Regulation DD-37.0: Building Maintenance Unit

37.1 Building with installations of BMU shall take approvals or should be incorporated on the initial submission drawings for EHS-NOC-BP that meets the following requirements- required load sustaining capabilities of platforms, building components, hoisting and supporting equipment; stability factors for carriages, platforms and supporting equipment; maximum horizontal force for movement of carriages and davits; design of carriages, hoisting machines, wire rope and stabilization systems; and design criteria for electrical wiring and equipment.

37.2 Once the installation is completed and prior to use EHS approved third party has to certify that the installation has been inspected, tested and maintained in compliance with the requirements and that all protection anchorages meet the requirements of the manufacturer.

37.3 Building anchors which extend 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

37.4 The intermittent stabilization system building anchors and components shall be capable of sustaining without failure at least four times the maximum anticipated load applied or transmitted to the components and anchors. The minimum design wind load for each anchor shall be 300 (1334 n) pounds, if two anchors share the wind load.

37.5 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's on one platform, one building anchor and stabilizer tie shall be capable of sustaining the wind loads.

37.6 ***Maintenance access***. Means shall be provided to traverse all carriages and their suspended equipment to a safe area for maintenance and storage. 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.

37.7 ***Tie-down anchors***. Imbedded tie-down anchors, fasteners, and affected structures shall be resistant to corrosion.

37.8 ***Cable stabilization***. Hanging lifelines and all cables not in tension shall be stabilized at each 200 foot (61 m) interval of vertical travel of the working platform beyond an initial 200 foot (61 m) distance. Hanging cables, other than suspended wire ropes, which are in constant tension shall be stabilized when the vertical travel exceeds an initial 600 foot (183 m) distance, and at further intervals of 600 feet (183 m) or less.

37.9 ***Emergency planning.*** 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 him or herself in the event of an emergency.

37.10 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 equipment power circuit may also be

connected to this system; 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 equipment to allow the operators of the equipment access to the switch; the disconnect switch for the power circuit shall be locked in the "ON" position when the equipment is in use; and an effective two-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 whenever the platform is being used.

37.11 Following safety features to be considered before installation of building maintenance unit/glass cleaning cradle.

37.11.1 Provisions in case of power failure

37.11.2 Overload safety device.

37.11.3 Wire rope equalizer limit switch.

37.11.4 Emergency stop.

37.11.5 Secondary brake with over speed protection (mechanical)

37.11.6 Slack rope device.

37.11.7 Lanyard restraint trip assembly.

37.11.8 Rotational slew limits.

37.11.9 Factor of safety for wire rope.

37.11.10 Cradle details (i.e. Anti-collision bar, hand rail / mid rail height, etc.)

37.11.11 Horizontal Traversing wheel locking device.

37.11.12 Working surrounding (i.e. weather conditions such as temperature, humidity, wind speed etc.)