendations of the corrosive substance producer, supplier, platform manufacturer or other equivalent information sources. Platform members which have been exposed to acids or other corrosive substances shall be washed down with a neutralizing solution, at a frequency recommended by the corrosive substance producer or supplier. (7-1-97)

d. Platform members, wire ropes, and life lines shall be protected when using a heat producing process. Wire ropes and life lines which have been contacted by heat producing process shall be considered to be permanently damaged and shall not be used. (7-1-97)

e. The platform shall not be operated in winds in excess of twenty-five (25) miles per hour except to move it from an operating to a storage position. Wind speed shall be determined based on the best available information, which includes on site anemometer readings and local weather forecasts which predict wind velocities for the area. (7-1-97)

f. On exterior installations, an anemometer shall be mounted on the platform to provide information of on site wind velocities prior to and during the use of the platform. The anemometer may be a portable (hand held) unit which is temporarily mounted during platform use. (7-1-97)

g. Tools, materials, and debris not related to the work in progress shall not be allowed to accumulate on platforms. Stabilizer ties shall be locked so as to allow unencumbered passage along the full length of the platform and shall be of such length so as to become entangled in rollers, hoists, or other machinery. (7-1-97)